

# Fifty Years of FEBS

A Memoir 1964 to 2013

Guy Dirheimer  
Horst Feldmann



WILEY Blackwell

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## **Fifty Years of FEBS**

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*FEDERATION OF EUROPEAN BIOCHEMICAL SOCIETIES*

**WILEY** Blackwell

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## Contents

**Preface** *XV*

**Foreword** *XIX*

**Part I**    **FEBS DEVELOPMENT, OBJECTIVES AND BODIES**    *1*

**Introduction**    *3*

**1**        **The Founding of FEBS and Early Developments**    *9*

1.1      The Foundation and Early Years of FEBS    *9*

1.2      The First Ten Years of FEBS (1964 – 1973): Retrospect and  
Prospect    *20*

**2**        **FEBS - From the End of the 20<sup>th</sup> into the 21<sup>st</sup> Century**    *27*

2.1      FEBS, the First Twenty Years (1964 – 1984)    *27*

2.2      Biochemistry in Europe – The Role of the Federation of  
Biochemical Societies (FEBS)    *31*

2.3      FEBS – 25th Anniversary in 1989    *33*

2.4      FEBS in the New Millennium    *35*

2.5      FEBS – A Guest at the Bosphorus in 2002 – New  
Developments    *37*

2.6      Role of FEBS in Establishing the European Research Area  
(ERA)    *39*

**3**        **FEBS Recent Ten Years**    *41*

3.1      General Overview    *41*

3.2      Present Status of FEBS Member Societies    *41*

3.3      FEBS New Activities in the 21<sup>st</sup> Century    *42*

3.3.1    Debates on Cooperation in European Life  
Sciences    *42*

3.3.2    Initiatives for New Committees    *42*

3.3.3    FEBS Committee on Science and Society    *43*

3.3.4    FEBS Education Committee    *43*

3.3.5	FEBS Working Group on Assistance to Central & Eastern Europe (WOGCEE)	44
3.3.5.1	Initiatives and Objectives	44
3.3.5.2	FEBS Volunteer Aid Programme – Call for Volunteers	47
3.3.5.3	Peter Campbell Lectureships	47
3.3.6	FEBS Working Group on Integration (WGI)	48
3.3.6.1	Renaming WOGCEE to WGI – and Its Goals	48
3.3.7	FEBS Working Group on the Career of Young Scientists (YSF)	48
3.3.7.1	Initiatives and Goals	48
3.3.7.2	FEBS Forum for Young Scientists	49
3.3.8	FEBS Working Group on Women in Science (WISE)	50
3.3.8.1	Initiatives and Objectives	50
3.3.8.2	Why Should FEBS be Concerned About Women in Science?	50
3.3.8.3	WISE Members and Obligations	52
3.3.9	FEBS Engagement World-Wide	53
3.3.10	Extension of Former FEBS Activities	53
3.3.10.1	FEBS Meetings/Congresses and Other FEBS Meetings >> Chapter 5	53
3.3.10.2	FEBS Publications >> Chapter 6	53
3.3.10.3	FEBS Educational and Related Activities >> Chapter 7	53
3.3.10.4	FEBS Activities in the New Millennium >> Chapter 8	54
3.3.10.5	FEBS Awards >> Chapter 9	54
3.4	Status of FEBS Management and Finances	54
3.4.1	New Perspectives	54
3.4.1.1	New Working Group Established	54
3.4.1.2	A Message from the Elected Secretary General (2006)	55
3.4.2	FEBS Finances	56
3.4.2.1	Treasurer’s Job (to the end of 2011)	57
3.4.3	New Treasury Office (2012)	61
3.4.4	Changes to FEBS Management and Finances (2013)	61
4	<b>FEBS as an Organisation</b>	63
4.1	FEBS as a Charity	63
4.1.1	Restructuring of FEBS	63
4.1.2	FEBS’ Objectives	63
4.1.3	Public Benefit	64

- 4.2 FEBS Present Activities Portfolio 64
- 4.3 FEBS Bodies 65
  - 4.3.1 FEBS Council and FEBS Officers 65
  - 4.3.2 FEBS Secretaries 75
- 4.4 Meetings of FEBS Council and FEBS Executive Committee 76
  - 4.4.1 The 'Old Times' 77
  - 4.4.2 'Modern Times' 80

## Part II FEBS ACTIVITIES 83

- 5 FEBS Meetings/Congresses and Other FEBS Meetings 85
  - 5.1 FEBS Meetings & Congresses 85
    - 5.1.1 Importance and Format – Historical Development 85
    - 5.1.2 Publications from FEBS Meetings/Congresses 87
    - 5.1.3 Locations of FEBS Meetings/Congresses 87
    - 5.1.4 Announcements of the FEBS Meetings and Congresses (1964 to 2014) 90
    - 5.1.5 Reminiscences of FEBS Meetings/Congresses 93
  - 5.2 FEBS Satellite Meetings 180
    - 5.2.1 Young Scientists Forum (FFYS/YSF) – General Aims 180
    - 5.2.2 Reminiscences from Young Scientists Forums 181
    - 5.2.3 Annual Meetings of the Third Year FEBS Fellows 199
  - 5.3 FEBS 3+ Conferences 201
    - 5.3.1 Programme and Support 201
    - 5.3.2 FEBS 3+ Meetings held 202
      - 5.3.2.1 VIII Parnas Conference 2011 202
      - 5.3.2.2 FEBS3+ Meeting: From Molecules to Life and Back, 13 – 16 June 2012 Opatija, Croatia 202
      - 5.3.2.3 FEBS 3+ Meeting: IX Parnas Conference: Proteins from birth to death, Jerusalem, September 29 – October 2, 2013 205
  - 5.4 FEBS Constituent Societies' Meetings 205
    - 5.4.1 Armenian Association of Biochemists 205
    - 5.4.2 Jubilee Anniversary of the Polish Biochemical Society 2008 207
    - 5.4.3 Golden Jubilee of the Hungarian Biochemical Society 2012 209
    - 5.4.4 Spanish Society of Biochemistry and Molecular Biology: celebrating 50 years 212

- 5.5 FEBS National Lecture Awards at Constituent Societies' Meetings 215
  - 5.5.1 SFBBM-SFB Congress 2012 215
  - 5.5.2 Polish Biochemical Society (PTBioch) and German Society for Biochemistry and Molecular Biology (GBM) 2012 216
  - 5.5.3 Hungarian Molecular Life Sciences Conference 2013 217
  - 5.5.4 SEBBM Society meeting 2013: 50th Anniversary 217
  - 5.5.5 Austrian Society (OEGMBT) meeting 2013 218
  
- 6 **FEBS Publications** 221
  - 6.1 Overview 221
  - 6.2 FEBS Publications Committee 222
  - 6.3 The European Journal of Biochemistry – The FEBS Journal 228
    - 6.3.1 First 25 Years of EJB 229
    - 6.3.2 Editorial for EJB in 1999 240
    - 6.3.3 The European Journal of Biochemistry in January 2003 242
    - 6.3.4 Important News from The European Journal of Biochemistry/The FEBS Journal 245
      - 6.3.4.1 The Years 2002 to 2004 245
      - 6.3.4.2 The Years 2005 and 2006 246
      - 6.3.4.3 The Years 2007 and 2008 248
      - 6.3.4.4 The Years 2009 and 2010 249
      - 6.3.4.5 The Years 2011 and 2012 249
      - 6.3.4.6 In Memoriam 249
      - 6.3.4.7 The Year 2013 – FEBS Journal Today 250
  - 6.4 FEBS Letters 253
    - 6.4.1 Founding FEBS Letters 254
    - 6.4.2 The Early Days of FEBS Letters 255
    - 6.4.3 An Appreciation of Professor S.P. Datta, Managing Editor of FEBS Letters, 1968 – 1985 258
    - 6.4.4 FEBS Letters: 30 Years 260
    - 6.4.5 A Good-bye and Best Wishes for the Next Millennium from the Managing Editor 263
    - 6.4.6 Serving FEBS Letters for 14 Years 264
    - 6.4.7 FEBS Letters – Plans in the New Millennium 269
    - 6.4.8 FEBS Letters in the New Millennium 270
    - 6.4.9 Important Developments in FEBS Letters from 2004 until To Date 272
      - 6.4.9.1 The Years 2002 to 2004 272
      - 6.4.9.2 The Years 2005 and 2006 273

	6.4.9.3	The Years 2007 and 2008	273
	6.4.9.4	In praise of ... subscription-based scientific publishing!	273
	6.4.9.5	The Years 2009 and 2010	275
	6.4.9.6	The Years 2011 and 2012	276
	6.4.9.7	The Years 2013 and 2014 – FEBS Letters Today	276
6.5		Molecular Oncology	279
	6.5.1	The New FEBS Journal in Molecular Oncology	279
	6.5.2	Molecular Oncology in its Second Year	280
	6.5.3	Molecular Oncology in 2011	281
	6.5.4	Molecular Oncology Today	284
6.6		FEBS Open Bio	286
	6.6.1	FEBS Open Bio, a New FEBS Journal in 2011	287
	6.6.2	FEBS Open Bio Today	288
6.7		The FEBS Bulletin	289
6.8		The FEBS Website	290
	6.8.1	The ‘Early’ Years (1995 to 2003)	290
	6.8.2	‘Modern’ FEBS Website	291
	6.8.3	FEBS Website Since 2012	294
	6.8.4	FEBS Website in 2014	295
6.9		FEBS Newsletter – FEBS News	295
	6.9.1	Good News: FEBS NewsLetter	295
	6.9.2	Better News: The FEBS NEWS	296
<b>7</b>		<b>Educational and Related Activities of FEBS</b>	<b>299</b>
	7.1	FEBS Advanced Courses Programme	299
	7.1.1	Initiatives and Developments	299
	7.1.2	Guidelines and Financing	300
	7.1.2.1	Types and Format of Events Funded	300
	7.1.2.2	Co-financing	302
	7.1.2.3	Submission of Applications	302
	7.1.2.4	Budget, Available Support, and Reporting	303
	7.1.2.5	Youth Travel Fund Grants	303
	7.1.3	FEBS Advanced Courses Committee	305
	7.1.4	FEBS Advanced Courses 1987 to 2004 – Personal Views of Two Chairmen	305
	7.1.4.1	FEBS Advanced Courses 1987 to 1995	305
	7.1.4.2	FEBS Advanced Courses 1996 to 2004	315
	7.1.5	FEBS Advanced Courses in the Years 2004 – 2013	318



	7.1.5.1	General Note on FEBS Courses Programme	318
	7.1.5.2	FEBS Courses Programme in 2004	319
	7.1.5.3	FEBS Courses Programme in 2005	319
	7.1.5.4	FEBS Courses Programme in 2006	320
	7.1.5.5	FEBS Courses Programme in 2007	320
	7.1.5.6	FEBS Courses Programme in 2008	321
	7.1.5.7	FEBS Courses Programme in 2009	321
	7.1.5.8	FEBS Courses Programme in 2010	322
	7.1.5.9	FEBS Courses Programme in 2011	323
	7.1.5.10	FEBS Courses Programme in 2012	324
	7.1.5.11	FEBS Courses Programme in 2013	325
	7.1.6	News for Prospective Organizers of Future Courses	326
7.2		FEBS Fellowships	327
	7.2.1	General Aims and Programmes (valid up to 2012)	327
	7.2.2	FEBS Fellowships Committee	331
	7.2.3	The FEBS Fellowships in the Period 1984 – 1992	334
	7.2.4	The FEBS Fellowships in the Period 1993 – 2001	336
	7.2.5	The FEBS Fellowships in the Period 2002 – 2004	336
	7.2.6	The FEBS Fellowships in the Period 2005 – 2009	343
	7.2.7	The FEBS Fellowships in the Period 2010 – 2012	344
	7.2.8	FEBS Fellowships News 2013	345
7.3		FEBS Scientific Apparatus Recycling Programme (SARS/SARP)	347
	7.3.1	The Scientific Apparatus Recycling Scheme (SARS)	347
	7.3.1.1	The First Years	347
	7.3.1.2	News of the Scientific Apparatus Recycling Scheme, Spring 2004	351
	7.3.1.3	Obituaries – Peter Campbell (1921 – 2005)	352
	7.3.2	The Scientific Apparatus Recycling Programme (SARP)	355
	7.3.2.1	Scientific Apparatus Recycling Programme (SARP) needs your support!	355
	7.3.2.2	Campbell Lecture 2008	356

	7.3.2.3	Shipping of Equipment to Various Locations around Europe (2007 – 2009)	357
	7.3.2.4	Termination of SARP	357
<b>8</b>		<b>FEBS Activities in the New Millennium</b>	<b>359</b>
	8.1	Cooperation between EMBO and FEBS	359
	8.1.1	Productive Interaction between EMBO and FEBS	359
	8.1.2	Present Cooperation between EMBO and FEBS	362
	8.2	FEBS Role in European Cooperation and Research Funding	362
	8.2.1	ELSF: A Voice for European Life Sciences Organisations	362
	8.2.2	A Visit to INTAS in Brussels	369
	8.2.3	The 6th Framework Programme – a Brief Status	370
	8.2.4	European Research Council (ERC)	371
	8.2.4.1	Creation of an ERC	371
	8.2.4.2	Life Sciences in the European Research Council – The Scientist's Options	372
	8.2.4.3	Strong Support from the Scientific Community to the Idea of Establishing a European Research Council within the Life Sciences	373
	8.2.4.4	ERA and the ERC – Constructive Debating	374
	8.2.4.5	The European Union: A knowledge-based economy	374
	8.2.4.6	A European Research Council for All Sciences: A Dream that Might Come True	377
	8.2.4.7	The European Research Council, for, against, don't know	378
	8.2.4.8	The European Research Council: The 'Mayor Group' Report and the Commission's Views on Basic Research and Its Impact	378
	8.2.4.9	Special Session at the FEBS Congress in Warsaw – the ERC	380
	8.2.4.10	The Outcome of ERC in 2007 and 2008	382
	8.2.5	Challenges for European Science	382

	8.2.5.1	Challenges for European Science (I/II)	382
	8.2.5.2	Challenges for European Science (II/II)	383
	8.2.5.3	Challenges for European Science (III/IV)	383
	8.2.5.4	Challenges for European Science (IV/IV)	384
	8.2.5.5	Challenges for European Science (V/V)	384
	8.2.5.6	Challenges for European Science (VI/VIII)	385
	8.2.5.7	Challenges for European Science (VII/VIII)	385
	8.2.5.8	Challenges for European Science (X/XII)	386
	8.2.5.9	Challenges for European Science (XI/XII)	386
	8.2.5.10	Challenges for European Science (XII/XII)	387
8.2.6		Initiatives for Life Science in Europe – ISE and ELSO	388
	8.2.6.1	The Initiative for Science in Europe (ISE) – A Reality	388
	8.2.6.2	The future of the initiative for Science in Europe (ISE)	389
	8.2.6.3	FEBS – A Charity at the Cross-Roads to the Future of Life Sciences in Europe	389
	8.2.6.4	Science Policy – Working Together to Shape Our Future	391
8.2.7		The European Research Area (ERA)	393
	8.2.7.1	FEBS Science and Society Committee: Debating Funding	393
	8.2.7.2	What lessons can be drawn from the 7th Framework Programme to optimize its successor?	393
	8.2.7.3	News from the Initiative for Science in Europe ‘Strengthening the European Research Area’ Barcelona, Spain; 3 – 4 May 2012	396
8.3		FEBS Committee on Science and Society	397
	8.3.1	Initiatives and Objectives	397
	8.3.2	Activities of the Science and Society Committee	400
	8.3.2.1	Report from Warsaw Congress 2004	400

- 8.3.2.2 Report of the Science and Society Committee, Vienna 2007 400
- 8.3.2.3 Report of the Science and Society Committee, Athens 2008 401
- 8.3.2.4 Report of the Science and Society Committee, Prague 2009 401
- 8.3.2.5 Report of the Science and Society Committee, Gothenburg 2010 403
- 8.3.2.6 Report of the Science and Society Committee, Turin 2011 406
- 8.3.2.7 Report of the Science and Society Committee, Sevilla 2012 407
- 8.3.2.8 Report of the Science and Society Committee, St Petersburg 2013 408
- 8.4 FEBS Committee on Education 410
  - 8.4.1 Initiatives 410
  - 8.4.2 Activities of the FEBS Education Committee 412
    - 8.4.2.1 Reports 2001 – 2006 412
    - 8.4.2.2 Report on the Activities of FEBS Education Committee in 2007 412
    - 8.4.2.3 Report on the Activities of FEBS Education Committee in Athens, 2008 414
    - 8.4.2.4 Reports on the Activities of FEBS Education Committee in 2009 419
    - 8.4.2.5 Commemorates of ED WOOD 422
    - 8.4.2.6 Reports of the Education Committee Gothenburg, 2010 424
    - 8.4.2.7 Report of the Education Committee in Turin, 2011 427
    - 8.4.2.8 Activities of FEBS Education Committee in Sevilla, 2012 433
- 8.5 FEBS Working Group for Exploring Ways to Assist Central and Eastern European Countries” (WOGCEE) 440
  - 8.5.1 Initiatives and Reports 440
  - 8.5.2 Reports on WOGCEE Committee Activities 441
    - 8.5.2.1 Visit to Kyiv (Ukraine) of the FEBS Working Group to Explore Ways to Improve Assistance to Central and Eastern European Countries 441
    - 8.5.2.2 FEBS Visits Armenia in 2004 – Margarian Meets FEBS Delegation 445
    - 8.5.2.3 Roundtable Discussions 2002 – 2008 448
    - 8.5.2.4 FEBS Visit to Croatia 2006 449
    - 8.5.2.5 WOGCEE Visit to Bulgaria 2007 449

- 8.6 FEBS Working Group on Integration (WGI) – and Its Activities 452
  - 8.6.1 Renaming WOGCEE and Goals of WGI 452
  - 8.6.2 FEBS WGI – Initiatives and Visits 452
    - 8.6.2.1 Report on a Visit to Vilnius, Lithuania, 2011 453
    - 8.6.2.2 Report on a Visit to Yerevan, Armenia, 2011 455
    - 8.6.2.3 Report on a visit to Georgia, 2012 457
- 8.7 FEBS Working Group on the Career of Young Scientists (YSF) 459
  - 8.7.1 Initiatives 459
    - 8.7.1.1 First Activities of the Working Group on the Career of Young Scientists 459
  - 8.7.2 Reports on FEBS Forum for Young Scientists at Satellite Meetings of FEBS Congresses 461
    - 8.7.2.1 First Young Scientists Forum in Portugal and Subsequent Forums 461
    - 8.7.2.2 FFYS, 18 – 20 October 2002, Istanbul, Turkey 461
    - 8.7.2.3 FFYS, June 24 – 26, 2004, Warsaw 462
    - 8.7.2.4 FEBS Forum for Young Scientists, June 30 to July 2, 2005, Budapest 462
    - 8.7.2.5 FEBS Forum for Young Scientists, June 24 – 26, 2006, Istanbul 462
    - 8.7.2.6 FEBS YSF Careers Session Vienna 2007 462
    - 8.7.2.7 FEBS Forum for Young Scientists 2008 463
    - 8.7.2.8 Overview of FEBS Forum for Young Scientists 2002 – 2013 463
- 8.8 Working Group on Women in Science (WISE) 463
  - 8.8.1 Initiatives and Goals 463
  - 8.8.2 Activities and Reports of the WISE Committees 464
    - 8.8.2.1 WISE Workshops at the FEBS Congress in Brussels, Belgium, 2003 464
    - 8.8.2.2 WISE Workshops at the FEBS Congress in Warsaw, Poland, 27th and 28th of June 2004 464
    - 8.8.2.3 Workshop on “Women in Science”, FEBS Congress in Budapest, Hungary 6 July 2005 469

	8.8.2.4	Workshops on “Women in Science”, FEBS Congress in Istanbul, Turkey, 25th and 26th of June 2006	471
	8.8.2.5	Events on the issue of “Women in Science”, FEBS Congress in Vienna, Austria 9th and 11th of July 2007	472
	8.8.2.6	Events on the issue of “Women in Science” FEBS Congress in Athens, Greece, 30th June and 2nd July, 2008	474
	8.8.2.7	Workshops on the issue of “Women and Science” FEBS Congress in Prague, 2009	477
	8.8.2.8	Events on the issue of “Women in Science”, FEBS Congress in Gothenburg, Sweden, 2010	478
	8.8.2.9	Events on the issue of “Women in Science” FEBS Congress in Turin, Italy, 2011	479
	8.8.2.10	Events on the issue of “Women in Science” FEBS Congress in Sevilla, Spain, 2012	480
	8.8.2.11	Events on the issue of “Women in Science” FEBS Congress in St Petersburg 2013	483
8.9		FEBS Engagement World-Wide	484
	8.9.1	The European Commission Gives EFBC the Green Light	484
	8.9.2	FEBS Activities in China	485
	8.9.2.1	FEBS presentation at the IUBMB and FAOBMB Congress in Shanghai 2009	485
	8.9.2.2	Links between European and Chinese researchers	486
	8.9.2.3	Chinese Society of Biochemistry & Molecular Biology Annual Meeting, Nanjing, China August 2010	488
	8.9.2.4	FEBS in China 2011	489
	8.9.3	FEBS in Brazil, 2012	491
<b>9</b>		<b>FEBS Awards</b>	<b>493</b>
	9.1	FEBS Medals	493
	9.1.1	Sir Hans Krebs Lecture and Medal	493
	9.1.1.1	Hans Krebs’ Personality	493
	9.1.2	The Datta Lectureship and Medal	495
	9.1.2.1	In Memoriam Prakash S. Datta	495
	9.1.3	The Theodor Bücher Lecture and Medal	497
	9.1.3.1	Theodor Bücher’s Personality	497

9.2	FEBS Annual Prizes	499
9.2.1	FEBS Anniversary Prizes of the Gesellschaft für Biochemie und Molekularbiologie	499
9.2.2	FEBS Ferdinand Springer Lectureship	501
9.2.3	FEBS 'National Society' Lecture Award	504
9.2.4	FEBS Campbell Lectureship	505
9.3	FEBS Diplôme d'Honneur	506
9.4	Other FEBS Awards	510
9.4.1	Awards for Young Scientists	510
9.4.1.1	FEBS Letters Award for Young Scientists	510
9.4.1.2	FEBS Journal Prize for Young Scientists	511
9.4.2	FEBS Distinguished Young Investigator Awards	512
9.4.3	FEBS/EMBO Women in Science Award	512
<b>10</b>	<b>Epilogue – FEBS Future Developments</b>	<b>515</b>
10.1	Documentation of FEBS Life through 50 Years	515
10.1.1	Fifty Years of FEBS – A Memoir 1964 through 2013	515
10.1.2	FEBS 50th Anniversary Book	516
10.2	FEBS-EMBO 2014 Conference in Paris	516
10.2.1	Joint Conference in Paris	516
10.2.2	Young Scientists Forum – YSF 2014 in Paris	518
10.3	FEBS-EMBO Conference 2014 - Preliminary Programme	519
10.3.1	Opening Lectures	519
10.3.2	Plenary Lectures	519
10.3.3	Plenary Sessions	519
10.3.4	Concurrent Session	520
10.3.5	Special Sessions	521
	<b>Appendix</b>	<b>523</b>

## Preface

In the year 2014, the Federation of European Societies for Biochemistry and Molecular Biology (FEBS) will celebrate its 50<sup>th</sup> Anniversary since its foundation in 1964.

We have been invited by the current Executive Committee to present a Memoir on this occasion, documenting the outstanding development and achievements of this renowned organisation in the Life Sciences. Both of us have served FEBS through many years as FEBS Officers and therefore were deemed appropriate to generate an attractive and comprehensive record of all events that have touched and influenced FEBS within the past fifty years. It is with pleasure and gratitude that we accepted this invitation.

We have compiled some 360 pages of Text, including a bunch of explicatory Tables, as well as some 500 Figures most of them in colour, all ready for print. Unfortunately, we learned that—for several unforeseen problems — it will be difficult to print this ‘FEBS 50 Years’ Memoir’ as a book, similar to what had been achieved with the ‘FEBS 40 Years’ Memoir’ (edited by one of us) which had been distributed in some 3000 printed copies to FEBS members. Thus, the present version comes in a more undiscerning fashion, as it would have been a tremendous additional task for us to edit our manuscript in a format more sophisticated than PDF.

The reader will experience that we have kept some of the former Text and Illustrations which had been used to prepare the ‘FEBS 40 Years’ Memoir’. Particularly, this applies to Chapter 1 (‘The Founding of FEBS and Early Developments’) and Chapter 2 (‘FEBS - From the End of the 20<sup>th</sup> into the 21<sup>st</sup> Century’). Chapter 3 deals with the new developments of FEBS during the recent ten years. Chapter 4 presents ‘FEBS as an Organisation’. Chapters 1 to 4 form ‘Part I: FEBS Development, Objectives and Bodies’ of the new compilation.

Part II is devoted to ‘FEBS Activities’. As far as convenient, we have integrated information from the former edition, but took care to extend our description until the end of the year 2013 (which in fact concludes FEBS’ first 50 years).

Chapter 5 (‘FEBS Meetings/Congresses and Other FEBS Meetings’) is devoted to the historical development of this most important FEBS activity, giving its present rules and format, followed by ‘Reminiscences to FEBS Meetings/Congresses’ through all 50 years, as far as feasible. Additional Sections are



reporting on 'FEBS Satellite Meetings' (Young Scientists Forum) and 'Annual Meetings of the Third Year FEBS Fellows', as well as 'FEBS +3 Conferences' and special 'FEBS Society Meetings'.

Chapter 6 describes 'FEBS Publications' — with a special view to the importance of this outstanding FEBS activity as an educational instrument and as a means to guarantee an essential income. FEBS owns all its publications, from *the FEBS Journal* to *FEBS Letters*, *Molecular Oncology* and *FEBS Open Bio*. The respective publishers return most of the revenue to FEBS, which, as a not-for-profit academic organisation, ploughs all the income into funding their diverse activities: FEBS fellowships; advanced courses and workshops; congresses; and aiding researchers in disadvantaged countries. Following a description and aims of the four FEBS Journals, the reader will find reminiscences of the 'FEBS Bulletin', the development of the 'FEBS Website', and the 'FEBS News', which latter have evolved into an important tool for communication among FEBS authorities, FEBS Societies, and FEBS members.

Chapter 7 takes care of 'Educational and Related Activities of FEBS'. The first Section is devoted to 'FEBS Advanced Courses Programme', giving insight into the various initiatives, guidelines and financing, followed by a survey on the activities through the past years. Section 2 describes the 'General Aims and Programmes' for 'FEBS Fellowships', which have evolved into the FEBS activity with the highest expenditure. Finally, a third Section presents 'FEBS Scientific Recycling Programme' that had been developed as a potent measure to assist research in disadvantaged countries.

Chapter 8 deals with 'FEBS Educational and Social Activities in the New Millennium' summarizing a number of aspects that have arisen particularly in the past years. The topics include 'Cooperation between EMBO and FEBS' and an intensive discussion on 'FEBS Role in European Cooperation and Research Funding'. The Sections to follow report on the activities of the FEBS Committees that were installed right after the beginning of the new century: 'FEBS Committee on Science and Society' and 'FEBS Committee on Education'. At the same time, three FEBS Working Groups were inaugurated: 'FEBS Working Group for Exploring Ways to Assist Central and Eastern Countries' (WOGA — WOGCEE; later transformed into 'Working Group of Integration' — WGI); 'FEBS Working Group on the Career of Young Scientists' (YSF); and 'Working Group on Women in Science' (WISE). Chapter 8 concludes with a description of 'FEBS Engagement World-Wide'.

Chapter 9 is devoted to 'FEBS Awards'. Over the years, FEBS has installed several named lectures awarded for outstanding achievements in Biochemistry and Molecular Biology or related sciences: 'Sir Hans Krebs Lecture and Medal'; 'Prakash Datta Lectureship and Medal'; 'Theodor Bücher Lecture and Medal'. The lectures will be presented at the annual FEBS Congresses. 'FEBS Anniversary Prizes of the *Gesellschaft für Biochemie und Molekularbiologie*' are awarded to selected persons invited to give a lecture at one of the Symposia or workshops held during a FEBS Congress. Inaugurated as part of the 10th Anniversary celebrations, the 'FEBS Diplôme d'Honneur' is awarded to individuals judged by

the Executive Committee as having made an exceptional contribution to FEBS activities.

The annual 'FEBS Letters Award for Young Scientists' was established in 2003; it is now renamed to 'The FEBS Letters Young Group Leader Award'. The FEBS Journal established the 'FEBS Journal Prize for Young Scientists in 2005'. Both Prizes are endowed with a sum of €10 000 each. The aim of the 'FEBS Distinguished Young Investigator Award' is to give recognition to FEBS Long-Term Fellows who have conducted excellent research during the tenure of their FEBS Fellowship; the Award takes the form of a certificate and the sum of €10 000.

The 'FEBS/EMBO Women in Science Award' is a joint initiative of the Federation of European Biochemical Societies (FEBS) and the European Molecular Biology Organisation (EMBO). Launched in 2007, the aim of the award is to highlight the major contributions made by female scientists to Life Sciences research.

Chapter 10 presents some aspects of the near future and developments of FEBS.

By contrast to the 'FEBS 40 Years' Memoir, we have avoided loading our compilation with Annexes, such as FEBS Statutes, contact details, Plenary Lectures at the First FEBS Meetings, The First Published FEBS Symposia, and a list of the FEBS Advanced Courses; these can be retrieved from the above book.

We wish to acknowledge the help of many colleagues, who have patiently answered questions or provided documents and photographs which we gratefully incorporated into this memoir. Regrettably, several colleagues, whom we addressed, did not reply in time to our requests. We hope this does not severely affect our presentation, as we found material in the nearly 1100 pages from FEBS NewsLetter and FEBS News, which we exploited carefully, referencing all items we incorporated into our documentation.

*Strasbourg and Bergkirchen (Munich), 2013*

*Guy Dirheimer (guy.dirheimer.febs@wanadoo.fr)*

*Horst Feldmann (horst.feldmann@med.uni-muenchen.de)*



## Foreword

FEBS, as a Federation of all European Biochemical Societies, stands out in many ways when compared with the other analogous umbrella organizations. The exceptional nature of FEBS is presented in great detail in the following pages. Further, the way these have been written up is another illustration of the spirit of FEBS. The present monumental work summarizes what is probably the equivalent of thousands of human-years' work, all done voluntarily by two colleagues — Horst Feldmann (Feldi), from Munich and Guy Dirheimer, from Strasbourg — who personally present the ideas that FEBS stands for, with remarkably selfless dedication. Each one of them has also served FEBS for many years in different positions as detailed below.

The relentless spirit of voluntary work is perhaps the most important characteristic of our Federation: At any point in time the members of the Executive Committee are involved daily with running the diverse FEBS activities. More than 30 colleagues who are members of the different committees devote their time to evaluating applications for Fellowships or for Advanced Courses, while others contribute to programs of education in biochemistry or advise young scientists about how to develop their careers. All this is done in a devoted voluntary manner making FEBS what it is — unique.

Throughout these decades, FEBS has been a leading force in enabling and promoting mobility and exposure, primarily of young students and scientists, to the recent research advances. Countless generations of European students and scientists have benefited from our Advanced Courses, Special Meetings and Congresses as well as our different types of Fellowships.

The diverse activities of FEBS, and even its very existence, have fulfilled a very prominent role during the years that Europe has been divided politically and non-democratic regimes mounted huge barriers to personal freedom and to the sharing of information and ideas. Annual FEBS Congresses were one mode of lowering the barriers, as they were organized in countries all over the continent, irrespective of severe political boundaries. These provided exposure to scientific updates and to personal contacts to countless colleagues in those countries where citizens' freedom was suppressed.

Soon after the 'iron curtain' collapsed, FEBS took the initiative of assisting the communities who started updating their research and teaching activities

and establishing normal communication with the rest of Europe and the world. These activities aimed at integration of the biochemists in economically deprived European countries are still ongoing.

The acute needs of all researchers for contacts and mobility has also led FEBS to develop and nurture fruitful cooperation with many international organizations, within Europe and outside, reaching as far as China and Brazil. These contacts bear different forms of fruits, important for the advancement of science.

From its very inception, FEBS has been financing all its diverse activities from its own resources, ascertaining its independence of any governmental or commercial sources. Its founding fathers had an understanding of the importance of this freedom and the vision to develop sources of financial support; the establishment and development of FEBS-owned and edited journals. These have been serving as major forums for disseminating results of high quality research and at the same time yielding funds for the Federation's operation.

The following volume provides a detailed account of half a century of FEBS, illustrated by dozens of photos. This Memoir, like all the exceptional contributions of FEBS detailed here, is a typical product of momentous voluntary work!

Congratulations and heart-felt gratitude to Feldi and Guy.

*Israel Pecht*

*FEBS Secretary General*

**Part I**  
**FEBS DEVELOPMENT, OBJECTIVES AND BODIES**



## Introduction

The Federation of European Biochemical Societies (FEBS) seeks to contribute and promote the advancement of research and education for public benefit in the sciences of biochemistry, molecular biology and related disciplines by all suitable means and in particular by:

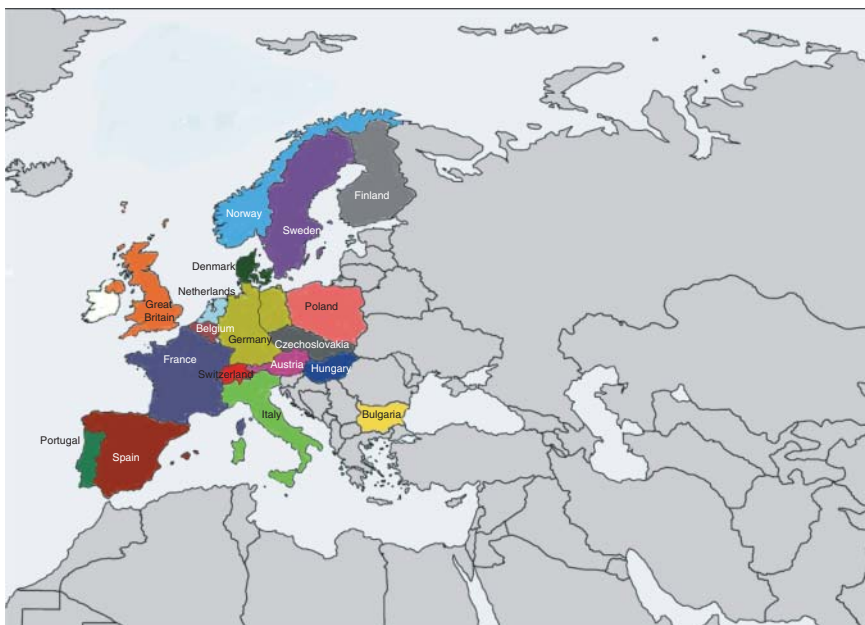
- holding and arranging congresses, training and educational courses on matters connected with biochemistry and molecular biology and related disciplines;
- facilitating and supporting the exchange of scientific information between biochemists, molecular biologists and scientists working in related disciplines generally and especially in Europe and other countries within the area of interest to FEBS;
- facilitating and supporting the training of young scientists in research, in the form of fellowships and advanced courses; and
- organizing the editing and publication of scientific research and educational material in biochemistry and molecular biology and related disciplines.

FEBS wholly owns and publishes four scientific journals—*FEBS Letters*, the *FEBS Journal*, *Molecular Oncology*, and *FEBS Open Bio*. FEBS funds an Annual Congress, Research Fellowships, Advanced Courses, Workshops, Special Meetings and Travel Grants. FEBS awards several Medals and Prizes, FEBS also promotes scientific and financial aid to biochemists in disadvantaged economies, aid on professional and educational activities, women in science, science and society, and research funding. FEBS has attained a strong position in International scientific activities and Science policy making.

FEBS came into official existence on 1 January 1964, with 17 adhering societies from Austria, Belgium, Bulgaria, Czechoslovakia, Finland, France, Germany, Great Britain, Hungary, Italy, The Netherlands, Norway, Poland, Portugal, Spain, Sweden, and Switzerland (Figure 1).

At the opening of the first meeting, the 17 Society delegates to the FEBS Council, plus the officers of FEBS, autographed a copy of the statutes, as detailed in Chapter 1. The statutes ‘of the first hour’ themselves filled only one page, while the statutes and guidelines of recent years fill a voluminous document ([www.febs.org](http://www.febs.org)).





**Figure 1** Founding Members of FEBS in 1964.

In the years to follow, as Biochemical Societies from other European countries applied for membership in FEBS, and FEBS itself engaged in new activities, the number of adhering bodies grew and the statutes had to pay attention to these developments. Around 1989/90, the Federation included 27 member Societies (Figure 2), because FEBS aimed at intensifying contacts and cooperation preferably with Eastern European Societies. After the ‘silent’ revolution in the Eastern block, FEBS was further open to memberships from those countries that had acquired their independence, though sometimes it was not easy for Council to define how far to extend the ‘European area.’

Until the year 2012, FEBS with more than 46 000 members developed into one of the largest organisations in European Life Sciences. The Constituent Societies of FEBS have been admitted as either a Member Society (M.S.) or Associate Member Society (A.M.). Figure 3 and Table 1 show 36 Member Societies (Ireland is a Section of The Biochemical Society, United Kingdom), and 7 Associate Member Societies.

Six of these societies did not respond to invitations to sign up to the ‘new FEBS’ restructured organization at the start of 2013. So, at the finalization of this compilation at the end of 2013, FEBS *de facto* had 37 adhering societies (33 Member Societies plus 4 Associate Members); questionable members are marked in light grey in Table 1.

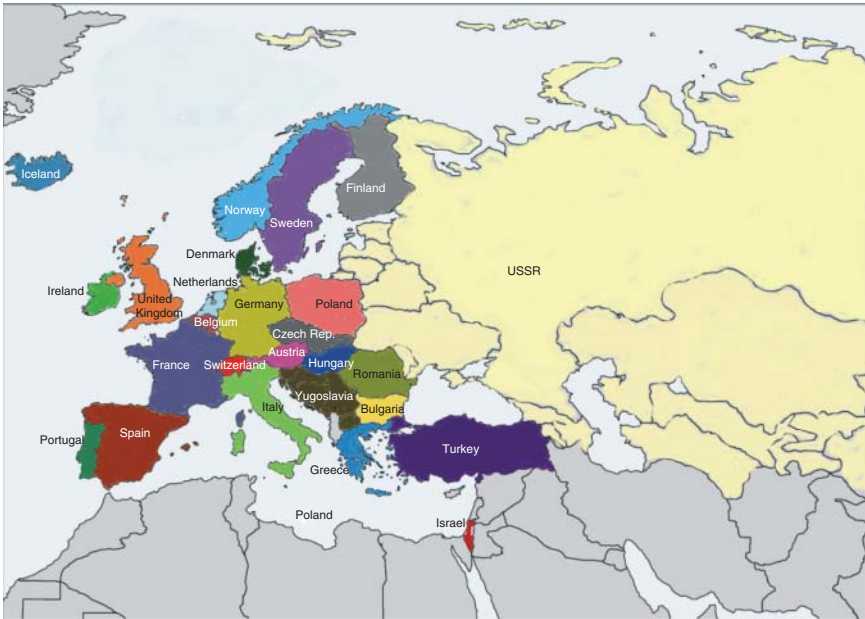


Figure 2 FEBS Constituent Societies in 1989.



Figure 3 Constituent Societies of FEBS in 2012.

**Table 1** List of FEBS Constituent Societies in 2012, alphabetical order.

Country	Name of the Membership Organisation	Status	Joined
Armenia	Association of Armenian Biochemists	(M.S.)	2002
Austria	Österreichische Gesellschaft für Biochemie und Molekularbiologie	(M.S.)	1964
Azerbaijan	Azerbaijan Society of Biochemists and Molecular Biologists	(M.S.)	1999
Belarus	Belarusian Biochemical Society	(A.M.)	2002
Belgium	Société Belge de Biochimie et de Biologie Moléculaire Belgische Vereniging voor Biochemie en Moleculaire Biologie	(M.S.)	1964
Bulgaria	Bulgarian Society for Biochemistry, Biophysics and Molecular Biology	(M.S.)	1964
Croatia	Croatian Society of Biochemistry and Molecular Biology	(M.S.)	1992
Cyprus	Cyprus Biological Society	(M.S.)	1999
Czech Republic	Czech Society for Biochemistry and Molecular Biology	(M.S.)	1964
Denmark	Danish Society for Biochemistry and Molecular Biology	(M.S.)	1964
Estonia	Estonian Biochemical Society	(M.S.)	1991
Finland	Societas Biochimica, Biophysica et Microbiologica Fenniae	(M.S.)	1964
France	Société Française de Biochimie et de Biologie Moléculaire	(M.S.)	1964
Georgia	Association of Georgian Biochemists	(A.M.)	2003
Germany	Gesellschaft für Biochemie und Molekularbiologie e.V.	(M.S.)	1964
Greece	Hellenic Society of Biochemistry & Molecular Biology	(M.S.)	1969
Hungary	Magyar Biokémiai Egységet	(M.S.)	1964
Iceland	Lífefnafræði Islands	(M.S.)	1972
(Ireland)	The Biochemical Society, Irish Area Section	(M.S.)	1964
Israel	Israel Society for Biochemistry and Molecular Biology	(M.S.)	1965
Italy	Società Italiana di Biochimica e Biologia Molecolare	(M.S.)	1964
Kazakhstan	Kazakh Molecular Biochemical Association	(A.M.)	2011
Kyrgyz Republic	Biochemical Society of Kyrgystan	(A.M.)	?

Table 1 (Continued)

Country	Name of the Membership Organisation	Status	Joined
Latvia	Latvian Biochemical Society	(M.S.)	1991
Lithuania	Lithuanian Biochemical Society	(M.S.)	1991
Macedonia (FYROM)	Macedonian Biochemical Society	(M.S.)	1996
Moldova	Moldovan Society of Biochemistry and Molecular Biology	(A.M.)	2001
Morocco	Société Marocaine de Biochimie (SMB)	(A.M.)	2002
Norway	Norsk Biokjemisk Selskap	(M.S.)	1964
Poland	Polish Biochemical Society	(M.S.)	1964
Portugal	Sociedade Portuguesa de Bioquímica	(M.S.)	1964
Romania	Societatea Romana de Biochimie si Biologie Moleculara	(M.S.)	1968
Russia	The Russian Biochemical Society	(M.S.)	1967
Serbia	(Yugoslav Biochemical Society) Serbian Biochemical Society	(M.S.)	(1998) 2011
Slovak Republic	Slovak Society for Biochemistry and Molecular Biology	(M.S.)	1964
Slovenia	The Slovenian Biochemical Society	(M.S.)	1993
Spain	Sociedad Espanola de Bioquímica y Biología Molecular	(M.S.)	1964
Sweden	Svenska Föreningen för Biokemi och Molekylärbiologi	(M.S.)	1964
Switzerland	Swiss Society for Biochemistry	(M.S.)	1964
The Netherlands	Nederlandse Vereniging voor Biochemie en Moleculaire Biologie	(M.S.)	1964
Tunisia	Tunisian Association of Biological Sciences	(A.M.)	2001
Turkey	Turkish Biochemical Society	(M.S.)	1978
Ukraine	Ukrainian Biochemical Society	(M.S.)	1994
United Kingdom	The Biochemical Society	(M.S.)	1964

(M.S.), Member Society; (A.M.), Associated Member

As the 50<sup>th</sup> Anniversary of the founding of FEBS approached, the Executive Committee decided that one way to celebrate this event would be to publish an updated Memoir covering major aspects of its foundation, early and recent developments, as well as presenting an overview on FEBS activities and contributions to support the ever growing disciplines of biochemistry, molecular cell biology and molecular biophysics throughout the European area.)



# 1

## The Founding of FEBS and Early Developments

### 1.1

#### The Foundation and Early Years of FEBS



*W.J. Whelan,  
Department of Biochemistry, University of Miami School of Medicine,  
USA*

It was Frank Young's and Peter Campbell's fault that I became involved in the formation of FEBS. I succeeded Campbell as Meetings Secretary of The Biochemical Society in 1959, Campbell becoming the Committee Secretary. As Meetings Secretary, he had already persuaded the Committee to look towards continental Europe in two ways. One was to encourage the continental societies to invite The Biochemical Society to hold joint meetings on their home ground. The other was for The Biochemical Society to issue a general invitation to all European societies to have their members attend The Biochemical Society's summer meeting, which traditionally alternated between Oxford and Cambridge. Joint meetings in Finland in 1959 and France in 1960 had already been planned, and I set up further such meetings over the next several years, until 1965, in Belgium, The Netherlands, Sweden and Italy. These meetings were terminated when the annual FEBS meetings began, as their logical successors.

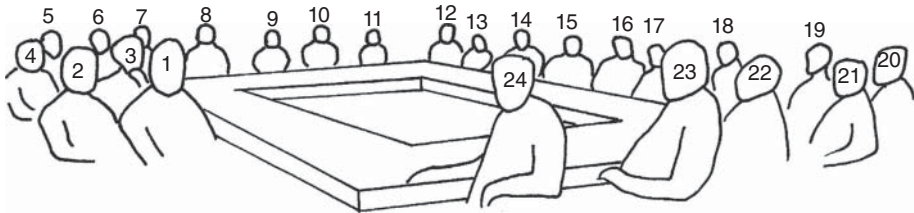
Hans Krebs and Frank Young, as the respective hosts at Oxford and Cambridge, willingly accepted the idea of larger audiences at the summer meetings, and a start was made at Cambridge in 1960 and Oxford in 1961. There followed immediately the Fifth International Congress of Biochemistry in Moscow in August 1961. By this time, through these various contacts, I was beginning to make good friends with fellow officers in the continental European biochemical societies. My further activities in Society affairs might have stopped at this time because I resigned my position as Meetings Secretary. I had begun to be bored with the routine of setting up each Society meeting, and arranging the printing, and I felt that if boredom was setting in, then I was not serving the Society. At the last Committee Meeting I attended as Meetings Secretary in December 1961, there was on the agenda a proposal that had originated with Young, namely that The Biochemical

Society should appoint a foreign secretary. This was agreed, with the amendment on the suggestion of Henry Arnstein, that the post be called International Secretary. Arnstein in fact became my successor as Meetings Secretary. The suggestion was adopted by the Society at its annual general meeting the following March, and the Committee was kind enough to invite me to occupy this new post, which I gladly accepted because I felt that there was an opportunity here for creativity, in fostering intra-European relations. The summer meeting at Cambridge, to which the continental European biochemists were invited, had already been arranged, and I contacted as many European societies as I was aware of, suggesting that an informal discussion be held during the Cambridge meeting, with the idea of putting intra-European biochemical contacts onto a more established basis. A spur to the idea of more formal contact, and arranging meetings for European biochemists, came from the upcoming venues for the International Congresses of Biochemistry. At that time the congresses were the only open, general meetings available to biochemists and with New York chosen for 1964 and Tokyo for 1967, it would not be until at least 1970 that another IUB Congress could be held in Europe. This was a distinct disadvantage to the younger biochemists.

The informal meeting was held, and I detected a great deal of enthusiasm towards the idea of such collaboration. Memories are hazy now, but I have a firm recollection of the support from Otto Hoffmann-Ostenhof for Austria and Jean Emile Courtois for France.

The stage was now set for an official meeting between representatives of the Societies, and this took place at the Oxford meeting of The Biochemical Society in July 1963, which Robert Thompson, as Secretary General of IUB, also attended to give us his advice, and Robert Harte came from the American Society of Biological Chemists (see Figure 1.1 and footnote on page 17). I had produced draft statutes for this so-far unnamed organization. These were discussed and appropriately modified and augmented, with the agreement that they should be sent to the Societies, to ask whether on this basis they wished to join a European biochemical organization. The tentative name Federation of European Biochemical Societies was assigned and was eventually accepted. The only alternative suggestion came from Campbell, who was advised that some eastern European biochemical societies felt that the description of the organization as a federation was too strong a term, and might not lead to approval by their respective governments, in cases where governmental approval was necessary. I resisted this suggestion because I could already see the convenience of describing the organization as FEBS, and the lesser attraction of AEBS. No trouble on this score was, in fact, ever raised.

Keeping up the initiative of The Biochemical Society in promoting this venture, its Committee was persuaded that its annual meeting for March 1964 at University College London should in fact become the first FEBS Meeting. The Federation itself came into official existence on 1 January 1964 with 17 adhering societies, and at the opening of the first meeting, the Society delegates to the FEBS Council, plus the officers of FEBS, autographed a copy of the statutes (see Figure 1.2 and footnote on page 25).



- |  |   |
|--|---|
| 1 H. Veldstra (The Netherlands)                      | 13 J.E. Courtois (France)                           |
| 2 S. Bergström (Sweden)                              | 14 P.H.S. Thompson (Secretary General IUB)          |
| 3 F. Lundquist (Denmark)                             | 15 H.R.V. Arnstein (Secretary, Biochemical Society) |
| 4 M. Brenner (Switzerland)                           | 16 E.H. Fischer (representing Israel)               |
| 5 W.F.J. Cuthbertson (Treasurer Biochemical society) | 17 T.K. Nikolov (Bulgaria)                          |
| 6 A. Sols (Spain)                                    | 18 P.N. Campbell (Secretary, Biochemical Society)   |
| 7 K. Zakrewski (Poland)                              | 19 V. Nurmikko (Finland)                            |
| 8 W.J. Whelan ((Secretary FEBS)                      | 20 S.F. Gomes da Costa (Portugal)                   |
| 9 F.C. Happold (Great Britain, Chairman FEBS)        | 21 O. Hoffmann-Ostenhoff (Austria)                  |
| 10 S.P. Datta (Treasurer FEBS)                       | 22 C. Liébecq (Belgium)                             |
| 11 S. Mason (Thos. Cook & Son Ltd.)                  | 23 E. Auhagen (Germany)                             |
| 12 S. Moore (Organiser IUB Congress)                 | 24 S. Laland (Norway)                               |

**Figure 1.1** Meeting between representatives of the Societies in July 1963 in Oxford.

The statutes, as worded at that time, provided that the host society would appoint the officers of FEBS for the year in question. Accordingly, Frank Happold, as Chairman of the Biochemical Society's Committee, became the first Chairman of FEBS. I became the Secretary of FEBS and Prakash Datta, the Treasurer. The Biochemical Society has usually held its annual general meetings at University College, where the Society was founded in March 1911. This meant, because



# Federation of European Biochemical Societies

These Statutes were signed at the First Meeting, London, 23 March 1964

## Statutes of The Federation

- 1 Purpose of the Federation**  
The Federation exists to promote the science of Biochemistry, and in particular to encourage close contacts between European biochemists by arranging meetings, exchanging information, and promoting relations between the members of the Constituent Societies.
- 2 Administration and Membership**  
(a) The Federation shall consist of Austria, Belgium, Czechoslovakia, Denmark, France, Germany, Great Britain, Hungary, Italy, The Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, and the Union of Soviet Socialist Republics. All members of the Constituent Societies are also members of the Federation with equal and democratic rights.  
(b) The office of the Federation shall be administered by a Council. The Council may employ a Secretary and a Deputy Secretary.  
(c) Each Constituent Society shall nominate one delegate or a deputy to the Council of the Federation. The delegate shall be supported financially by the Society.  
(d) The Administration of the Federation shall be vested in turn in the Constituent Society which has charge of the arrangements for the next General Meeting of the Federation. The Host Society shall be appointed by a simple majority vote of the Council at the previous General Meeting.  
(e) The Council shall meet at each General Meeting of the Federation and at such other times as may be necessary.  
(f) The Chairman of the Council shall be the delegate of the Host Society, and his Society shall nominate as two or more members of the Council as Secretary and Treasurer respectively. Such ex-officio members shall be without voting powers.  
(g) Any Constituent Society is free to withdraw from the Federation at a meeting of the Council provided notice of such withdrawal has been communicated to the Chairman at least one month before the Council Meeting.
- 3 Meetings of the Federation**  
(a) A General Meeting of the Federation shall be held at least every two years at a place chosen by the Host Society.  
(b) A General Meeting of the Federation shall provide opportunities for the presentation of original communications, demonstrations, and symposia.  
(c) The detailed arrangements for the Meeting shall be at the entire discretion of the Host Society.  
(d) A registration fee shall be charged equally to all societies attending the Federation meeting. The fee will also be open to non-members.  
(e) Any profits arising from the Federation Meeting shall be the property of the Host Society to defray the expenses incurred in administering the Federation.
- 4 Exchange of Information**  
(a) Each Constituent Society shall send to a nominated officer of all other Constituent Societies the same circulars that it sends to its own members.  
(b) It shall be the duty of each Constituent Society to publicize the activities of the other Constituent Societies so as to encourage contacts between biochemists in the different European countries, and to request to circulate in its members' publications of the next Federation Meeting.
- 5 Attendance at Domestic Meetings**  
Any member of the Federation may, on making proper application, be admitted to an open meeting of a Constituent Society when desirable, on the same terms as if he were a member of that Society, although permission to present a paper shall be at the discretion of the Society holding the meeting.
- 6 Date of Inception of the Federation**  
The Federation shall come into being on 1st January 1964.
- 7 Dissolution of the Federation**  
The Federation and its members may be dissolved at any time at a meeting of the Council at which two-thirds of the delegates are present and at which a two-thirds majority of the delegates vote in favour of the proposal. The proposal must be notified to the Constituent Societies at least one month before the Council meeting and shall be signed by at least one-third of the delegates.
- 8 Statutes of the Federation**  
These statutes of the Federation may be amended, deleted, or augmented at any Council meeting by a two-thirds majority vote, provided that at least two-thirds of the delegates are present.
- 9 Address of the Federation**  
The official address of the Federation shall be that of the Secretary of the Federation.

## The Council of the Federation

<b>Austria</b> (Österreichische Biochemische Gesellschaft) Professor O. Hofmann-Göttsch	<b>Germany</b> (Gesellschaft für Physiologische Chemie e.V.) Dr. E. Aulagen	<b>Poland</b> (Polskie Towarzystwo Biochemiczne) Professor K. Zakrzewski
<b>Belgium</b> (Société Belge de Biochimie: Belgische Vereniging voor Biochemie) Professor C. Liégeois	<b>Great Britain</b> (The Biochemical Society) Professor F. C. Haywood, Chairman	<b>Portugal</b> (Sociedade Portuguesa de Bioquímica) Professor S. F. Gomes da Costa
<b>Czechoslovakia</b> (Československá společnost biochemická při Čl. Akademii Věd) Dr. P. J. Mišar	<b>Hungary</b> (Magyar Biokémiai Társaság) Dr. G. Dampai	<b>Spain</b> (Asociación Española de Bioquímica) Professor A. Soto
<b>Denmark</b> Professor F. Lundquist	<b>Italy</b> (Società Italiana di Biochimica) Professor A. Bonaventura	<b>Sweden</b> Professor S. Bergsten
<b>Finland</b> (Societas Biochemica, Biophysica et Microbiologica Fennica) Professor V. Nurmikko	<b>The Netherlands</b> (Nederlandse Vereniging voor Biochemie) Professor H. Velders	<b>Switzerland</b> (Société Suisse de Biochimie: Swiss Society for Biochemistry) Professor M. Brunner
<b>France</b> (Société de Chimie Biologique) Professor J. E. Courvoisier	<b>Norway</b> Professor S. Lahod	SECRETARY: Dr. W. J. Whelan TREASURER: Dr. S. P. Datta
<b>Bulgaria</b> (Société Bulgare de Biochimie) Professor T. T. Nikolov		

Figure 1.2 The Statutes of FEBS as signed by the members of Council on 23 March 1964 in London.

of my previous activities, that I had already established a close collaboration with Datta as the man on the spot for arrangements for meetings at University College. In particular, the 50th Anniversary Meeting of The Biochemical Society at University College in March 1961 had brought us very close together.

The first Council Meeting of FEBS was held in London on Sunday, 22 March 1964, in The National Liberal Club, and I have two distinct memories from that meeting. The first was the very important decision to drop the word 'national' from the phrase 'national societies', which I had written into the original statutes as a description of the proposed members of FEBS. This was done at the suggestion of the biochemists from the GDR and GFR and was designed to eliminate any political or territorial considerations. The members of FEBS would simply be the societies, and in turn the society members. The other recollection is of E.H. Fischer, recently returned from a visit to Israel, and delegated by the Israel Biochemical Society to present an application to join FEBS, being unable to persuade the Council that Israel was part of Europe.

The meeting itself was highly successful in terms of attendance. We had thought that a print of 1000 for the programmes and abstracts would be more than adequate, but in fact the number of those attending slightly exceeded this figure. Fred Sanger arranged a symposium entitled 'Structure and Activity of Enzymes', which was subsequently published as FEBS Symposium No. 1, edited by T.W. Goodwin, J.I. Harris and B.S. Hartley, and has, I believe, been the best seller of all FEBS Symposia. The speakers were truly international, coming from Britain, France, Hungary, Czechoslovakia, The Netherlands, Sweden, Italy and the United States. The only disappointment was that Sanger was stricken by influenza and unable to see the fruits of his handiwork. It is also a matter of very pleasant record that the first paper ever read at a FEBS Meeting was delivered by Feodor Lynen. The European flavour was further enhanced by Edgar Lederer delivering The Biochemical Society's Hopkins' Memorial Lecture during the meeting.

Someone who should be remembered from the early days is David Thomas, honorary consultant in typography to University College. He left his imprint on FEBS by designing the layout of the program of the first meeting, the charter flight



Figure 1.3 Keir, Campbell and Arnstein.



Figure 1.4 The first FEBS Logo.

brochures, the Bulletin, and the cover of the *European Journal of Biochemistry*. The familiar FEBS logo was his creation.

In the beginning, FEBS was founded only with the idea that the Societies might come together to hold regular meetings. There was even some doubt whether the meetings would be annual or biennial. For the further growth of FEBS, it was a happy coincidence that the Sixth International Congress of Biochemistry was taking place in New York in August 1964. I had developed an interest in organizing reduced rate travel when helping British biochemists attend the Moscow IUB congress and the joint meetings with sister societies in Europe. The upcoming New York Congress was an even bigger opportunity and I was already planning charter flights for members of the British Society. FEBS had come into existence just in time to qualify as a charter organizer. Wearing my FEBS hat, I transferred the arrangements from the British Society to FEBS, and persuaded the French biochemists, who were organizing their own charter, to do likewise. This allowed us to open the charters to all biochemists who were members of FEBS Societies. Societies whose membership was too small to justify an economical charter could now offer this to their members via FEBS, and in the event three charters were organized from London and one from Paris. By deliberate arrangement, biochemists from different countries sat next to each other on the aircraft, as a further means of developing intra-European contact on an individual basis. I have two particular memories of these charters. One was of receiving a phone call from Theodor Bücher's secretary in Munich, asking for a seat on one of the aircraft. I had a vague idea that Bücher was somewhat influential in biochemistry in the GFR, and as part of the process of making contact I put him in a first-class seat next to Campbell. The contact that he then made with FEBS was perhaps to be significant in terms of later developments, which will be recounted. The other memory is of a rivalry between BOAC and Air France over the degree of hospitality to be accorded to charter passengers, which led to two of the BOAC charter planes returning to London being loaded to the roof with champagne. Lynen, one of the passengers, was highly appreciative of this gesture and took full advantage of it. He was subsequently photographed in a somewhat dazed state, on the tarmac at London Airport by Hugo Theorell. When Lynen's Nobel Prize was announced the following November, it was this photograph that Theorell gave to the waiting reporters, and which was to appear in the press and on television.

An informal Council meeting of FEBS was held in New York, at which came the beginnings of ideas other than simply holding meetings. I suggested that FEBS might issue a news bulletin, listing meetings and other types of announcement with which we are now familiar. This was agreed and the first bulletin was produced in time for distribution at the second FEBS Meeting in Vienna in April 1965.

I attended this second Council meeting no longer as an officer of FEBS. The officers were now, according to the statutes, appointed by the Austrian Society, and Hoffmann-Ostenhof was the Chairman. This was a memorable meeting. Three suggestions were made which have become permanent features of the FEBS scene. Arnstein proposed that FEBS should organize summer schools. He became, on this account, the summer schools' organizer and in turn persuaded Christian de Duve to hold the first such activity in Louvain in the summer of 1965. Pointing out that FEBS could do many more things than simply organize meetings, I suggested that officers might be appointed on a more permanent basis than had earlier been envisaged, and that while the Chairman of FEBS should be appointed each year by the host society for the meeting, there should be a secretary, not necessarily associated with the host society, who would act on a longer term basis and deal with activities other than the meetings. A second suggestion was that FEBS might venture into the field of publication. I had particularly in mind something along the lines of *Biochemical and Biophysical Research Communications*, which seemed a first-rate innovative idea with scope for imitation. Sub-committees were set up to consider both ideas and at the third Council meeting, held at the end of the week, I accepted the invitation to become the Secretary General of FEBS for a three-year period. The idea of a journal publication was referred to a sub-committee.

With the Bulletin and Summer Schools already augmenting FEBS activities, the stage was now set for the next development, that of publication. I should inject here the great pleasure I personally felt at the keenness of individual societies to invite FEBS to hold a meeting in their country, and a long list of invitations was quickly built up.

FEBS did not have the funds with which to meet the expenses of convening a meeting of the sub-committee, but by various acts of individual enterprise, six members eventually met in Courtois's office in Paris in November 1965. These were Courtois, Hoffmann-Ostenhof, Uriel Littauer, Claude Liebecq, Pavao Milner and myself. Peter Reichard could not attend but sent his views. Littauer had been sent by the Israel Biochemical Society to the Vienna meeting to renew the application for membership, and his powerful advocacy convinced FEBS, where conviction had been lacking the year before, that Israel was part of Europe.

The sub-committee made a recommendation, but not the proposal I had originally put forward. The majority opinion was that if a journal was to be launched, it should be of the conventional type, publishing the customary extended reports. We chose not to wait for the next Council meeting to approve the idea, but instead drew up a specification for the journal and sent it to various publishers, asking for their interest. We received a number of encouraging replies and were particularly impressed by the North-Holland Publishing Company, who was then developing



**Figure 1.5 and 1.1.6.** Delegates of FEBS departing for an informal meeting in New York July 1964.

their rapid photo-offset process. Also at this time, I had decided to propose to FEBS that a treasurer should be appointed. While we did not have much income by way of society dues, if we were to go into the field of publication, there would be a lot of financial matters to handle. I could think of no one more suitable than Datta, who had performed this task for the first FEBS meeting and I already involved him informally in FEBS prior to the Council meeting in Warsaw, at which his name would be proposed, by taking him with Liébecq and me to Amsterdam to talk to North-Holland about the journal. This brought us in contact with the dynamic Bart van Tongeren of North-Holland, a most pregnant meeting.

The early years of FEBS were marked by a succession of happy coincidences. The coincidence that now comes to mind is of Bücher being invited to lecture at the Middlesex Hospital, and my receiving a message that he would like to talk to me during his visit to London. I agreed and roped in Arnstein and 'Cuth'

Cuthbertson, the Treasurer of The Biochemical Society. During a convivial evening Bücher explained that he had become the President of the Gesellschaft für Physiologische Chemie, and was keenly interested in sponsoring cooperation of the type for which FEBS had been designed. Specifically, he wished to propose that instead of FEBS founding a new journal, he would use his best efforts to persuade his Society in turn to persuade Springer-Verlag to agree to convert the *Biochemische Zeitschrift* into the FEBS journal. I was delighted by this proposal for it seemed to me that we should not be in the business of creating new journals of the conventional type, and enlarging already numerous activities, but rather that we should become associated with an existing journal. Secretly I had hoped that the British Biochemical Society might have made this proposal in relation to the *Biochemical Journal*. The meeting with Bücher occurred in March 1966, and at the Council meeting in Poland the following month, the alternatives were proposed of founding a new journal, or of accepting Bücher's suggestion regarding the *Biochemische Zeitschrift*. It was the second suggestion that was adopted and the officers were empowered to negotiate with Springer-Verlag. At the same meeting the proposal for Datta to become the Treasurer was also accepted. Events then moved very rapidly. The negotiators for FEBS were Whelan, Datta, Liébecq and Hoffmann-Ostenhof, assisted by Bücher and Otto Westphal. At an initial meeting in Heidelberg, we came in contact with the kindly, understanding Dr. H. Mayer-Kaup of Springer-Verlag. Also at this first meeting was a representative of the *Hoppe-Seyler Zeitschrift*, because an early idea was that both journals might merge into the FEBS journal. This was not to be. It was decided that it would be good to retain a German language journal in the form of *Hoppe-Seyler*, with the *Biochemische Zeitschrift* becoming the truly international FEBS journal. There was a second meeting in Heidelberg, notable for me by Liébecq's hair-raising driving between Frankfurt airport and Heidelberg. Subsequently meetings were held between Datta, Whelan, Liébecq and Hoffmann-Ostenhof in Brussels, and with Mayer-Kaup in a hotel room at London airport, at which a contract was agreed. Liébecq was already appointed as Editor-in-Chief; Krebs became Honorary Chairman of the Editorial Board, and the rest is history.

I conclude with an account of my final year with FEBS before I left Britain in September 1967 to take up my present post at the University of Miami. The FEBS charter operation was again repeated for the Seventh International Congress of Biochemistry in Tokyo, with the added innovation that for the return journey there would not be a charter operation, but returning biochemists could travel by the normal service of the airline that had taken them to Tokyo by charter, and with unlimited stop-offs, so that full advantage of the return through the Far East could be had.

I decided to raise again the question of FEBS publishing a *BBRC-like* journal and there were two more happy coincidences to follow. One was that in June 1967 Bücher had invited me to Munich, to lecture to his medical students. On this visit I discussed the idea of the new journal with Bücher, and found him very enthusiastic. Part of his motivation seemed to stem from one of his colleagues having

had a paper rejected by *BBRC*. Bücher felt that it was time for competition. The second coincidence was that Bernard Horecker had been spending the summer in Stockholm, and I took advantage of this to invite him to be a chairman at a symposium that I was organizing as part of the Fourth FEBS Meeting in Oslo. Horecker was, and is, the Chairman of the Editorial Board of *BBRC*. The idea of the journal was proposed at a meeting of the FEBS Publications Sub-committee held prior to the first of the two Council meetings, and it was immediately evident that there was strong opposition. Nevertheless, it was presented to the Council, but because of similar divided opinions it was referred back to the Publications Sub-committee. There were three principal arguments against such a journal. The first was that it would not be possible to recruit an editorial board. The second was that there was not a market for such a journal. The third came from people who felt that short communications are ephemeral and simply overburden the literature, later being replaced by full reports. I felt a compulsion to try to secure approval of the proposal during that meeting. If I did not do so then I would lose any influence that I had, because I was resigning as Secretary-General prior to leaving for Miami. On this basis, therefore, answers to the main lines of opposition had to be found immediately. The answer to the first question was had by using all one's powers of persuasion on prominent European biochemists who were at the Oslo meeting, asking if they would join the editorial board of the new journal, for which a name was already to hand – *FEBS Letters*. It was on this basis that the first editorial board came into being. I believe that every member of the board except Sydney Cohen and Boja Keil was someone who was at Oslo and who agreed to join on the spot, notably Krebs and Sanger. The next question, whether there was a market for such a journal, was answered by the fortunate presence of Horecker. He informed us that *BBRC* had been so successful that the editorial board was thinking of launching a companion journal, with the subject matter being divided between molecular biology on the one hand and biochemistry on the other. Horecker, on hearing our suggestion, said he would rather see a second such journal, the need for which he and his editorial board were already convinced of, started by a separate organization. Then there would not be a monopoly in the hands of one organization, but there would be competition and innovation. What we realized from this news was that if *FEES Letters* was not founded then and there, the potential market would become saturated by *BBRC* itself dividing into two journals. Obviously, this gave additional impetus to try to launch *FEBS Letters*.

The third argument raised against *FEBS Letters*, namely that the contents would be ephemeral, in fact proved to be a very positive helpful influence in shaping policy. As a result of discussions with the projected editorial board, it was agreed that it would be the policy of *FEBS Letters* that although its contents would consist of short communications with rapid publication, the board would insist that these were to be publications in a final form, not to be republished elsewhere. A meeting of the Publications Sub-committee was hurriedly summoned, to inform them of developments, and with one dissenting member they agreed to support the proposal at the Council meeting on the next day.

A truly memorable discussion took place at that Council meeting. The opposition was still there, but less evident now. Bücher was a powerful protagonist, making the point that the journal could be brought into existence without FEBS being involved, but that the editorial board, willing to serve the journal, was in fact making a marriage proposal to FEBS, with *FEBS Letters* as the present from the bridegroom to the bride. However, the issue could still not be resolved, but the impasse was broken by Arnstein's suggestion that the proposal be referred to each of the individual Societies for a vote, using the argument that the Societies had not been able to consider the proposal and therefore that the delegates to the Council meeting did not have instructions. This was accepted, and it was agreed that unofficial approaches could be made to publishers to see whether, in fact, anyone was willing to put the capital into such a journal, because FEBS itself had no capital.

Immediately after the meeting, several publishers were approached with the idea that news could be brought to an unofficial meeting of FEBS Council delegates during the Tokyo Congress the next month. Despite our contacting four publishers, there was an inevitability that the photo-offset process, so expertly developed by North-Holland, was ideal for the rapid publication envisaged for *FEBS Letters*. The publishers' responses were brought to the meeting in Tokyo. The Societies had already been asked for their votes, and while some were negative, a clear positive majority vote was obtained. Datta, who had thrown all his weight behind the proposal, became the Managing Editor, and the first issue of *FEBS Letters* appeared in July 1968. I shall always be grateful to Datta that the paper I had submitted for this first issue, along with my colleagues Brenda Ryman and Norman Palmer, was inserted by him as the first paper to be published in that journal.

Looking back on those early, heady, first years of FEBS, two thoughts come to mind. The first is that of my good fortune in having had the opportunity to share in these memorable experiences. While I may have been propelled into a catalytic role in the founding of FEBS, I stay away from any idea of originality on my part. It was clear, from the first time that the idea of FEBS was mooted, that all that was required was the activation energy. The forces for collaboration were already there and the idea of such a European organization was developing in everybody's mind. FEBS also became the model for sister organizations; PAABS, in the Americas, and FAOB in Asia and Oceania. These three organizations now work closely with the International Union of Biochemistry and greatly assist IUB for the reason that the Union's contacts with individual biochemists are only possible via the societies. The regional organizations link IUB with the societies.

The second thought is that while I have related a succession of what I have called happy coincidences, the happy coincidence that towers above all other was that of my getting to know Prakash Datta and realizing what he might be able to do for FEBS. That, and his insatiable energy and enthusiasm, have been responsible more than any other single factor or person for the outstanding success of FEBS. The staggeringly successful financial fortunes that have come about through the journal publications are the result of Datta's astute management, and the way in which his engaging personality has made friends of everybody. As Treasurer, Managing



Editor of *FEBS Letters*, Publisher of the *FEBS Bulletin*, and innovator in so many directions, he has truly become Mr FEBS, and long may he so continue.

Miami, 13 December 1973

*FEBS LETTERS (1974) vol. 40 suppl., S154–S159*

## 1.2

### The First Ten Years of FEBS (1964–1973): Retrospect and Prospect



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A decade is, of course, too short a period for a thorough assessment of the significance and achievements of an organization like FEBS and in any case such a study should be undertaken by someone not too closely involved in its day to day affairs and therefore able to take a detached view. The 10th anniversary of FEBS is, however, an appropriate occasion to review its present activities and to discuss future developments. Looking back at the time immediately preceding the foundation of FEBS, I still remember vividly the enthusiasm which was generated everywhere by the idea of setting up an organization to promote co-operation among European biochemists. The time was clearly opportune for the initiative taken by **W.J. Whelan** in arranging first the preparatory meeting of delegates in Oxford in July 1963 and then the first Council meeting in London on 22 March 1964. As Meetings Secretary of The Biochemical Society I was not at that time actively involved in FEBS affairs though I attended various meetings as an observer. It was a unique opportunity to watch an international scientific organization take shape at an incredible pace under the dynamic influence of Bill Whelan who seemed to have in great measure the indispensable gift of obtaining agreement on a number of important ideas and proposals concerning FEBS activities, as well as insuring that decisions once made would be implemented efficiently. The fact that within three years of the foundation of FEBS it was possible to publish two major biochemical journals gives a good indication of the pace at which new developments were being carried out. What is perhaps equally remarkable is that at that time FEBS had practically no financial resources of its own and indeed in the original statutes there is no mention of any membership subscription or other funds to be used for running the Federation. Since it was originally planned that the Federation would be administered in turn by the different constituting societies responsible for organizing the FEBS meetings it was envisaged that any profits accruing from the annual FEBS meeting would be used by the host society to defray the administrative expenses. With the acceptance at the second Council meeting of a proposal to appoint a Secretary-General, and later a Treasurer, for a three-year term of office, a somewhat more permanent administration came into being and it was decided that constituent societies would pay a membership fee

on the basis of 5p/member, which was increased to 10p in 1967. The total income of FEBS from this source was, however, still less than 1,000 pounds, a very modest sum for an organization soon to encompass essentially the whole of Europe.



*Claude Liébecq*

Whilst Bill Whelan was heavily engaged in setting up the initial FEBS organisation and discussing the arrangement for publishing the *European Journal of Biochemistry*, I mentioned to him one day a proposal that FEBS should organize summer schools, which might serve not only to give advanced instruction in new techniques and other developments but also to bring together young biochemists from all over Europe and thus encourage future co-operation. Without hesitation he thought this seemed a good idea and that I could get on with it. The suggestion was, therefore, considered further at an informal meeting of FEBS delegates in New York in July 1964 and subsequently approved at the Vienna meeting in April 1965. In New York it was suggested that Christian de Duve should be asked to organise the first course in Louvain and I think it was **Claude Liébecq** who offered to make the initial approach. Since FEBS had no funds to support such a venture it was evident that each school would have to be financially self-supporting. In retrospect it seems to me that it was slightly crazy to start a new activity of this kind without any financial backing, but such was the momentum of FEBS and goodwill of the organizers that the idea of a school not succeeding and giving rise to a serious deficit simply did not loom very large in our discussions. In fact, the first summer school was held on 8–18 June 1965, which is less than a year after the proposal was first made.

It became my task, as Chairman of the newly set up FEBS Summer Schools Committee, to seek financial support and it is a pleasure to acknowledge the helpful response of a number of individuals and organisations. Through the good offices of Dr. A. Kepes in Paris ICRO was persuaded to make a substantial financial contribution to the cost of the Louvain course. Later, support was received from EMBO for several summer schools including a course in Uppsala on “The separation and fractionation of macromolecules and particles”, which is still held, though now entirely under the auspices of EMBO. Other organizations, which supported early summer schools, included the British Council, the Royal Society and the Council of Europe.



*Peter Campbell*

Although all these contributions were very welcome, and indeed of great importance, it was time-consuming to negotiate financial support separately for each course. Moreover, usually course organizers had to start planning the programme without knowing whether FEBS would be able to obtain any funds. Sometimes course organizers themselves were able to negotiate local financial support, but the burden of being responsible for both the scientific and the financial organization was more than one could continue to ask of organizers. I should like, however,

to acknowledge their willingness to help FEBS in this way. By the time I succeeded Bill Whelan as Secretary General in 1967 and Peter Campbell became Chairman of the Summer School Committee there was the expectation that one day FEBS would have an independent income from its publications. Council readily agreed in principle that some of these funds would be allocated to the summer schools programme, but it was clear that the immediate problem could not be solved in this way. Fortunately, with the help of Theodor Bücher and Otto Westphal a successful approach was made to the Volkswagenstiftung who generously provided a grant of DM 50,000 in 1968 and subsequently a further grant of DM 100,000, which successfully bridged the gap until it became possible to provide support from FEBS funds.

Under **Peter Campbell's** chairmanship of the Summer Schools Committee the number of summer schools increased from each two in 1966 and 1967 to usually four per year. In addition, at his suggestion summer schools were renamed advanced courses, mainly because this description indicated more clearly that the courses were meant to be for postdoctoral biochemists and intending participants would thus find it easier to obtain travel grants from universities and other institutions. A second, though more trivial point was that in fact some courses had been held during winter months and, except for the poetic view of an eternal FEBS summer, the new name would therefore be more appropriate.



Max Gruber

In 1971, **Max Gruber** became chairman of the Advanced Courses Committee and continued to arrange a very successful programme. Many different topics have been covered by the 26 courses that have been held since the beginning of the scheme and altogether several hundred biochemists from all FEBS countries have taken part. Now that FEBS has an independent income from *FEBS Letters* and the *European Journal of Biochemistry* it has been possible not only to subsidize advanced courses, but also to set up a FEBS Youth Travel Fund

which provides individual grants to young biochemists to help meet the ever-increasing travelling costs. It was inevitable that the initial burst of activity in setting up FEBS and organizing the various major undertakings in the fields of charter travel, meetings, publications and summer schools would be followed by a period during which these activities would need to be fully developed and become firmly established. Although the second half of the first decade may thus be regarded as a time of consolidation, a number of new developments have in fact taken place during these years. Thus, a hospitality scheme for visit by children of members and the exchange of houses or apartments for a limited period was started in 1967. A scheme for exchanging laboratory protocols was originally organized by R. Crokaert in 1969 and again in 1972 and is now being continued by IUB under the aegis of Biochemical Education. More recently, an experimental scheme for the exchange of information on the teaching of biochemistry at the graduate level has been initiated by Giorgio Semenza at the *Eidgenössische Technische Hochschule, Zürich*.

A number of developments that have been made possible through the generosity of various benefactors deserve special mention. A donation from the Lord Rank Research Centre has been used to finance the Sir Hans Krebs Lecture that has been given since 1968 as one of the plenary lectures at the annual FEBS meetings. More recently, the publishers of the European Journal of Biochemistry, Springer-Verlag, have endowed an annual FEBS-Ferdinand Springer Lecture. Under this scheme, the lecturer visits at least two different FEBS countries, local arrangements for the lecture tour being the responsibility of the host society. Lastly, as from this year generous support from Eppendorf Gerätebau Netheler & Hinz GmbH and Boehringer Mannheim GmbH will enable FEBS to award Anniversary Prizes to two symposium contributors at annual FEBS meetings.

Of the major activities the regular FEBS meetings continue to provide the main opportunity for European biochemists to get together. In general, they have followed the established pattern but their size has been increasing steadily, and they are now as large as early International Congresses. Although it has been FEBS policy not to arrange the annual FEBS meetings in a year when an IUB Congress is held in Europe, a special FEBS meeting on Industrial Aspects of Biochemistry was organized in Dublin last year as an experiment. This was a smaller and more specialized meeting and its success may encourage other similar meetings.

The host societies continue to have sole responsibility for organizing the annual meetings. This seems to me a highly desirable arrangement since local conditions vary so much that it is conceivable that any central organization could do the job, unless the meetings were to be held in the same one or two places year after year. The suggestion has been made that this would be efficient and reduce the vast amount of preparatory work that is now done by the organizing committee of the host society. A major disadvantage, however, would be that such an arrangement would give rise to a stereotyped kind of meeting whereas one of the most stimulating aspects of the present system is the diversity of places where FEBS meetings have been or will be held and the freshness and enthusiasm with which each one is organized.

When one considers the size of the FEBS meetings and all the problems involved in their organization it is remarkable how few serious difficulties there have been. Even though we live in troubled times the only occasion when a FEBS meeting came near to being in jeopardy was in 1969 when some of the universities in Spain were closed and the question was raised whether the meeting in Madrid should be held as planned. In the event, the meeting took place and was most successful. I believe the experience of dealing with this crisis ultimately strengthened FEBS and incidentally established useful general criteria for judging the practicability of holding international meetings in delicate political conditions (see *Nature* 1969, **221**: 794).

As regards the publication of symposia arising from meetings, it was reaffirmed in 1972 that each society was free to make its own arrangements with publishers. Although the possibility of FEBS setting up its own publishing house has been discussed, there seems to be little advantage at present pursuing this idea, particularly in view of the difficulties experienced by many scientific periodicals in

maintaining their circulation. Indeed, considering these circumstances it is clear that both the *European Journal of Biochemistry* and *FEBS Letters* have done exceptionally well to become established as major biochemical journals during difficult times and their editors deserve the highest praise for the success of their efforts. A recent development has been the publication last year of an *Index of Biochemical Reviews* as a special *FEBS Letters* supplement and it is hoped that this will be continued annually.

Mention should also be made here of the FEBS Bulletin produced twice yearly by Prakash Datta, who incidentally also prepares the Information Sheet now under IUB auspices. These publications are significant, for together with the circulars from the FEBS officers they provide important channels of communication with FEBS societies and through them with individual members.

Over the years, relations with several other international bodies have steadily improved and there is now excellent co-operation between FEBS, IUB and PAABS. Also, FEBS is represented on the board of the European Cell Biology Organization (ECBO) and contact has been made with the newly created Federation of Asian and Oceanic Biochemists (FAOB). There is no doubt that effective collaboration between the various international organizations interested in biochemistry and allied fields is highly desirable. An important step in this direction would be to establish closer co-operation with the European Molecular Biology Organization (EMBO), with which in the past there has only been sporadic contact.

As the time goes on and FEBS activities expand, the administrative burden will inevitably increase. At the moment, a small Executive Committee consisting of six officers has overall responsibility for FEBS between Council meetings, but the various activities I have described are organized on a decentralized basis. These arrangements have the advantage of being highly flexible and keeping the administration costs extremely low. Whereas a permanent FEBS secretariat might be convenient, it would be expensive and not necessarily more efficient. For these reasons, I think it would be a mistake to set up a permanent office but provision should be made in future for increased secretarial assistance to individual officers.

At one time there was some criticism that a small Executive Committee is inevitably not fully representative. A proposal to increase the membership to eight by the election of two additional members by FEBS Council was informally discussed, but subsequently not pursued. In my opinion, such a development would have many advantages, not least the opportunity of giving more people experience of organising some of the FEBS activities whilst at the time relieving the officers of a certain amount of the administrative work.

By the end of the first decade, nearly all of the European biochemical societies, consisting of some 18,000 biochemists, have become members of FEBS, the last to join being Iceland. The present Statutes were adopted at the tenth Council meeting in Zürich in 1970 after a number of alterations during the early years. At the same time, the tax position of FEBS was satisfactorily sorted out and the objects of FEBS are now officially recognized as scientific and non-profit making. For better or for worse the innocence of the original statutes concerning financial matters has disappeared and a central fund, composed of membership fees, royalties and other

income is defined in Statute 6. Even so the Statutes remain but ten in number, and are brief as well as simple. FEBS has not succumbed to bureaucracy and its objects remain unchanged, namely “to advance research and education in the science of biochemistry ... to hold and arrange instructional courses ... to facilitate the exchange of scientific information between biochemists generally and especially European biochemists by holding of meetings and discussions and by other appropriate means”.

Much progress has been made towards achieving these objects, but I think that there is room for improvement. Thus there is still relatively little contact with some societies and the extent to which different constituent societies are keen to play an active part in FEBS varies greatly. It would be helpful if societies would suggest ideas more often, for example for advanced courses or other activities.

The past ten years do not appear to have diminished the need for FEBS nor has the original enthusiasm vanished. As an organization it is now firmly established and widely respected and the future prospects are bright.

Throughout the time I have been associated with FEBS, Prakash Datta has been a constant source of strength with his tremendous keenness and wise counsel. FEBS is indeed fortunate in having him as treasurer. For me, personally, the years in FEBS have been exhilarating and enjoyable, above all because of the opportunities of meeting and working with so many colleagues, from all the different societies, whose friendship I shall always value highly.

London, 5 February 1974

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Footnote to Figures 1.1 and 1.2

**Figure 1.1:** The photo was taken on the occasion of a meeting between representatives of the prospective FEBS Societies, and this took place at the Oxford meeting of The Biochemical Society in July 1963. A number of personalities, more or less involved in FEBS founding, were present. Some of the prospective Societies were not represented (e.g., Italy, Czechoslovakia, ...); Israel was represented by E.H. Fischer but not accepted from the beginning. In his article in ‘Comprehensive Biochemistry’, vol. 42, U.Z. Littauer mentions that at the FEBS Meeting in 1965 Israel was accepted full member of FEBS, after FEBS had been renamed “Federation of Biochemical Societies in the European Area” in order to meet earlier objections that Israel is not a European country.

**Figure 1.2:** This shows the Statutes of the Federation, signed by 18 delegates on 23 March 1964 in London. The list of Member Societies (Council of the Federation) names 18 countries, too; the representative of Bulgaria (T.T. Nikolov) added in hand-writing. As I remember, there is ample correspondence in FEBS archive, which documents that within the  $\frac{3}{4}$  years following the first meeting in Oxford this final list was set up.

It is quite difficult to attribute the signatures to the people, but Nikolov’s must be in, probably between Lundquist from Denmark and Nurmikko from Finland—the Cyrillic T.T. looks like our hand-written M.M. (The Italians probably sent another representative instead of Bonsignore).



## 2

## FEBS - From the End of the 20<sup>th</sup> into the 21<sup>st</sup> Century

### 2.1

#### FEBS, the First Twenty Years (1964–1984)



*M. Yomtov and G. Dirheimer*  
*Former Secretaries General of FEBS*

One of the most important annual scientific events for biochemists in Europe is the Meeting of the Federation of European Biochemical Societies. This year's 16th full FEBS Meeting coincides with the 20th Anniversary of the Federation's foundation (FEBS Meetings are not held when there is an IUB Congress). Since FEBS Members are scientists and dedicated to higher things they seldom read FEBS circulars, minutes of Council Meetings and know little about the history, statutes, rules, and activities of FEBS, this article will, we hope, fill a gap.

FEBS was conceived in 1963 when a group of biochemists eager to further intra-European cooperation met on the initiative of The Biochemical Society (of the United Kingdom) during its Oxford meeting. W.J. Whelan had prepared draft Statutes which, appropriately modified and augmented, were sent to the European biochemical societies with an invitation to join a European biochemical organization tentatively named Federation of European Biochemical Societies.

The Annual General Meeting of the Biochemical Society in London in 1964 in fact became the first FEBS Meeting. The Federation itself came into official existence on 1 January 1964 and it consisted of 17 Constituent Societies. As provided for by the Statutes, the Host Society at that time appointed the officers of FEBS for the corresponding year. Its first chairman was F.C. Happold, W.J. Whelan was its Secretary-General and S.P. Datta its Treasurer. The first Council Meeting was held in London, on Sunday 22 March 1964, at the National Liberal Club. The London Meeting was the first of a succession of full and special FEBS Meetings and gave the Federation a good start.



According to the Statutes the aims of FEBS are to advance research and education in the science of Biochemistry and to publish, or arrange the publication of, the results of biochemical research and other information tending to advance Biochemistry. To these ends the Federation at first intended only to hold regular (annual or biannual) Meetings but soon new initiatives were proposed and adopted and now FEBS is committed to the following range of activities.

### **Meetings**

FEBS holds a *full Meeting* every year in which the International Union of Biochemistry does not organize a Congress. In the years in which an IBU Congress takes place outside Europe FEBS organizes a *Special Meeting* with a restricted programme. No Meeting is normally held when an IUB Congress takes place in Europe.

The financial arrangements for a FEBS Meeting and its organization are the responsibility of the Host Society. In some instances FEBS helps by lending money to the Host Society or by giving a guarantee against loss but in these cases it requires to be acquainted with the budget of the Meeting.

In order to facilitate the work of the Meeting organizers, and to pass on the experience of former organizers, the office of the Meetings Counsellor was created in 1978. S.G. van den Berg is the first holder of this office and has contributed greatly to the smooth running of Meetings.

The question as to whether it is worthwhile organizing such large and broad meetings as FEBS Meetings have become raised in, and discussed, by Council. The general opinion that emerged was that FEBS Meetings should continue to be held since they were thought to be very useful, especially for young biochemists. FEBS Meetings often provide the only opportunity for young people to present their results to, and discuss them with, a broad audience of specialists and also to meet outstanding scientists. FEBS Meetings are conducted in a friendly and congenial atmosphere and lead to lasting scientific and human relationships.

### **Advanced Courses and Lecture Tours**

The idea that FEBS should organize Advanced Courses originated from H.R.V. Arnstein during the second Council Meeting in Vienna in 1965. He proposed sponsoring summer schools and a committee was formed under his chairmanship to look after their organization. C. de Duve was persuaded to run the first such school on 'Centrifugal Fractionation of Animal Cells; Theoretical Basis and Practical Procedures' in Louvain. Gradually the Committee broadened its activities and began also to sponsor symposia, workshops, round-table discussions, etc. and the summer schools were renamed Advanced Courses (since some of them were held in winter!). Arnstein chaired the committee for the period 1965–1967, followed by P.N. Campbell (1967–1970), and M. Gruber (1970–1977). After 1977, under the chairmanship of G. Bernardi, the Advanced Courses Committee increased its activities and adopted a new policy – to sponsor almost exclusively events of educational value and to refuse to fund symposia and other types of meetings beneficial mainly to well-established scientists. The new policy underlines the concern

felt by FEBS for young biochemists, who alone are entitled to grants from FEBS Youth Travel Fund to attend FEBS Advanced Courses, of which about one hundred have been successfully held up to the present time.

The Committee also sponsors and organizes *Lecture Tours* by prominent scientists, both from within and outside Europe, who visit different 'FEBS' countries, where, besides giving lectures, they visit laboratories for discussions and consultations.

### **Publications**

The first publication issued on behalf of FEBS was the volume of *Abstracts* of the first FEBS Meeting in 1964. Since then volumes of Abstracts have been issued by the organizers of all subsequent meetings.

In the early years it was traditional to publish the proceedings of *Symposia* held during FEBS Meetings. The first, entitled 'Structure and Activity of Enzymes', was edited by T.W. Goodwin, J.I. Harris, and B.S. Hartley and published by the Academic Press Inc. (London) in 1964; it immediately sold out. Since then 70 volumes have appeared with varying success. The reluctance of some invited speakers to provide manuscripts and the proliferation of volumes on the topics of many symposia has in recent years inhibited Host Societies from publishing the Symposia they have organized. Nevertheless Council has reiterated its view that the proceedings of selected and timely Symposia are useful and should still be published.

The *FEBS Bulletin*, listing meetings and other announcements of interest to members of FEBS was started in 1965 by W.J. Whelan and is supplied through the Constituent Societies.

FEBS is proud of the two major biochemical journals that it edits, these are:

*European Journal of Biochemistry*, of which C. Liébecq has been the Editor-in-Chief since it first appeared in 1967; it is published on behalf of FEBS by Springer-Verlag. The journal contains original papers on fundamental aspects of biochemistry and molecular biology and on new methods and concepts applicable to biochemical problems.

*FEBS Letters* is a journal for the rapid publication of short, essentially complete papers. Its first issue appeared in 1968 and S.P. Datta has been Managing Editor since then; it is published on behalf of FEBS by Elsevier Science Publishers.

Both journals have a high reputation and are considered to be among the leading biochemical journals in the world. It is important to note that they are financially very beneficial to FEBS; the income from them supports the larger part of the activities of FEBS.

All FEBS publications are supervised by the Publications Committee, the chairmen of which have been C. Liébecq (1966–72), B.G. Malmström (1972–74), S. Rapoport (1975–77), T.W. Goodwin (1978–83), and U.Z. Littauer (1984–1989).

### **Fellowships**

The FEBS Fellowships programme started in 1979. Fellowships are to support usually short-term visits (up to three months) by members of any FEBS Constituent Society to laboratories in another 'FEBS' country for the purpose of

carrying out experiments with special techniques or other forms of scientific collaboration or advanced training, and especially to support developments arising at short notice. The Fellowships Officer, who in 1984 was C. Gancedo, administers the programme. The first Fellowships Officer was G. Dirheimer (1979–83) under whom the programme got off to a good start and became very successful. In the course of five years 200 fellowships were granted out of 298 requested.

All 'FEBS' countries, except Iceland, have received or sent fellows, or both. Three fellowships were given to people not from a 'FEBS' country, two from Tunisia and one from Jordan. Most fellows have been young scientists with a PhD degree and they have been very appreciative in their reports and grateful for the opportunity their fellowship gave them.

In 1983 Council decided that fellowships should not be awarded to undergraduate students or those just starting research (a PhD degree or a publication in a major journal is a prerequisite), nor are senior scientists eligible.

### **Awards**

The organizing committee of every FEBS Meeting since 1968 has had the pleasant though sometimes the quite difficult task of selecting the *Sir Hans Krebs Lecturer*. Thanks to a gift from the Lord Rank Research Centre, FEBS is able to invite a distinguished scientist to give a plenary lecture at each FEBS Meeting and the lecturer receives the Sir Hans Krebs Medal. The first recipient of this award was M.F. Perutz whose lecture was entitled 'X-Ray Analysis, Structure and Function of Enzymes'.

Every two years the Executive Committee awards *Diplômes d'Honneur* to biochemists who have been particularly involved in FEBS activities.

A committee especially appointed by Council normally awards two prizes each year to persons under the age of 40 years, selected from among the invited speakers at a FEBS Meeting, for their outstanding achievements in the field of Biochemistry. These prizes, known as *FEBS Anniversary Prizes of the Gesellschaft für Biologische Chemie* are provided from the interest on a generous capital donation from *Boehringer Mannheim GmbH* and *Eppendorf Gerätebau Netheler und Hinz GmbH*.

All FEBS activities are supervised by *Council*, which is composed of one delegate from each Constituent Society and the members of the Executive Committee. Council meets during every full FEBS Meeting and on other occasions, when necessary. Between meetings of Council the administration is vested in the *Executive Committee* which is composed of the Chairman (of Council), Immediate Past Chairman, Secretary General, Treasurer, Chairman of the Publications Committee, Chairman of the Advances Courses Committee, Fellowships Officer, and Meetings Counsellor.

To complete the list of officers, those not mentioned above include:

*Chairmen:* F.C. Happold (1964–65), O. Hoffmann-Ostenhof (1965–66), K. Zakrewski (1966–67), A. Pihl (1967–68), F. Sorm (1968–69), J.R. Villanueva (1969–71), T.K. Nikolov (1971–72), L.L.M. van Deenen (1972–74), F. Guba

(1974–75), J.P. Ebel (1975–77), F. Lundquist (1977–78), S. Rapoport (1978–80), N. Sharon (1980–81), H.M. Keir (1981–83), C. Liébecq (1983–84), and Yu.A. Ovchinnikov (1984–86).

*Secretaries-General:* W.J. Whelan (1965–67), H.R.V. Arnstein (1967–74), L.L.M. van Deenen (1975–77), M. Yomtov (1978–83), and G. Dirheimer (1984–).

*Treasurer:* S.P. Datta (1964 and 1966–).

It is a pity that in this short article it is impossible to pay tribute to all those biochemists involved in the foundation and successful development of FEBS. It is unthinkable, however, not to mention that the present image of FEBS is largely due to the creative imagination and persistence of W.J. Whelan, its first Secretary-General, to the personality of S.P. Datta, its Treasurer, and to the perseverance and thoughtfulness of H.R.V. Arnstein, its Secretary-General during the longest and most decisive period of its existence.

There is no doubt that during its first 20 years FEBS has matured and is now an organization that has greatly contributed to the development of Biochemistry in Europe and the World. There is also no doubt that FEBS, though mature, has preserved its youthful vigour and will continue its useful activities in the development of science for the benefit of mankind.

We are convinced that a large number of those who had have a hand in engineering the success of FEBS will be happy to meet again at the Anniversary Meeting, this time in Moscow and we wish with them, the organizers, and all the participants an interesting and successful meeting.

*M. Yomtov*

*G. Dirheimer*

*June 1984*

*FEBS Letters (1984) Volume 171, number 1, 1–4.*

## 2.2

### Biochemistry in Europe – The Role of the Federation of Biochemical Societies (FEBS)



*Guy Dirheimer,  
Secretary-General of FEBS from 1984–1989*

Cooperation in Science is essential if research is to be efficiently pursued. All the techniques and competence cannot be found in a single laboratory or even in a single institute or country. Furthermore, the explosive development of biological sciences in the last 3–4 decades means that a single individual cannot have a detailed appreciation of all the discoveries about cells and organisms. Thus discussion with colleagues becomes a “sine qua non” of research. This became evident to the scientists working in Europe in the field of Biochemistry in the early sixties. In an attempt to foster intra-European relations and to put

intra-European biochemical contacts on a more established basis they arranged meetings for European biochemists. This led to the creation of FEBS, which was conceived in 1963 at a gathering of biochemists convened on the initiative of The Biochemical Society of the United Kingdom during its Oxford meeting. The Federation itself came into existence on the 1st of January 1964 with 17 adhering societies. Yugoslavia and Israel joined in 1964, USSR in 1967, Rumania in 1968, Greece in 1969, Iceland in 1972 and finally Turkey in 1978, so that FEBS has now 27 Constituent Societies comprising more than 39,000 members.

In the beginning, FEBS was formed only with the idea that the Societies might come together to hold General Meetings. These Meetings provide the main opportunity for European biochemists to get together, and their size has been increasing steadily. FEBS Meetings are conducted in a friendly and congenial atmosphere and lead to lasting scientific and human relationships. They have been held in almost all European countries. In 1989, the 19th FEBS Meeting will be in Rome.

Soon after its foundation, FEBS started organizing Summer Schools. Christian de Duve held the first such activity in Louvain in summer of 1965. A Committee was formed and the Summer Schools were renamed Advanced Courses. Up to the present, 166 Advanced Courses have been held. FEBS sponsor almost exclusively events of educational value and refuse to fund symposia and other types of meetings where the principal beneficiaries are well-established scientists. This policy underlines the concern felt by FEBS for young biochemists, which alone are entitled to grants from the FEBS Youth Travel Fund: 278 Travel Fund Awards were made in 1988 to young scientists for a total of 186,000 dollars. The Advanced Courses Committee also sponsors and organizes Lecture Tours by prominent scientists both from within and outside Europe, who visit different FEBS countries, where, besides giving lectures, they visit laboratories for discussion and consultation.

It was as early as 1965 that a suggestion was made that FEBS might venture into the field of publication. Two journals are published by FEBS: The *European Journal of Biochemistry* and *FEBS Letters* which are both now established as major biochemical journals. *FEBS Letters* was created as a journal for rapid publication of short but complete papers. Its first issue appeared in 1968 and since then it has perfectly fulfilled its objectives; the overall publication time is 9.7 weeks, i.e. about two months.

The most recent FEBS programme, the Fellowships, started in 1979. Fellowships are usually to support short-term visits (up to two months) by members of any FEBS Constituent Society to laboratories in another FEBS country for the purpose of carrying out experiments with special techniques or for other forms of scientific collaboration or advanced training, and especially to support developments arising at short notice. This programme rapidly has become very successful: in the course of five years 200 fellowships originating both from Western and Eastern European countries have been granted.

Last year FEBS started a Long-term Fellowships programme. This is a very ambitious, but absolutely necessary activity in Europe because, due to administrative constraints, it is not possible, in many European countries to manage

grants, like in the USA. Very often there are no salaries included in these grants and no possibility of converting bench money, or money for apparatus, into post-doctoral fellowships. This activity will, however, be very expensive and as FEBS is not supported by public (governmental) funds, the money has to be found from its own resources.

FEBS devoted about 600,000 dollars last year to its scientific activities. This corresponds essentially to the income from the two FEBS journals. It is therefore important that the number of subscriptions to *EJB* and *FEBS Letters* increase. On the occasion of the 25th Anniversary of FEBS there is to be a special offer to personal subscribers for each of these journals. It will cost only 198 dollars for *EJB* and 185 dollars for *FEBS Letters* for a year. It is hoped that this will increase the number of subscribers, which at present is 2050 for *EJB* and 1700 for *FEBS Letters*.

The aim of FEBS as time goes on is to expand its activities to the benefit of Biochemistry, attempting to build bridges across the political and linguistic barriers in Europe.

*Chimicaoggi - gennaio-febraio 1989, 9–10*

### 2.3

#### FEBS – 25th Anniversary in 1989

*Address by the Hellenic Biochemical and Biophysical Society*



Athanasios  
Evangelopoulos

In trying to write the history of a successful scientific Organization like FEBS from a global point of view, one has to consider the forces behind this effort, which made FEBS the most prominent Scientific Federation in European Science. Those that have followed the progress of FEBS the last 25 years step by step know that the success was not a miracle but the result of idealism, hard work, perfect planning and solid objectives of leading European Biochemists. FEBS is the best example of how scientists-dreamers can influence scientific and even social progress in a geographic area of this small planet, if they act collectively with defined objectives.

FEBS as an experiment demonstrates also that they are not financial matters that determine progress in Science and Society, but the mobilization of human resources to serve noble ideals and well studied objectives.

The sixties was the period when European Science realized that the initiative in research of Biochemistry and Molecular Biology was rapidly passing to USA from Europe, where many of the early key discoveries have been made. The brain drain that followed convinced leading scientists in the European Countries that Europe could only play its accustomed role in Biochemistry if the individual countries work together, increase their scientific interaction by exchanging information and unite their national resources. The previous logic resulted not only in the creation of FEBS but also to CERN, EMBO, EMBC, EMBL etc.

In contrast to the other European Organizations, FEBS and its leadership had to face additional insoluble problems to perform its activities. In the peak of the cold war era between western and eastern European states, FEBS managed to bring together biochemists from both fronts of the cold war areas and succeeded to have yearly successful Meetings of the Federation of European Biochemical Societies. The success of the yearly Meetings and the FEBS Bulletin was the beginning then followed by the European Journal of Biochemistry and FEBS Letters.

Writing the history of FEBS from a country in southeast Europe like Greece on behalf of the Hellenic Biochemical and Biophysical Society, one should also write about the influence of FEBS in national Biochemistry as well as Biochemistry in the Balkan area. FEBS Advanced Courses Committee, FEBS Fellowships Committee and FEBS Youth Travel Fund opened the doors of the country to young Greek Biochemists to visit European Laboratories and perform experiments which were impossible to perform in the country under the existing then local conditions. The FEBS Youth Travel Fund supported young Biochemists in participating in Conferences, Symposia and Lecture Courses in other European Countries, which gave to them new horizons in Biochemistry. The landmark of FEBS activities for the benefit of the Hellenic Biochemical Community was the FEBS Meeting on April 25–29, 1982, when 1200 Biochemists from all over the world gathered to Athens to meet and discuss with the Biochemical Community of the Country recent progress in Biochemistry.

In the Balkan area, with the initiative of the Balkan Biochemical Societies and under the auspices of FEBS, Balkan Biochemists were gathered for 3 days in Athens, on April 13–15, 1977, to start the every second year Meetings “Balkan Biochemical and Biophysical Days” (BBBD). The effort was very successful for the progress of Biochemistry, since it managed to overcome local problems and create collaborations between Laboratories and individual Biochemists in the area. The 9th BBBD, which will take place in Thessaloniki May 21–23, 1992, demonstrates the success of the endeavour. BBBD Meetings were already convened more than once in Varna, Belgrade, Istanbul, Dubrovnic, Cluj-Napoca, Athens, and Thessaloniki.

FEBS through its Advanced Courses Committee and Youth Travel Fund with NATO Scientific Affairs Division and EMBO were the moving force to establish the yearly summer conferences on “Molecular and Cell Biology” in the Island of Spetsai, Greece. Since the sixties, annual Meetings on Molecular Biology, Cell Biology, Bioenergetics, Immunology etc are taking place in Spetsai. About 50 Summer Schools have been organized until now in the Island (three are planned for 1992, August 3–10, August 17–29, August 30–September 11). Collective efforts of leading European Biochemists and Molecular Biologists for about 30 years raised the Scientific Conferences in the Island of Spetsai to a European Summer Centre for efficient knowledge transfer in Biological Sciences well known all over the world.

What are the perspectives of the activities of FEBS in the post cold war area of the United Europe? We are living in a continent with great potentialities and very

difficult problems to solve in different areas. Nationalism appears to be the most difficult one. While borders are breaking down in the West in order to increase interaction, development and productivity of various states to make integrated Europe competitive internationally, in scientific, technological, and industrial matters, in Eastern Europe nationalism is becoming the moving force of changes that lead, sometime, the creation of new small European states with questionable ability of survival in the new competitive world.

It might be time for FEBS with its experience of bridging differences between Western and Eastern European Scientific Societies to provide its services for the scientific, technological and social integration of Europe from Atlantic to Urals. We have to provide to the European scientists, students and societies ideas and perspectives that are more sound and appealing than the nationalistic ones. The situation is critical, but if we work collectively as we have done for the last 25 years we are going to succeed.

*The Council of the Hellenic Biochemical & Biophysical Society*

*President: Orestes Tsolas, Ph.D., Professor of Biological Chemistry, Laboratory of Biological Chemistry, University of Ioannina Medical School, GR - 451 10 Ioannina, Greece.*

*Secretary General: A.E. Evangelopoulos, Ph.D., Research Director, Institute of Biological Research & Biotechnology, The National Hellenic Research Foundation, 48 Vassileos Constantinou Ave., 11 6 35 Athens, Greece.*

## 2.4

### FEBS in the New Millennium



*Julio Celis*  
*Secretary General of FEBS, 1999–2007*

We are now in the new millennium, and FEBS must be ready to tackle the challenges that are being posed by the rapid explosion of technology and information in the life sciences, as well as by the evolution of ideas as a new generation of scientists takes charge. There are not only economic challenges, derived from the rapid pace of science and the development of sophisticated and expensive instruments, but there is also the urgent need to create strategies and mechanisms to nurture the careers of young scientists who will be the leaders of the future. FEBS has not the resources to be a significant contributor to these economic challenges, and therefore we must concentrate our efforts on catalysing initiatives, both at the national and the European level, to ensure that Europe remains at the forefront of the life sciences in this new millennium.

We are well aware that research in biology is becoming multidisciplinary and it is clear to us that we must join forces with other organizations to acquire a global vision for the life sciences. We need to coordinate our efforts, share our experiences and collaborate in areas of common interest, such as education, the



impact of science on society, annual meetings, etc. The latter is crucial, as there is an urgent need to have meetings in Europe that achieve critical mass and provide opportunities for young scientists to network. FEBS, together with the European Molecular Biology Organization (EMBO) and the European Molecular Biology Laboratory (EMBL), have taken the initiative in this respect by establishing, together with several other organizations, the European Life Sciences Forum (ELSF) (<http://www.elsf.org>). The aim of the Forum is to stimulate scientists to take a more active role in strategic and science policy issues, to enable us to speak with a unified voice and to take joint action in matters of common interest. By consulting the scientific community at large, we plan to generate a bottom-up approach and, most importantly, to create a vision for the life sciences in this new millennium that in due course can be put forward for support by politicians and funding agencies. A paper concerning the 6th framework programme is already available on the ELSF website for discussion. FEBS is also very supportive of the idea of establishing E-Biosci in Europe, as electronic publications will become an essential part of future communication among scientists.

FEBS has applied to become a Regional Associated Member of IUBMB and plans to help drive the collaboration worldwide in areas of common interest. We already organize joint meetings, but we need to do more. In this respect, a working group was recently established to consolidate our commitments and to explore further areas for collaboration. Within FEBS, Central and Eastern European countries have serious problems, as far as research funding, technology, infrastructure and training are concerned. Owing to low salaries and lack of support, most post-doctoral fellows do not return home to work and, therefore, deprive their country of vital human resources. Recently, at the request of the Romanian delegate to Council, FEBS agreed to form a Working Group to explore ways of improving assistance to Eastern Europe. On a visit to Romania, and after discussions on the situation in Poland, Ukraine and the Czech Republic, the Working Group made a series of recommendations for action to Council that we believe will benefit a large number of scientists. There is a clear need to provide assistance for PhD students to visit laboratories in Western Europe, and for organization of more practical and lecture courses in the area. These measures aim to provide both novel technology and networking assistance to achieve (virtual) critical mass in these parts of Europe. The Working Group also agreed that FEBS should continue its efforts to catalyse improvements in Central and Eastern Europe by providing bridges where possible between scientists, science policy-makers and funding agencies. In this respect, FEBS is willing to assemble panels of scientific advisors to evaluate and formulate strategic plans. Implementing these proposals will be a significant escalation of the FEBS initiative, the Scientific Apparatus Recycling Scheme (SARS), which was established many years ago and has enabled the distribution of surplus research material via the Constituent Societies in Central and Eastern Europe.

No Society or Organization can be successful without the active engagement of its members, and FEBS is no exception. In this age of global information, we are committed to providing more and faster information to our members, by keeping

an up-to-date website. Your comments and suggestions for new initiatives would be greatly appreciated.

*Birmingham, July 2000*

*(Excerpt of the Introduction to the Programme of the 18<sup>th</sup> International Congress of Biochemistry and Molecular Biology).*

## 2.5

### FEBS – A Guest at the Bosphorus in 2002 – New Developments



*Guy Dirheimer*

*Past Chairman of the FEBS Executive Committee, 1999–2002*

“Independence in interdependence”, this could be the motto of FEBS. FEBS is one of the only European scientific organizations to be auto-financed. It does not receive any governmental help or charity. Nevertheless, FEBS is in an excellent financial condition. This permits FEBS to choose its members and its scientific policy independently, without submitting to external pressure. This independence is, however, only possible because of the interdependence of FEBS’ many members who democratically elect – via their delegates at the annual Council Meetings – the members of the FEBS Committees. These individuals sacrifice themselves, on a completely voluntary basis, sparing neither efforts nor time (and often without secretarial help), to the activities of FEBS, just because they consider that European Biochemistry and Molecular Biology deserves to be supported and developed.

FEBS is not a static organization, but a dynamic one, as this book by Horst Feldmann clearly reflects. At the beginning, the idea to create FEBS was followed by the adoption of its statutes and of the organization of the first FEBS Meeting 38 years ago. These events are perfectly described by W.J. Whelan in the first chapter of this book.

FEBS has much evolved since 1964. From 13 Constituent Societies it has now grown to 36 full members and 5 associate members. Its dynamism found expression since its inception in many activities. As early as 1965 the *Advanced Courses* were organized, and a FEBS Bulletin was published. Then, in 1967, the *European Journal of Biochemistry*, of which C. Liébecq was the first managing editor, was established. And then, in 1968, the establishment of *FEBS Letters* followed, a journal for which S.P. Datta assumed responsibility for 27 years with his well-known dynamism and enthusiasm. G. Semenza succeeded him for 14 years with competence and dedication. The two journals have a great international reputation and the successive editors in chief succeeded in fructifying and enhancing them. All European Biochemists and Molecular Biologists should be very keen to publish their best papers in them. In fact FEBS had practically no resources at its beginning, and its assets did not exceed 1000 British pounds in 1967. This situation

changed thanks to the income of the two journals, and thanks to the rigour and know-how of the two successive treasurers of FEBS, S.P. Datta and J. Mowbray. The income permitted FEBS to develop new initiatives, essentially in favour of young scientists, who remain one of FEBS major concerns. In 1971 the *Youth Travel Fund*, which allows young scientists to attend the Advanced Courses, was initiated. Then followed establishment of the programme of FEBS Fellowships, of which I had the honour to be the first Fellowship officer in 1979. This programme has also evolved a lot since, as is shown in several chapters of this book. At the beginning it consisted of only *Short Term Fellowships*, thereafter it enlarged with the creation of *Summer Fellowships* and *Long Term Fellowships*. *Bursaries* permitting young scientists to attend the FEBS Meetings were created in 1990. Finally, owing to the difficult situation of the young Biochemists and Molecular Biologists in some Central and Eastern European countries, "*Collaborative Experimental Scholarships*", were established along with a "*Follow-up Research Grant*", which was established in order to favour the installation of the long term fellows in their country of origin, as well as to struggle against the brain drain, which the fellowships could promote. However, FEBS cannot substitute for governments, and if decent salaries are not paid to young scientists and assistants in universities, the emigration will continue. We hope that the situation will improve in the future.

Another recent initiative of FEBS was the creation of a "*Working Group to explore ways to improve assistance to Biochemists of Central and Eastern European Countries*" in 1999. This working group has already travelled to Rumania and Ukraine, where it has defined supplementary assistances to be added to those of the "*Scientific Apparatus Recycling Scheme*", which was created in 1990, and to this day is brilliantly managed by P. Campbell.

One major objective of FEBS is education, as is written in the first sentence of its Statutes. This naturally is reflected by the nature of many of the activities, which are carried out within the organization. The setting up in 2000 of a "*Working Group on Education in Biochemistry in Europe*" aims to accentuate this orientation, too. Recently other initiatives have been taken with the creation of new working groups or committees. These include "*Working Group on Careers of Young Scientists*", which focuses on helping young researchers (considered to be the fundamental duty of FEBS), a "*Working Group on Women in Science*" and a "*Science and Society Committee*".

FEBS does not like to withdraw into itself. Under the impulse of our dynamic Secretary General J. Celis the relations of FEBS with IUBMB have been developed with the organization of a common Congress in 2000, but other initiatives have also been undertaken: Participation of FEBS in the "European Life Science Forum", cooperation with UNESCO etc., as is detailed in one contribution to this book by J. Celis. FEBS is well on its way to becoming one of the leading organizations in the life sciences in Europe, to the benefit of all Biochemists and Molecular Biologists whose role in the achievement of these sciences will continue to grow in this century, which has just begun.

*Written on the occasion of the 28<sup>th</sup> FEBS Meeting in Istanbul 2002.*

2.6

**Role of FEBS in Establishing the European Research Area (ERA)**



*Julio Celis*  
*Secretary General of FEBS, 1999–2007*

At the last FEBS Council meeting, which took place in Istanbul on October 25, 2002, it was decided to expand the activities of FEBS, by establishing a Working Group that will be actively engaged in the realisation of the European Research Area (ERA), a vision championed by Commissioner Philippe

Busquin that aims at fostering the integration and co-ordination of science in Europe. The member countries at the European Council meeting in Lisbon in June 2000 endorsed the concept. At this particular meeting, the European Union (EU) Heads of Governments agreed to make *‘the EU the most competitive and dynamic knowledge based economy in the world, capable of sustained economic growth providing more and better jobs and greater social cohesion. In addition, it was agreed that research activities at national and EU level, must be better integrated and co-ordinated to make them as efficient and innovative as possible, and to ensure that Europe offers attractive prospects to the best brains’*. At this stage, ERA acquired politically operational status. At the Barcelona summit in 2002, the head of governments pledged to increase the R&D and Innovation in the Union to approach 3 % of GDP by year 2010.

Instruments to achieve ERA comprise so far the EU Framework Programme 6 (FP6), and a potential European Research Council (ERC; ERC could mean one or several research councils), which was discussed thoroughly at a recent conference in Copenhagen organized by the Danish Presidency of the EU. The need for such funding instruments arose mainly due to the fact that most of the FP6 budget is dedicated to industrial development, and thus there is a need to increase support



**Figure 2.1** Structure of the European Research Area.

for basic research. To ensure the participation of the scientific community in the initial stages of the ERC discussions, FEBS, the European Molecular Biology Organization (EMBO), and the European Life Sciences Forum (ELSF) hosted a joint meeting in February 2003, to discuss the need and priorities of the ERC initiative. UNESCO will host the meeting.

There is no doubt that FEBS could play a major role in establishing ERA, as our membership is scattered across many countries in Europe. Thus, our organization should prove vital in building the constituency of science, in addressing national and regional dimensions of policy imbalances, as well as in contributing to the training and career of young scientists. FEBS role should be envisaged in collaboration with other scientific and intergovernmental organizations as well as with various other players in the European scene as outlined in the scheme. (In 'Forty Years of FEBS')

## 3 FEBS Recent Ten Years

### 3.1

#### General Overview

Up to the 40<sup>th</sup> Anniversary in 2004 one of us (Horst Feldmann) has documented the founding of FEBS and its developments in form of a book “FORTY YEARS OF FEBS, 1964 to 2003, A MEMOIR”, printed by Blackwell Publishers (2003/2004) on behalf of FEBS.

Since then, FEBS has initiated and experienced a number of important developments. The outcomes of these are much easier to reconcile as the FEBS Website, having been installed in the year 2002, served to document new FEBS activities in written contributions and in pictures, as well as the nearly 1100 pages from FEBS NewsLetter and FEBS News. Likewise, the two editors have collected relevant documents, pictures, and recollections during the past ten years that may help accent the importance and reputation of FEBS.

Because of the plethora of information thus available, this chapter will concentrate on accounting the new FEBS activities rather briefly, while more extensive documentation on special topics is reserved to **Chapters 5 through 9 in Part II of this Memoir.**

### 3.2

#### Present Status of FEBS Member Societies

Since the end of 2003, some changes to the number of FEBS Constituent Societies have occurred. The Biochemical Societies or Associations of the following countries were integrated: as Associate members: Georgia, Kazakhstan, Kyrgyzstan, and Serbia; that of former Yugoslavia was released. The Biochemical Society (Great Britain) is now counted as one Member Society, representing the UK and Ireland (with its Irish Section). The Azerbaijan Society of Biochemists and Molecular Biologists was promoted from an Associate Member to a FEBS Member Society in the year 2009.

### 3.3

#### FEBS New Activities in the 21<sup>st</sup> Century

##### 3.3.1

#### Debates on Cooperation in European Life Sciences

Since the year 2002, many debates arose in FEBS on how European Organisations could contribute to improve cooperation and funding for research. The decisive role of FEBS in these efforts will be detailed in **Chapter 8, Sections 8.1 and 8.2**, respectively.

##### 3.3.2

#### Initiatives for New Committees



*Guy Dirheimer,  
Past Chairman of FEBS Executive Committee*

In the year 1999 it became evident that new activities should be developed by FEBS. J. Celis proposed to the Executive Committee in London in March 1999, and then to the FEBS Council in Nice 1999, that there be established a ***Science and Society Committee*** (cf. **Sections 3.3.3 and 8.3**).

In March 1999, Dr Stefan Szedlacsek, on behalf of the Romanian Society of Biochemistry and Molecular Biology, wrote an extensive report called “Necessity for improved FEBS assistance to biochemical Sciences in East-European Countries”. He warned that biochemistry in East-European countries is in real danger due to, first of all, the lack of financial resources of the governments (for example in Romania only 0.36% of the National Gross Domestic Products was devoted to R&D in 1996) and, second, the continuous drain of highly qualified biochemists to West-European and American laboratories. In addition there was a serious lack of important biochemical journals in these countries. Bulgaria, Romania and Ukraine had not even one subscription to FEBS Letters. Therefore, a ***Working Group for Exploring Ways to Assist Central and Eastern European Countries (WOGA)*** was set up at the Council in Nice in 1999. Later, WOGA was renamed “***Working Group on Assistance to Central & Central Europe***” (WOGCEE) (cf. **Sections 3.3.5 and 8.5**), which was finally transformed into ***WGI, FEBS Working Group for Integration*** (cf. **Sections 3.3.6 and 8.6**).

At the Council meeting in Birmingham in 2000 it was also decided to increase the Executive Committee by two new members for one term of 3 years, starting in January 2002. These new members would serve not only as a liaison between Council, the Constituent Societies and the Executive Committee, but would take care of specific tasks. M. Makarow (Finland) and S. Rogne (Norway) were elected by mail ballot and the Executive Committee in Paris, April 29, 2001 proposed that they tackle respectively the ‘***Careers of Young Scientists***’ (cf. **Sections 3.3.7 and 8.7**) and the ‘***Role of Women in Science***’ (cf. **Sections 3.3.8 and 8.8**). This was approved at the Council Meeting in Lisbon in July 2001.

## 3.3.3

## FEBS Committee on Science and Society



Federico Mayor

The idea behind establishing the Working Group on Science and Society was to bridge the gap between scientists and society so that FEBS can identify and deal with those issues that arise as a result of research developments. People on the street do not understand the world of science; they act on emotions rather than on knowledge. Therefore, it is important to dedicate resources to educate the public as well as politicians. Council agreed and the committee was set up; Professor *Federico Mayor*, former Director General of UNESCO, agreed to be the chairman.

The 41st FEBS Council in Lisbon, July 3, 2001 adopted the terms of reference for the committee, which are:

1. To discuss and advise the Executive Committee on problems arising or foreseen from advancements in science.
2. To participate in public debates and make recommendations on behalf of FEBS.
3. To interact with other organisations engaged in similar activities.
4. To organize a symposium or colloquium at the annual FEBS Meetings.

Four members of the committee were appointed in Lisbon for a period of 4 years starting January 1, 2002. These are N. Lenoir (France), G. Glaser (Germany), G. Semenza (Switzerland) and A. Quintanilla (Portugal), the Secretary General and the Treasurer of FEBS being *ex officio* members.

At the 27th FEBS Meeting in Lisbon a session “Impact of Biochemistry on Society” took place; and at the 28th Meeting in Istanbul, there were 3 sessions on “Science, Society and the Media”, “Ethics of Modern Genetics” and “Patent Rights in Biochemistry and Molecular Biology”.

More details can be obtained from **Section 8.3**.

## 3.3.4

## FEBS Education Committee



Jean Wallach

The FEBS Education Committee had its roots in the FEBS “Working Group on Teaching Biochemistry”, which was founded in 2001 by Prof. Jean Wallach (Lyon, France). In April 2001, the Working Group on Education came forward with a programme to:

1. Stimulate the European Biochemical Societies to create in every country of a working group on education.



2. Organize during each FEBS Meeting, in association with the local organizer, a session on education in order to promote new aspects of teaching via workshops and demonstrations.
3. Provide information on the FEBS web site about meetings on education in Europe, teaching programs, local expertise etc.
4. Develop FEBS workshops on education particularly in Central and Eastern Europe.

Generally, the FEBS Education Committee has the mission of promoting education of the highest quality in Biochemistry and Molecular Biology in Europe at both the undergraduate and postgraduate levels.

In order to realize this important mission:

1. We encourage the development of innovative teaching methods
2. We disseminate advice on educational resources
3. We arrange at least one education event at each FEBS Congress
4. We arrange other educational events from time to time such as workshops on educational issues in FEBS member countries on request.

Between 2001 and 2006, the FEBS Education Committee was active in promoting educational events at yearly FEBS Congresses. A workshop on “New frontiers in teaching Biochemistry” was organized at the 27th FEBS Meeting in Lisbon and was well attended. In Istanbul at the 28th FEBS Meeting, a Symposium “Multi-media approaches in biochemical education” was organized including workshops and demonstrations. At the FEBS Special Meeting in July 2003 in Brussels, the Working Group has proposed a session on the theme “Teaching metabolism and cell signalling” with demonstrations and round tables. For the FEBS Congress in Warsaw (2004) a session devoted to “Problem based learning in Europe” had been chosen and one devoted to “Post-graduate Biochemical Education” was proposed for the future.

At the Council Meeting held in Istanbul in 2006, the “FEBS Working Group on Teaching Biochemistry” was converted into the **FEBS Education Committee**, with Prof. Edward Wood (Leeds, UK) as the founding Chair. Prof. G”A I G”A ner-Akdođan (Izmir, Turkey) took over following the sad loss of Ed Wood on December 14th, 2008. Detailed information is presented in **Section 8.4**.

### 3.3.5

#### **FEBS Working Group on Assistance to Central & Eastern Europe (WOGCEE)**

##### **3.3.5.1 Initiatives and Objectives**

*By Guy Dirheimer,*

*Chair of the FEBS Working Group on Central and Eastern Europe (1999 until 2008)*

**A Working Group for Exploring Ways to Assist Central and Eastern European Countries**, called **WOGA**, was set up at the FEBS Council in Nice (June 1999) after the alarming report of S. Szedlacsek (Romania) about the discouraging

situation of research possibilities in CEE countries. He particularly emphasised that Biochemistry in the CEE countries needs consistent help in order to survive.

Thus, FEBS having realized the necessity for improving assistance to biochemical sciences in Central and Eastern European (CEE) countries felt that biochemistry and molecular biology was in real danger in some countries due to, first of all, lack of governmental financial resources, and second the continuous drain of highly qualified biochemists to Western European and North American laboratories. The Working Group for exploring ways to assist biochemists in CEE countries met for the first time in Bucharest (Romania) from February 6 to 9, 2000. It visited representative units in the field of biochemistry and molecular biology and had discussions with officials from the Ministry of Education, the National Agency for Science, Technology and Innovation and from the Romanian Academy. Two meetings of the Working Group also took place where it was clearly shown, in addition to the above mentioned facts, that the number of FEBS Long-term Fellowships attributed to Central and Eastern European biochemist represented only 15% of the total number of these fellowships in 1999. This was not the case with Short-term (49%) and Summer (55%) Fellowships. In addition 45% of the Youth Travel Fund grants went to biochemists from these countries.

**WOGA** consisted of J. Baranska (Poland), A.V. El'skaya (Ukraine), S. Szedlacsek (Romania), I. Safaric (Czech Republic), I. Mowbray (Treasurer of FEBS), K. Wirtz (Chairman of FEBS Advanced Course Committee), P. Campbell (Coordinator of the Scientific Apparatus Recycling Scheme), J. Celis (Secretary General of FEBS) and G. Dirheimer (Chairman of the Group). In Bucharest the objectives of the Working Group were defined. These led to the Terms of Reference of the group that was renamed **Working Group on Assistance to Central & Eastern Europe (WOGCEE)**.

The FEBS Council in Birmingham on July 14, 2000 decided:

- (1) To improve the flow of information in the Eastern European countries by providing Internet access. This can be partly or fully supported by FEBS.
- (2) To offer a limited number of free subscriptions (hard copy) of FEBS Letters and EJB to those Eastern European Countries that are in desperate need (about 30 copies in total).
- (3) To increase the Advanced Courses Committee budget by 100,000 Euros in order to earmark two practical courses per year in Central and Eastern European countries. The budget includes a special allowance for equipment of 20,000 Euros per course.
- (4) To improve collaboration with laboratories from Western European countries where the PhD students would go from time to time for short periods (average of 3 months in a year; 2 times during a thesis) to perform experiments not feasible in Eastern and Central European Countries. To this end FEBS established a new type of Fellowship – the Collaborative Experimental Scholarships for Central and Eastern European Countries – that is intended for students engaged in research for a doctoral thesis. A sum of 100,000 Euros was put aside for this purpose.

- (5) To struggle against the brain drain and to encourage young scientists who have been recipients of a FEBS Long-term Fellowship to start work on return to their country of origin a FEBS Fellowship Follow-up Research Fund was created. The award will provide a single sum of money that may be used to buy small pieces of equipment and specific consumable items but not to provide a salary or to defray travel, conference, publication or similar expenses. The FEBS Fellowships Committee will award this money.

Due to their better economical situation the Polish and the Czech Biochemical Societies asked to be excluded from the programme. On the other hand the Council decided that Turkey should be included.

In 2001, out of the 17 Advanced Courses organised, two took place in Croatia (Hvar and Dubrovnik), one in Bucharest (Romania) and one in Moscow (Russia). In 2002 again there were four, out of a total of 15, Advanced Courses organised in Central and Eastern Europe (Gliwice, Poland; Kyiv, Ukraine; Kransjska Gora, Slovenia and Moscow, Russia). Out of 16 Long-term Fellows who started in 2001, 3 came from Moscow and 1 from Budapest. Eight extensions of the Fellowships awarded in 2001 were given in 2002. Three of them were for applicants from the Eastern European Countries. In addition 7 Collaborative Experimental Scholarships were granted to young biochemists in 2001. Two were coming from Moscow, two from Budapest, one from Bratislava and one from Warsaw. Between 1 January and 31 July 2002 eight Collaborative Experimental Scholarships were given to biochemists originating from Croatia (1), Hungary (1), Poland (2), Russia (3) and Slovenia (1). Thus this programme was clearly successful.

From 2005 on, the chairperson of the FEBS Education Committee also became a member of WOGCEE. The WOGCEE members were re-elected by Council in 2006, and in 2008 WOGCEE consisted of O.P. Matyshevska (Ukraine), A. Dżugaj (Poland), G. Negroiu (Romania) and K. Bezouska (Czech Republic) in addition to I. Mowbray (Treasurer of FEBS), K. Kuchler (Chairman of FEBS Advanced Course Committee), K. Wirtz (Coordinator of the Scientific Apparatus Recycling Scheme), I. Pecht (Secretary General of FEBS), E. Wood (Chairman of the FEBS Education Committee), and G. Dirheimer (Chairman of the Group up to end of 2008).

The WOGCEE meetings during the time from 2000 to 2008 are detailed in **Chapter 8, Section 8.5**.

In order to meet all the delegates to the FEBS Council coming from CEE countries, four round tables were organised (see **Section 8.5.2.3**).

FEBS also aims to organise more practical and lecture courses in CEE countries in order to provide novel technology and networking assistance as well as achieving virtual critical mass in the area. Twenty-one Advanced courses were held in 11 different CEE countries since 1999. This is facilitated by the donation by FEBS of special grants, up to €20,000, to Workshops organisers for buying basic materials that will remain in the organiser's laboratory. In addition more than 110 Youth Travel Fund a year permitted PhD students and post-docs from CEE countries to attend these courses.

At the end of 2008, FEBS decided to rename *WOGCEE* as *WGI (Working Group for Integration)* under the chairmanship of Mathias Sprinzl (see **Chapter 8.6**).

### 3.3.5.2 FEBS Volunteer Aid Programme – Call for Volunteers

*By Guy Dirheimer*

At the round table discussion within FEBS Working Group for Exploring Ways to Assist Central and Eastern European Countries (Istanbul October 2002), delegates from several Eastern European countries pointed out that many papers from Eastern European scientists are rejected by publishers, due to language related problems.

The fact that several colleagues from the Central and Eastern countries have problems writing in English was discussed in depth. It constitutes a major obstacle, as it also prevents many from applying for e.g. grants, fellowships or European funds.

The discussion resulted in a decision that FEBS is to provide help to these colleagues by establishing a panel of volunteers, who will help with language related problems, e.g. by doing reviews of scientific papers. This initiative has been named FEBS Volunteer Aid Program (VAP).

The Program now starts recruiting FEBS members, who – apart from being fluent in written English – are willing to help out colleagues from Central and Eastern European Countries by reviewing 3–6 papers or scientific applications (grants, fellowships etc.) per year.

Should you wish to volunteer, please contact the VAP coordinator and WOGA Committee Chairman Prof. Guy Dirheimer. (FEBS NewsLetter 2003/2, p.5)

A panel of volunteers was established and worked on several papers from Armenia, Russia, etc., but it stopped to work in 2006 because of lack of applications.

### 3.3.5.3 Peter Campbell Lectureships

Another activity was set up in 2005. It was called the Ambassador Programme and renamed Peter Campbell Lectureships after the death of Peter. After invitation by the Biochemical Society of a CEE country, the Peter Campbell Lecturers give one or two lectures and provide information about the various FEBS programmes in CEE countries. FEBS pay travel and accommodation expenses of the lecturers and the receiving Institutes have to cover the meal expenses. Three lecturers have worked up to now: M. Makarow in Vilnius, I. Pecht in Yerevan, and E. Wood again in Vilnius and in Kaunas (Lithuania). In conclusion WOGCEE tried to do its best to help the biochemists from CEE countries. It will continue to enlarge its area of action to countries up to now untouched by its activities without forgetting the follow-up of countries already visited.

## 3.3.6

**FEBS Working Group on Integration (WGI)**

## 3.3.6.1 Renaming WOGCEE to WGI – and Its Goals



*Mathias Sprinzl Chairman of the Working Group on Integration (since 2009)*

Formerly known as the Working Group on Assistance to Central and Eastern Europe, WOGCEE), this working group is now named the Working Group on Integration (WGI). The terms of reference of WGI are given in the FEBS Statutes and Guidelines.

*Mathias Sprinzl*

Since its constitution, WGI has visited several national biochemical societies, laboratories and institutes in CEE countries, where WGI members have met scientists, students, and high-level politicians responsible for science and education. The message of WGI conveyed at these visits is that it is vital to develop basic research and to invest in scientific infrastructure in order to prevent brain drain. Moreover, WGI has emphasized that good higher education is not possible without good research. These visits have enabled us to find out the most urgent problems, and some of these have been addressed by FEBS afterwards (e.g. access to electronic literature, special travel and workshop funds, laboratory equipment). Details of the visits and activities of WGI are regularly published in *FEBS News*.

Besides official visits of the national biochemical societies in CEE countries, WGI is engaged in cooperation with other Working Groups and Committees of FEBS, and promotes European networking during FEBS courses/workshops and Congresses. (Text from FEBS WEBSITE)

At the recent FEBS Executive Committee meeting, it was also agreed that the FEBS Scientific Apparatus Recycling Programme (SARP) in its present form will be terminated. However, donations of scientific instrumentation as part of an ongoing collaborative project will be supported by FEBS by covering the costs for transportation. Applications should be directed to the FEBS WGI. (*FEBS News* Febr. 2012, p. 14).

Visits undertaken by WGI will be detailed in **Section 8.6**.

## 3.3.7

**FEBS Working Group on the Career of Young Scientists (YSF)**

## 3.3.7.1 Initiatives and Goals

The Working Group on the Career of Young Scientists was established in 2001. Inspired by the initiative performed for many years by the French Society of Biochemistry and Molecular Biology, FEBS at the Council Meeting in Lisbon decided to set up a Forum dedicated to young scientists that was attached to the annual Congress. The organisation of the annual Young Scientists Forum (YSF) is the key activity of this Working Group.

The basic idea of the FEBS YSF is to promote interactions between young scientists in the pre-doctoral and early post-doctoral stages, and also to give them the

opportunity to be responsible for the organisation of the event. Each year the local organisation is run by students in the Congress host country. Usually 100 young scientists are selected to participate in the Forum, which takes place immediately before the annual Congress in a relaxing and informal atmosphere, where these students can make friends, interact and exchange ideas. These students are also granted financial support to attend the annual FEBS Congress, and therefore can enjoy the different experiences that the YSF and Congress offer.

As well as supervising the YSF, the Working Group moderates the YSF round-table discussions that deal with career issues. Over the years, the Working Group has invited people from several organisations, such as EMBO and ELSO, who have launched programmes aimed to promote and support the young scientists' careers. Representatives of companies are also invited to give advice on career prospects. During the discussions the students have raised several questions, particularly related to scientific publishing, management, and career pathways in academia, as well as science politics.

### 3.3.7.2 FEBS Forum for Young Scientists

#### 3.3.7.2.1 Initiatives for a FEBS Forum for Young Scientists



*By Marja Makarow  
Professor, Program in Cellular Biotechnology, Institute  
of Biotechnology P.O. Box 56, 00014, University of Helsinki, Finland*

European countries strive to become knowledge-based societies, characterized by businesses which are based on a high education level of employees, innovation, sufficient public and private investment into research and development, and high quality basic research. Europe cannot afford to lose highly educated young scientists to the United States, where more attractive career prospects are offered than in many European countries. Thus, the specific problems that scientists encounter early on in their careers have to be identified and surveys on their career developments should be carried out. Visions for future solutions should be created and the decision makers informed about the problems and ways to solve them. The Council of FEBS decided in the Lisbon meeting last summer that a FEBS Forum for Young Scientists (FFYS/YSF) will be organized on a regular basis as a satellite meeting of the Annual Meeting. One hundred thousand Euros was allocated annually for organization of the Forum and travel support of the participants. The program will consist of a few didactic key note lectures by senior scientists, oral presentations by students selected amongst the submitted abstracts, and a panel discussion addressing young scientists' issues. The Forum will provide a direct channel to hear the voice of young European scientists. FEBS has a clear niche to promote Ph.D. student's issues, as organizations like EMBO for instance fund postdoctoral students. A working party of the Executive Committee, concentrating on young scientists' issues was formed. The members are Prof. Ineke Braakman, Netherlands, Dr. Fatima Chakrani, France and Prof. Marja Makarow (chair), Finland.

The Council of FEBS decided in the Lisbon meeting in summer 2001 that a FEBS Forum for Young Scientists will be organized on a regular basis as a satellite meeting of the Annual Meeting. One hundred thousand Euros was allocated annually for organization of the Forum and travel support of the participants. The program will consist of a few didactic key note lectures by senior scientists, oral presentations by students selected amongst the submitted abstracts, and a panel discussion addressing young scientists' issues. The Forum will provide a direct channel to hear the voice of young European scientists. FEBS has a clear niche to promote Ph. D. students issues, as organizations like EMBO for instance fund postdoctoral students. A working party of the Executive Committee, concentrating on young scientists' issues was formed. (FEBS NewsLetter 2002/2)

### 3.3.8

#### **FEBS Working Group on Women in Science (WISE)**

##### **3.3.8.1 Initiatives and Objectives**

The Working Group on Women in Science (WISE) was established in 2001. Its main objective is to facilitate awareness, to encourage people to participate actively in promoting gender equality in science, and to support the 43 Constituent Societies and academic institutions in these countries on the issue of Women in Science.

The Working Group has worked to create awareness on the issue of Women in Science, and has organised workshops on the issue at several FEBS Congresses in recent years.

Sissel Rogne, member of FEBS Executive Committee, chaired the FEBS Working Group on Women in Science (WISE), which started its 3-year period in January 2003. The objective was to develop a plan for FEBS' engagement in the topic 'Women in Science'. In order to increase the possibility for women to make a career in science, the working group will 'work on' – try to change – people's attitudes throughout the whole educational system as well as in all strategic processes in science or science politics. It will collaborate with FEBS Science and Society Committee, as well as with the Working Group "Career of Young Scientists". Furthermore, the Working Group on Women in Science will create forums for debating this issue, and participate in venues where the issue is debated.

##### **3.3.8.2 Why Should FEBS be Concerned About Women in Science?**



*Sissel Rogne,*

*Professor, The Norwegian Biotechnology Advisory Board, Oslo, Norway*

What is actually happening to women in science (WISE)? Why do we see so few women as professors, or in other leading positions in science – even in countries where there are more female students in science than male? This is the general situation in many other areas as well. But in science we are educated to think that we are all competing on the same playing field – a playing

field were the only criterion is the quality of science. Are there any reasons to follow this issue in science organisations, reasons to be worried and take actions? We are living in high tech societies. To develop and run our societies we are therefore heavily dependent on people with a background in Life Sciences, including medicine and engineering. The fast growing biotech industry alone is expected to have a need for a 30% increase in chemists in the next 3 years. As such, one should think that the young generation would be flocking around the Life Sciences, seeing these as an almost guarantee for a good job and a career. But the trends are different; we are experiencing a decreasing interest for the Life Science education, although the proportions of female students in these areas are increasing, particularly in biology and medicine. In many European countries there are now more women than men who start an education in the natural sciences. But what happens to the women, since we hardly see any changes in the number of females in higher positions? Are they not clever or intelligent enough? They tend to climb to a certain level, and then what happens? Do they hit the glass ceiling? What sorts of signals will the lack of female role models send to Generation X? To women: Science is not the place to go for a career although the societies indeed need natural scientists. Did we simply “select” the “wrong type of female students”, those who are not good and tough enough for the “rat race”? What do the men think? Would it create a more interesting and creative environment for men with more “biodiversity” even at the top level? Women are an important part of “biodiversity”. In all other parts of ecology you regard the ecosystem to be more robust with a higher degree of biodiversity or genetic variation. Women represent more than half of the human population but approximately 10% of the leaders. This is not regarded as a good situation when there is a growing mistrust between science and society. Do the scientists have the right priorities, do they try to solve the important problems of the world, and can they be trusted to give advice to the governments about the application of technology and political priorities? Since men and women are different, it would strengthen science by both expanding the perspectives and hopefully contribute to a better dialogue with the society. There are many (but very few new) questions and answers in the WISE debate. However, this does not mean that it is time to give up. On the contrary it is time to involve more people to start working harder on these issues.

As the issues on WISE have priority within FEBS, it was decided to expand the Executive Committee with one member to lead a working group on WISE. And so, at the FEBS Council meeting in 2001, I was lucky to be elected for this position for a three-year period, starting on 1st of January 2002. The FEBS working group for WISE consists additionally of the following persons: Assistant Professor Mickal Neeman (Israel), Professor Stefana Petrescu (Romania), Director Susan Greenfield (UK), Director Alexandre Quintanilha (Portugal), and Advisor Gerlind Wallon, EMBO (Germany). A scientist will assist the group for one month in total.

During this 3 year period the working group will develop a plan for FEBS' engagement in the topic Women in Science, and co-ordinate FEBS' activities within this area. WISE can not be handled by the science institutions themselves



simply by employing a number of women. In order to increase the chance of seeing more women with a career in science in the future, we will have to work with people's attitudes throughout the whole educational system, as well as in all the strategic processes in science or science politics. Thus we are going to collaborate with the FEBS working groups on Science and Society (headed by Professor Frederico Mayor) and Young Scientists (headed by Professor Marja Makarow). The Ministries of education in most European countries gather statistics about the proportion of female professors at universities and the percentage of female professors in the natural sciences. Some research institutions have also been studying WISE and made reports or publications about their results. Success in science is dependent of funding. In good scientific tradition we therefore would like also to collect published information about the percentage of women among grant applicants from the main research councils, and their success rate in grant application and "average funding" compared with that of men, as well as other success criteria, e.g. number of publications in peer review journals. So far, there seems to be large differences between the countries (see the ETAN report), which makes this exercise interesting not only from a research point of view, but also as a source for interesting debates about how neutral is the evaluation of scientists and their work. We are going to have the first debate at the 28th FEBS meeting in Istanbul in October 2002. (FEBS NewsLetter, September 2002)

### 3.3.8.3 WISE Members and Obligations

WISE is composed of a chairman elected by the Council, and of four ordinary members who are selected by the chairman and approved by the executive committee. The chairman is elected for a period of 3 years, not renewable.

Terms of reference:

1. To advise the FEBS Committees on measures to improve the situation for women in science and to recommend expenditure on these actions to the Council.
2. To facilitate awareness on the issue of Women in Science and to encourage people to participate actively in promoting gender equality in science.
3. To organise workshops at each FEBS congress, one of which is in close collaboration with the local organising committee.
4. To undertake initiatives with the aim to expand the probabilities for women to pursue a career in science
5. To advise, on request, Constituent Societies and Institutions in FEBS member countries on the issue of Women in Science.
6. The Working Group members meet once a year to discuss strategies.
7. The Working Group will be dissolved when the perceived need for its activities has ended.

(FEBS News November 2005)

## 3.3.9

**FEBS Engagement World-Wide**

Details can be found in **Section 8.9**

## 3.3.10

**Extension of Former FEBS Activities**

All documents pertinent to the development of Former FEBS Activities have been integrated into PART II, Chapters 5 through 9, respectively. The following overview defines their localization within this document.

**3.3.10.1 FEBS Meetings/Congresses and Other FEBS Meetings >> Chapter 5**

FEBS Meetings & Congresses >> 5.1

Satellite Meetings >> 5.2

Young Scientists Forum >> 5.2.1

Annual Meetings of the Third Year FEBS Fellows >> 5.2.3

FEBS 3+ Meetings >> 5.3

Constituent Societies' Meetings >> 5.4

**3.3.10.2 FEBS Publications >> Chapter 6**

Overview >> 6.1

FEBS Publications Committees >> 6.2

The European Journal of Biochemistry – The FEBS Journal >> 6.3

FEBS Letters >> 6.4

Molecular Oncology >> 6.5

FEBS Open Bio >> 6.6

The FEBS Bulletin >> 6.7

The FEBS Website >> 6.8

FEBS NewsLetters – FEBS News >> 6.9

**3.3.10.3 FEBS Educational and Related Activities >> Chapter 7****FEBS Advanced Courses Programme >> 7.1**

Initiatives and Developments >> 7.1.1

Present Guidelines and Financing >> 7.1.2

FEBS Advanced Courses Committees >> 7.1.3

FEBS Advanced Courses (1987–2004) >> 7.1.4

FEBS Advanced Courses (2004–2013) >> 7.1.5

**FEBS Fellowships >> 7.2**

General Aims and Programmes >> 7.2.1

FEBS Fellowships Committee >> 7.2.2

The FEBS Fellowships in the Period 1984–1992 >> 7.2.3

The FEBS Fellowships in the Period 1993–2001 >> 7.2.4

The FEBS Fellowships in the Period 2002–2004 >> 7.2.5

The FEBS Fellowships in the Period 2005–2009 >> 7.2.6

The FEBS Fellowships in the Period 2010–2012 >> 7.2.7

FEBS Fellowships News 2013 >> 7.2.8

### **FEBS Scientific Apparatus Recycling Programme (SARS/SARP) >> 7.3**

SARS under Peter Campbell (up to 2005) >> 7.3.1

SARP under Karel Wirtz (2006–2011) >> 7.3.2

#### **3.3.10.4 FEBS Activities in the New Millennium >> Chapter 8**

Cooperation between EMBO and FEBS >> 8.1

FEBS Role in European Cooperation and Research Funding >> 8.2

FEBS Committee on Science and Society >> 8.3

FEBS Committee on Education >> 8.4

FEBS Working Group for Exploring Ways to Assist Central and Eastern European Countries” (WOGA - WOGCEE) >> 8.5

FEBS Working Group on Integration (WGI) – and Its Activities >> 8.6

FEBS Working Group on the Career of Young Scientists (YSF) >> 8.7

Working Group on Women in Science (WISE) >> 8.8

FEBS Engagement World-Wide >> 8.9

#### **3.3.10.5 FEBS Awards >> Chapter 9**

FEBS Medals >> 9.1

FEBS Annual Prizes >> 9.2

FEBS Diplôme d’Honneur >> 9.3

Other FEBS Awards >> 9.4

## **3.4**

### **Status of FEBS Management and Finances**

Since 2006, debates arose about the future FEBS management and finances. The problems of new perspectives in these matters led to the establishment of a new working group to address the future structure of FEBS, as well as the installation of a FEBS Finance Committee. These measures culminated in a drastic change of FEBS management and finances in the years 2012/2013.

#### **3.4.1**

##### **New Perspectives**

##### **3.4.1.1 New Working Group Established**

At the Council Meeting 2006 it was decided to establish a new FEBS Working Group to address the future structure of FEBS. Also, the members of this group were elected; the group will be chaired by Israel Pecht (Israel), and the members include Laszlo Fesüs (Hungary), Erik Boye (Norway), Iain Mowbray (UK) and Julio E. Celis (Denmark). (FEBS News July 2006)

### 3.4.1.2 A Message from the Elected Secretary General (2006)

Israel Pecht

First and foremost, I would like to express my deep appreciation of the confidence which FEBS council members expressed by electing me. I consider it a great responsibility, privilege and honour to serve our community. The Secretary General's function is central to *both* the day-to-day operation of the Federation and in determining the future development of biochemical/molecular biological sciences in a *United Europe* and beyond its borders. Julio Celis has launched several major initiatives and set new standards for the activities of the Secretary General. Prominent among these are the establishment of the European Life Sciences Forum (ELSF) and the Initiative for Science in Europe (ISE). Both were central in the pioneering role of FEBS when creating the *European Research Council*. I intend to further develop and diversify this activity in additional directions as enhancing the level of biochemistry teaching and research in *all* European countries is now a major challenge. This will help in ascertaining a future *inside Europe* for the younger members of our community who are interested in biochemistry and molecular biology and enable them the necessary development. It is therefore essential to concentrate on creatively further developing the *All-European scientific community* and attract policy maker's attention and involvement in the advancement of science in Europe and its neighbouring countries. I view FEBS as a Federation of all its individual members, operated by, and acting for, its members. This means that FEBS has to become much more active at the level of the individual biochemists and molecular biologists members of its constituencies:

- It means the FEBS leadership and activities are known and available to *all* members, already to the student starting his biochemistry studies and in *all* constituent societies.
- It means helping and promoting teaching and research of biochemistry at a truly European wide scope.
- It means making European Biochemistry and Molecular Biology *the* world-wide leader.

Acting in a constantly changing and evolving world, many elements in FEBS activities and its structure may require an on-going examination and evaluation: The far-sighted actions of the founding fathers of FEBS remain to provide a financial potential for the range of our activities. With a face to the future, additional sources should be considered and developed. Our governance structure is still the original one conceived decades ago, and it is time for re-examining it for potential improvements. The wide spectrum of our activities and their mode of operation should be a subject of an on-going process of improvement and rejuvenation. I personally have benefited from being able to carry out research and contributing to biochemistry, immunochemistry and bioinorganic chemistry as documented in more than 320 refereed papers. In parallel, I had also served in leading international scientific bodies: Presiding the International Union of Pure and Applied Biophysics (IUPAB), the European Federation of Immunological Societies (EFIS).

Last and certainly not least, I had the privilege of Chairing FEBS and its fellowships committee. On the national academic level, I have chaired the Israel National Science Foundation at its inception and Research Centres and Departments at the Weizmann Institute of Science. Looking forward to taking up my role as Secretary General of FEBS, I intend to invest in it all my *time* and *energy*. This means addressing both the daily operation and developing FEBS in response to the emerging challenges. As a native European, growing up on the continent's periphery and having experienced the dramatic and turbulent events on this continent, I am committed to dedicate myself to develop a better future for the next generations. It is my aim that European biochemistry again becomes world leading; FEBS should be the leading barrier-breaker in Europe, bringing all of its talents to full expression. In perusing these endeavours, I shall need the help, involvement and input of all individual members of FEBS and hope to be available to all of you. (FEBS News July 2006)

### 3.4.2

#### FEBS Finances

**Table 3.4.1** Members of the FEBS Finance Committee.

Member	Country	Elected	Start	End
<b>2009</b>				
John Mowbray Chairperson	UK	Vienna (2007)	01 01 09	31 12 11
Michael Munday	UK	Athens (2008)	01 01 09	31 12 12
Ferdinand Hucho	D	Athens (2008)	01 01 09	31 12 12
<b>2010</b>				
John Mowbray Chairperson	UK	Vienna (2007)	01 01 09	31 12 11
Michael Munday	UK	Athens (2008)	01 01 09	31 12 12
Ferdinand Hucho	D	Athens (2008)	01 01 09	31 12 12
<b>2011</b>				
John Mowbray Chairperson	UK	Vienna (2007)	01 01 09	31 12 11
Michael Munday	UK	Athens (2008)	01 01 09	31 12 12
Ferdinand Hucho	D	Athens (2008)	01 01 09	31 12 12
Alan Fersht, FEBS Treasurer elect	UK	Gothenburg (2010)	01 01 12	31 12 14
<b>2012</b>				
Alan Fersht, FEBS Treasurer, Chair	UK	Gothenburg (2010)	01 01 12	31 12 14
Michael Munday	UK	Athens (2008)	01 01 09	31 12 12
Ferdinand Hucho	D	Athens (2008)	01 01 09	31 12 12
Winnie Eskild	N	Athens (2008)	01 01 09	31 12 12

Table 3.4.1 Continued

Member	Country	Elected	Start	End
<b>2013</b>				
Alan Fersht, FEBS Treasurer, Chair	UK	Gothenburg (2010)	01 01 12	31 12 14
Michael Munday	UK	Rome (2013)	01 01 13	31 12 15
Ferdinand Hucho	D	Rome (2013)	01 01 13	31 12 15
Winnie Eskild	N	Rome (2013)	01 01 13	31 12 15

#### 3.4.2.1 Treasurer's Job (to the end of 2011)



*John Mowbray*

At the end of 2011, Dr John (Iain) Mowbray (photo left) stepped down as the FEBS Treasurer after an extraordinarily long stint of 25 years. This has been an unpaid, demanding position, with its remit stretching from negotiations and discussions with FEBS' publishing, banking and accounting partners to work with the various committees of FEBS to manage ongoing expenditure in FEBS initiatives across Europe and beyond.

Through this central role, Iain has contributed enormously to the achievements and direction of FEBS since the 1980s. At the most recent FEBS Executive Committee meeting in London (November 2011), Iain was formally thanked for his outstanding long-term service to FEBS, and presented with a silver chalice inscribed with a phrase that summed up his commitment: 'Total dedication to FEBS'. He also received a Folio edition of the life of Fryderyk Chopin from the Polish Biochemical Society, which has conferred on him the accolade of Honorary Membership of the Society. From his long association with FEBS, Iain is in a unique position to provide *FEBS News* readers with some historical perspective on the work of FEBS. In this farewell interview, he reflects on his role as Treasurer and how FEBS has developed over the years.

***The path from biochemistry researcher to FEBS Treasurer is not an obvious one. What is your research background and how did you end up working for FEBS?*** There are a number of coincidental strands to this. My research career was always within a university environment and I have always also been active in organizing complementary events – whether these were beer and skittles matches or visiting speakers and departmental seminars. When I returned to Europe in 1972 from a post-doc period in Melvin Calvin's Department of Chemical Biodynamics in Berkeley, California, it was to a lectureship at University College London (UCL). The Biochemical Society had been founded there in 1911, and UCL was still very active in the Society affairs. Its main three-day Annual Society Meeting was held there and I soon inherited the role of local organizer. In addition, I founded and ran the Society's Regulation in Metabolism Group as Group Secretary and Chairman from 1978–1984, and represented all the Groups

on the main Society Committee for much of this time. The second strand is that during this time I was fortunate to develop a strong friendship with the founding Treasurer of FEBS, Prakash Datta, whose office was adjacent to mine and my research labs. Partly as a consequence, I took my research students and post-docs to the annual FEBS Meeting (now Congress) and, through Prakash, became familiar with FEBS activities. Prakash retired in 1985 but continued to come to UCL daily, researching what was to become *The Oxford Dictionary of Biochemistry*. However, in 1986 a sudden worry about his health led him to consider what would happen to FEBS if he became seriously unwell, since all FEBS treasury activities were solely in his hands. Thus he asked me to his study at home where all the FEBS files were so that I would be able to access these if necessary. Another consideration may have been that much of the data were on his BBC 'B' computer and I was probably one of only two active computer-literate members of the Department! My research on the mechanism of ATP conservation in myocardial ischaemia was going well and I had just been promoted to a Readership. Prakash Datta's wife, Naomi, a very distinguished microbiologist, warned me that the commitment required for FEBS might be too great, but I ignored her sensible advice and crossed the Rubicon. The FEBS Executive Committee and then Council appointed me as Assistant Treasurer and gave me access to the bank accounts. I continued to take over part of the Treasurer's duties and at the Rome Council in 1989 I was appointed Treasurer-elect when Prakash announced his intention of resigning. A key role of the FEBS Treasurer has been to balance income from FEBS publications with ongoing and new programmes and initiatives of FEBS as a charity.

***What have been your guiding principles and aims?*** It is quite clear – and we can see examples – that Societies starved of funds are likely to be relatively ineffectual in meeting their aims. Thus my objective as Treasurer has been to husband FEBS' resources to provide a significant wealth base. The first priority was to keep the journals viable not only as conduits of research findings but also as businesses by (most importantly) forging good trusting relationships with our professional publishing partners – and further to make sure that FEBS received its fair share of the income generated from the quality assurance provided by our distinguished Editorial Boards. The next was to keep a firm control on expenditure, looking for value for money in everything and keeping spending committees clearly informed about the resources available to them. The statutes set this as a discretionary responsibility of the Treasurer. In the initial years my aim was to underspend each year so that a reserve could accumulate to provide stability should our income, somewhat over-dependent on publishing, suffer a downturn. More recently, having a reserve of over four times annual expenditure, I have been keen to encourage diversification into new support schemes consonant with our aims so that the reserves will not continue to accumulate. Hence, even with a complete loss of publishing income, FEBS would still be able to fulfil its current commitments.

***Would the founders of FEBS recognize the FEBS of today?*** In the sense of its concentration on younger scientists, support for an annual wide-ranging Congress and its requirement for mobility between countries in the European area, yes. By contrast, the ability to fund diverse programmes without having to trawl around to find individual sponsorship for 'Summer Courses' and research exchange visits would have been a source of relief compared to the efforts they had had to go to. Their foresight in rebranding *Biochemische Zeitschrift* with the support of the German Society and Springer Verlag as the *European Journal of Biochemistry*, and the drive by Prakash Datta and Bill Whelan to establish *FEBS Letters* with the support of Hans Krebs, was crucial. Central to all this was Prakash's insistence that FEBS should hold the copyright of these journals. Without that, I would have been unable to achieve the favourable financial terms we now have with the publishers for these publications.

***Of all its initiatives, the FEBS Fellowship programme receives the most funding from FEBS. How has this programme developed over the years?***

The Fellowships programme was established at a time when one could find support for research visits within a country but not for mobility across state borders. Thus, the imperative of FEBS' transnational rules produced one of the very first European research mobility programmes. The Short-Term (up to 3 months) programme developed into a Long-Term (1 year) one as FEBS funds grew, and the Summer Fellowships for pre-PhD students were a further extension to younger members. Finally, the consideration of how to help economically deprived Eastern European scientists without actively promoting the 'brain-drain' led to the Collaborative Scholarship scheme, which allowed research students from these states to visit Western laboratories to conduct experiments impossible in their home laboratory but required a return home to complete a thesis. More recently, the increased funds available have allowed FEBS to offer the 3-year Fellowships for very able researchers – a length of time often now needed to complete a significant advance in a field of research.

***Other important areas of FEBS funding over the past 25 years have been the annual FEBS Congress and the Advanced Courses. Are you surprised these have remained important fixtures in scientists' calendars?***

We debated often in past years about the need for a 'general' Congress rather than meetings on focused research topics. Our conclusion was that for young scientists at the beginning of their research careers, and who are not committed to a particular field, there was still a strong need to provide research at the cutting edge but available to a wide spectrum of audience. Indeed, the case is even stronger now that research teams often consist of scientists trained initially in a variety of disciplines from physics and mathematics through chemistry and biochemistry to cell biology and genetics. There are now many research-area-specific meetings and only Congresses such as the annual FEBS one offer a view of the horizon across the biosciences. 8 *FEBS News* February 2012 FEBS COMMITTEE NEWS As for the Advanced Courses programme, which includes focused Workshops



and Special Meetings as well as theoretical and practical teaching both *in silico* and in the laboratory, the rate of development and evolution of techniques has never been so fast and the need for these (re-)training events remains very strong.

***There have been huge changes in national boundaries, politics and monetary matters in the FEBS area since the 1980s, and these continue. Tell us about some of the impacts on the work of FEBS during your time as Treasurer.*** FEBS has always tried to build positive bridges with state officials and not to take a political stance since that would seldom be to the benefit of members in regimes that were less democratic than the optimum. There were two problems. Sending funds to support events in some regimes meant that any surplus could not be recovered – although often that could be ceded to the local biochemical society. Equally, exchange rate fluctuations meant that endless last-minute adjustments were needed. In the Soviet Bloc, most bills had to be paid in cash – local or exchangeable! The best exchange rates for local currency were usually available from the chief porter in your hotel and transactions took place in the lift between floors! Prakash and I were lucky in being relatively well-built so that the body belts round our waists containing Deutsche Marks, US Dollars and Roubles were not too obvious. Even in Western European countries there were problems because of foreign exchange rules and limits on the amount one could draw at any time from a bank on a single cheque. Because of the small maximum limit in Italy in 1989, Prakash and I spent hours taking turns to queue up at the Congress bank counter to redeem cheques!

***As Treasurer, you've been involved in all aspects of FEBS. Looking back over the past 25 years, are there specific programmes or events that you are particularly proud of?*** I think pride is the wrong term. FEBS is a team effort. I am very fortunate to have had a hand in building up FEBS resources and thus increasing the potential our scientists have to influence research in the European area. This was only achieved by the many talented European colleagues with whom I was privileged to be able to collaborate in trying to improve, promote and make available our scientific advances for everyone – and to use the income from these efforts for the educational benefit of the coming generation of scientists.

*Has it been all work and no play?* Certainly not! I have made the most wonderful set of friends in every country in Europe and beyond, with colleagues willing to share their efforts freely and generously for the benefit of our science. This is the sort of legacy which provides a network of goodwill like nothing else, it seems, can.

***FEBS wishes you a relaxing retirement and all the best for the future. What's next?*** I'm still active in a number of UCL societies, am beginning again to take a more active role in local politics, and have joined a very active local branch of the U3A (University of the Third Age). I've even begun the long-neglected task of weeding my filing systems! With two (and soon to be three) of our children along

with four grandchildren settled in Australia, extended trips to the antipodes will be much easier to schedule too. (From FEBS News 2012/1)

### 3.4.3

#### **New Treasury Office (2012)**

The Treasury at University College London was closed at the end of the year 2011. A most modern Treasury office was installed by the new FEBS Treasurer, Sir Alan Fersht, in Cambridge. The Treasury Manager became Elena Ratcliff, who is running everything electronically. Carolyn Ellis is FEBS Communication Officer as well as Treasury Liaison Officer; she now runs “FEBS News”. FEBS News is properly up to date and makes an exciting contribution to FEBS. Carolyn also works very hard coordinating lots of activities on the legal side.

### 3.4.4

#### **Changes to FEBS Management and Finances (2013)**



*Sir Alan Fersht*

Dear Colleagues,

2012 was a year for FEBS to take stock of its governance and finances, and as a result FEBS now enters 2013 in better shape for achieving long-term contributions to the advancement of molecular bioscience research and education.

#### ***Restructuring of FEBS***

FEBS has been an unincorporated charity, which is an outmoded form of governance for a large charity with financial, contractual and legal obligations. During 2012, FEBS updated its structure to become a company limited by guarantee (registered company number 08239097) and registered as a charity (registered charity number 1149638) – a model used by other significant UK-registered charities such as the Biochemical Society. FEBS is still a charity but is now a legal entity with financial safeguards.

It is important to emphasize that the name, aims and activities of FEBS remain unchanged by the restructure. The organization’s overall objective is formally stated as ‘to contribute to and promote the advancement of research and education for the public benefit in the sciences of biochemistry and molecular biology and related disciplines ... by all suitable means ...’. More details on FEBS’ objectives, the restructuring and links to FEBS’ governing documents can be found on the FEBS website under ‘FEBS as a charity’.

#### ***Publishing Changes and FEBS Finances***

FEBS has recognized the value of and demand for open access publishing in the bioscience and wider community over recent years, and as a result its established journals offer open access publication options, and indeed FEBS recently launched the entirely open access journal *FEBS Open Bio*.

At the same time, FEBS is very aware of how traditional journal subscription publishing models have enabled investment in and development of high-quality science publishing by its journals. Furthermore, as FEBS wholly owns these, this mode of publishing has generated significant income for FEBS to use to support and advance the molecular life sciences cross Europe and further afield, through research fellowships, conferences, travel grants and so on. The established journals of FEBS currently have a strong subscription base, but we must face the reality that the trend towards open access publishing will continue, and that current pricing structures for open access publication will ultimately result in a drastic reduction in FEBS' income – a problem FEBS shares with many other learned societies.

A new financial strategy for FEBS is therefore needed. FEBS will now try to develop its current financial reserves as an endowment, with future income derived largely from that. As a result, FEBS is reassessing and reducing some of its recent high expenditure levels, with any excess income over expenditure for the next two or three years of guaranteed income to be used both to cover its current commitments and to build up the endowment.

A key area of FEBS spending that has increased dramatically in recent years is Long-Term Fellowships (~€2.3 million in 2012), followed by Advanced Courses (~€0.9 million in 2012). Unfortunately, these high levels of spending are now unsustainable and both areas will be making fewer awards in 2013. Although clearly regrettable, this is unavoidable if FEBS is going to be able to continue to support biochemistry and molecular biology in the long-term. The changes mean that funding in these programmes in 2013 and 2014 will need to be focused on the most outstanding applications.

### ***FEBS Programmes in 2013***

Despite these concerns, there is much for FEBS to be positive about as 2013 begins. Congress funding is maintained and we look forward to a spectacular and unique event in St Petersburg in July. FEBS has an excellent range of Advanced Courses lined up for the year, with many bridging pure biochemistry/molecular-biology studies and medical/industrial applications – and all at exciting locations across Europe. FEBS continues to offer Youth Travel Fund grants for most of these events. Although competition for Long-Term Fellowships will become fiercer, the full range of FEBS Fellowships are also still on offer. For Constituent Societies, FEBS will be funding National Lectures, a FEBS3+ meeting, and education workshops. All members of the FEBS Executive and other Committees (elected to posts by FEBS Council) continue to devote their time and energy to FEBS and the bio-science community on a pro bono basis, with some administrative support only for the busier areas of FEBS work.

On behalf of the FEBS Executive Committee, I wish you all the best in your scientific endeavours in 2013.

*Alan Fersht, FEBS Honorary Treasurer*  
(FEBS News January 2013)

## 4 FEBS as an Organisation

### 4.1 FEBS as a Charity

#### 4.1.1 Restructuring of FEBS

FEBS has recently updated its structure to become a company limited by guarantee (registered company number 08 239 097) and registered as a charity (registered charity number 1 149 638), rather than remaining as an unincorporated charity (registered charity number 261 793). As a result of this restructuring, FEBS is now a legal entity with financial safeguards.

The assets of the old FEBS entity were donated to the new incorporated charity on 31 December 2012, and the old FEBS entity has been dissolved, according to a resolution passed at the FEBS Council meeting in Seville, Spain, in September 2012.

The articles of association of the new company (which are based on and replace the previous statutes) can be viewed at [www.febs.org](http://www.febs.org). The name, aims and activities of FEBS remain unchanged by the restructuring.

#### 4.1.2 FEBS' Objectives

The objectives of FEBS are to contribute to and promote the advancement of research and education for the public benefit in the sciences of biochemistry, molecular biology and related disciplines ... by all suitable means and in particular by:

- holding and arranging congresses, training and educational courses on matters connected with biochemistry and molecular biology and related disciplines;
- facilitating and supporting the exchange of scientific information between biochemists, molecular biologists and scientists working in related disciplines generally and especially in Europe and other countries of Constituent Societies;
- facilitating and supporting the training of young scientists in research, in the form of fellowships; and

- organising the editing and publication of scientific research and educational material in biochemistry and molecular biology and related disciplines.

#### 4.1.3

##### **Public Benefit**

Through the activities outlined above, the beneficiaries of FEBS include scientists at all levels directly engaged in research and education in the molecular life sciences, and ultimately humankind across the globe through the contributions of these areas of science to human health, agriculture, biotechnology and related areas, and enrichment of human knowledge.

FEBS wholly owns its international journals, which are of importance to FEBS both by directly contributing to its objectives and as a source of income to support its other purposes. FEBS follows all directives on Open Access publishing from the UK, EU and relevant research funders across the world. Its journals offer authors an immediate open access option for new articles and an option to turn past papers to open access; in addition, authors are able to immediately deposit accepted research articles in institutional repositories, through which they are accessible to the public, and all published articles in our subscription-model journals are freely available after 12 months to all readers. FEBS has also recently launched an entirely open access journal, *FEBS Open Bio*.

FEBS events are normally open to scientists throughout the world. Recipients of FEBS grants for fellowships and for support of attendance at meetings are normally required to be members of FEBS' Constituent Societies (where membership criteria are those expected of learned societies) and resident within the FEBS area of Europe and neighbouring countries. Some FEBS programs particularly benefit disadvantaged scientists.

##### **Federation of European Biochemical Societies (FEBS)**

A Company Limited by Guarantee (Number 08 239 097)

A Registered Charity (Number 1 149 638)

Registered in England and Wales

Registered office: 98 Regent Street, Cambridge, CB2 1DP, UK.

#### 4.2

##### **FEBS Present Activities Portfolio**

Founded on the 1st of January 1964, FEBS is one of the largest organisations in European Life Sciences. It is a Federation of the Societies of Biochemistry and Molecular Biology in 43 countries in the European Area, with nearly 46 000 members distributed among 36 Member Societies and 7 Associated Member Societies.

FEBS seeks to promote, encourage and support biochemistry, molecular cell biology and molecular biophysics throughout Europe in a variety of ways:

FEBS facilitates the exchange of information at an annual **Congress and Other FEBS Meetings**—cf. Chapter 5,  
 FEBS publishes primary research through their **Publications**—cf. Chapter 6,  
 FEBS offers **Advanced Courses** (for FEBS members)—cf. Chapter 7,  
 FEBS provides various types of **Fellowships** (for FEBS members—and non-members in the case of Summer Fellowships)—cf. Chapter 7,  
 FEBS facilitates to transmit news from our **Member Societies** and contact and knowledge between their members—cf. Chapter 8,  
 FEBS have a strong focus on promoting the career of scientists with a special interest in the careers of **Young Scientists and Women**—cf. Chapter 8,  
 FEBS furthers the cooperation with **European Institutions**—cf. Chapters 3 and 8,  
 FEBS awards **Prizes and Medals** in recognition of scientific distinction—cf. Chapter 9,  
 FEBS offers a free e-newsletter (**FEBS News**) with e.g. job offers and news from the FEBS community.  
 On the **FEBS Website** (<http://www.febs.org>) relevant information as to the above topics, including guide-lines and forms for applications, a calendar of forthcoming dates and events, as well as interesting news will be published quarterly—cf. **Chapter 6**.

These many activities that FEBS have developed over the years would not have been possible without the FEBS members' continued support of, and publication in, the four FEBS journals. Equally, the indefatigable engagement of the members and chairmen of the various FEBS Committees and the rather newly shaped Working Groups have great merit in these efforts.

### 4.3

#### FEBS Bodies

##### 4.3.1

#### FEBS Council and FEBS Officers

FEBS is governed by a **Council** composed of one delegate from each of the Constituent Societies (Member Societies, who have paid full subscriptions, as well as Associated Members who do not pay subscription) plus the members of the Executive Committee. Each delegate and Executive Committee member has one vote each. Associated members can send an observer to Council but they cannot vote.

The Council meets once a year at the annual FEBS Congress, under the chairmanship of a member of the Society hosting that Meeting; the Council Chairperson also chairs the Executive Committee until replaced at the next FEBS Meeting.

Subject to the Council, the administration of the Federation shall be vested in an Executive Committee consisting of the Chairman, the Vice-Chairman, and the FEBS Officers together with any person or persons appointed by Council to serve



The Vice-Chairperson, who after one year becomes Chairperson, is appointed by the Society hosting the Annual Scientific Congress and Council Meeting in the previous year; the others are nominated by the Member Societies and appointed by Council after a secret ballot for three-year terms. Council also elects members to the Advanced Courses Committee, the Fellowships Committee, the Publications Committee, the Education Committee, and the Science and Society Committee for single four-year terms. The current membership of all committees together with dates of appointment and geographical distribution will be set out at the FEBBS website. The Executive Committee with the approval of Council will also set up from time to time Working Groups to explore new issues and services.

Tables 4.1 and 4.2 present an overview on the Chairpersons, FEBS Officers, and other personalities, who have served the Federation for certain periods of time since its foundation in 1964. As can be seen from these tables, one of the above Committees and several Working Groups have only recently been installed. The obligations and functions of the FEBS Officers and their Committees as well as their compositions are detailed in the Statutes; descriptions of their activities can also be found in the relevant Chapters of Part II.

**Table 4.1** Members of the FEBS Executive Committee, 1964 through 2013

Period	FEBS Chairpersons	Country
1964–1965	Frank Happold	United Kingdom
1965–1966	Otto Hoffmann-Ostenhof	Austria
1966–1967	K. Zakrewski	Poland
1967–1968	Alexander Pihl	Norway
1967–1969	Frantisek Sorm	Czechoslovakia
1969–1971	J.R. Villanueva	Spain
1971–1972	Todor Nikolov	Romania
1972–1974	Laurens L.M. van Deenen	The Netherlands
1974–1975	Ferenc Guba	Hungary
1975–1976	Jean-Pierre Ebel	France
1977–1978	Frank Lundquist	Denmark
1978–1979	Samuel Rapoport	Germany (DDR)
1980–1981	Nathan Sharon	Israel
1981–1983	Hamish Keir	United Kingdom
1983–1984	Claude Liébecq	Belgium
1984–1986	Yuri Ovchinnikov	Russia
1986–1987	Karl Decker	Germany
1987–1989	Vito Turk	Slovenia
1989–1990	Doriano Cavallini	Italy
1990–1992	Peter Friedrich	Hungary
1992–1993	Norma Ryan	Ireland
1993–1995	Lars Thelander	Sweden
1995–1996	Joachim Seelig	Switzerland
1996–1998	Carlos Gancedo	Spain

*(continued overleaf)*



Table 4.1 (Continued)

Period	FEBS Chairpersons	Country
1998–1999	Brian Clark	Denmark
1999–2002	Guy Dirheimer	France
2003–2005	Claudina Rodrigues-Pousada	Portugal
2005–2006	Israel Pecht	Israel
2006–2007	Jolanta Baranska	Poland
2007–2008	Balasz Sarkadi	Hungary
2008–2009	Nazmi Özer	Turkey
2009–2010	Andreas Hartig	Austria
2010–2011	Emmanuel Fragoulis	Greece
2011–2012	Tomàs Zima	Czech Republic
2012–2013	Winie Eskild	Norway
2013–2014	Sergio Papa	Italy
<b>Secretaries General</b>		
1965–1967	William J. Whelan	United Kingdom
1968–1974	Henry R.V. Arnstein	United Kingdom
1975–1977	Laurens L.M. van Deenen	The Netherlands
1978–1983	Moritz Yomtov	Bulgaria
1984–1989	Guy Dirheimer	France
1990–1998	Vito Turk	Slovenia
1999–2007	Julio Celis	Denmark
2008–2016	Israel Pecht	Israel
<b>Treasurers</b>		
1964–1990	Prakash S. Datta	United Kingdom
1991–2011	John Mowbray	United Kingdom
2012–2014	Sir Alan Fersht	United Kingdom
<b>Meetings/Congress Counsellors</b>		
1978–1987	Simon G. van den Bergh	The Netherlands
1988–1996	Horst Kleinkauf	Germany
1997–2005	Joan Guinovart	Spain
2006–2014	Adam Szewczyk	Poland
<b>Chairpersons Advanced Courses Committee</b>		
1965–1967	Henry R.V. Arnstein	United Kingdom
1967–1970	Peter N. Campbell	United Kingdom
1970–1977	Max Gruber	The Netherlands
1978–1986	Giorgio Bernardi	France
1987–1995	Horst Feldmann	Germany
1996–2004	Karel Wirtz	The Netherlands
2005–2010	Karl Kuchler	Austria
2011–2013	Jaak Järv	Estonia
<b>Chairpersons Fellowships Committee</b>		
1979–1983	Guy Dirheimer	France
1984–1992	Carlos Gancedo	Spain
1993–2001	Israel Pecht	Israel
2002–2010	Maciej Nalecz	Poland
2011–2013	Vicente Rubio	Spain

Table 4.1 (Continued)

Period	FEBS Chairpersons	Country
	<b>Chairpersons Publications Committee</b>	
1966–1972	Claude Liébecq	Belgium
1972–1974	Bo G. Malmström	Sweden
1975–1977	Samuel Rapoport	Germany
1978–1983	Trever W. Goodwin	United Kingdom
1984–1989	Uriel Z. Littauer	Israel
1990 (Interim)	Vito Turk	Slovenia
1990–1996	Karl Decker	Germany
1997–2005	Willy Stalmans	Belgium
2006–2011	Felix Goni	Spain
2012–2014	László Fésüs	Hungary
	<b>Chairpersons of the Science and Society Committee</b>	
2001–2007	Federico Mayor	Spain
2008–2010	Giorgio Semenza	Switzerland
2011–2013	Jacques H. Weil	France
	<b>Chairpersons of the Education Committee</b>	
1999–2005	Jean Wallach	France
2007–2009	Edward Wood	United Kingdom
2010–2015	Gül Güler-Akdogan	Turkey
	<b>Chairpersons of the Working Group on Assistance to Central &amp; Eastern Europe/for Integration (WOGCEE/WGI)</b>	
1999–2008	Guy Dirheimer	France
2009–2014	Mathias Sprinzl	Germany
	<b>Chairpersons of the Working Group on the Career of Young Scientists/Young Scientists Forum (YSF)</b>	
2002–2004	Marja Makarow	Finland
2005–2007	Claudina Rodrigues-Pousada	Portugal
2008–2010	Daniella Corda	Italy
2011–2013	Claudina Rodrigues-Pousada	Portugal
	<b>Chairpersons of the Working Group on Women in Science (WISE)</b>	
2003–	Sissel Rogne	Norway
2008–2010	Ruth Hakkry Paulssen	Norway
2011–2013 (resigned in 2012)	Lea Sistonen	Finland
2012–2013 (replaced)	Cecilia Arraiano	Portugal
	<b>Chairmen of the FEBS Finance Committee</b>	
2009–2011	John Mowbray	United Kingdom
2012–2014	Sir Alan Fersht	United Kingdom



**Figure 4.2** Chairpersons of the FEBS Executive Committee. From top to bottom and from left to right: Frank Happold, Otto Hoffmann-Ostenhof, K. Zakrewski, Alexander Pihl, Frantisek Sorm, J.R. Villanueva, Todor Nikolov, Laurens L.M. van Deenen, Ferenc

Guba, Jean-Pierre Ebel, Frank Lundquist, Samuel Rapoport, Nathan Sharon, Hamish Keir, Claude Liébecq, Yuri Ovchinnikov, Karl Decker, Vito Turk, Doriano Cavallini, Peter Friedrich, Norma Ryan, Lars Thelander, Joachim Seelig, Carlos Gancedo, Brian Clark.



**Figure 4.2** (contd). Chairpersons of the FEBS Executive Committee From top to bottom and from left to right: Guy Dirheimer, Claudina Rodrigues-Pousada, Israel Pecht,

Jolanta Baranska, Balasz Sarkadi, Nazmi Özer, Andreas Hartig, Emmanuel Fragoulis, Tomas Zima, Winnie Eskild, Sergio Papa, Miguel Angel de la Rosa.



**Figure 4.3** FEBS Secretaries General. From left to right. William J. Whelan, Henry R.V. Arnstein, Laurens M.L. van Deenen, Moritz Yomtov, Guy Dirheimer, Vito Turk, Julio Celis, Israel Pecht.



**Figure 4.4** FEBS Treasurers. From left to right. Prakash Datta, John Mowbray, Sir Alan Fersht.



**Figure 4.5** FEBS Meetings/Congress Counsellors: From left to right. Simon van den Bergh, Horst Kleinkauf, Joan Guinovart, Adam Szewczyk.



**Figure 4.6** Chairmen of the FEBS Advanced Courses Committee. From top to bottom, and left to right Henry Arnstein, Peter Campbell, Max Gruber, Giorgio Bernardi, Horst Feldmann, Karel Wirtz, Karl Kuchler, Jaak Järv.



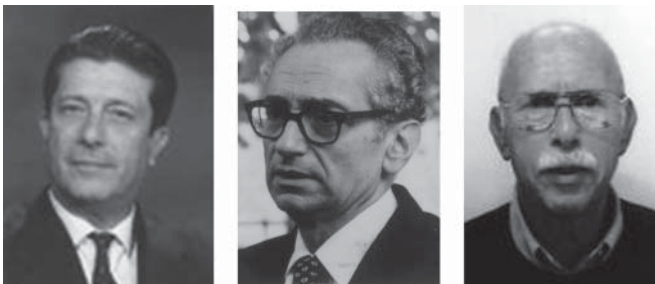
**Figure 4.7** Chairmen of the FEBS Fellowships Committee: From left to right. Guy Dirheimer, Carlos Gancedo, Israel Pecht, Maciej Nalecz, Vicente Rubio.



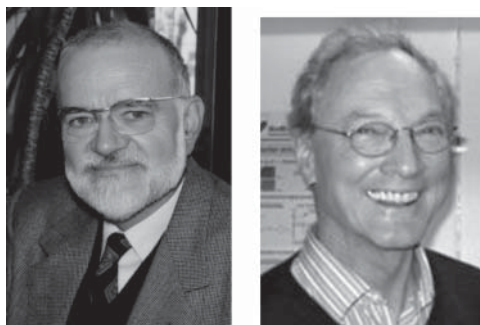
**Figure 4.8** Chairmen of the FEBS Publications Committee: From top to bottom, and from left to right. Claude Liébecq, Bo Malmstörn (no picture available), Samuel Rapaport, Trevor W. Goodwin, Uriel Littauer, Vito Turk, Karl Decker, Willy Stalmans, Felix Goni, Laszlo Fesus.



**Figure 4.9** Chairpersons of the Education Committee. From left to right. Jean Wallach, Edward Wood, Gül Güler-Akdoğan.



**Figure 4.10** Chairmen of the Science & Society Committee. From left to right. Federico Mayor, Giorgio Semenza, Jacques-Henry Weil.



**Figure 4.11** Chairpersons of the WOGCEE and Working Group for Integration (WIG): Left to right. Guy Dirheimer, Mathias Sprinzl.



**Figure 4.12** Chairpersons of the Working Group on the Career of Young Scientists (YSF): Marja Makarowa, Claudina Rodrigues-Pousada, Daniella Corda, Claudina Rodrigues-Pousada.



**Figure 4.13** Chairpersons of the Working Group on Women in Science (WISE): Sissel Rogne, Ruth Hakry Paulsen, Lea Sistonen, Cecilia Arraiano.

Table 4.2 Other Appointments.

<b>Chairmen of the Editorial Board of the European Journal of Biochemistry/he FEBS Journal</b>		
1967–1988	Claude Liébecq	Belgium
1989–1998	Philipp Christen	Switzerland
1999–	Richard Perham	United Kingdom
<b>Managing Editors of FEBS Letters</b>		
1964–1985	Prakash Datta	United Kingdom
1986–2000	Giorgio Semenza	Switzerland
2000–2001	Matti Saraste	Germany
2001–	Felix Wieland	Germany
<b>Editors of FEBS Bulletin</b>		
1965–1983	Prakash Datta	United Kingdom
1984–2001	Jan Skoda	Czech Republic
<b>Editor-in-Chief of Molecular Oncology</b>		
2007–	Julio Celis	Denmark
<b>Executive Editor of FEBS OpenBio</b>		
2011–	Mary Purton	United Kingdom
<b>Counsellors of SARS/SARP</b>		
1990–2005	Peter Campbell	United Kingdom
2006–2011	Karel Wirtz	The Netherlands
2011–2012	Mathias Sprinzl	Germany

## 4.3.2

**FEBS Secretaries**

As the activities of FEBS increased the duty of the Secretary General became too heavy for one man, even if he was helped by his secretary from the University (Guy Dirheimer was helped by Danièle Werling and Vito Turk by Zvonka Vadjal). Thus the need of a full time secretary became evident. The first one was Inge Detlefsen who was attached to Julio E. Celis, when he became Secretary General. She worked for FEBS for 7 years (1994–2001). Dorte Holst Pedersen followed her, looking after the day to day business. Camilla Krogh Lauritzen joined the FEBS Secretariat on June 3 2002 as Information manager. Her central part of job was to compose the FEBS NewsLetter which appeared 6 times a year. She, Inge Detlefsen and Louise McSeveny manned the FEBS stand at the FEBS congresses during the time of Julio Celis as Secretary General. After the General Secretariat left Denmark on December 31, 2007, the duty of publishing the NewsLetter was done in the Treasurer's Office, and it was Louise McSeveny who took over the job. She also acted as the new FEBS Webmaster. The Secretary



Generals office of Israel Pecht in Rehovot was held by Hava Ayalon from January 2008 to 2010. Hanni Naor took the job following her. Without the dedication and hard work of these ladies FEBS would not have been able to develop as it did.



**Figure 4.14** FEBS Secretaries. From left to right: Danièle Werling, Zvonka Vadnjaj, Inge Detlefsen, Dorte Holst Pedersen, Camilla Krogh Lauritzen, Regina Klaus, Louise McSeveny, Hava Ayalon, Hanni Naor.

#### 4.4

##### **Meetings of FEBS Council and FEBS Executive Committee**

While Council has met routinely at the FEBS Meetings/Congresses, meetings of the FEBS Committee have been scheduled at shorter intervals and took place two to three times a year.

Though documents on the discussions and decisions—as well those of Council as those of the Executive Committee—are still available, we refrain from reproducing them in this Memoir, because (i) publication would occupy too much space, (ii) the record may be patchy during the first years of FEBS, and fragmentary in the years to follow; (iii) moreover publication would violate confidentiality. Instead, we present some data and pictures from the meetings. Decisions of general interest to FEBS have been publicised through the FEBS Website and FEBS NewsLetter/FEBS News since 1999. They will be apparent throughout the chapters to follow.

4.4.1

The 'Old Times'



**Figure 4.15** FEBS Executive Committee Meeting in Vienna (1965). From left to right: Peter Reichard, Unknown, Uriel Littauer.



**Figure 4.16** FEBS Executive Committee Meeting in Moscow (1984) Visible: C. Liébecq, Y. Ovchinnikov (Chairman), G. Dirheimer, Danièle Werling, Prakash Datta, Simon van den Bergh.



**Figure 4.17** FEBS Executive Committee Meeting in Prague (1988). G. Dirheimer, V. Turk, K.Decker, C. Gancedo, H. Feldmann.



**Figure 4.18** FEBS Executive Committee Meeting in Rome (1989). C. Gancedo, U. Littauer, Daniéle Werling, G. Dirheimer, D. Cavallini, V. Turk.



**Figure 4.19** FEBS Executive Committee Meeting, Budapest 1990. Sitting: P. Datta, D. Cavallini. Standing: H. Kleinkauf, J. Mowbray, K. Decker, G. Dirheimer, V. Turk, H. Feldmann, C. Gancedo.



**Figure 4.20** Party at Peter Friedrich's home.



**Figure 4.21** Executive Committee Meeting, Ljubljana 1998, J. Guinovart, J. Mowbray, B. Clark, K. Wirtz, Z. Vadnjal, J. Celis, B. Wheland, V. Turk, Igor Kregar, C. Gancedo, I. Pecht, W. Stalmans.

## 4.4.2

## 'Modern Times'

**Table 4.3** Meetings of FEBS Councils and Executive Committees

<b>Date of Council Meeting</b>	<b>Place</b>
15 July 2000	Birmingham, UK
03 July 2001	Lisbon, Portugal
25–26 October 2002	Istanbul, Turkey
08 July 2003	Brussels, Belgium
30 June 2004	Warsaw, Poland
8–9 July 2005	Budapest, Hungary
27–28 June 2006	Istanbul, Turkey
12–13 July 2007	Vienna, Austria
3–4 July 2008	Athens, Greece
9–10 July 2009	Prague, Czech Republic
1–2 July 2010	Gothenburg, Sweden
30 June–01 July, 2011	Turin, Italy
9–10 Sept. 2012	Seville, Spain
11–12 July 2013	St. Petersburg, Russia

<b>Date of EC Meeting</b>	<b>Place</b>
<b>2000</b>	
March 29–30	Strasbourg, France
July 14	Birmingham, UK
December 9	Leuven, Belgium
<b>2001</b>	
April 29	Paris, France
June 30	Lisbon, Portugal
December 1	Barcelona, Spain
<b>2002</b>	
April 27	Amsterdam, The Netherlands
October 20	Istanbul, Turkey
<b>2003</b>	
March 9	Copenhagen, Denmark
July 3	Brussels, Belgium
November 29	Lisbon, Portugal
<b>2004</b>	
March 28	Paris, France
June 26	Warsaw, Poland
December 11	Ljubljana, Slovenia

*(continued overleaf)*

Table 4.3 (Continued)

Date of EC Meeting	Place
<b>2005</b>	
April 16	Rehovot, Israel
July 2	Budapest, Hungary
December 3	Leuven, Belgium
<b>2006</b>	
April 8	Warsaw, Poland
June 24	Istanbul, Turkey
December 16	Madrid, Spain
<b>2007</b>	
March 24	Copenhagen, Denmark
July 7	Vienna, Austria
December 8	Brussels, Belgium
<b>2008</b>	
March 9	Budapest, Hungary
July 28	Athens, Greece
November 8	Istanbul, Turkey
<b>2009</b>	
March 14	Strasbourg, France
July 4	Prague, Czech Republic
November 14	Tallinn, Estonia
<b>2010</b>	
March 20	Tromsø, Norway
June 26	Gothenburg, Sweden
November 20	Zurich, Switzerland
<b>2011</b>	
April 9	Athens, Greece
June 30	Turin, Italy
November 26	London, UK
<b>2012</b>	
April 21	Prague, Czech Republic
September 4	Seville, Spain
<b>2013</b>	
March 16	Rome, Italy
July 6	St Petersburg, Russia



**Figure 4.22 and 4.23.** Executive Committee Meeting in Rehovot, 2005. Left: Israel and Marita Pecht. Right: Guy Dirheimer, Jolanta Baranska, Iain Mowbray.



**Figure 4.23** Executive Committee Meeting in Istanbul, 2009. Israel Pecht, Ava Hayalon, Guy Dirheimer and unknown.

All other Meetings of FEBS Committees and Working Groups will be dealt with in the respective Chapters to follow.)

## Part II

### FEBS ACTIVITIES





## 5 FEBS Meetings/Congresses and Other FEBS Meetings

### 5.1 FEBS Meetings & Congresses

#### 5.1.1 Importance and Format – Historical Development

Since the foundation of FEBS in 1964, FEBS Meetings have been one of the most visible activities of the Federation. From that time on, FEBS Meetings were held annually in countries that have a Constituent Society of the Federation (Table 5.1.1), in accordance with the FEBS Statutes. The local Society will organize the Meeting on behalf of FEBS and should aim for it to be collaboration with other national Life Science Societies.

Up to 2004, the following rules applied: Only when an IUBMB Congress was being held in Europe was the Meeting a FEBS/IUBMB Meeting. If the IUBMB Meetings (in a three-year turn) were held outside Europe, FEBS had decided in 1973 to organize in parallel Special Meetings in countries that have a Constituent Society of the Federation.

From 2004 onwards, FEBS Meetings were renamed “FEBS Congresses”. At the same time, organizational strategy has been modified: Only when an IUBMB Congress is being held in Europe will FEBS collaborate with IUBMB in order to make it a joint FEBS/IUBMB Congress. In addition, the IUBMB may collaborate with FEBS in order to organize joint FEBS Congresses/IUBMB Conferences.

For 2010, FEBS agreed for the first time that an Annual Congress may be organized by two Constituent Societies. Thus the FEBS Congress in Gothenburg was organized by Sweden and Norway.

The format of the FEBS Congresses held in 2011 in Turin and 2012 in Seville followed the rules worked out in 2004, as presented in the following.

In 2014 for the first time a joint FEBS/EMBO Conference will be organized. It will be held in Paris and named “Biochemistry at the crossroads of life sciences”.

### **Time Settings**

The Congress will normally be held during six days at the end of June or beginning of July in order to avoid conflict with summer vacations. However, local circumstances can also be taken into account. In order to derive travel concessions for staying over a Saturday night, the Congress should start on a Saturday afternoon and finish on a Thursday afternoon. The dates should be chosen to avoid clashing with any other known main scientific conferences or local popular activities (e.g. athletics championships, Olympic Games, etc.).

### **Scientific Events**

The general format of these venues has largely been kept over the years, though details have been modified to meet the actual requirements. FEBS Congresses, although aimed at the whole community of biochemists and molecular biologists, should preferably have a focal topic, which defines the congress.

FEBS Congresses must consist of:

- Plenary or Main Lectures (about 50 min)  
The following Named Lectures will be accommodated in the programme normally as Plenary Lectures: *Sir Hans Krebs* Lecture; *Datta* Lecture; *Theodor Bücher* Lecture; EMBO Lecture; IUBMB Lecture; PABMB Lecture.  
Additionally, the recipient of the FEBS/EMBO Women in Science Award is expected to hold a plenary lecture at the FEBS Congress.
- Parallel Symposia (Mornings on days 2 to 6), each involving 4–5 state-of-the-art lectures (25/30 min). These symposia (limited to 4 to 5) should be structured around the focal topic. It is recommended that these symposia extend along the five mornings of the congress, so that the topic can be covered thoroughly.
- Parallel Workshops (Afternoons on days 2, 3 and 5) each involving 4–5 lectures (20–30 min). These workshops are usually more specific than symposia.
- Poster Sessions
- A Commercial Exhibition
- Forum for Young Scientists
- Special sessions on Women in Science, Education, and Science and Society.

The number of parallel sessions will be, in part, dependent upon the characteristics of the Congress Venue.

It is also recommended that the Congress include:

- A Social Programme
- A Programme for Accompanying Persons
- A Public Awareness Programme open to the public
- Educational activities
- A system of baby-sitting and children care should be organized at the Congress.

In order to get a good attendance, the Registration Fee for the Meeting has to be kept within reasonable reach of most European biochemists. A Reduced

Registration Fee (50%) has to be made available for young participants (under 31 years old at the time of the Congress). The rates, subsidised in part by the FEBS grant, were normally only applied to scientists working in academia: those working in industry were asked to pay an appropriately higher registration fee.

#### 5.1.2

##### **Publications from FEBS Meetings/Congresses**

During the first years, until about 1983, the Symposia at the FEBS Meetings as well as a list of the Plenary Lectures were published in book form (see Annexes 2 and 3, respectively, in “40 Years of FEBS, 1964–2003”). In recent years, the Statutes demand that accepted abstracts of paid-up delegates have to be published in the proceedings of the Meeting. For some time, it has been customary that The European Journal of Biochemistry (now The FEBS Journal) and FEBS Letters edit Special Issues presenting selected contributions of invited lecturers whose contributions are in focus with timely topics of the Meeting. The Organising Committee has at an early date to make contact with the Managing Editor of FEBS Letters with a view to organising a Special Issue of that journal in connection with the Congress. The Organising Committee is to notify the Chairman of the Editorial Board of The FEBS Journal and the Managing Editor of FEBS Letters as soon as the lecturers have accepted their invitations to lecture. These Special Issues are distributed to the participants of the Congress free of charge.

From 1965 onwards, it was customary for the Sir Hans Krebs Lecture to be published in the *European Journal of Biochemistry* (EJB) and in the *FEBS Journal*, and for the Datta Lecture in the Special Issue of *FEBS Letters*. Organizers were to inform those awarded these lectureships about their obligation to submit the manuscripts in due time.

Along with all necessary information related to the Congress, the participants obtain a Book of Abstracts that will contain the abstracts for the invited lectures, accepted abstracts, indexed by author and keywords. With the availability of electronic publication, abstracts are now made available on-line at a designated website (see [www.febs.org](http://www.febs.org) for further details) a few weeks before the Meeting and may be left for consultation once concluded. FEBS has reserved the right to publish the Book of Abstracts as a supplement for one of its own journals or to arrange for specialist electronic publishing. Where the local Society wished to publish the Book of Abstracts as a special issue of its own journal, prior consent is required from the FEBS Executive Committee.

#### 5.1.3

##### **Locations of FEBS Meetings/Congresses**



Figure 5.1.1 Locations of FEBS Meetings and Congresses from 1964 through to 2014.

Table 5.1.1 FEBS Meetings/Congresses during the first fifty years

	Year	Place	Dates
1	1964	London	March 23–25
2	1965	Vienna	April 21–24
3	1966	Warsaw	April 4–7
4	1967	Oslo	July 3–7
5	1968	Prague	July 15–20
6	1969	Madrid	April 7–11
7	1971	Varna	September 20–25
8	1972	Amsterdam	August 20–25
Special	1973	Dublin	April 15–19
9	1974	Budapest	August 25–30
10	1975	Paris	July 20–25
	1976	<i>IUB: Hamburg</i>	
11	1977	Copenhagen	August 14–19
12	1978	Dresden	July 2–8
Special	1979	Dubrovnik	April 17–21
13	1980	Jerusalem	August 24–29
14	1981	Edinburgh	March 29–April 4
Special	1982	Athens	April 25–29
15	1983	Brussels	July 24–29
16	1984	Moscow	June 25–30
Special	1985	Algarve	April 21–26
17	1986	Berlin	August 24–29
18	1987	Ljubljana	June 28–July 3
	1988	<i>IUB: Prague</i>	
19	1989	Rome	July 2–7
20	1990	Budapest	August 19–24
	1991	<i>IUB: Jerusalem</i>	
21	1992	Dublin	August 9–14
22	1993	Stockholm	July 4–9
Special	1994	Helsinki	June 26–July 1
23	1995	Basle	August 13–18
24	1996	Barcelona	July 7–12
Special	1997	Amsterdam	June 29–July 3
25	1998	Copenhagen	July 5–10
26	1999	Nice	June 19–24

(continued overleaf)

**Table 5.1.1** (Continued)

	<b>Year</b>	<b>Place</b>	<b>Dates</b>
IUB/FEBS	2000	Birmingham	July 19–24
27	2001	Lisbon	June 30–July 5
28	2002	Istanbul	October 20–25
Special	2003	Brussels	July 3–8
29	2004	Warsaw	June 26–July 1
30	2005	Budapest	July 2–7
31	2006	Istanbul	June 24–29
32	2007	Vienna	July 7–12
33	2008	Athens	June 28–July 3
34	2009	Prague	July 4–9
35	2010	Gothenburg	June 27–July 2
36	2011	Turin	June 25–30
37	2012	Sevilla	September 4–9
38	2013	St. Petersburg	July 6–11
39 FEBS-EMBO Conference	2014	Paris	August 30–September 4

## 5.1.4

**Announcements of the FEBS Meetings and Congresses (1964 to 2014)**

At the beginning, FEBS Meetings were advertised in various biochemical journals as well as by sending out first and second announcements by the Constituent Societies responsible for their organization. This practice has been followed for many years, even after 1995, when FEBS installed a special FEBS WEB site (**cf. Section 6.8**) to spread information and relevant news *via* Internet.

The Editors have collected documents reflecting these developments (Figures 5.1.2 through 5.1.48).



Figure 5.1.2 – 5.1.37 Selected announcements or covers from material given out for the annual FEBS Meetings/Congresses, 1964 to 2003.





Figure 5.1.2 – 5.1.37 (Continued)



Figure 5.1.38 – Figure 5.1.48 Selected announcements for the annual FEBS Meetings/Congresses, 2004 to 2014.

5.1.5

Reminiscences of FEBS Meetings/Congresses



*Edited by Horst Feldmann*

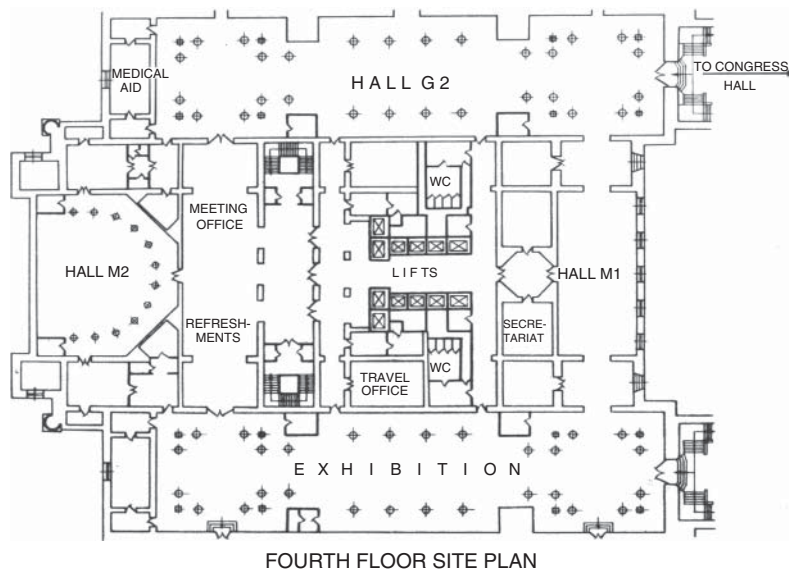
*Chairman of FEBS Advanced Courses Committee, 1987–1995*

In the years since its foundation up to its 40<sup>th</sup> Anniversary, FEBS had held 29 Annual Meetings and seven Special Meetings throughout Europe. In several instances, particular FEBS Constituent Societies were engaged in organising these venues more than once. I attended several of these Meetings and still have kept documents from these times (unfortunately not many photographs), which may help

to reconstruct some salient features of these events. For the past ten years, up to FEBS' 50<sup>th</sup> Anniversary, many more documents became available. I am grateful to all those colleagues who kindly supplied material to present interesting facets of the FEBS Meetings/Congresses.

**Warsaw 1966**

The third FEBS Meeting was organized by the Polish Biochemical Society, and the Palace of Culture and Science in the centre of Warsaw was chosen as the convention site. Sessions were held in the Congress Hall and in smaller



**Figure 5.1.49** Floor plan of the Meeting's venue.

**Figure 5.1.50** Acceptance as a participant.

lecture halls at the 4<sup>th</sup>, 6<sup>th</sup> and 12<sup>th</sup> floor of the Palace built in the confectioner's style.

The programme was scheduled in four (mostly parallel) Sections: G – Properties and Function of Genetic Elements (Symposium contributions and communications); P – Biochemistry of Blood Platelets (Colloquium contributions and communications); M – Biochemistry of Mitochondria (Colloquium contributions and communications); and F – Free papers. In the Symposium 'Genetic Elements', contributions during the first three days were devoted to timely topics, such as the Genetic Code, molecular structures of nucleic acids (especially tRNAs), cytoplasmic DNAs, bacterial transformation, and virus replication.

Though supplies at that time were short and restoration of the picturesque Old Town had just been begun, the organizers did their best to offer an attractive social programme: we could enjoy a performance of Gounod's Faust at the Warsaw Opera House (Teatr Wielki) and admire the completely renovated Chateau of Wilanów. After we had discovered the splendid restaurant 'Krokodil' situated at the Old Market Place, we forgot our disappointment of the first evening on which we were not able to find suitable nourishment at our hotel 'Saski'. Even the restaurant at Hotel Europejski had closed down after 9:30. But we were happy to find the bar serving good beer.

### Oslo 1967

The fourth FEBS Meeting was scheduled on the invitation of the Norwegian Society for Biochemistry and Physiology and was held during early July at the Congress Center located north from Oslo at Blindern. The young participants were accommodated in two nearby large student hotels, the 'Studentbyens Sommerhotell and Nord-norske Student- og elevhjem'. All three locations could be reached by the same electric train with its downtown terminal located near the National Theatre.

The Meeting was organized into six Symposia – Enzyme Activity, Virus Replication, Transfer RNA, Fatty Acids, Glycogen Metabolism, Endoplasmic Reticulum –, each of which included a number of Open Communications related to these topics. Nearly 600 papers were presented. At the opening session, Peter Reichard presented the Plenary Lecture on the biosynthesis of desoxyribonucleotides. Major themes were the activities and allosteric interactions of various enzymes, the biochemistry of virus replication, studies on protein biosynthesis, tRNAs and 5S RNA, as well as other nucleic acids, fatty acid and lipid metabolism, glycogen metabolism, endoplasmic reticulum in animal cells.

The social programme included an informal reception at the Congress Centre, a reception at the City Hall, and a boat tour around Oslo. The younger participants (and as I realized also the senior ones) were grateful that free snacks and drinks were offered at these venues, because they had to experience that the prices

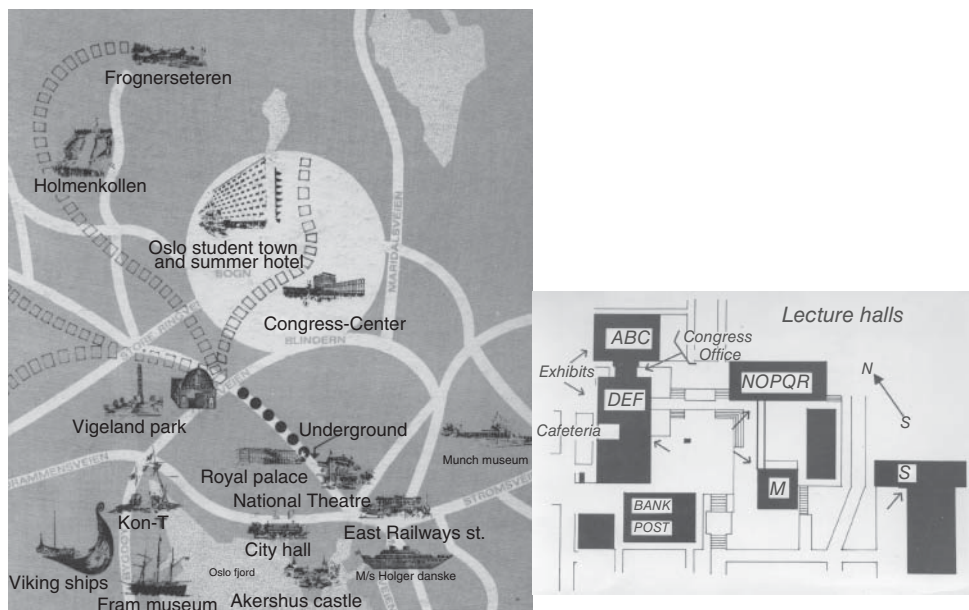


Figure 5.1.51 (A) Oslo map and (B) floor plan of the venue.

even for (real) beer were at least five times higher in Norwegian restaurants than elsewhere.

### Prague 1968

For the fifth meeting in Prague, eight topical subjects had been selected which were discussed in mostly full-day Symposia, some of which had to be run in parallel: (1) Enzyme structure and activity, (2) Isoenzymes, (3) Structure and biosynthesis of gamma globulin, (4) Metabolism of peptide hormones, (5) Antimetabolites as tools in biochemical investigations, (6) Biochemistry of connective tissue, (7) Structure and function of mitochondria, (8) Drugs and chemical action of their metabolites. Remarkably, altogether some 1200 oral presentations were scheduled, about half of which were concerned with the main topics while the rest were so-called free communications. The highlights of the Opening Session were the first Sir Hans Krebs Lecture presented by Max Perutz on 'X-Ray analysis, structure and function of crystalline proteins,' and a concert given by the State Philharmonic Orchestra.

The Meeting took place in a pleasant and relaxed atmosphere. Prague had managed already to restore a great number of its attractive buildings such as churches, palaces and art deco houses. The restaurants not only served excellent meals, but much to our surprise at unbelievably cheap prices: at the Prague 'Kleinseite' we enjoyed a three courses meal including best Pilsner beer for less than one Deutsche Mark!

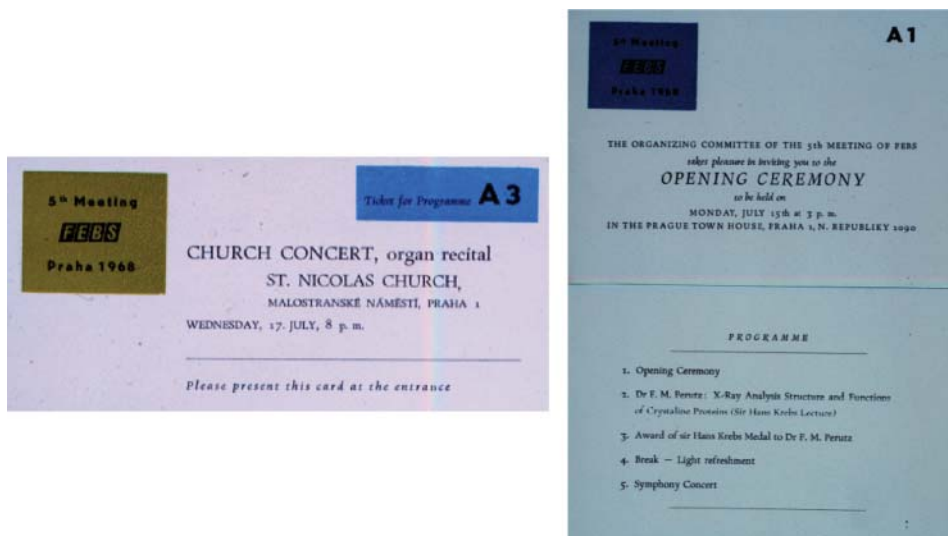


Figure 5.1.52 Tickets for events in the social programme: (A) Concert, (B) Opening Ceremony.

With the social programme, the organizers had done their best to show to the participants the historical places and monuments of this marvellous city, we were invited to visit the Hradschin, the Old Town with the Jewish quarter, concerts in many churches (traditional events during summer time in Prague), the World Exhibition Centre, see a performance at the famous theatre 'Laterna Magica', and make a tour to the nearby 'Karlsfeste'. Nobody realized that some weeks later the Prague Spring would end abruptly in an unbelievable disaster during the shocking and sad days of August 1968.

### Madrid 1969

The 6th Meeting was organized by the Spanish Biochemical Society under the auspices of the Spanish Research Council and held at the University City of Madrid. Four Symposia, each spanning two or three days, were devoted to the following topics: (1) Biosynthesis of Macromolecules—structure and function of ribosomes; translation of genetic message; morphogenesis of viruses. (2) Metabolic Regulation—control of gene expression; gluconeogenesis and related pathways; enzymically interconvertible forms of enzymes. (3) Mechanism of Enzyme Action—active sites and modulation of enzyme activity. (4) Membranes: Structure and Function—structure of cell membranes and active transport. Additionally, five Colloquia (on enzyme pathology, biochemical evolution, molecular biology of differentiation, molecular bases of antibiotic action, and molecular neurobiology) were held, intermingled with Free Communications.



Figure 5.1.53 Special stamps for the Madrid Meeting.



Figure 5.1.54 (A) and (B) Two of Salvador Dali's drafts for Madrid posters.

I vividly recollect some very special features to this Meeting. The Spanish Post had edited an extra stamp for 150 Pesetas, which was presented on a special envelope showing the Genetic Code. Salvatore Dali, who was a good friend to Severo Ochoa, had designed the cover of the Programme. I later saw the original draft at the Centro de Investigaciones Biologicas in Madrid during a Yeast Genetics Course and had a chance to document two further “scientific” gouaches, which Dali had dedicated to Ochoa in 1975/6.

Concerning the FEBS Meeting in 1969 in Madrid, a difficult problem arose: What will be the position of the French Société de Chimie Biologique towards a meeting held in Madrid (7 to 11 April, 1969) because of the declaration of “State of Exception” in Spain. After two hours of debate at an extraordinary session, they decided to go for referendum amongst its members. The text run as follows: ‘Do

you accept that the French Society for Biological Chemistry as such should participate in the FEBS Meeting in Madrid?' A majority of 57% voted "yes". (G. Dirheimer in 'The 100th Anniversary of the 'Société de Chimie Biologique')

### FEBS Meetings 1970 to 1980

In the years to follow, I had to space out most of the annual FEBS Meetings. I was engaged in building up my own research group and had to devote much of my time to educational and organizational duties at our institute and our faculty. As a good compensation, I became involved in the organization of many national and international meetings and courses. During this time, it was difficult for me, also for financial constraints, to attend general meetings; instead I had to concentrate on special meetings.

### Paris 1975

Fortunately, three documents from this FEBS Meeting recently turned up in Guy Dirheimer's archive so that they can be presented here. As inferred from the legends to these pictures the Nobel Prize winners Feodor Lynen and Sir Hans Krebs were giving key lectures at this venue.

The only other documents from this time I keep in my collection are letter envelopes from the FEBS Meetings in **Copenhagen 1977** and in **Jerusalem 1980**,



**Figure 5.155** Reception at the 'Hôtel de Ville de Paris' on Monday, 21<sup>st</sup> July, 1975.1. The professors H. Krebs and F. Lynen sign in to the Golden Book of Paris after receipt of the Medals. From right to left: Professor

J.E. Courtois, former President and Secretary General of the French Society of Biological Chemistry, Dr. B. Lafay, President of the Council of Paris, Sir Hans Krebs, and Professor Feodor Lynen.





**Figure 5.1.56** Professor J.P. Ebel, President of the 10th FEBS Congress, receiving the Diploma and Medal of the town of Paris from Dr. B. Lafay, President of the Council of Paris.



**Figure 5.1.57** Sir Hans Krebs cutting the *gâteau* offered to him on the occasion of his 75<sup>th</sup> birthday by the organisers of the FEBS Symposium 'Mitochondrial-cytosolic interactions in cellular metabolism'.

which Uriel Littauer kindly provided and which show the special stamps by which these venues were celebrated.



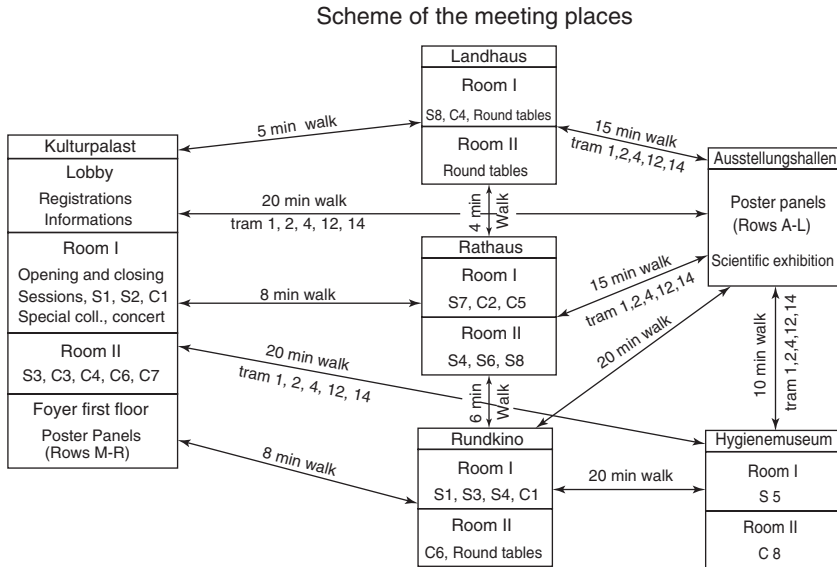
**Figure 5.158** Letters carrying extra stamps from the Meetings at Copenhagen (left) and Jerusalem (right).

### Dresden 1978

The 12th FEBS Meeting was organized by the Biochemical Society of the German Democratic Republic. One has to recollect that at that time two German Biochemical Societies existed, which had strictly separated after the creation of two German States. The organizers had composed a huge programme. It included eight Symposia, eight Colloquia, eight Round Table Discussions, and half-day Poster sessions covering 79 different themes. The abstract books listed nearly 4000 contributions. Just to mention the Symposia, they were devoted to the following topic issues: (1) DNA-Protein interactions in the organization and function of biological systems; (2) Gene expression; (3) Protein structure and assembly; (4) Structure and function of enzymes; (5) Energy transformation in mitochondria and cells; (6) Processing and turnover of proteins and organelles in the cell; (7) Cyclic nucleotides in cell regulation; (8) Regulation of secondary and plant hormone metabolism. Unfortunately, the sessions were split up among six different locations, which were scattered throughout the city and could be reached only by up to 20 min walks or a ride by tram.

The major events, such as the Opening and Closing Ceremonies, took place in the new Dresden Congress Centre (Kulturpalast). The Sir Hans Krebs Lecture was presented by P. Mitchell on 'Compartmentation and Communication in Living Systems'. There were a number of attractions in the social programme: free visits to the Dresden musea which in part had been restored such as the Semper Gallery, the collection of mathematical and astronomical instruments, the Meißen porcelain collection, the Albertinum, the 'Green Vault', and the Chateau of Pillnitz. The farewell party was arranged on a number of pleasure boats of the 'White Fleet' taking all participants for a four-hour trip on the Elbe River.

Other aspects of the stay in Dresden were not so pleasant. The younger participants were accommodated in student hostels throughout, where four to



**Figure 5.1.59** Scheme how to reach Meeting places.



**Figure 5.1.60** Extra stamp for the FEBS Meeting.

eight of them had to share a very spartan bedroom. The organizers had taken care to strictly separate West from East German students, and I remember that the farewell party was an 'unavoidable' occasion for us to meet. The supply of reasonable restaurants was extremely short. Advanced reservations had to be made but it could happen that these places were over-crowded or that people were simply not admitted when they arrived. Fortunately, clever colleagues had found an escape from such restrictions: we gathered at the InterConti Hotel, which sold 'everything' for hard currency and provided live music gratis.

It is worth mentioning, however, that attendants from West Germany (FRG) encountered a special privilege: they were permitted to travel by car and after the congress to make one-day visits to other cities, like Naumburg, Meißen, Weimar, or Leipzig.

**Moscow 1984**

The 16th FEBS Meeting was held in Moscow, which I could not attend. I otherwise had a chance to visit Moscow several times during the 1980s in connection with the Soviet–German Bilateral Symposia on Molecular Biology that were held every two years, alternating between a German university town and an Academy Institute in an interesting area of Russia. The two photographs shown here thus are the only documents from the Moscow FEBS Meeting I could include in my collection.



Figure 5.1.61 Liébecq, Yomtov and Datta waiting at Moscow Airport.



Figure 5.1.62 Audience at the Opening of the Moscow FEBS Meeting.



Figure 5.1.63 Moscow extra stamp for the FEBS Meeting.

### Algarve 1985

The Special FEBS Meeting organized that year by the Portuguese Biochemical Society was devoted to 'Metal Ions, Proteins and Membranes' and held at the Congress Centre of Hotel Alfa-Mar at Albufeira. This was an ideal location for a small FEBS Meeting. At the end of April, Portugal was still empty of tourists and many of the participants after the meeting took the chance to travel through this beautiful and hospitable country and to enjoy such fantastic places as Sagres, Lisbon, or Sintra.



Figure 5.1.64 Opening of the Algarve Special Meeting by the Portuguese Minister of Cultural Affairs.

**Berlin 1986**

The 17<sup>th</sup> FEBS Meeting was held in Berlin. However, because of the particular status of the town the organizers had to advertise the venue as being held in Berlin West.



Figure 5.1.65 Composite picture of snapshots from the Berlin FEBS Meeting.



Figure 5.1.66 Guy Dirheimer, Marianne Grunberg-Manago and Jean-Piere Ebel at the Berlin Meeting.

**Ljubljana 1987**

The Union of Biochemical Societies of Yugoslavia had decided to hold this FEBS Meeting in the friendly town of Ljubljana. Most of the members of the Organising and Scientific Committee were from Ljubljana.

## FEBS ACTIVITIES IN 1986

REPORT BY THE SECRETARY GENERAL

### FEBS MEETINGS

The Gesellschaft für Biologische Chemie has been the host Society and organizer of the 17th FEBS Meeting in Berlin (West) August 24-29, 1987. This was very successful. 2370 people attended the meeting, 1084 young scientists at reduced prices. The first Prakash DATTA Lecture was given at this meeting by F. MELCHERS from Basel. FEBS thanks all the German organizers, especially H. KLEINKAUF, President of the Organizing Committee

### ADVANCED COURSES AND YOUTH TRAVEL FUND

The Advanced Courses Committee, under G. BERNARDI's, Chairmanship, organized 12 courses in 1986. They were held in 7 different European Countries (Belgium, France, German Democratic Republic, Greece, Hungary, Rumania and USSR). 286 young scientists got a FEBS Youth Travel Fund to attend these courses (an increase of 50% as compared to 1985). Support from FEBS towards Advanced Courses and Youth Fund was respectively 318.380 DM and 349.397 DM

### FELLOWSHIPS

During 1986 the FEBS Fellowships Committee chaired by C. GANGED handled 67 applications. 44 fellowships were awarded. The fellows originated from the following countries: Czechoslovakia 6, Bulgaria, Great Britain, Greece, Spain 4, Denmark 3, France, Netherlands, Poland 2, Austria, Belgium, FRG, GDR, Hungary, Israel, Italy, Norway, Sweden, Turkey, USSR, Yugoslavia and Tunisia 1. The receiving laboratories were located in Great Britain 15, France 10, FRG 5, Switzerland 3, Belgium 2, Italy 2, Sweden 2, Denmark 1, Finland 1, Netherlands 1, Rumania 1. The average length of stay was 45 days. The total expenses was of 178.966 DM.

A new activity of FEBS is the awarding of summer fellowships. Eight of them were given to applicants originating from France (3), Spain (2), Belgium (1), Ireland (1) and United Kingdom (1). The fellows went to London (3), Berlin (1), Dundee (1), Freiburg (1), Utrecht (1) and Vienna (1).

### FEBS FERDINAND SPRINGER LECTURE

This lecture made possible by a contribution from Springer-Verlag publishers of European Journal of Biochemistry, was given in 1986 by W. SCHAFFNER from the Zurich Institut für Molekularbiologie in Sofia. Munich, Utrecht, Amsterdam and Gamboux.

### FEBS PUBLICATIONS

Our two journals European Journal of Biochemistry (Chairman of the Editorial Board: C. LIEBECQ) and FEBS Letters (Managing Editor: G. SEMENZA) continue to be successful. FEBS BULLETIN is edited by J. SKODA in Praha. The Publications Committee under U.Z. LITTAUER's Chairmanship, is responsible for overseeing the publications activities of FEBS.

Since most of FEBS activities are only possible because of the income generated by its two journals, I most strongly urge you all to continue to support our journals by publishing your best work in them and encouraging others to do the same. In this way you can help FEBS work on behalf of European Biochemistry.

Guy Dirheimer

(printed in the Programme booklet of the FEBS Meeting in Ljubljana, 1987)

**Figure 5.1.67** 1986 Report of the FEBS Secretary General.

The programme listed 18 Symposia and Colloquia: Genome organization, Gene expression, Protein synthesis, Structure and function of proteins and peptides, Enzymology, Metabolic regulation, Simple and complex Lipids, Biomembranes, Neurobiochemistry, Bioenergetics, Growth and differentiation of cells, Hormones, Immunochemistry, Biochemistry of Viruses, Medical Biochemistry,

Biotechnology, Molecular Design and engineering of proteins, Plant biochemistry. The Meeting was held in the new Congress and Cultural Centre of Ljubljana (Cankarjev Dom). The Report of the FEBS Secretary General was printed in the Programme booklet.

### IUB Prague 1988



Figure 5.1.68 Composite picture from a FEBS stand presented at the IUB Congress in Prague 1988.



The International Meeting of Biochemistry organized by the Union of Biochemistry was held 1988 at the Congress Centre of Prague, so there was no Special FEBS Meeting that year. However, FEBS Council, the FEBS Executive Committee and other FEBS Committees convened at this occasion to hold their annual sessions. To inform all participants about FEBS activities, Iain Mowbray had inspired me to set up a poster show and to bring it to Prague in my car. We installed the material at a particular FEBS stand that was aimed at presenting an overview on recent, current and future developments. It was also designed to celebrate the 20<sup>th</sup> anniversary of FEBS Letters, one of the two FEBS journals that came into existence in 1968. This was the initiation of putting up a special FEBS booth competing with exhibitors at all Congresses to follow.

### **Rome 1989**

The 19th FEBS Meeting organized by the Società Italiana di Biochimica was held in Rome at the Palazzo dei Congressi located in a residential area South West of Rome, the Universal Exposition of Rome (EUR) that had been conceived in the thirties. The scientific programme consisted of 23 Symposia including four plenary lectures and 90 working and poster sessions. The following topics had been chosen: Genome organization and evolution–Gene expression and regulation–Growth and differentiation–Proteins–Enzymes - Biochemistry of immunoresponse–Evolutionary biochemistry - Biochemistry and molecular biology of plants–Biomembranes–Receptors and signal transduction–Bioenergetics–Cell and tissue biochemistry–Metabolism and regulation–Cell-cell interaction–Neurobiochemistry–Biochemical pharmacology–Medical and clinical biochemistry–Biochemistry under extreme life conditions–Emerging topics in nutritional biochemistry–Environmental biochemistry–Biochemistry in technology–Novel and advanced techniques in biochemistry–Biochemical education. Additionally, nine Satellite Meetings were held after the congress in different places around Italy. A very attractive venue in the social programme was an open-air performance of Puccini's "Tosca" at the Terme di Caracalla. As the time of the Meeting marked the onset of sequencing the Human Genome, a special round table discussion on problems and perspectives of this project was set up. The Italian Post had edited a special stamp for this venue.

### **Budapest 1990**

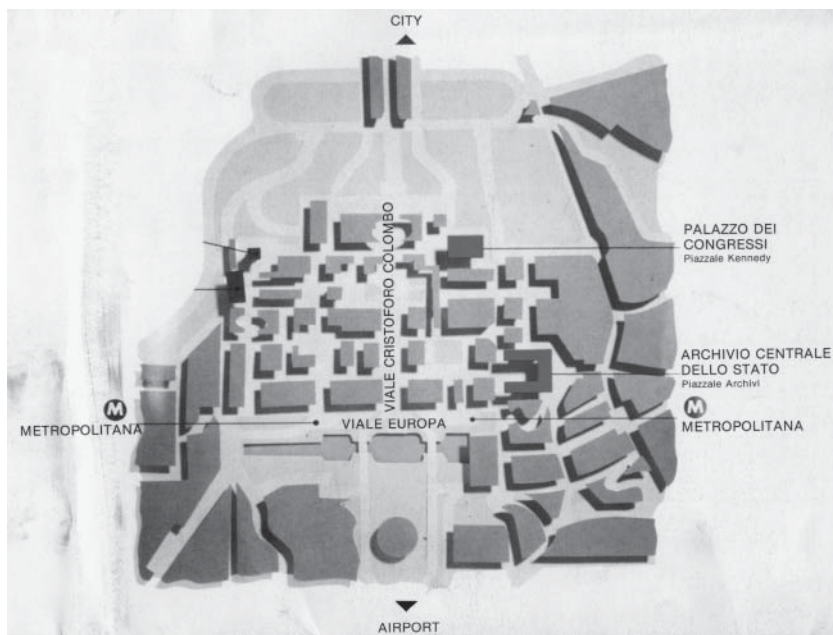
The 20th FEBS Meeting was organized by the Hungarian Biochemical Society. Three Congress venues had been chosen: the Opening and Closing Ceremonies as well as the five Plenary Lectures took place at the Budapest Convention Centre, while the scientific sessions were held at the University Of Economic Sciences Of Budapest and at the Technical University of Budapest, these places being located within a short walking distance.



Figure 5.1.69 Letter with extra stamp from the Rome FEBS Meeting.



Figure 5.1.70 First announcement of the Rome FEBS Meeting.



**Figure 5.1.71** Floor plan of Congress venue.

The Scientific Programme Committee had concocted a rich scientific menu that was served in altogether 25 Symposia, 28 Colloquia, 5 Workshops and three Poster Sessions—but fortunately had reserved a whole afternoon to offer to all participants a free sight-seeing tour through wonderful Budapest. Other venues of the social programme will remain unforgettable as well: A grand reception at the National Gallery of Arts on the evening of 20<sup>th</sup> of August followed by big fireworks that night and the Hungarian Farewell Dinner. The significance of this particular St. Stephen's Day celebrated on 20<sup>th</sup> of August becomes evident from an article contributed by a young journalist to a special Meeting's newspaper (edited at a FEBS Meeting for the first time): the organizers had aimed at including into the congress an extraordinary event, the first national holiday after the breakdown of the communist era. One could easily feel the relief of the Hungarian people, which also became obvious from the fact that the Technical University, formerly "Karl-Marx-University", had been instantly renamed, and the monument of Marx at the entrance hall had been covered over and over with Hungarian tricolours by the students.



### 20<sup>th</sup> of August

Apart from its scientific significance, the timing of the 20th FEBS Meeting offers a unique opportunity to the organizers to introduce Hungary a little bit in depth to the participants. As it is quite uncommon that scientists attending a meeting are celebrated by fireworks, inevitably questions will be asked about the significance of the 20th of August.

The story began in 895 AD when the pagan Magyar tribes settled here at the end of a long journey from their original homeland somewhere in Central Asia. (According to their original plans they would have moved further westward had they not been stopped by the German Empire; this would have saved us much trouble later in history. But one could not escape geopolitical realities even in the 9th century.) Having arrived to a Christian Europe, the Magyars' only chance to survive was to abandon their original tribal religion and put an end to nomadism. This was realized first by Duke Geza, although personally he considered himself powerful enough to believe in, two religions: the ancient tribal one and the new Christianity. (The few Christian missionaries around him suspected that he did not believe in anything at all.) As a careful political move, he had his son Vajk baptized, to whom on this occasion the name Stephen (after the first Christian martyr) was given. Heir to Geza, Stephen became Duke in 997. He was coronated on Christmas day 1000 AD with a crown sent by Pope Sylvester II.

The coronation of King Stephen was of great significance. Symbolically, the Pope recognized him as a Christian king and gave him support to convert the Magyars into good Christians. Moreover, receiving a crown from the Pope meant the independence of Hungary, since if Stephen had accepted a crown from, say, the Emperor of Germany, he would have been regarded as a mere vassal. Therefore his crown, also known as the Holy Crown of Hungary, has remained the symbol of Hungarian independence ever since. Stephen completed the Christianization of Hungary and built the framework of the Hungarian state. He was a truly religious man; although his efforts to create a then modern state required cruel measures, his laws were considered humane by his time's standards.

Not so long after Stephen's death in 1038, his descendant King Laszlo I arranged for his canonization not only on religious grounds but presumably also to pay tribute to the founder of the

Hungarian kingdom. St. Stephen became the first Hungarian saint in 1083. Catholic saints have special days on which they are celebrated: St. Stephen's day is the 20th of August.

For Hungarians the importance of this day is well beyond that of a Catholic holiday. Being the founder of the independent Hungarian state, St. Stephen is revered as one of our national heroes. 20<sup>th</sup> of August reminds us Hungarians of our national identity which we could preserve over 1000 years, surviving a not particularly merciful history.

The importance of the 20th of August is such that even the Communists, although fuelled by their usual enthusiasm to eradicate all patriotic feelings from the nation, did not dare to abolish its celebration completely. On the 20th of August, 1949 the new Constitution of Hungary, compiled following the guidelines of Stalin's Soviet Constitution, came into force and this careful timing gave an excellent pretext for the celebration of St. Stephen's Day as Constitution Day. (Yes, with military parade and fireworks.) By tradition, this is also the day when the first bread is baked from the newly harvested crop; this has also been adopted by the Communist mythology, probably to calm down the peasants. Later it was not considered awkward even to remember St. Stephen as well; this way the Hungarians were given a "three-in-one" national holiday.

The end of the Communist rule in Hungary was symbolised, among other hints, by the appearance of some of the prominent personalities of the previous regime last year in the procession held by the Catholic church regularly on St. Stephen's Day. (In this procession the king's right hand, an invaluable relic, is shown around; otherwise it is on display in the Basilica of St. Stephen in Budapest.)

The 20<sup>th</sup> FEBS Meeting was carefully organized so that it takes place after the "peaceful revolution".

Therefore all of you are kindly invited to celebrate St. Stephen's Day, for the first time without any distortion of its traditional meaning, together with us. Do not worry, just leave the patriotic feelings to the Hungarians, we will be satisfied if you enjoy the fireworks.

*Andras Aszodi born on 20th of August, 1964*

Figure 5.1.72 Page from "FEBS News" printed at the Budapest FEBS Meeting 1990.

### IUB Jerusalem 1991

Like three years before, the Congress of the International Union of Biochemistry was held in the European area, thus no Special FEBS Meeting was organized that year. All FEBS Officers and the delegates of Council were invited to Jerusalem to attend the Congress and to meet for their annual conventions.

**Dublin 1992**

For the 21<sup>st</sup> FEBS Meeting, the Irish Area Section of the Biochemical Society had applied to hold this venue in association with the Quarter Centenary Celebrations of Trinity College Dublin. As space was limited at the grounds of Trinity College (they were still in the process of setting up new and modern facilities), the Meeting could only accommodate a limited number of participants as well as of sessions. Altogether, some 26 Symposia on topical themes were offered. Each day, five of these were held in parallel. The beautiful setting of Trinity College made the meeting both enjoyable and relaxing. The participants could find time to visit the famous Trinity Library (housing over one million books, the most notable being the Book of Kells), see the pleasant city and the lovely surrounding countryside. Most remarkable and hitherto an exception to FEBS Meetings was the fact that a lady, Norma Ryan, acted as the President, giving everybody the nice feeling of Irish hospitality and friendliness.

**Stockholm 1993**

As a Congress venue for the 22<sup>nd</sup> FEBS Meeting, the Swedish Society for Biochemistry and Molecular Biology had chosen the area of the Stockholm Exhibition Centre, located a little outside of the city but easily reachable from there by suburban trains. The Organising Committee had set up 27 Symposia, some of which were divided into three sessions. Four to six of these sessions were run in parallel, accompanied by poster presentations that could be shown during the whole time of the congress and were discussed on three afternoons.

**Helsinki 1994**

Although the FEBS Meeting that year was a Special Meeting organized by the "Societas Biochemica, Biophysica et Microbiologica Fenniae" on Biological Membranes, it attracted nearly 600 participants from all over Europe. Probably, this success was, last but not least, supported by the wish to experience Helsinki, the 'white town' which at the time of the venue (end of June) offered sunshine nearly until mid-night. The Opening Ceremony took place at the Great Hall of the venerable downtown University of Helsinki, while the 24 Sessions were held (in parallel) at three locations of the Dipoli Congress Building at Espoo. These sessions accompanied by poster sessions had been organized around six major topics: Structure and function of membrane proteins–Membrane carbohydrates–Lipids in membrane organization and function–Protein targeting and export–Cell signalling–Cell adhesion. The organizers had taken care not only to compose an attractive scientific programme but also to create a most enjoyable social atmosphere. To get a "taste of Finnish Summer" all participants were taken for an extended cruise through Helsinki harbour and the archipelago to the Island Museum of Seurasaari, where a tremendous buffet dinner was served at the Seurasaari restaurant.

### Basel 1995

The host of the 23<sup>rd</sup> FEBS Meeting was the Swiss Society of Biochemistry. All sessions took place at the Convention Center Basel, in two of its buildings. Curiously, the ten conference halls used for the Opening and Closing Ceremonies, the plenary lectures, and the parallel sessions were named after important cities: Bonn (!), Lisbon, Montreal, Osaka, Paris, Rio, Rome, San Francisco, Singapore, Sydney. In all, 64 interesting Symposia were held. Posters to each of the topics were presented during three afternoons.

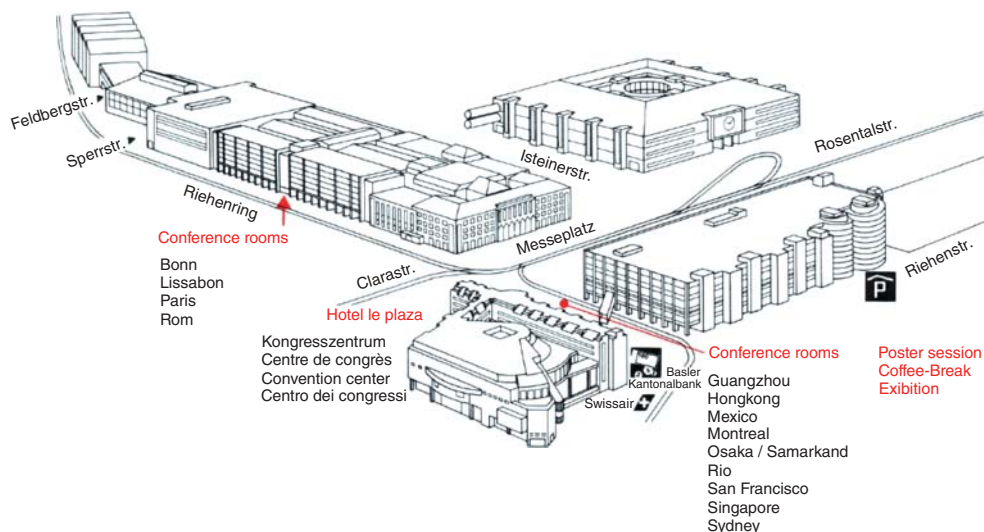


Figure 5.1.73 Congress centre of Basel.

### Barcelona 1996

The 24<sup>th</sup> FEBS Meeting was hosted by the Sociedad Espanola de Bioquímica y Biología Molecular. The scientific programme of the meeting had been planned to cover current topics in Biochemistry and Molecular Biology in a novel format. The organizers had aimed at combining the advantages of traditional, large congress with the benefits of smaller, more specialized meetings. Symposia on five of the most compelling topics in Molecular and Cellular Biology (Molecular and metabolic aspects of disease—Structure-function relationships in macromolecules—Signal transduction and cell proliferation—Genome organization and expression—Molecular aspects of development and differentiation) were scheduled, each of which continued throughout the five days of the meeting to cover subjects thoroughly. Different Symposia were to meet in Joint Sessions to allow permeability of concepts in the frontier areas. Twelve Workshops on three afternoons were designed to cover new trends in more specific fields. Particular attention was paid to the Poster Sessions: the posters could not only be discussed ‘in

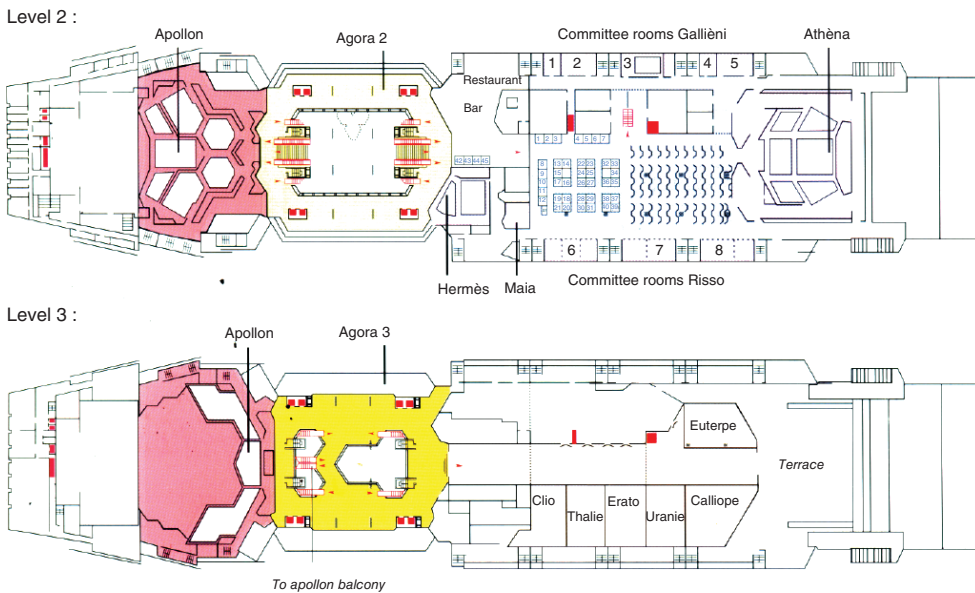
situ' but all abstracts had been made available beforehand on the internet WWW page of the meeting.

### Copenhagen 1998

This year saw the 25<sup>th</sup> Silver Jubilee FEBS Meeting. It was organized by the Danish Society for Biochemistry and Molecular Biology and held at The Bella Centre at the periphery of Copenhagen. The meeting was aimed at gathering leading international experts for the presentation of the most advanced research on a broad range of topics: 41 Symposia, five each held in parallel during eight morning and afternoon sessions were to reflect this endeavour. Additionally, seven Plenary Lectures and three Popular Lectures by eminent scientists were scheduled. Posters pertinent to the same topics were on display in three sections during three days. Though all activities could take place under one roof, the participants accommodated at the city centre had to take a rather long ride to reach the congress area. The friendly and relaxed atmosphere of downtown Copenhagen—visiting Tivoli or one of the many pleasant restaurants or pubs—compensated this.

### Nice 1999


The FEBS Meeting organized by the French Society for Biochemistry and Molecular Biology was held at the magnificent Acropolis Congress Centre of Nice. The venue was financially supported by a large number of governmental, local and private institutions. The meeting was scheduled similarly to the one in Copenhagen.



Advertisements

Publicité

**26<sup>e</sup> Congrès de la FEBS**  
Nice  
19-24 juin 1999



**Conférenciers plénières**  
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- 3 Cycle cellulaire, mort cellulaire et dérégulation dans le cancer.
- 4 Organisation des macromolécules : règles et concepts.
- 5 Le monde des ARN.
- 6 Contrôle transcriptionnel de l'expression des gènes.
- 7 Synthèse protéique.
- 8 Transport et maturation des protéines.
- 9 Trafic vésiculaire.
- 10 Glycobiologie.
- 11 Les lipides dans la structure et la fonction des cellules.
- 12 Le monde de la mitochondrie.
- 13 Récepteurs et signaux associés.
- 14 Transport membranaire et affections associées.
- 15 Biologie végétale.
- 16 Biocatalyse.
- 17 Extremophiles.
- 18 Adhésion cellulaire et cytosquelette.
- 19 Mécanismes moléculaires des maladies.

**La 2<sup>e</sup> annonce du Congrès a paru :**  
Elle comprend le titre des 232 conférences et les formulaires d'inscription.  
Pour se la procurer s'adresser à :  
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Un Forum des Jeunes Chercheurs et un Forum Emploi Jeunes Chercheurs/Entreprises se tiendront en même temps que le Congrès de la FEBS.  
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Une Exposition de matériel scientifique, idéalement située entre les salles de conférences et les communications affichées, se tiendra pendant le Congrès.

La date limite d'envoi des résumés de posters est le 28 février 1999.

**SITE WEB**  
<http://coli.polytechnique.fr/febs99>

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# 26th FEBS Meeting



Nice, France, 19-24 June, 1999

The scientific programme includes plenary lectures, symposia (subdivided in half-day sessions), and poster sessions. This programme aims to combine the advantages of the traditional, large congresses, with the benefits of the smaller and more specific meetings. Therefore most of the symposia have been subdivided into sessions and will continue throughout several days of the meeting, so that topics can be covered thoroughly. In addition, the first speaker of each session will give a short state-of-the-art review of the subject so that non-specialists can benefit fully from the different sessions. The wide range of topics will cover both specific problems in Biochemistry and Molecular Biology and also biochemical aspects of Cellular Biology, Pharmacology and Medicine. Poster sessions, scheduled daily, will be located in close proximity to the technical exhibition and lecture rooms. The Meeting, taking place in the unique setting of Nice-Côte d'Azur, will aim to provide a stimulating environment for the exchange of new information, promote discussion and encourage the establishment of future collaborations. The organisers look forward to your participation and to welcoming you and your family.

Further information: FEBS bursaries for scientists under the age of 31 years will be available.  
To receive the Second Announcement with the preliminary programme, list of speakers, titles of conferences, meeting schedule, social programme and the abstract, registration, hotel and tour reservation forms please apply to:

**Technical Secretariat:**  
Congrès Louis Pasteur - FEBS'99  
19, rue du Maréchal Lefebvre  
67100 Strasbourg  
Fax : (+33) 3 88 39 53 18  
E-mail: [dirheim@ibmc.u-strasbg.fr](mailto:dirheim@ibmc.u-strasbg.fr)

Abstract deadline: February 28th  
Deadline for application to FEBS bursaries: January 31st

For latest information consult the www-page:  
<http://coli.polytechnique.fr/febs99>

## Plenary lectures

S. Prüsner (USA), M. Barbacid (Spain), K. Simmons (EMBL), M. Van Montagu (Belgium), J.E. Walker (UK)

## Symposia

- 1 **Genome:** 1.1: New genomes; 1.2: Genome analysis and evolution; 1.3: Gene targeting, gene therapy.
- 2 **DNA synthesis and repair:** 2.1: Control of DNA replication; 2.2: DNA recombination, repair and plasticity.
- 3 **Cell cycle, cell death and regulatory dysfunction in cancer:** 3.1: Cell cycle; 3.2: Cell cycle and cancer; 3.3: Programmed cell death.
- 4 **Rules in macromolecular organization:** 4.1: Structural motifs, dynamics and function in proteins; 4.2: Macromolecular recognition and assembly.
- 5 **The RNA world:** 5.1: RNA splicing and trafficking; 5.2: RNA editing and other.
- 6 **Transcriptional control of gene expression:** 6.1: Structure and function of 6.3: Gene regulation by nutrients and hormones; 6.4: Molecular recognition.
- 7 **Protein synthesis:** 7.1: The translational machinery; 7.2: Translational control and
- 8 **Protein transport and maturation:** 8.1: Protein degradation; 8.2: Structure
- 9 **Vesicular trafficking:** 9.1: Molecular mechanisms of secretion; 9.2: Endocytosis
- 10 **Glycobiology:** 10.1: Functions of glycosylation; 10.2: Structure and biosynthesis
- 11 **Lipids in cell structure and function:** 11.1: Lipids in membrane function;
- 12 **The mitochondrial world:** 12.1: Mitochondrial biogenesis, function and pathology
- 13 **Receptors and associated signals:** 13.1: Neurotransmitter receptors; 13.2: Regulation in regulatory processes; 13.4: Growth factor receptors; 13.5: The multi
- 14 **Membrane transport and associated diseases:** 14.1: Ionic channels; 14.2: Transport
- 15 **Plant biology:** 15.1: Growth regulators and signalling in plants; 15.2: Plant organelles
- 16 **Biocatalysis:** 16.1: Enzymatic mechanisms and catalysis; 16.2: Metal-assisted
- 17 **Extremophiles**
- 18 **Cell adhesion and cytoskeleton:** 18.1: Molecular mechanisms of cell adhesion
- 19 **Molecular mechanisms of diseases:** 19.1: Molecular mechanisms in neuro

### SCIENCES DE LA VIE

#### FEBS'99

19-24 juin, Nice (06)  
26<sup>e</sup> Congrès de la Fédération des sociétés européennes de biochimie. 18 symposia, chacun organisé en 1 à 5 sessions d'une demi-journée chacune. 6 sessions sont organisées en parallèle tous les matins. Palais des congrès «Acropolis». Envoi des résumés avant le 31 janv.

Contacts : secrétariat du Congrès, Strasbourg.  
Fax : 03 88 39 53 18.  
Pr. G. Dirheimer.  
Fax : 03 88 60 22 18.  
Guy.Dirheimer@ibmc.u-strasbg.fr  
<http://coli.polytechnique.fr/febs99>

### Neurosciences

6-13 mars, La Plagne (73)  
19<sup>e</sup> Séminaire hivernal des neurosciences européennes. Champ : des mécanismes moléculaires et cellulaires à la neurologie et la psychiatrie cliniques en

«Jeune épouse»  
tous les aspects de la chaîne du bore et ses dérivés. Pour recevoir la 2<sup>e</sup> circulaire, prendre contact au plus tard début janv. S'inscrire avant le 15 janv.  
Contact : Joseph Bauer et Jean-François Malet, LCSIM (UMR CNRS 6511, Rennes).  
Tel. : 02 99 28 67 78.  
Fax : 02 99 38 34 87.  
<http://www.univ-rennes1.fr/ibsb99>

### GFCEI 99

22-25 mars, Noirmoutier (85)  
Réunion annuelle du Groupe Français d'Etude des composés d'intercalation (GFCEI), organisée par l'Institut des matériaux de Nantes. Ce congrès recouvre tous les aspects de la chimie d'intercalation. S'inscrire dès maintenant.  
Contacts : P. Palvadeau, R. Bascara, IMN Chimie des solides.  
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<http://www.cnrs-imn.fr/GFEI99.html>

**26th FEBS MEETING**  
June 19-24, 1999 - Nice, France  
Second announcement is now available.  
Visit our Web site for detailed information:  
<http://coli.polytechnique.fr/febs99>  
(This page will be updated continuously)

NATURE | VOL. 396 | 10 DECEMBER 1998

Le Journal du CNRS | Janvier 1999

Figure 5.1.75 A composite picture with announcements of the Nice FEBS Congress.





Figure 5.1.76 Side view of the 'Acropolis'.



Figure 5.1.77 Organisers and assistant staff. First row (from left to right): E. Faurobert, N. Voiley, M.Lazdunski, G. Dirheimer, R. Négrel, G. Keith, R. Giegé.

Figure 5.1.78 Guest book from the Meeting. Figure 5.1.79 From left to right: Richard Giegé, Mireille Bruschi, Guy Dirheimer, Marianne Grunberg-Manago, Sylvain Blanquet.



**Figure 5.1.80** Following Prusiners lecture in Nice: From right to left: Julio Celis, Brian Clark (first row); Guy Dirheimer, Sylvain Blanquet, Marianne Grunberg-Manago, Richard Giegé (second row).



**Figure 5.1.81** Following Prusiners lecture in Nice: From right to left: Iain Mowbray, Karel Wirtz, Willy Stalmans (first row); Jean-Luc Souciet, Horst Feldmann, Robert Martin, Raymond Négrel (second row).



**Figure 5.1.82** Nice Congress: From left to right: Mme. Lazdunski, Chantal and Bernard Ehresmann, Guy Hervé, Richard Giegé, Michel Lazdunski.

Nineteen Symposia subdivided into two to three sessions each were run in parallel, at eight different lecture halls of the congress centre during eight mornings and afternoons.

Wednesday afternoon was reserved for five Satellite Meetings for interested participants. Posters accompanying the Symposia were presented on three different days. The organizers had not promised too much, when they expected that all participants, coming from 55 different countries and among them about 100 young scientists endowed with a FEBS Youth Travel Fellowship, would enjoy the excellent scientific programme and appreciate the elegant atmosphere of the Acropolis. Nearly unnecessary to say that beautiful Nice, the 'Queen of the Riviera', offered so many attractions to the participants that they might not even have been able to taste all of them: the superb seafront boulevard(s), the elegant hotels and architecture follies of the 'Belle Epoque', the picturesque Old Town, the beaches, and the numerous famous musea (Matisse, Chagall, Dufy, Klein.....). Not to be missed: the specialities of the Nicois cuisine. Whoever could afford to join one of the excursions had a chance to visit such exorbitant places as Antibes, Monaco, St. Paul de Vence, and others.

I am most grateful to Guy Dirheimer, who provided most of the photographs to document this unforgettable venue, the last FEBS Meeting at the end of the second millennium.

### **Birmingham 2000**

For the changing millennium, the International Union of Biochemistry and Molecular Biology (IUBMB) and FEBS had joined their efforts to organize a common venue, the 18<sup>th</sup> International Congress of Biochemistry and Molecular Biology. The hosting corporation was the Biochemical Society and the meeting took place at the International Convention Centre (ICC) of Birmingham, a

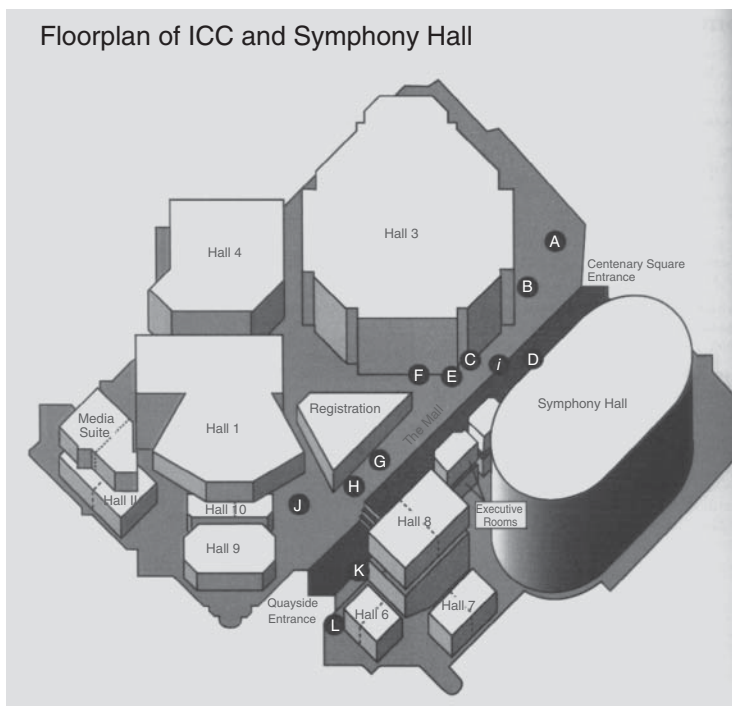


Figure 5.1.83 Birmingham International Congress Centre.



Figure 5.1.84 Joint venture in Birmingham 2000.



**Figure 5.1.85** Beyond the Genome, Birmingham 2000.

representative new building in the middle of the nicely restored area of the Birmingham canals. The programme combined nine Plenary Lectures (The Severo Ochoa Lecture–The Kunio Yagi Lecture–The Sir Hans Krebs Lecture–The Osamu Hayaishi Lecture–The Chester Beatty lecture–The EMBO Lecture–The E.C. Slater lecture–The PABMB Lecture–The Datta Lecture), 50 parallel Speaker Sessions at four mornings and afternoons each, Education Sessions, History Sessions, and Poster Sessions. 680 papers and 1660 posters were presented in these Sessions. In addition, three Satellite Meetings were held after the Congress.

An article by the Secretary General of FEBS on the importance of this Meeting and the newly established cooperation among Life Sciences Organizations has been published in the meeting's programme and has been included in Chapter 2.

### **Lisbon 2001**

The 27th FEBS Meeting, the first meeting in the new century, was held in Lisbon, organized by the Portuguese Biochemical Society in collaboration with the Pan-American Association for Biochemical Molecular Biology. The venue was hosted at the marvellous Lisbon Congress Centre overlooking the river Tejo in a famous area of the city–Junqueira/Belém, close to the historical quarter where the magnificent Jerónimos Monastery and Tower of Belém are located.

The Organising Committee chaired by Claudina Rodrigues-Pousada had done a wonderful job by setting up an attractive scientific programme as well as a most enjoyable ambience. Forty-eight parallel Speaker Sessions and Workshops had been scheduled. The seven Symposia subdivided into up to five

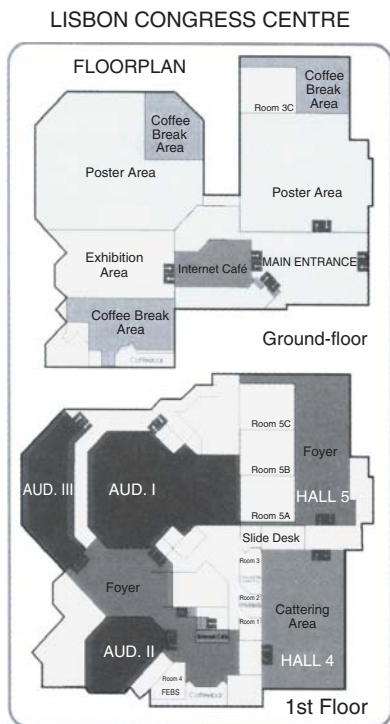


Figure 5.1.86 Lisbon Congress Centre.



Figure 5.1.87 Prakash Datta introducing the 'Datta Lecture' in Lisbon.

sessions were devoted to topical themes: Bioinformatics, functional genomics and proteomics–Cell dynamics–Signal transduction pathways–Cellular stress responses–Developmental biology–Molecular basis of diseases. A novelty was that posters could be displayed for two full days; they were discussed in two Poster Sessions. A speciality of this meeting: opulent meals were served



**Figure 5.1.88** (1) The Organising Committee at work; (2) FEBS Executive Committee members with Minister Mariano Gago; (3) Opening ceremony—in memoriam Matti Saraste; (4) Fado at the farewell

party-singers with Karel Wirtz, Claudina Pousada, and Guy Dirheimer; (5) Incoming mail for participants; (6) Concert at the opening ceremony.

at the Congress Centre. Though not even mentioned in the programme, the organizers had arranged for a fantastic farewell party at San George, the castle high above Lisbon, which guaranteed a marvellous view over the whole town.

Claudina Rodrigues-Pousada kindly provided the collection of photographs from the Lisbon Meeting shown in Figure 5.1.88.

### Istanbul 2002

The 28th FEBS Meeting was held at the Convention Centre at Hilton Hotel, Istanbul. Originally, the natural choice for the site of this meeting organized by the Israel Society for Biochemistry and Molecular Biology (Chair Israel Pecht) had been Jerusalem. However, as the organizers were confronted with severe difficulties already during the two years of planning, the initial choice had to be abandoned as early as March 2001. They then decided to move to the Red Sea resort of Eilat, a city more remote from the tragic events. But again, in December 2001, the Organising Committee was forced to reconsider Eilat, in the wake of some of the worst acts of terror in Jerusalem and Haifa. Fortunately, the Turkish Biochemical Society offered their help to host the meeting in Istanbul, the closest and most attractive city that could provide the required facilities. The 42 Symposia, each five of which were run in parallel, were preferably devoted to topical developments: the exceptionally powerful combination we witness in recent years, of genetic information with three-dimensional structures—the explosion of genetic data and the means to use it, which has already made an impact on our daily lives—the notion that our knowledge leads to remarkable practical implications and carries with it intricate ethical

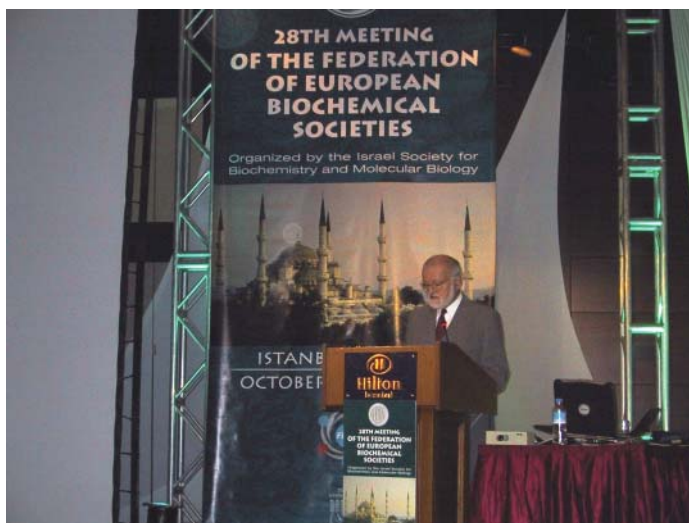


Figure 5.1.89 Guy Dirheimer (FEBS Chairman) opening the Meeting.



problems—new exciting aspects of the structure and modes of action of complex systems.

The Meeting was preceded by the first FEBS Forum for Young Scientists, which took place at Hotel Ceylan Inter-Continental, Istanbul, from 18 to 20 October, 2002. This venue organized by M. Makarow (Finland), T. Özben (Turkey) and N. Saris (Finland) consisted of five sessions concentrating on Signal transduction and protein phosphorylation, Protein folding, Translocation and intracellular transport of proteins, Genomics and proteomics, and Molecular medicine and clinical chemistry.



**Figure 5.1.90** Jean Poységur, the winner of the Krebs Medal (middle) with Israel Pecht, chairman of the Organising Committee (left) and John Mowbray, FEBS Treasurer (right).



**Figure 5.1.91** John Mowbray, Claudina Rodrigues-Pousada and Uriel Littauer.



**Figure 5.1.92** The FEBS stand with the two FEBS secretaries, Inge Detlefsen and Louise McSeveny, and Horst Feldmann.

**Brussels 2003**

This FEBS Congress was held in one of the buildings at Brussels Exposition Centre in Laeken, already used for the World Exhibition (EXPOO) in 1958. The location (exhibition hall 3) was easily accessible from the centre by metro to Heizel.



**Figure 5.1.93** Special Issue of FEBS Letters, showing the Town's landmark—the Atomium.



Figure 5.1.94 Floor-plan of the exhibition centre of the Brussels Congress.

The Special Meeting on Signal Transduction brought together researchers working in this field reaching from basic molecular mechanisms to the pathophysiology of diseases. It also included structural aspects of signalling molecules, their localization and their role in cell functions.

The meeting was composed of general state-of-the-art lectures, parallel specialised sessions and poster viewing. In addition to these sessions, subjects were discussed in depth in workshops at the end of each day of the congress. The workshops were to represent a highlight of the meeting. As expected, very recent results, discussion of controversies, clarification of what is established, controversial or to be forgotten and clear ideas about where to go, were presented.

One highlight of the Congress was the presentation of a 'FEBS Memoir' which had been edited by Horst Feldmann (former Chairman of the FEBS Advanced Courses Committee), a retrospect of the 40 years that had elapsed since the foundation of the organization in 1964. Copies were given to the participants for free.

It was evident that Brussels, at the centre of a tourist region and harbouring many interesting architectural monuments and splendid *musea*, as well as offering the excellent Belgium *cuisine*, was an attractive place for all attendants, all the more so as they were to enjoy nice but not too hot weather during their stay.

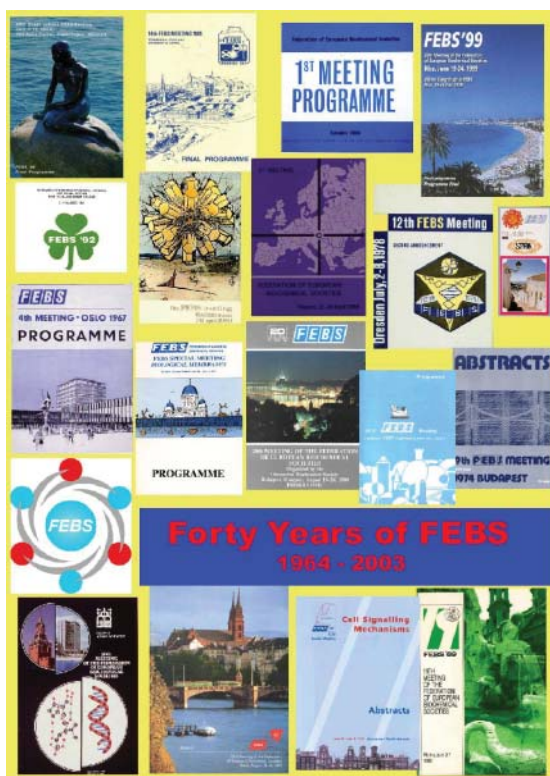


Figure 5.1.95 Cover of the “FEBS Memoir”.



Figure 5.1.96 At the FEBS booth, offering the Memoir: Regina Klaus (Congress Office secretary), Peter Ott (current webmaster), Horst Feldmann (editor), and Gül Güner.

### **European Affairs**

At the recent Special FEBS Meeting in Brussels under the title Signal Transduction several extra programmes were held on more general matters. One of these was a whole day session chaired by Prof. Federico Mayor, the Chairman of the FEBS Science and Society Committee. In the morning the discussion concerned general matters. In particular it was interesting to hear from Dr Rainer Gerold from the European Commission on the European Science and Society Action Plan. We also heard from a number of journalists about the problems of publishing science in the popular press. In the afternoon the first session was on Stem Cell Research and Society. The final session was entitled Genetically Modified Organisms (GMO's): Public Perception, Regulation and Role of Media. We heard about the work of the International Council for Science (ICSU). They have published a report under the title *New Genetics, Food and Agriculture: Scientific Discoveries-Societal Dilemmas*. The full report is on the internet <http://www.icsu.org>. We also heard about the experience of Switzerland with respect to public debate and national regulation on GMO's and finally from Claire Cockcroft in Cambridge on The role of science communication and the media.

Peter Campbell stated: "Concerning the session on GMO's, I left with the following thoughts. First, that the scientists' former line, that if only the public understood our science they would accept it, is ill conceived. Rather it is essential that the scientists should enter into a dialogue with the public. In order to ensure that this does not become a monologue, the scientists must accept a degree of humility and admit their degrees of certainty. Too often scientists seem to me to overstate their case for GMO's and this naturally encourages a vigorous response. Second, the opposition to GMO food in Europe is surely linked to the lack of any obvious benefit in terms of the shopper with respect to either economics or improved taste. It is no good trying to encourage the European shopper on the basis that the development of GMO foods will help to prevent starvation in Africa. Moreover, we cannot expect Africans to encompass GMO foods if we in Europe reject them. Third, as academic teachers we usually miss our opportunity to encourage our students to enter discussion on matters like GMO foods. We should endeavour to see that our graduates leave our universities ready to stand as advocates for our science and its role in promoting science for the good of humanity. This is especially true now that so many science graduates enter a wide variety of non-science professions. I must end by mentioning that the audience which attended the sessions on Science and Society was disappointingly small in contrast to the large attendance at the scientific lectures. The reasons for this need to be investigated but perhaps a predominant one is that our youth feel they have little hope of influencing change". (Peter Campbell, 10th July 2003)

### **Warsaw 2004**

The 29<sup>th</sup> FEBS Congress was organized by the Polish Biochemical Society and held at the Warsaw Convention Centre, the same building as in 1966, where the 3<sup>rd</sup> FEBS Meeting had taken place. Similar to 1966, the Congress in 2004



Figure 5.1.97 Virtual picture of the Warsaw celebration of the 40th Anniversary of FEBS.

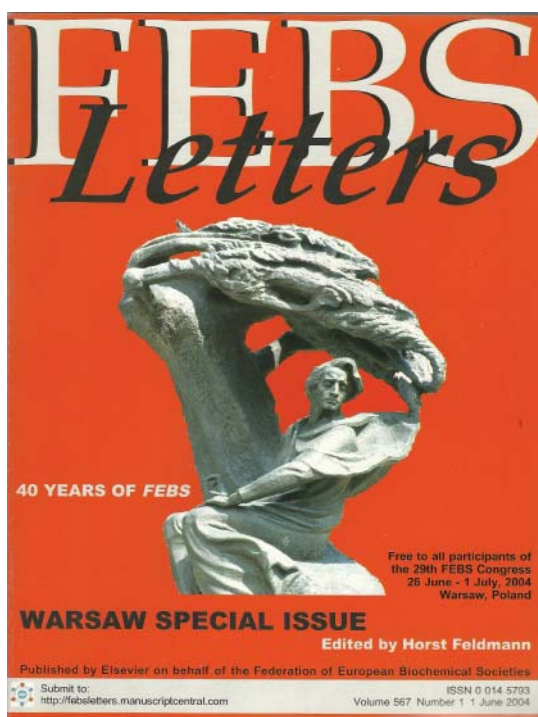


Figure 5.1.98 Cover from Warsaw FEBS Letters' Special Issue.



Figure 5.1.99 Warsaw Culture Tower.



Figure 5.1.100 Two Scenes from a performance of a Polish folklore ensemble at the opening ceremony.

celebrated a particular historical moment: In 1966, it was to remember the year 966, which marked the 1000<sup>th</sup> anniversary of the founding of the Polish State by Duke Mieszko, who converted to the Christian faith in 966. In 2004, Poland took pride in hosting the FEBS Congress at the 40<sup>th</sup> Anniversary of FEBS founding in 1964.

The cover of the Special Issue of FEBS Letters resulted from a joint enterprise. Adam Szewczyk, one of the local organizers and an enthusiastic photographer, supplied a colour picture of Frédéric Chopin's monument from Łazienki Parc (where a fabulous open air concert with Chopin piano works was presented to

all Congress participants). This was taken by the editor as a basis to design the cover, employing the Polish National colours (red and white).

This time, a big convention hall (within the Culture Tower) was necessary to accommodate all the audience that wanted to attend this venue, and, in particular, the fantastic opening ceremony.

The **Scientific Program** was composed of the following events

**Plenary Lectures:** 1. Datta Lecture (Opening Lecture): “NMR views of soluble proteins and membrane proteins”, Kurt Wüthrich (Switzerland); 2. Sir Hans Krebs Lecture: “Pharmacology of vascular endothelium”, Ryszard Gryglewski (Poland); 3. Theodor Bücher Lecture: “Calcium signalling in apoptosis”, Rosario Rizzuto (Italy); 4. EMBO Lecture: “Assembling the nuclear envelope”, Iain Mattaj (Germany) 5.1. IUBMB Lecture: “Extracellular proteolysis at the synapse: regulatory roles in synaptic structure, function, and plasticity”, Peter Sonderegger (Switzerland); 6. PABMB Lecture: “Yeast activators transcription factors (YAPs) and stress response: An overview”, Claudina Rodrigues-Pousada (Portugal).

**Symposia:** (1) “DNA realm”: Session 1: “Mutagenesis and DNA repair”; Session 2: “Control of gene expression; chromatin and epigenetics”; Session 3: “Comparative genomics and bioinformatics”; (2) “RNA world”: Session 1: “mRNA: biogenesis, localization, translation”, Session 2: “RNA interference and microRNAs”, Session 3: “Ribosome: evolution, structure and function”, Session 4: “Noncoding RNAs”, Session 5: “Ribozymes and therapeutic use of RNA”; (3) “Proteins and peptides at work”: Session 1: “Protein structure and function at the atomic level”, Session 2: “Enzyme structure and function: from bioinformatics to biochemistry”, Session 3: “Macromolecular recognition”, Session 4: “G-protein coupled receptors”, Session 5: “Peptidases in health and disease”, Session 6: “Proteomics”, Session 7: “Signaling by the ubiquitin family”, Session 8: “Cell membrane molecules and cancer progression”; (4) “Cell biochemistry”: Session 1: “Cell physiology and lipid signalling”, Session 2: “Biology of Glycoconjugates I: Structure, metabolism, function and evolution”, Session 3: “Biology of Glycoconjugates II: Glycoconjugates in human pathology”, Session 4: “Intracellular ion channels”, Session 5: “Nucleotide receptors”, Session 6: “Extracellular proteases in brain function and dysfunction”, Session 7: “PI-3K/Akt signalling in immunity, cancer and neuronal plasticity”, Session 8: “Bioenergetics”, Session 9: “Membranes: transport and signalling”, Session 10: “Mechanisms of endogenous protection in cells”; (5) “Biosphere and biochemistry”: Session 1: “Symbiosis and parasitism”, Session 2: “Molecular determinants of behaviour”, Session 3: “Molecular evolution”, Session 4: “Human genetic polymorphism and unity”, Session 5: “Genotype–phenotype relations with extremophiles”, (6) “Towards healthier life”: Session 1: “Aging population”, Session 2: “Food and health”, Session 3: “Bacterial diseases: mechanisms and control”, Session 4: “Viruses—threat or service?”

**Special Sessions:** 1. “Problem-based Learning: Information or Skills?” arranged by FEBS Working group on Teaching Bio chemistry. 2. “Life time career planning”



arranged by FEBS Working group on Women in Society. 3. “The Use of Stem Cells in Research and Future Medical Practice” arranged by FEBS Working group on Science and Society.

### Budapest 2005



Figure 5.1.101 Logo of the Budapest FEBS Congress.

The 30<sup>th</sup> FEBS Congress was held together with the 9<sup>th</sup> IUBMB Conference (at the occasion of the 50<sup>th</sup> Anniversary of IUBMB) in Budapest in 2005 and organized by the Hungarian Biochemical Society. Professor Peter Friedrich was the President of the Congress, and Professor Peter Csermely acted as the chairman of the Organising Committee. The organizers had chosen the new convention centre of Budapest University.



Figure 5.1.102 Audience in the big Lecture Hall.

2646 participants at the Budapest Congress could choose to enjoy the excellent programme. The organizers spared no effort to concoct a programme that would take care of showing to the young participants that “Science is Fun”. This was the first time that so much care was given to the young scientists, and all the events were accepted enthusiastically by them. Also the scientific programme was outstanding.

## Programme Highlights

### Opening▣Addresses▣Lectures

Welcome message, Péter Friedrich, President of the Congress; Opening of the Congress, Jan Potočník, Commissioner of Science and Research of the European Union; Addresses of the Patrons of the Meeting; Address of Bálint Magyar, Minister of Education, Hungary; Address of FEBS president, Israel Pecht; Address of IUBMB president, Mary Osborn; Address of ASBMB president, Judith Bond; Address of FEBS Secretary General, Julio Celis; Ferenc Cakó: Sand animation; EMBO Young Investigator Lecture: Attila Mócsai; Presentation of the FEBS Letters Young Scientist Awardee: Elke Deuerling; Presentation of the FEBS Journal Prize winner: Christian Klammt; Report of FEBS Secretary General, Julio Celis; Message from IUBMB President, Mary Osborn; Presentation of Congress Awards; Invitation to the 31st FEBS Congress, Nazmi Özer; Invitation to the 20th IUBMB Congress; Closing of the Congress, Péter Friedrich, chairman of the Congress.

### Plenary Lectures Budapest 2005

**FEBS-Datta Lecture** Ada E. Yonath (Tel Aviv, Israel; Hamburg, Germany): Ribosome structure

**50th Anniversary IUBMB Lecture** Christopher M. Dobson (Cambridge, UK): Protein misfolding and human disease: What we have learned from 50 years of protein science.

**Theodor Bücher Lecture** Douglas B. Kell (Manchester, UK): Metabolics and systems biology – using genetic programming to analyze complex networks.

**PABMB Lecture** Natalie C. J. Strynadka (Vancouver, Canada): Crystal structure of enzymes.

**Sir Hans Krebs Lecture** Thomas Jenuwein (Vienna, Austria): Epigenetic regulation of transcription; July **Special Plenary Lecture** Keiichi Namba (Osaka, Japan): Self-assembly and mechanical switching of the bacterial flagellum.

**EMBO Lecture** Maria Carmo-Fonseca (Lisbon, Portugal): Organization of nuclear proteins.

### Outline of Budapest Congress 2005 Symposia

- A. Functional Genomics, Proteomics, Bioinformatics**, A1. Protein Function and Ageing; A2. Evolution of Protein Structure and Function; A3. Bioinformatics; A4. Human Genomics and Diseases
- B. Proteases** B1. Proteases as Molecular Targets of Drug Development; B2. Protein Degradation; B3. Serine Proteases and their Inhibitors; B4. Regulatory Proteases
- C. Membrane Proteins and Their Interactions**, C1. Membrane ATPases and Channels; C2. ABC Transporter Proteins; C3. Receptor Proteins and

- Membrane Organization; C4. Lipid-protein Interactions in Membrane; C5. Lysophospholipids in Cell Signaling; C6. Physical methods for studying protein-protein interactions; C7. Membrane proteins—membrane traffic
- D. *Proteins In Development And Diseases***, D1. Extracellular Matrix Proteins; D2. Proteins in Development; D3. Proteins Linking Innate and Adaptive Immunity; D4. Protein complexes and modifications in health and disease
- E. *Signal Transduction*** E1. Protein Kinases; E3. Adaptor Proteins and their Functions; E4. Small GTPases and their Regulatory Proteins
- F. *Molecular Motors*** F1. Structure and Function of Motor Protein; F2. Single Molecule Biochemistry and Mechanics; F3. Rotary Motor Complexes
- G. *Protein Folding and Interactions, Folding and Misfolding*** G1. Molecular Chaperones G2. Protein Structure and Stability; G3. Protein-Protein Recognition; G4. Protein-Protein Interactions in Blood Coagulation
- H. *Modifications And Networks In Health And Disease*** H1. Protein Crosslinking by Transglutaminases; H2. Oxidation of Proteins; H3. Protein Targets in Oxidative Stress; H4. Protein Networks in Cellular Functions
- J. *Plant Proteins*** J1. Photosynthetic Light Harvesting and Reaction Center Complexes; J2. Cell Cycle Control in Plants; J3. Circadian Rhythm Control in Plants; J4. Nutrition/Metabolite Sensing in Plants
- K. *Proteins Of The Transcription Machinery*** K1. Basal Transcription Machinery; K2. Epigenetic Regulation of Transcription; K3. Nuclear Hormone Receptors
- L. *Protein Biotechnology***; L1. Protein Diagnostics, Protein Determination; L2. Microarrays for Proteome Analysis; L3. Genomics in Protein Biotechnology/Protein Biotechnology
- N. *Special Symposia*** N1. IUBMB 50th Anniversary Symposium: Protein Structure and Function; William J. Whelan: 50 years of IUB/IUBMB. N2. Media Relations Symposium. N3. Apoptosis and Signal Transduction. N4. ISN Symposium on System Neurochemistry: From Genes to Drugs. N5. Mitochondrial Dysfunction in Disease. N6. IUBMB Symposium on the Education of Biochemistry and Molecular Biology: Visual Literacy in Biochemistry. N7. FEBS Symposium on the Education of Biochemistry in memory of Prof. Peter Campbell. This Symposium has been dedicated to the memory of Professor Peter N. Campbell (1921–2005) who was instrumental in establishing FEBS and was an ardent supporter of young scientists in all his life. N8. FEBS Conference on Science and Society (*FEBS NewsLetter* 2005/4, *Special Issue*, pp. 1–10 and 14–18)

### Special Programme 2005

Prior to the Budapest Congress, the organizers had promised colourful extra programmes, which finally became true. The following excerpts from FEBS News (FN 2005/4, *Special Issue*, pp. 3–10) indicated these enterprises.

### **An Outline of Science is Fun, Special Sessions, Workshops and Evening Programs**

For the first time (!) the Congress had special and unique afternoon programs to show that *science is fun* and this conference is organized for the participants' creativity. Below you will find a description of these programs.

Bioinformatics Internet Contest: 1. Bioinformatics Contest I: Sequence Analysis. The participants will be given "unknown" sequences to be analysed from various aspects which will be announced at the beginning of the contest. 2. Bioinformatics Contest II: 3D Structures. The participants will have to solve "3D puzzles" that is to build a structure from mixed up or partial pdb files, and to search for potential ligand binding sites of given proteins during this competition. In both Bioinformatics Contests the participants will compete in the designated computer room of the Congress venue either using the whole World-wide-web or "surprise" programs available at the desktops provided. Protein Cinema: Movies about cells. Imaging has revolutionized biology in the last decade. Christian Sardet will present images and show movies of tissues, embryos, cells, organelles and macromolecules using computer animation, video and digital imaging. He will also talk about the history of the cell theory and ways to popularize the Cell and its components for a larger public. It is possible to combine all these into multimedia stories about research and education called BioClips ([www.bioclips.com](http://www.bioclips.com)). The organizers hope that the participants will complete the session with a public discussion of these topics. Most Beautiful Protein Contests: Images of the Cell in Modern Paintings: from 14 outstanding 20th century painters one of the paintings will be chosen by the applicants. The painting will be sent to the organizers with an imaginative discovery identifying a motif of our cells or its biochemical apparatus. The participants of the session will be selected from those, who sent their repainted bio-paintings. At the session, participants will receive the "bio-painting" of another contestant with the original annotations and they have to make a novel version of the bio-painting using a projected image of the original painting as a background/help in two hours. All the three versions will be displayed by the end of the Contest. The best participants will be awarded. Sculpture Making Competition Recycling in Art and in the Cell.

A contest on the proteasome to commemorate the 2004 Nobel Prize in Chemistry and the Hungarian-born Avram Hershko: In 2004 the Nobel Prize in Chemistry was awarded for the discovery of ubiquitin-mediated protein degradation performed by the proteasome, the major proteolytic (recycling) apparatus of the cytoplasm. The 20 participants in four groups with the help of an artist and professional high school students will build a sculpture of the proteasomal function or image. Painting facilities will also be given to help the fantasy of the teams become true. All of the sculptures will be exhibited in the congress venue and will be judged by an expert jury.

After the teaching session, a Beauty Contest will be organized and all of the created works will be exhibited at the Congress venue. 'When Your Proteins get Stressed': a Mixed Lecture Session will be organized.

Protein Cook Contest. The participants in four teams will have to buy from a given amount of money the ingredients of two Hungarian dishes in the Central Market Hall which is one of the most beautiful buildings of Budapest. The winning team is the one that shops for the lowest prices and most precisely.

***This Congress is for Women Scientists! This Congress is for Young Scientists!***

The 2005 FEBS *Forum for Young Scientists* is a satellite meeting of the 30th FEBS Congress, organized for hundred PhD students and recently graduated PhDs who are members of a FEBS Constituent Society. As winners of the special IUBMB and Sigma Aldrich Co. Travel Scholarships 15 students from outside Europe will also join them. The Forum intends to give a unique possibility for outstanding young colleagues to get to know each other and to discuss both their research data and career possibilities in an informal way. The Forum will be organized at the Danube Bend, which is one of the most picturesque places of Hungary. The accommodation will be provided at the Danubius Spa and Conference Hotel Visegrád. High school student researchers will act as hosts and hostesses: As a unique element of the Congress, the FEBS-sponsored Network of Youth Excellence ([www.kutdiak.hu](http://www.kutdiak.hu)) will recruit more than a hundred high school students pursuing biochemical and molecular biological research in top laboratories as hosts and hostesses.

At the FEBS–IUBMB Congress two events on the issue “*Women in Science*” will take place. The first event (organized by the Hungarian Local Organising Committee) is a panel discussion on “Joys and Burdens of Research” with special reference to “Women in Science” and young scientists that will take place on the 3rd of July. Furthermore, the FEBS working group on Women in Science (WISE) will organize a “lunch box” workshop entitled “Creating Awareness & Changing Institute Policies” jointly with EMBO. Keynote speaker Prof. Nancy Hopkins from the Massachusetts Institute of Technology (MIT) will present a seminar entitled “Women Faculty in Science and Engineering at MIT”. Nancy Hopkins, a geneticist and professor of biology, has achieved unprecedented success in cloning vertebrate developmental genes by exploiting zebra fish as an ideal model organism. By using insertional mutagenesis, a technique pioneered in invertebrate animals such as *Drosophila* but long considered impossible to use in vertebrates, Hopkins’s laboratory has isolated hundreds of genes that play a role in creating a viable fish embryo. This research has earned her several accolades, including 1998 election to the American Academy of Arts and Sciences and 1999 election to the Institute of Medicine. Hopkins has gained additional recognition for her revolutionary work on gender equity issues in science. She forced MIT to investigate the issue in 1999, which resulted in a story of gender discrimination by one of America’s most distinguished universities. The story was featured on the front page of the New York Times and carried uncritically by newspapers across the USA. She has been given many awards and had more than 400 requests to speak on the topic. In 2004, Hopkins became a member of the National Academy of Sciences. The MIT story can be found at <http://web.mit.edu/fnl/women/women.html>.

*Local Poster Printing.* The registered participants of the Congress will have the possibility to print the posters for the poster presentations at Copy General with a discount price.

*Congress DVD:* The organizers realized that the outstanding results and knowledge the speakers bring so generously to the Congress deserves a much wider coverage than the attention of those participants who will be able to come to the lectures. Despite of all efforts undertaken, the organizers were unable to raise enough funds to cover the participation of hundreds of scientists from developing countries. Thus, they decided to prepare a summary of the Congress for these people and for educational and research purposes.

*Congress Balloon* – Lift your Proteins to the Air! Congress participants are entitled to a 25% discount V.I.P. ticket to the FEBS-IUBMB Balloon at the Westend City Center (close to most hotels): a large balloon to see the proteins of the town from the sky.



**Figure 5.1.103** Three ladies at the FEBS desk: Inge Detlefsen, Regina Klaus, and Louise McSeveny (from left to right).

### Istanbul 2006

Like four years before, the FEBS Community gathered in the old metropolis at the Bosphorus to celebrate the 31st FEBS Congress, organized by the Turkish Biochemical Society.





Dear Colleagues,  
 The Turkish Biochemical Society would like to take this opportunity to renew its invitation to meet in Istanbul on 24–29 June, 2006. With the efforts of our colleagues throughout Europe and the helping hands extended across continents, the theme of “Molecules in Health and Disease” has taken on many shapes and colours. We believe that the Symposia available at [www.FEBS2006.org](http://www.FEBS2006.org) provide each of you with a suitable scientific platform that intersects with

your field of interest.

To help you plan your trip, the “Survival Crew” has included information on hotels, transportation and other technical aspects of life in The City, supplemented by a sampling of recreational possibilities.

We look forward to sharing the excitement of the Congress with you and extend our warmest greetings.

Sincerely yours,

Nazmi Özer, Ph.D.

Professor of Biochemistry

Chairperson of FEBS 2006

President of Turkish Biochemical Society



Figure 5.1.104 View on Istanbul.

The participants were welcomed at Rumeli Garden, the new Istanbul Convention and Exhibition Centre (ICEC), located at the marvellous Sisli hill, near Democracy park and in between Istanbul’s prettiest hotels, cultural buildings, and modern shopping malls, and offering a fantastic view over the lively district

of Besiktas and the Bosphorus. The Convention Centre itself contributed ample space and many facilities to accommodate all venues organized for the Congress: Anadolu Auditorium, Topkapi Hall, Dolmabahce Hall, Halic Hall, Marmara Hall, Rumeli Meeting Hall II, Sultan Hall IV, and Rumeli Exhibition Hall.

During free time, the participants could enjoy the famous attractions of the metropolis, stroll through its picturesque quarters, and taste real Turkish food at the numerous restaurants and taverns.



Figure 5.1.105 Rumeli Garden, Istanbul Convention and Exhibition Center (ICEC).



### **Scientific Programme**

Five Symposia, each with eight Sessions during the mornings (9:00 to 10:30) and the afternoons (13:30 to 15:00) were held, enframing the Plenary lectures (11:00 to 12:00). Lunch, Poster evaluation and Company presentations took place between 12:00 and 13:30. Oral Presentations were partitioned into three days, (A–E; F–J; K–O), each from 15:30 to 17:00.

Special Sessions and Workshops of FEBS Committees and FEBS Workgroups were arranged at Intermissions or for the evenings (17:00 to 19:00). Poster Presentations were accessible all day on Sunday, Monday, and Wednesday.

### **Symposia**

Session 1.1: Integration of Metabolism and Survival. Session 1.2: Integration of Defense and Survival. Session 1.3: Rhythmic Signals. Session 1.4: NF- $\kappa$ B Pathway in Normal physiology and Disease. Session 1.5: Signalling and Cancer–Nuclear Receptor Connection. Session 1.6: Cell Surface Receptors and Downstream Targets. Session 1.7: Signalling Through Ion Channels. Session 1.8: Signaling and Apoptosis.

Session 2.1: Embryonic Stem Cells. Session 2.2: Adult Stem Cells. Session 2.3: Differentiation of Stem Cells. Session 2.4: Pros and Cons of Stem Cell Therapy. Session 2.5: Gene Therapy. Session 2.6: Cell Cycle Regulation. Session 2.7: Therapeutic Enzymes. Session 2.8: RNA Interference.

Session 3.1: Oxidative Stress. Session 3.2: DNA Damage Processing. Session 3.3: DNA Repair in Health, Disease and Aging. Session 3.4: Diabetes, Obesity and Metabolic Syndrome. Session 3.5: Lipid Related Disorders and Atherosclerosis. Session 3.6: Oncogenes and Tumor Suppressors. Session 3.7: Intracellular Trafficking in Health and disease. Session 3.8: Neurodegenerative Disorders.

Session 4.1: Bioinformatics and Proteomics. Session 4.2: Clinical Proteomics. Session 4.3: DNA and Protein Microarrays. Session 4.4: Pharmacogenomics and Toxicogenomics. Session 4.5: Glycobiology and Glycomics. Session 4.6: New Proteomic Assays for Cancer Biomarkers. Session 4.7: Imaging and Non-invasive Techniques–Fluorescence Techniques. Session 4.8: Imaging and Non-invasive Techniques–MRI.

Session 5.1.1: Biocompatibility of Materials for Advanced Therapies. Session 5.1.2: Parasitic Diseases. Session 5.1.3: Immune Intervention. 5.1.4: New Vaccines. 5.1.5: Rational Drug Design. 5.1.6: Drug Targeting. Session 5.1.7: Environmental Biomonitoring and Health. Session 5.1.8: Food, Nutrition and Health–Nutrigenomics.

### **Plenary Lectures**

Sir Hans Krebs Lecture: Aaron Ciechanover, Israel: The ubiquitin proteolytic system. From a vague idea through basic mechanisms onto human diseases and drug targeting.

IUBMB Lecture:

Bücher Lecture: Rudi Aebershold, Switzerland: Qualitative proteomics and systems biology.

Datta Lecture: Joan Massagué, USA: The logic of TGF-*beta* signalling.

EMBO Lecture: Fotis C. Kafatos, Germany; Innate Immunity and the control of malaria transmission in Anopheles.

PABMB Lecture: K. Ugurbil, USA: Harnessing nuclear spins and high field magnets for the study of brain.

### Vienna 2007

The 32<sup>nd</sup> FEBS Congress took place from July 7 to 12 at the Congress Centre 'Messezentrum Wien-Neu' (New Vienna Fair Grounds) organized by the Austrian Society for Biochemistry and Molecular Biology (ÖGBM). The new Fair Exhibition Centre, inaugurated in early 2004, offered sophisticated, versatile and state-of-the-art facilities. The lecture halls, furnishings and equipment, and architecture assured maximum functionality paired with an ideal atmosphere for scientific exchange.

As research in modern biology is following new avenues, crossing traditional boundaries between scientific disciplines, it is moving towards interdisciplinary Life Sciences. Therefore, FEBS2007 was dedicated to "Molecular Machines and

**Invitation to attend FEBS2007 in Vienna !!**

**32<sup>nd</sup> FEBS Congress**  
**MOLECULAR MACHINES**  
 July 7 - 12, 2007 Vienna, Austria

**For Information about:**

- \* Onsite Registration
- \* Daily Passes
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- \* Final Programme
- \* Accommodation & Travel
- \* Media-Writing Contest
- \* Gala Dinner Reception
- \* Career-Coaching
- \* Science & Society Events
- \* Prizes & Awards

Last important **Deadline**

Late Abstract Submission By **May 31, 2007**

Please visit **[www.febs2007.org](http://www.febs2007.org)**

**ÖGBM**  
 Under the Auspices of Dr. Heinz Fischer, President of the Federal Republic of Austria

Figure 5.1.106 Announcement of the 'Vienna Congress'.

their Dynamics in Fundamental Cellular Functions” to promote this interdisciplinary exchange in Life Sciences, and to emphasize the need for quantitative approaches in Biology.

The Congress counted 2038 registered participants coming from 69 different countries. FEBS2007 hosted 218 invited speakers coming from 24 different countries, who delivered 8 Plenary Lectures and 125 Symposia contributions. Additionally, 35 workshop speakers addressed recent relevant developments in 12 scientific and special workshops.

The Opening Ceremony included speeches by several authorities from the Austrian Ministries, the town of Vienna, the Vienna Universities, as well as those of the Chairmen of the Congress, Karl Kuchler and Andreas Hartig.



**Figure 5.1.107** FEBS 2007 opening ceremony. From left to right: G. Winckler (Rector of the University of Vienna), G. Blobel (Nobel Laureate), A. Hartig (Co-Chair), J. Hahn (Minister of Science & Research), K. Kuchler (Chair), A. Mailath-Pokorny (City Counsellor, Vienna), W. Schütz (Rector of the Medical University of Vienna).

Following the opening ceremony, the ‘Keynote Opening Plenary Lecture’ entitled “Structure of the Nuclear Pore Complex” was delivered by Günter Blobel, Nobel Laureate in 1999. At the Closing Ceremony, 2004 Nobel Laureate Aaron Ciechanover presented his ‘Keynote Closing Plenary Lecture’ on “The ubiquitin proteolytic system: From a vague idea through basic mechanisms onto human diseases and drug targeting”.

#### **Other Plenary Lectures**

##### ***Krebs Medal Lecture***

Tom Rapoport (Howard Hughes Medical Institute, Harvard Medical School, Boston, USA).

“Transport of Proteins In and Out of the Endoplasmic Reticulum”.

##### ***Böcher Medal Lecture***

Kim Nasmyth (Head of Department of Biochemistry, University of Oxford).

“Cohesin: Its Role and Mechanisms”

##### ***Datta Medal Lecture***

Venki Ramakrishnan (MRC Laboratory of Molecular Biology, Cambridge).

“What We Have Learned from Structures of the Ribosome”.

**EMBO Lecture**

Titia de Lange (Laboratory of Cell Biology and Genetics, The Rockefeller University, New York)

“Protection and Maintenance of Mammalian Telomeres”

**IUBMB Lecture**

Angelika Amon (Massachusetts Institute of Technology, Cambridge, USA)

“Chromosome Regulation and the Cell Cycle”

**PABMB Lecture**

Mike Tyers (University of Toronto, Canada)

“The Chemical Genomic Portrait of Yeast”

**Scientific Programme****Symposia**

The scientific programme of FEBS 2007 consisted of five main Symposia entitled

- Nuclear World
- Transport Machineries
- Signal Transduction
- Metabolism and Energetics
- Quantitative Biology

each divided into five Sessions.



**Figure 5.1.108** After the Opening Ceremony of FEBS2007, Vienna.

For the first time at a FEBS Congress, the ‘Plenary Award Session’ was held in the main lecture hall with some 1200 people in the audience. The prizes and awards included “FEBS Letters Young Scientists Award”; “FEBS Journal Prize Lecture”; “Young Scientist Forum Award 2007” (given to Noburu Mizushima); as well as the “FEBS Anniversary Prizes”, the national “OEGBM-VWR Prize”, and the “OEGGT Prize”.



Figure 5.1.109 Vienna 2007: Karel Wirtz and Guy Dirheimer.



Figure 5.1.110 Vienna 2007: Willy Stalmans and Jacques H. Weil.

#### *Scientific Workshops*

- Lipids–from diseases to aging: Understanding and possible approaches to lipid related diseases and their ethical, societal and healthcare problems.
- Cytoskeleton & Motility: Latest insights into mechanisms driving chromosome movement along microtubules, new regulators of the actin skeleton, and understanding the coordinated migration of cell groups during development
- Chemogenomics & Drug Discovery: Changes in research strategies and needs for future concepts.
- Quantitative Proteomics & Networks: Creating inventories of proteins in organelles, cell lysates, and fluids.
- Bioinformatics, Evolution & Databases: Societal aspects on the progress of bioinformatics and related areas.
- Integrative Structural Biology: Examples of integrative approaches, combining X-ray diffraction, cryo-electron microscopy, and computer simulation in determining the structures of large macromolecular machines.

**Special Workshops**

- FEBS/EMBO Science & Society Workshop: 'Aging of the Brain'
- FEBS/EMBO Workshop on Women in Science: 'Careers for Women'
- Special Cancer Research Workshop: 'Towards a Vision for Cancer Research: Perspectives from Scientists'
- Special Media Workshop: 'Communicating Science to the Public & Media Contest'
- FEBS Education & Teaching Workshop: 'How to Translate Biochemical Research into Commercial Products'
- Career Workshop: 'Grant-writing & Career Development'

**Science & Society in Public Places:**

- 'Re-emerging diseases—a global threat?' This venue at the Natural History Museum attracted 250 participants.
- 'Stem cells in and for Society' assembled an audience of 220 participants at the Museum of Modern Art (MUMOK).



Figure 5.1.111 Vienna 2007: Children's University.

**Poster Session and Other Venues**

The 1170 posters could be displayed for the entire duration of the congress. Mainly for young scientists, the following were organized: 'Biocomputing & Bioinformatics Tutorial'; 'International Media-Writing Contest'; Children's University; and the WISE 'FEBS/EMBO Science and Society Workshop' entitled "Strategies and Programmes to Facilitate Careers for Women".

Following an old Vienna tradition, the organizers of FEBS2007 had arranged a memorable event, a Gala-Dinner at the Vienna Town Hall with live music and a ball 'The FEBS2007 Congress Dances'; the party concluded beyond midnight.



Figure 5.1.112 OeGBM student-FEBS2007 Staff.



Figure 5.1.113 Vienna 2007: Farewell banquet and dancing in the big festive hall at the Vienna Rathaus.

### Athens 2008

Originally, the organizers of the 33<sup>rd</sup> FEBS Congress and 11<sup>th</sup> IUBMB Conference had envisaged holding the venue in some buildings of the New Olympic Stadium in Athens built for the games in 2004. But as the location finally revealed several drawbacks in terms of housing of the participants, too complicated transport facilities and probably difficulties with air conditioning, the organising committee of the Hellenic Society of Biochemistry and Molecular Biology decided to run the venue at the Megaron Athens International Conference Centre, a series of buildings located not far from the centre (Syntagma square) and easily reachable by metro or buses. The attractive buildings offered ample and well air-conditioned

**33<sup>rd</sup> FEBS Congress & 11<sup>th</sup> IUBMB Conference**  
*Biochemistry of Cell Regulation*  
 June 28 - July 3, 2008, Athens, Greece  
 Megaron Athens International Conference Centre

Hellenic Society of Biochemistry and Molecular Biology  
 Federation of European Biochemical Societies  
 International Union of Biochemistry and Molecular Biology

Under the Auspices of H.E. the President of the Hellenic Republic

**Biochemistry of Cell Regulation**  
 Athens, Greece  
 June 28 - July 3, 2008

**Register NOW**  
 CLIC&C at [www.febs-iubmb-2008.org](http://www.febs-iubmb-2008.org) or [www.febs2008.org](http://www.febs2008.org)  
 Early Registration Deadline: April 15, 2008  
 Late Registration Deadline: June 17, 2008

Information about the program and speakers is available at [www.febs2008.org](http://www.febs2008.org)

**SYMPOSIA & TOPICS**

- Chromosome architecture and nuclear dynamics
- Coupling and regulation of gene expression machines
- Protein structures and dynamics
- Extracellular and intracellular structures in cell communications
- Microbial cell regulation and interactions
- Stem cell differentiation systems
- Regulation of membrane signaling
- Applied Biochemistry and Biotechnology

FOR FURTHER INFORMATION PLEASE CONTACT US AT [febs-iubmb2008@acnc.gr](mailto:febs-iubmb2008@acnc.gr)

Figure 5.1.114 Online poster to promote registration.





**Figure 5.1.115** At the Congress foyer: Mme. XX, Guy Dirheimer, Israel Pecht, Adam Szewczyk.

facilities to attend the various venues the organizers had arranged: The Hall of Friends of Music, The Banqueting Hall, Hall MC3, The Dimitris Mitropoulos Hall, The Nikos Skalkotas Hall, and Conference 1.

The opening ceremony welcomed all participants with the usual addresses and a colourful folkloristic entertainment programme presented by the Municipal Choir of Athens, followed by the Sir Hans Krebs Lecture given by Tim Hunt.

### *Scientific Programme*

#### *Plenary Lectures*

For the nominated Lectures, the organizers had selected renowned speakers, presenting a bouquet of most interesting talks.

Sir Hans Krebs Medal & Lecture: Tim Hunt – ‘Getting in and out of mitosis’

Datta Medal & Lecture: Sidney Altman – ‘New functions of RNase P’

Theodor Bücher Lecture: Axel Ulrich – ‘Targeted cancer therapies: Herceptin and SUTENT’

The EMBO Lecture: Günter Blobel – ‘Nucleo-plasmatic traffic’

IUBMB Medal & Lecture: Naoyuki Taniguchi – ‘Biochemical and molecular network of n-glycans in disease’

PABMB Lecture: Miguel Beato del Rosal – ‘Hormone signalling to chromatin.’

Except for the Sir Hans Krebs Lecture, the Plenary Lectures were scheduled between 12:30 and 13:30 each day at the Hall of the Friends of Music.

#### *Symposia*

The Congress ‘Biochemistry of Cell Regulation’ presented a portfolio of eight interesting Symposia, of which five were subdivided into five, and the rest into three Sessions.



**Figure 5.1.116** Ancient Greek coins with Athena and the owl, symbol of wisdom..

- (1) Chromosome architecture and nuclear dynamics. Session 1a: Chromosome architecture, movements and insulators; Session 1b: Imprinting and epigenetic regulation; Session 1c: Nuclear extra chromosomal structures; Session 1d: Evolving genomes and synthetic biology; Session 1e: Pharmacogenomics.
- (2) Coupling and regulation of gene expression machines. Session 2a: Transcription, RNA processing and export; Session 2b: Nuclear receptors and control of transcription; Session 2c: Regulation at the transcriptional level; Session 2d: Micro and siRNAs; Session 2e: Catalytic RNA.
- (3) Protein structure and dynamics. Session 3a: Protein structure, modelling and drug design; Session 3b: The ubiquitin-proteasome system; Session 3c: Protein misfolding, diseases and therapeutic strategies; Session 3d: Protein macromolecular machines and networks; Session 3e: Protein maintenance and the ageing process.
- (4) Extracellular and intracellular structures in cell communication. Session 4a: Extracellular matrix in tissue architecture and cellular functions; Session 4b: Glycobiology; Session 4c: Mitochondrial-nuclear communication and dynamics; Session 4d: Functional cytoskeleton dynamics; Session 4e: Cell-cell communication.
- (5) Microbial cell regulation and interactions. Session 5a: Biochemistry of symbiosis and microbial cell interactions; Session 5b: Host-pathogen interactions. Session 5c: Life adaptations in extreme environments; Session 5d: Horizontal gene transfer; Session 5e: Metabolic engineering and systems biology.
- (6) Stem cell differentiation systems. Session 6a: In vitro differentiation of embryonic and adult cells; Session 6b: Mechanisms of stem cell renewal and differentiation; Session 6c: Somatic cell cloning, nuclear reprogramming and cell therapies.
- (7) Regulation of membrane signalling. Session 7a: Regulation by hormones, growth factors, cytokines and neurotransmitters; Session 7b: Regulation of non-genomic and transcriptional signaling; Session 7c: Signalling molecules as therapeutic targets.

- (8) Applied Biodiversity and Biotechnology. Session 8a: Plant biotechnology and renewable materials; Session 8b: Nano biotechnology; Session 8c: Nutritional biochemistry.

Parallel sessions were scheduled in a non-regular fashion during the mornings on Sunday through Thursday mornings, and the late afternoons of Sunday, Tuesday and Wednesday, arranged in a way to accommodate the prospective audience at appropriate locations. Special Sessions, such as those on Scientific Career, E-learning, and Intellectual Property, as well as FEBS and EMBO activities in Science & Society, Biochemical Education, and Women in Science, and finally the presentations of the FEBS Prizes' winners, were arranged during the early afternoons and the evenings from Sunday through Wednesday. To avoid any confusion, the organizers had worked out a precise 'at-a-glance' programme. Because of the multitude of poster presentations, poster viewing had to follow a fixed time schedule: discussions were run between 10:40–11:10, 12:00–12:30, and 17:10–18:30 every day at the poster area.

The Congress Dinner on Tuesday night assembled many participants at Bel Azure, a charming peninsula surrounded by the Saronic Gulf, evolving into a truly memorable event: Authentic Greek cuisine and wine were served in a large open air area, after which everyone was invited to enjoy Greek dancing; in all it was an unforgettable farewell to Greece.

Instead of choosing one the 'classical' after Congress Tours, Hava Ayalon, Guy Dirheimer and myself (HF) paid a visit to the quiet, green area around Philipappou (Filopapou) Hill situated southeast of Acropolis. Strolling in this wonderful garden around the 'hill of the muses' formed by the famous architect Pikionis in 1954–1957 we found the Pnyx, the birthplace of Greek democracy; the prison of Socrates; and the little Orthodox Church upon the hill. After a recreative walk, we enjoyed a wonderful performance of Greek dances at the Dora Stratou Theatre, an amphitheatre built to celebrate this cultural tradition.



**Figure 5.1.117** Performance of Greek dances at Dora Stratou Theatre on Philipappou Hill in Athens.

## Prague 2009

The 34<sup>th</sup> FEBS Congress was held at the Prague Congress Centre, already known to participants who had attended the IUB Congress in 1988. It was organized by Czech Society for Biochemistry and Molecular Biology, running from July 4 through July 9.

### Plenary Lectures

IUBMB Lecture: Sir Tom Blundell

*Genomes, structural biology and drug discovery: challenges for academia and industry*

Sir Hans Krebs Lecture: Prof. Vaclav Horejsi

*Membrane rafts: important (yet controversial) components of receptor signalling*

Datta Lecture: Sir David Lane

*Drug discovery in the p53 pathway*

Theodor Bücher Lecture: Prof. Walter Sebald

*The molecular basis of cytokine receptor signalling – theme and variations*

The EMBO Lecture: Prof. Dirk Inzé

*Molecular machines driving plant growth*

PABMB Lecture: Prof. Nahum Sonenberg

*Translational Control via mRNA 3'-5' interactions: from development to miRNA function*

WISE plenary lecture: Prof. Anne Houdusse

*How myosin motors work: a fun journey from structure to function*



Figure 5.1.118 Announcement of the FEBS Congress Prague 2009.

**Address from the FEBS Secretary General***Prof. Israel Pecht, Rehovot*

Dear participants in the 34th FEBS Congress, dear colleagues and friends,

Welcome to the great city of Prague, a capital of a country at the heart of Europe in so many ways: lying centrally on this continent and being for centuries at the interface of major cultures and ethnic components. Many more reasons than the latter features of Prague and the Czech Republic make it of particular significance and pleasure to be here and to welcome you all to this country. Outstanding among these reasons are the facts that in this country some most fundamental and pioneering contributions have been made to our understanding of life on this planet.

The naturalist Johann Gregor Mendel (1822–1884) was the founder of the theory of heredity: In the 1840s Mendel discovered the laws of heredity and thus established an entire scientific field; genetics. Three of Mendel's Laws of Inheritance—the law of the uniformity of hybrids, the law of segregation and the law of independent assortment—have become the basis for the breeding of plants and animals and an important part of medicine and other scientific fields. The fact is that the breeding of plants and animals continues today thanks to his work.

Another great pioneer of the life sciences is Jan Evangelista Purkinje (1787–1869), an anatomist and experimental physiologist whose name lives on today in many specialized concepts and terms used in as broad fields as anatomy to criminology. The early academic presence in this country is also evidenced by the founding of the Charles University in Prague, the first university in Central Europe in 1348—and of the oldest technical university in Central Europe, the Czech Technical University, recently celebrating its 300th anniversary. All these illustrate the major position Czech intellectual presence has in this continent. Our Czech colleagues have organized a great congress with an interesting program that should serve all of us, but mainly the younger ones, as an overview of advances in molecular life sciences to help them in planning their own future. The Young Scientist Forum that FEBS initiated several years ago is another tool presented to the future generation of biochemists assisting them in designing their road in research. All these events will take place in a city with unique beauty and stimuli. Make sure to enjoy at least some of what Prague offers. Enjoy the science and its unique ambience. (FEBS News, July 2009)

**Welcome address by FEBS Chairman***Prof. Andreas Hartig, Vienna,*

Mr. Minister, Mr. Mayor, Mr. Rector, Mr. Chairman,

Dear participants of this FEBS Congress.

How many of you have heard about FEBS before coming to this Congress? How many of you know what FEBS actually is, what role this Federation of altogether 46 Societies plays? The people working for and in FEBS see this organization as an



**Figure 5.1.119** Andreas Hartig presenting his address at the opening ceremony.

important and major player in Science, offering a variety of services and support especially to the younger scientists among us. It does so by offering fellowships, courses for training in special areas and career advice at early stages, and by supporting initiatives to boost education.

FEBS is also in charge of three journals to provide a platform for publication, and it fosters the exchange of people, material and ideas between the well-developed and the less developed countries in Europe. Prestigious prizes for the more advanced scientists are also part of FEBS activities. Every year a FEBS Congress and a Young Scientist Forum is organized to offer the opportunity for presentation and discussion of scientific results and it is always held in a different country to demonstrate FEBS' truly European nature. These are the more visible activities of FEBS. But behind the scene people working for and in FEBS feel also responsible to influence the public attitude towards scientific research and development. Teamed up with other European organizations FEBS is actively interacting with political decision makers to provide a better and stronger base for science in Europe and to convince them that scientific developments are the basis for innovation. For us as scientists this is a trivial fact, but the political reality looks different. The ERC was one of the fruits of these efforts, its foundation is a big success, and when the first call was issued for ERC grants an overwhelming 9200 applications were turned in, demonstrating the desperate need for such a tool—however, less than 300 were funded!

A success rate of 3%, at a cost of roughly 350 Mio Euro for all of Europe on its way to becoming the world's most competitive knowledge-based economy, spending 3% of its budget on research and development in 2010—commonly referred to as the famous Lisbon goals. But 2010 will be here in a few months! How shall we reach that goal if we scientists hear the same answer over and over again: Sorry, there is no money. All these heroic goals look like

empty phrases, and sometimes a famous song from the 70s comes to my mind sung by the BeeGees “It’s only words, and words are all I have”. A year and a half later the economic crisis made clear that the lack of money was a poor excuse. 100s of billions are spent to keep alive without any restrictions an almost corrupt financial and real estate system. How much innovation could be pushed forward with just 2 or 3% of this sum? We need to change this attitude of neglect and ignorance towards scientific research and innovation, regardless how long and enduring such a task may be. But we ourselves have to believe in this goal passionately. We have to remind and convince the public that without scientific research there will be no prosperous future.

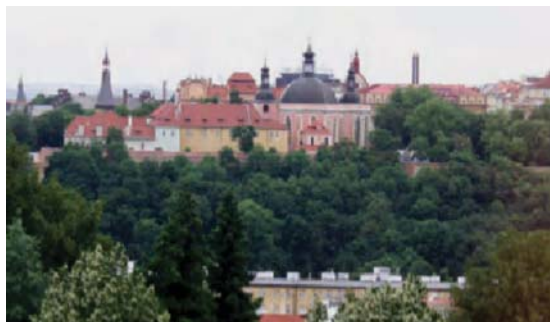
Having said all that I wish all of us a successful Congress, a fruitful exchange of ideas, many chances for new collaborations, and maybe also for new jobs. And if only a few of us here will later remember that the first sparkling idea for the major breakthrough reached ten years from now came to their mind here in Prague, at a FEBS Congress, listening to a speaker, or discussing novel ideas or techniques with colleagues or initializing a new collaboration, then this FEBS Congress has achieved its goal.

Herewith I declare the 34<sup>th</sup> FEBS Congress open. Thank you very much.  
(FEBS News, October 2009).

#### **View from the FEBS Booth**

*By Louise McSeveny*

I have worked for many Congresses now. My friends are quite envious of the international jet lifestyle I appear to lead, and my protests that my international jet set lifestyle mainly consists of sitting in an under air conditioned basement with harsh fluorescent lighting for a week seem to fall on deaf ears. No woman likes seeing herself in over-lit bathroom mirrors and spending a week dealing with the public looking like I have not slept for a month is not what I have in mind when I board a plane.



**Figure 5.1.120** View from the FEBS Booth.



**Figure 5.1.121**  
Tomàs Zima..

This year though, I am pleased to announce that this year's view from the FEBS Booth is just that: a view from the FEBS Booth—with windows, natural lighting and everything! Here it is: The Congress was situated at the Prague Congress Centre, Prague 4 in the Vyšehrad area and I believe this view to be of the Vyšehrad Castle. Big thank you to Prof. Tomàs Zima, organizer of the Congress who broke every road traffic rule to squeeze 5 FEBS ladies into his car to drive us to a fantastic local Czech restaurant for our annual FEBS girl's night out. Tomàs, we had a great night and the food was fab! Thanks for the ride and recommendation.

It was not all fun and games. As usual we were busy doing the promotion thing at the Booth during the day and attending various functions in the evening. We were not as busy, though, as at the IUBMB Congress in Shanghai, where we handed out specially made FEBS logo USB Memory sticks. I would have to put that in the top 5 of my list of FEBS Booth riots, as Congress participants love a freebie. All 1000 of them—all at once. I still have the bruises... Once again we were kept company by the FEBS Education Committee working tirelessly to promote the careers of young scientists during their CV sessions. Many thanks to them for taking turns on the numerous coffee runs to keep us all awake and alert. (A special thanks to Jason for providing the materials for the casual silliness with the complimentary plastic hotel shower caps.) Here they are in a quiet moment: I also have to make a special mention of participant Henri Franquelim from Portugal. Last year I reported that only one brave Portuguese man had what it took to attend the Women in Science lunch and enjoy the company of room full of intelligent women. Well this unnamed chap went back home told Henri he should attend, which he did and here he is: Obviously Portuguese men are made of sterner stuff. I should point out that the WISE career lunch is about discussing careers of women, but can the careers of women be discussed in a vacuum without the participation of men? Shouldn't we work together to resolve issues of family, glass ceilings and career development? I lay down the challenge to all young men reading this for more active participation in the WISE event in Gothenburg next year. You too can have your photo on these pages! (FEBS News, October 2009).

### Gothenburg 2010

The 35<sup>th</sup> FEBS Congress was organized jointly by two National Societies, 'Svenska Föreningen för Biokemi och Molekylärbiologi' and 'Norsk Biokjemisk Selskap'. The Convention Centre in Gothenburg, *Svenska Mässan*, very conveniently combined the congress facilities with the congress hotel 'Gothia Towers'. The *vis-à-vis* tram



# 35<sup>TH</sup> FEBS CONGRESS MOLECULES OF LIFE



June 27–July 2, 2010 • Göteborg (Gothenburg), Sweden

**Figure 5.1.122** Logo of the Gothenburg FEBS Congress.

station easily connected this centre to any site of interest of the city. Within walking distance, the participants could reach the museum, the old opera, and from there stroll down the main avenue towards shopping centres, huge parks, or the harbour.

## Message from the FEBS Chairman

### *Professor Emanuel Fragoulis*



It is a great honour and pleasure for me to Chair for 2010 the Federation of European Biochemical Societies (FEBS). It is a well known fact FEBS is involved in multiple and important activities in the support of young scientists. In addition FEBS is renowned for the pioneering and effective presentation of scientific knowledge by means of its prestigious journals. According to our statutes, the management of the Federation is among the duties of its Secretary General. The Chairman of the Federation has to present initiatives and proposals of policies in the frame of Executive Committee as well as in the Council meeting.

Under the Statutes of FEBS, which were wisely conceived, the Constituent Societies are given the capability to provide the Federation with new ideas each year. From our point of view, biochemistry is the most rapidly developing discipline in Scientific History. The new knowledge generated in Biochemistry will not only affect other Sciences such as Medicine, Agriculture, but, most probably, new energy production technologies based on bio fuels. New biochemical discoveries are expected to influence social thinking regarding bioethics. Therefore, biochemistry will also be in the centre of social agendas. Biochemistry can be equally considered as a pioneering science but its potential negative impacts need to be always taken into account. Among the duties of FEBS, via members of its Constituent Societies, is to aim at development and presentation of newly generated knowledge in a way understandable by the public. In addition it has a role to influence scientific policies in order to promote basic biochemical research. Although this task is particularly difficult, due to the heterogeneity of member societies, it is considered to be of utmost importance.

With these thoughts I wish all the FEBS community a new productive year, full of health and enthusiasm for a better world. (FEBS News, January 2010).



Figure 5.1.123 Älvsborgsbron with regatta boats.

### Programme highlights

#### Plenary Lectures and Awards

- **Opening Lecture:** Roger Tsien (UCSD; Nobel Laureate 2008)
- **Closing Lecture:** Venki Ramakrishnan (MRC-LMB; Nobel Laureate 2009)
- **Special Lectures:**
  - Elizabeth Blackburn (UCSF; Nobel Laureate 2009)
  - John Walker (MRC Cambridge, Nobel Laureate 1997)
- **Datta Lecture:** Juleen Zierath (Karolinska Institute, Clinical Integrative Physiology, Stockholm)
  - “Gene-Environment influence on skeletal muscle insulin sensitivity in Type 2 Diabetic patients”*
- **Sir Hans Krebs Lecture:** Harald Stenmark (Centre for Cancer Biomedicine, University of Oslo and Department of Biochemistry, Institute for Cancer Research, the Norwegian Radium Hospital)
  - “How a lipid mediates tumour suppression”*
- **The Theodor Bücher Lecture:** Svante Pääbo (Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany)
  - “Analyses of Pleistocene genomes”*
- **The EMBO Lecture:** Uri Alon (Weizmann Institute, Rehovot, Israel)
- **The IUBMB Lecture:** Susan Lindquist (Whitehead Institute, Cambridge, USA)
- **The FEBS/EMBO Women in Science Award:** Ingrid Grummt (Division of Molecular Biology, German Cancer Research Centre, DKFZ-ZMBH Alliance, Heidelberg): *“Wisely chosen paths: Regulation of ribosomal RNA synthesis”*

#### Congress Symposia

- A – Molecules in Health and Disease
- B – Molecular Networks
- C – Molecules at Work
- D – Cellular Compartments
- E – Biomolecular Design and Functions

**Activities by FEBS Committees and Working Groups**

Science and Society  
Education  
Women in Science

**Workshops on Technology Developments**

Sequencing Technology – Proteomics Technologies – Metabolomics – Protein Structures - Life Imaging – Dynamic Modelling – Protein Interactions – Molecular Imaging – Protein Expression – Lipidomics – Network Modelling – Bioinformatics



**Figure 5.1.124** Gothia Towers at the Göteborg Messan.

Highlights for short excursions downtown were Göteborg's wonderful Botanical Garden, full of regional and foreign plants and flowers, covering a huge area, including fantastic draperies on natural granite rocks. During the summer time, some 130 employees are busy cultivating the garden, the numerous green houses, and the restaurants and cafes (see Figures below). Another attractive area, the old town down by the harbour, opened fascinating views to the busy shipping traffic along the sound, plenty of pubs invited leisure, some of which offered >100 draft beers and satiable local dishes. Across the sound (crossing by one of the numerous ferry-boats), the new quarter promised a worthwhile tour; during the



Figure 5.1.125 Scenic Botanical Garden of Göteborg.



Figure 5.1.126 Open air restaurant at Botanical Garden.



Figure 5.1.127 The Gothenburg yacht harbour.



Figure 5.1.128 Romantic sundown at Göteborg archipelago.



Figure 5.1.129 Lecturer's dinner.

period of the Congress, a (reconstructed) battle ship from the 17<sup>th</sup> century was to be seen there, mooring at one of the many small wharfs.

### Turin 2011

The 36th FEBS Congress/12<sup>th</sup> IUBMB Conference 'Biochemistry for Tomorrow's Medicine' was held in Turin, Italy, from 25th to 30th June 2011, organized by the Italian Society for Biochemistry and Molecular Biology. The site of the Congress was the *Centro Congressi Lingotto* at the former plant of the FIAT car industry, which was completely reshaped by the famous architect Renzo Piano, making it an excellent structure for functional and comfortable running of conferences. The campus reachable from the town centre by the automatic underground train, running every 10 minutes, and connecting all important locations of the city on a route about 13 km in length is very conveniently combined with a

congress hotel, and a restaurant and shopping area on its second floor. These facilities at the conference centre, the weather conditions and the general atmosphere in Turin all contributed to smooth and pleasant participation in the Congress.

The Congress was attended by more than 2000 participants from all over the world: 1741 from Europe, 184 from Asia, 51 from Central and Southern America, 44 from North America, 13 from Africa, and 5 from Australia.

The FEBS Congress aimed to provide a comprehensive view of the impact of biochemistry and molecular biology in medicine, from the most advanced basic research to new perspectives in the molecular understanding of pathogenic mechanisms and development of therapeutic strategies.

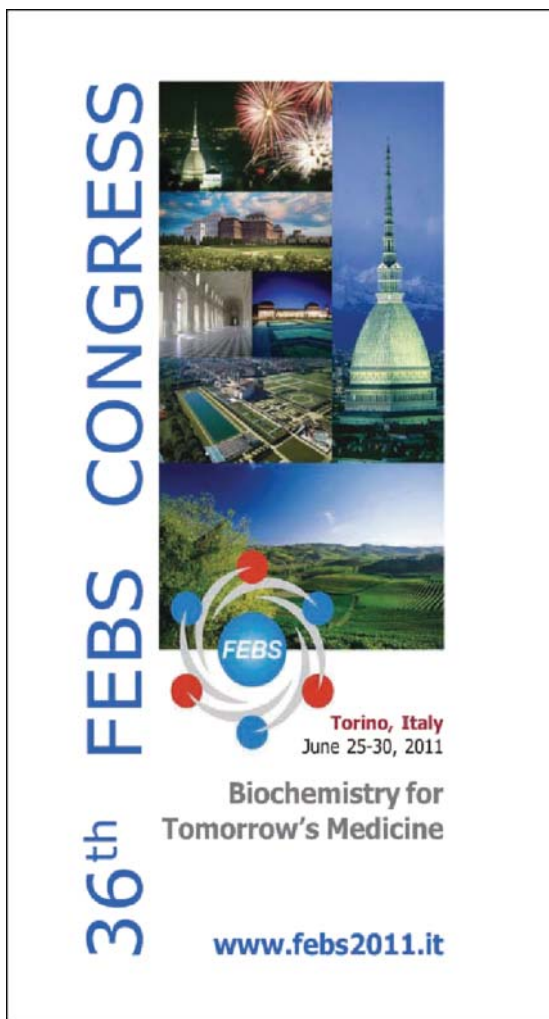


Figure 5.1.130 Announcement for the Turin Congress.



**Figure 5.1.131** Torino Madrigal Choir at the opening ceremony.

The scientific programme was centred on 19 thematic areas, including ‘The genome in the 3rd millennium’, ‘Complexity in RNA biology’, ‘Protein and membrane dynamics’, ‘Molecular basis of development and major human diseases’, as well as other advanced topics. The sessions of the Congress consisted of 11 plenary lectures, 44 symposia, and 13 special sessions and workshops—with 212 invited speakers, and 74 speakers selected from the submitted abstracts.

### **Programme Highlights**

#### ***Plenary Lectures***

Opening Plenary Lecture: Pier Paolo Pandolfi, Harvard Medical School, Boston  
 Sir Hans Krebs Lecture: Elena Conti, Max Planck Institute of Biochemistry, Munich

Theodor Bücher Lecture: Pier Giuseppe Pelicci, European Institute of Oncology, Milan

PABMB Lecture: Hugo Maccioni, National University of Córdoba, Córdoba

Datta Lecture: Sirpa Jalkanen, University of Turku, Turku



**Figure 5.1.132** Audience at the 2011 opening ceremony.



**Figure 5.1.133** Opening addresses by the authorities.

IUBMB Lecture: John Mattick, University of Queensland, Brisbane

EMBO Lecture: Luis Serrano, Centre for Genomic Regulation, Barcelona

WISE Award Lecture: Carol V. Robinson,  
University of Oxford, UK

Closing Plenary Lecture: Guido Kroemer, Gustave Roussy Institut, Villejuif

### **Symposia**

Altogether the Symposia were held at 19 different locations.

Symposia Area S1: The Genome in the 3rd millennium; Coding and non-coding information in genome function; • Mechanisms controlling genome integrity; • Epigenetic control of cell fate.

Symposia Area S2: Complexity in RNA biology; • Non coding RNA: evolution, function; • Small RNA in disease.

Symposia Area S3: Following the life of a protein. Protein synthesis, traffic and turnover; • Protein folding and binding; • NAD-dependent Post-translation.

Symposia Area S4: Cell-Cell communication; • Intercellular trafficking of signals; • Regulation of cell functions by intercellular contact systems.

Symposia Area S5: Membrane dynamics; • Membrane dynamics; • Organelle dynamic; • Membrane dynamics and disease.

Symposia Area S6: Molecular basis of development; • Stress adaptation and development; • Cell shape determination; • Development of cognition and language.

Symposia Area S7: Systems Biology; • Omics and Bioinformatics; • Networks and circuits.

Symposia Area S8: Molecular Engineering for medicine; • Synthetic biology for medicine; • Biomedical application of nanotechnology.



- Symposia Area S9: Prokaryote biochemistry: Friends and foes in the microbial world; • Probiotics as health-promoting agents; • Antimicrobial drug discovery: a new challenge for the future.
- Symposia Area S10: Metabolic control and disorders; • Nuclear receptors and lipid metabolism; • Molecular perspectives for diabetes; • Redox balance and obesity.
- Symposia Area S11: Recent advances in cancer biology; • Genes and Pathways in Cancer; • Cancer Stem Cells and Metastasis.
- Symposia Area S12: Cellular Senescence and Aging; • Plasticity of Aging; • Cellular Senescence.
- Symposia Area S13: Rare diseases reveal new biochemical mechanisms; • Rare metabolic diseases; • Mitochondrial diseases.
- Symposia Area S14: Biochemistry of the Brain and Neurodegenerative disorders; • Recent advances in neurodegenerative disorders; • Dopaminergic neurons and Parkinson disease.
- Symposia Area S15: Molecular Basis of Cardiovascular diseases; • Development of vascular system; • Molecular basis of cardiovascular diseases.
- Symposia Area S16: Biochemistry of immunity and inflammation; • Ecto-enzyme network and diseases; • Structure and function of innate immunity receptors; • Receptors and signal transduction.
- Symposia Area S17: Biochemistry and molecular biology of malaria and tuberculosis; • Biochemistry and molecular biology of Tuberculosis; • Biochemistry and molecular biology of Malaria.
- Symposia Area S18: Plant Biochemistry for Health and Tomorrow's Medicine; • Green Factory; • Plant Innate Immunity.
- Symposia Area S19: Molecular and cellular therapeutics; • Vectors for therapeutic and experimental applications; • Gene and cell therapy for genetic diseases.

#### ***FEBS Committee Events***

##### ***Science & Society***

Session on Genetic Diseases

Public Science & Society Forum on "Biochemistry for Tomorrow's Medicine"

##### ***Education in Biochemistry***

Integrating Bioscience Education with Medical training

Post-Graduate Education

##### ***Poster Sessions***

P1 Genomes: structure, information and epigenetic control; P2 RNA biology; P3 Protein structure, functional mechanisms, turnover; P4 Cell-cell communication; P5 Membrane dynamics; P6 Molecular basis of development; P7 Systems biology; P8 Molecular engineering for medicine; P9 Prokaryote biochemistry; P10

Metabolic control and disorders; P11 Cancer biology; P12 Cellular senescence and aging; P13 Rare diseases; P14 Biochemistry of the brain and neurodegenerative disorders; P15 Molecular basis of cardiovascular diseases; P16 Biochemistry of immunity and inflammation; P17 Biochemistry and molecular biology of malaria and tuberculosis; P18 Plant biochemistry; P19 Molecular and cellular therapeutics; P20 Apoptosis; P21 Signal transduction; P22 Bioinformatics; P23 Bioenergetics; P24 Membrane phospholipids; P25 Protein kinases and phosphatases; P26 Free radical balance and oxidative stress; P27 Photosynthetic systems; P28 Proteomics; P29 Cell organelle dynamics; P30 Glycobiology; P31 Developmental biology; P32 Metals in biology; P33 Varia.

### Complementing Programme



**Figure 5.1.134** A unique piece from the exhibitions of the Turin Egyptian Museum.

A highlight of the scheduled programme was a visit to the *Museo del' Automobile* facing the banks of river Po.

Another highlight was spectacular fireworks illuminating Turin.



**Figure 5.1.135** 'Museo del' Automobile' in Turin.

WISE Award Lecture: Carol V. Robinson, University of Oxford, UK

FEBS Committee Events

Science & Society: Session on Genetic Diseases

Public Science & Society Forum on "Biochemistry for Tomorrow's Medicine"

Education in Biochemistry: Integrating Bioscience Education with Medical training, Post-Graduate Education

The old capital of the First Italian Republic invited the participants to undertake extensive tours to its most attractive sites: the picturesque old town, its busy boulevards, its famous Cathedral, its unique Egyptian Museum.



Figure 5.1.136 Famous cars in the Museo del' Automobile.



Figure 5.1.137 Fireworks over Turin at the end of the Congress.

### Sevilla 2012

The joint 22nd IUBMB and 37th FEBS Congress was held from 4th to 9th September 2012 in Seville, Spain. The meeting was organized by the Spanish Society for Biochemistry and Molecular Biology (SEBBM), along with the Portuguese Society for Biochemistry (SPB) as a partner society.



Figure 5.1.138 Logo of the Seville Congress.

The main theme of the Congress was 'From Single Molecules to Systems Biology'. Recent spectacular advances in '-omic' disciplines and information technology have led to multi-disciplinarity and integration becoming key features of post-genomic and proteomic research. Genes, gene products, their regulatory networks and their interactions with their environment must be analysed not only at the molecular level, but also as components of higher-order structures, metabolic pathways or entire cells and organisms. This branch of research, termed 'Systems Biology', combines concepts in a holistic approach from molecular biology, engineering sciences, mathematics and information technology to complex biological systems such as living cells.

We would like to praise the excellent scientific level of all abstracts submitted. With a total of 1990 abstracts approved, 1703 posters and 122 oral communications were presented. We would also like to highlight the awarding of registration fee waivers to 498 PhD students and young scientists.

Table 5.1.1 Top 20 countries by number of participants.

	Spain	1023		South Korea	43
	Turkey	123		United States	43
	Portugal	105		Chile	29
	Poland	104		Romania	29
	Italy	79		Hungary	26
	United Kingdom	76		Australia	24
	Russia	73		Switzerland	21
	Japan	64		Serbia	20
	Brazil	52		Greece	20
	Germany	58		Sweden	19
	Czech Republic	50		Israel	18
	France	47		Netherlands	18

The Congress brought together 2454 participants and 59 exhibitors from 73 different countries spanning five continents. Events and speakers reflected great geographical diversity as well as the important contributions made by both sexes

(see Table for a list of the top participating countries). The female:male participant ratio was 55:45.1.

### **The Seville FEBS Congress**

*Miguel A. De la Rosa, Chair of Organising Committee*

*Irene Díaz-Moreno, Secretary of Organising Committee*

A total of 20 plenary lectures (including those of six Nobel Laureates) and 137 symposium and workshop lectures were delivered by internationally renowned experts in their fields. Of particular note is that both the European Molecular Biology Organization (EMBO) and the European Research Council (ERC) organized sessions during the Congress, thus strengthening FEBS' links and collaboration with these major European science organizations.

The program of the meeting followed the standard format for typical FEBS and IUBMB Congresses, with morning and evening sessions running over six days. Additionally, it incorporated the main events of the SEBBM Congress, including the meetings of its 20 scientific groups and lectures delivered by researchers from Argentina, Chile and Mexico.

As local organizers, we intended to add value to the Congress experience by developing new ideas and creating novel activities, such as the 'Biochemistry in Cuisine' presentation to show scientific principles underlying modern gastronomy, the 'Guided Poster Tour' to facilitate the exchange between speakers and poster presenters, and the 'Portrait Gallery' to honour 24 outstanding female scientists. Also worth a special mention is the 'Abstract Search Online Service' by which all approved abstracts were made available on the official website about a month prior to the Congress, allowing participants to comfortably decide in advanced which posters to visit and which presentations to attend. Other novel services such as the Conference App, the Child Care at the venue, and the Poster Printing On Site were also very much appreciated.

Immediately prior to the Congress, the 12th FEBS Young Scientists' Forum was held as a joint event with the IUBMB Young Scientist Program, and also along with the FEBS Fellows' Forum for the first time, involving 150 outstanding young scientists.

With the goal of bringing science closer to a wider audience, a number of activities took place under the umbrella of the 'Biochemistry in the City' initiative—namely two 'Round-Tables Open to the Public' (one on cancer and entitled 'And You? Me, a Biochemist!' to encourage high-school students to study science at university,—and the science for non-scientists activity 'Genes in a bottle', where passers-by could isolate DNA molecules from a buccal swab. In addition, a 'Meeting with Nobel Laureates' was held at a downtown hotel with the aim of making people realize how crucial science is for future development of a knowledge-based economy.

Under the theme 'From Single Molecules to Systems Biology', we hope to have fulfilled delegates' expectations by providing a quality program and a good arena for expanding knowledge and networking.

*(FEBS News 2012/3)*

### **Scientific Programme**

The Congress was a fantastic forum for scientists at all career stages and from across the spectrum of molecular life sciences. The broad subject coverage of the Congress – with the theme 'From Single Molecules to Systems Biology' – provided many opportunities for scientists to re-assess their own research approaches and directions in the context of progress in the bioscience field as a whole, and to discuss ideas and forge links with others.



**Figure 5.1.139** Before opening the Congress.



**Figure 5.1.140** After the opening ceremony of the Seville Congress.

<p style="text-align: center;"><b>Congress Plenary Lecturers</b></p> <p>Tim Hunt, Nobel Laureate, Hertfordshire, UK  Mathias Mann, Martinsried, Germany  Ferid Murad, Nobel Laureate, Washington, DC, USA  Christian Griesinger, Göttingen, Germany  Kazutoshi Mori, Kyoto, Japan  Carlos López-Otín, Oviedo, Spain  Sai-Juan Chen, Shanghai, China  Elizabeth Robertson, Oxford, UK  Susan Gasser, Basel, Switzerland  Ada Yonath, Nobel Laureate, Rehovot, Israel  Carlos Bustamante, San Francisco, CA, USA  Joan Massagué, New York, NY, USA  Robert Huber, Nobel Laureate, Martinsried, Germany  Bruce Alberts, San Francisco, CA, USA  Venki Ramakrishnan, Nobel Laureate, Cambridge, UK</p>	<p style="text-align: center;"><b>SYMPOSIUM 3: BEYOND BIOCHEMISTRY</b> Ageing  Global Regulation and Cell Reprogramming  Artificial Cells and Genomes  Computing with Molecules and Cells  Dealing with Errors and Evolution</p> <p>Maria Blasco, Madrid, ES; Matt Kaeberlein, Seattle, WA, US; David A. Sinclair, Boston, MA, US; Stathis Gonos, Athens, GR; Anamaria Camargo, Sao Paulo, BR; Mordechai Choder, Haifa, IL; Clyde Hutchison, La Jolla, CA, US; Kitai Kim, New York, NY, US; Antoine Danchin, Evry, FR; Daniel A. Hammer, Philadelphia, PA, US; Philipp Holliger, Cambridge, UK; Hamilton O. Smith, La Jolla, CA, US; Martyn Amos, Manchester, UK; Alexander Gabibov, Moscow, RU; Ehud Shapiro, Rehovot, IL; Ricard Sole, Barcelona, ES; Isabel Gordo, Oeiras, PT; Nicola Illing, Cape Town, ZA; David Posada, Vigo, ES; Eörs Szathmáry, Budapest, HU</p>
<p style="text-align: center;"><b>SYMPOSIUM 1: SINGLE MOLECULES</b> Protein–Nucleic Acid Interactions  Protein Interactions and Networks  Membranes and Proteins  Proteins Intrinsically Disordered  Engineering and Design</p> <p>Frederic H. Allain, Zurich, CM; Renée Schroeder, Vienna, AT; Alfredo Torres-Larios, México D.F., MX; Wei Yang, Bethesda, MD, US; Patrick Aloy, Barcelona, ES, Rita Bernhardt Saarbrücken, DE; Natasa Przulj, London, UK; Marcellus Ubink, Leiden, NL; Peter Hildebrandt, Berlin, DE; Uhtaek Oh, Seoul, KR, Manuela M. Pereira, Lisboa, PT; Keith Dunker, Indianapolis, IN, US, Jenny Dayson, La Jolla, CA, US; Isabella Felli, Florence, IT; Monika Fuxreiter, Debrecen, HU; Dominique Bourgeois, Grenoble, FR, Jenny Martin, Brisbane, AU; Modesto Orozco, Barcelona, ES; Nuno Santos, Lisboa, PT</p>	<p style="text-align: center;"><b>SYMPOSIUM 4: MOLECULAR BASES OF DISEASES</b> Neurodegenerative and Organ Degenerative Diseases  Inflammation and Diseases  Stem Cells and their Niches  Cancer Genomics and Biomarkers  Role of Hypoxia in Pathogenesis of Inflammation in Cancer</p> <p>Dario Alessi, Dundee, UK; Albena Jordanova, Antwerp, BE; Ángela Nieto, Alicante, ES; Maria João Saraiva, Porto, PT; Jacqueline Bromberg, New York, NY, VS; Lisa Coussens, Portland, OR, US. Gabriel Rabinovich, Buenos Aires, AR; Francisco Sánchez Madrid, Madrid, ES; Eduard Battlle, Barcelona, ES; Leanne Jones, La Jolla, CA, US; Janet Rossant, Toronto, CA; Rune Toftgard, Stockholm, SE; Iqbal Parker, Cape Town, ZA; Kevin Ryan Glasgow, UK; Raquel Seruca, Porto, PT; Eyal Gottlieb, Glasgow, UK; José López-Bameo, Seville, ES; Jacques Pouyssegur, Nice, FR; Idit Shachar, Rehovot, IL</p>
<p style="text-align: center;"><b>SYMPOSIUM 2: TRENDS IN BIOCHEMISTRY</b> Genome Dynamics  Transcription and Chromatin  RNA Biogenesis and Processing  Autophagy and Protein Homeostasis  Integrated Cell Structure and Function</p> <p>Andrés Aguilera, Seville, ES; Zoi Lygerou, Patras, GR; Michele Ramsay, Johannesburg, ZA; Camilla Sjögren, Stockholm, SE; Sebastián Chávez, Seville, ES; Mauro Giacca, Trieste, IT; Jane Mellor, Oxford, UK; Laszlo Tora, Strasbourg, FR; Myriam Gorospe, Baltimore, MD, US; Marcelo López Lastra, Santiago, CL; Reinhard Lührmann, Göttingen, DE; Raúl Méndez, Barcelona, ES; Claudio Hertz, Santiago, CL; Matthias Peter, Zurich, CH; Sandhya Visweswariah, Bangalore, IN; Jiarui Wu, Shanghai, CN; Philippe Bastiaens, Dortmund, DE; Christina Mitchell, Melbourne, AU; Howard Riezman, Geneve, CH; Claudio Sunkel, Porto, PT</p>	<p style="text-align: center;"><b>SYMPOSIUM 5: ENVIRONMENTAL BIOCHEMISTRY</b> Oxidative Stress: Dealing with Oxygen  Dealing with Osmotic Stress  Life In Extreme Environments  Responding to Environmental Perception  Molecular Clocks and Cell Cycling</p> <p>Eva-Mari Aro, Turku, FI; Sue Goo Rhee, Seoul, KR; Alicia Juliana Kowaltowski, São Paulo, BR; Tomris Özben, Antalya, TR, Nestor Carrillo, Rosario, AR; Karin Lindkvist, Lund, SE; Francesc Poses, Barcelona, ES; Haruo Saito, Tokyo, JP; Ronald S. Oremland, Menlo Park, CA, US; Juan Luis Ramos, Granada, ES; Helena Santos, Oeiras, PT; Rafael Vicuña, Santiago, CL; Bouchaib Bencharki, Casablanca, MA; Francisco Javier Cejudo, Sevilla, ES; Stanislaw Karpinski, Warsaw, PL; Cornelia Spetea, Gothenburg, SE; Albert Goldbeter, Brussels, BE; Paloma Mas, Barcelona, ES; Paolo Sassone-Corsi, Irving, CA, US; Marcelo Yanovsky, Buenos Aires, AR</p>

**Figure 5.1.141** Speakers in the Plenary Lectures and Symposia at the Seville Congress.

The ensuing cross-fertilization of data, techniques and ideas will hopefully have led to new inspiration and fruitful avenues of research.

The Congress poster sessions enabled researchers to discuss their findings with those engaged in similar work, while, for a broader outlook, talks from leading international researchers in the five central symposia (Single



**Figure 5.1.142** The five Nobel prize winners after their presentation at hotel Alfonso XIII. From left to right: Ferid Murad, Hamilton Smith, Venki Ramakrishnan, Ada Yonath, Robert Huber, together with José Joly (President of Group Joly), Miguel de la Rosa (President of the Congress), José Antonio Carrizosa (Director of Diario of Sevilla).

Molecules–Trends in Biochemistry–Beyond Biochemistry–Molecular Bases of Diseases–Environmental Biochemistry) provided top-level updates and useful overviews of recent findings. An opportunity for informal discussions between speakers and congress participants at the ‘Speakers’ Corner’ was offered. The speakers available were rotating according to the list of speakers of the day, and participants keen to take part in this activity could sign up at the Congress venue. In addition to the symposia, workshops had been organized for several disciplines (Omic Sciences, Biochemistry in Medical Diagnosis and Therapy, and Systems Biology) to facilitate interaction of senior and young scientists.

For career inspiration and insight into topics perhaps well beyond a scientist’s immediate research area, there was an impressive plenary lecture line up, featuring Nobel Laureates and recipients of 2012 awards. And for wider interests still, there was an interesting range of workshops and additional events covering topics such as biochemistry education, science and society, and entrepreneurship.

#### **Other highlights**

Seville was an exciting location for the Congress, with numerous historic, artistic and other attractions that could be enjoyed just by strolling through the city or through an extensive Social Program of organized tours. The Congress was also introducing some innovative ideas to the conference experience, including a conference *app*, and a childcare service at the venue (bookable online during registration) to help participation of parents.

#### **St. Petersburg 2013**

The 38th FEBS Congress, held from 6th to 11th July 2013 in St Petersburg, Russia, was organized by the Russian Biochemical Society. It gathered over 2400 delegates from over 50 countries worldwide; as the host country, Russia was



Sevilla

**XXII CONGRESO INTERNACIONAL DE BIOQUÍMICA** Debate sobre la investigación como motor de desarrollo

# La ciencia como necesidad

'Diario de Sevilla' reúne en un coloquio a cinco premios Nobel con destacados economistas y científicos que concluyen que la crisis podría acabar con una generación de investigadores y alertan del retroceso de España

Marta José Guzmán

La ciencia no es un lujo, es una necesidad perenne. Con este argumento prestigiosos investigadores y economistas se reanuda la noche del miércoles en Sevilla para reflexionar sobre los riesgos que la crisis económica y los mecanismos que activan los distintos gobiernos para salir de ella suponen para el avance de la humanidad. Un coloquio de gran altura, organizado por Diario de Sevilla que sirvió para reunir en una misma mesa a cinco premios Nobel, todos, al unísono, alertaron de la posibilidad de que España y también otros países desarrollados prosigan con sus recortes y medidas de ajuste la pérdida de toda una generación de investigadores. Y, quizás sin pensárselo, instaron al sake un mensaje dirigido a los gobiernos para que eviten convertir la ciencia en el llamado burocracia.

Un simple aparte de Miguel Ángel de la Rosa, catedrático de la Universidad de Sevilla que preside el Congreso Internacional de Bioquímica que discurre en la capital andaluza, sirvió para introducir el debate en la Cámara de Diputados de 2002 se fijó como meta incrementar las inversiones de la Unión Europea en 110 hasta llegar al 3% del PIB en 2010, pero dos años después, el resto es silencio. Solo en España, que nada a consecuencia reduciendo drásticamente las ayudas y el dinero público para investigación.

El día coincidió con la presentación que los científicos más importantes hacen en el congreso. Dos de ellos, Robert Huber y Ferid Murad, conocen bien España. El primero nada retrocede al decir una semana de año en Sevilla y el segundo, que trabajó con Santiago Grisolá en el extranjero, vino desde hace una década Valencia, donde ejerce de jefe del premio Juan I.

No obstante, también desde la experiencia de los laboratorios vna otros, como el de la bioquímica desaconsejados que salen de España para no volver. Otros sí siguen siendo ahora con oportu-



Los cinco premios Nobel invitados posan en el hotel Alhambra XIII con José Joly, presidente del Grupo Joly, Miguel Ángel de la Rosa, presidente del Congreso Internacional de Bioquímica que se celebra en Fíber, y José Antonio Carretero, director de Diario de Sevilla.

Miguel Ángel de la Rosa  
Prer del congreso internacional

“Nuestro sistema de I+D+i engordó como un niño malchodado, como sin control y ahora hay que ponerlo a dieta”

Adá Yuasa, Nobel de Química en 2009 y profesor en el estado, alude a la sostenibilidad del sistema de ciencia en España en las últimas dos décadas. Por el Instituto Weizmann de Heberberg, donde trabaja

jó hasta 2004, han pasado numerosos españoles. “Y espero que si pare pasados ‘fluncendos’ apén a ante el auditorio. Y retomando la España pero según sus cartas.”

La fuga de cerebros siempre fue un problema económico de España. Hamilton Smith, Nobel de Fisiología y Medicina en 1978, tuvo hacer décadas un destacado investigador que se volvió a la India tras su formación: “Crisis que se lo dejó a su país, pero no pudo encontrar un empleo y me enseñó una carta a su país que se admitió, lo hice claro y se lo ocupó a la laboracion Lili y se jubiló en Estados Unidos”.

Este científico, que ha trabajado con Craig Venter, considerado el padre del genoma humano, asegura que la crisis también afecta a su laboratorio y que en estos momentos están buscando financiación porque “no hay dinero suficiente”.

A pesar de ello, el mensaje es optimista. A Virgil Ramakrishnan, Nobel de Química en 2009, no le gusta permitir, ni entender, por qué se les pide que hablen sobre cualquier materia cuando el país no les recibe por una investigación en un campo muy reducido del conocimiento. Aun así, es simpático, advierte que España necesita encontrar a sus continos y

facilitar a los jóvenes recursos e independencia, clave del éxito de Estados Unidos en investigación: “Un científico es creativo en sus primeros 40 años”.

Por ello, a Ferid Murad, Nobel de Medicina en 1998, le preocupa que en España muchos los jóvenes científicos que acaban su formación no reciben beca para investigar hasta los 40 años. “Hoy perdiendo una década de oportunidades, vamos a perder una generación de científicos”, asegura ayer el autor del descubrimiento que hizo posible la Viagra. Murad lo tiene más que claro: “Más importante que encontrar

**LAS FRASES**

Robert Huber  
NOBEL DE QUÍMICA EN 1986

“Necesitamos cerebros frescos, ideas nuevas; hay que gastar con sensatez, pero gastar en los estudiantes”



Ferid Murad  
NOBEL DE QUÍMICA EN 1998

“Más importante que construir bombas y tanques es invertir en investigación y recortar en Defensa”



Hamilton Smith  
NOBEL DE FISIOLÓGIA Y MEDICINA EN 1978

“Estamos formando a más gente de la que puede luego trabajar porque no hay dinero, hay que buscar financiación”

Figure 5.1.143 The same picture as above, but in black on white from the newspaper 'Diario de Sevilla'. "Science as a necessity".

represented by over 850 attendees. Other well-represented countries included Turkey, Poland, Italy, USA, Germany, UK, Czech Republic, France, Spain, Korea, Ukraine, Portugal, Japan, Israel, Greece, The Netherlands, Romania, Croatia, China, Hungary, Slovakia, Switzerland, Austria, Serbia, Sweden, Canada and Finland.

The cohort of invited speakers consisted of over 320 internationally renowned scientists, including 11 Nobel Laureates. We are grateful to all speakers who contributed to the event, resulting in an outstanding congress. The scientific program spanned all key areas of biochemistry, molecular biology, biotechnology, cell biology, biophysics and related fields. The motto of the Congress 'Mechanisms in Biology' was well substantiated by lectures and talks delivered in almost 40 symposia and 18 plenary sessions.



Figure 5.1.144 FEBS Seville Congress assistants.



Figure 5.1.145 Big audience hall at Seville Congress.

### *Scientific Programme*

#### **Opening Ceremony**

The Opening Lecture was delivered by Jules Hoffman, 2011 Nobel Laureate, who told the story of how work on the *Drosophila* receptor Toll, and subsequent discovery of pathway homologues in other organisms, has reshaped understanding of innate immunity.

#### **Congress Plenary Lectures**

The Congress Plenary Lectures were delivered by Geneviève Almouzni, Sidney Altman, Aaron Ciechanover, Pavel Georgiev, Anna-Karin Gustavsson, Jules Hoffmann, Robert Huber, Roger Kornberg, Jean-Marie Lehn, Richard Lerner, Susumu Mitsutake, Richard Roberts, Gottfried Schatz, Joseph Schlessinger, Jack Szostak, Susumu Tonegawa, Kurt Wüthrich, and Ada Yonath. All lectures were recorded and will be placed on the website of the Russian Society. Those who could not



**Figure 5.1.146** Announcement of the FEBS Congress 2013 in St Petersburg.

join us in St Petersburg will then still be able to learn from these masterpieces of research.

#### **Congress Symposia**

***Biochemistry for Medicine*** (a multi-session symposium—Chairs: Alexey Egorov, Oleg Kisselev, Serhiy Komisarenko and Tomas Zima)

The focus was on recent advances in treatment of cancer, autoimmune and metabolic diseases. One of the keynote lectures was delivered by Michael Sela (Israel) whose pioneering research has contributed greatly to fighting autoimmune diseases; in addition, very informative presentations were made on targeted elimination of pathologic B cells by new-generation compounds developed to treat autoimmune diseases such as systemic *lupus erythematosus* and rheumatoid arthritis.

***Organization of Eukaryotic Genomes*** (Chairs: Wendy Bickmore and Sergey Razin)

Indeed, the implications of molecular findings for understanding and treatment of disease were an interesting part of several symposia



Figure 5.1.147 Congress venue in St Petersburg.

**RNA World** (Chairs: Olga Dontsova and Eric Westhof)

Among others, targeted drug design for bacterial ribosomal proteins.

**Biocatalysis** (Chairs: Alexander Gabibov and Michael Blackburn)

Among other topics, implications for future *in silico* metabolic pathways and applied pharmacokinetic research.

**Proteomics and Peptidomics** (Chairs: Vadim Govorun and Vadim Ivanov)

For example, co-existence of macro- and microorganisms and the fight between 'self' and 'non-self'.

**Stem cells** (Chairs: Clare Blackburn and Alexey Tomilin)

**Bioengineering** (Chairs: Vladimir Popov, Vytas Svedas and Marcel Wubbolts)

**Neoplastic transformation** (Chairs: Georgy Georgiev and Joseph Schlessinger)

**G protein signaling** (Chairs: Andrew B. Goryachev and Alfred Wittinghofer)

**Molecular basis of autoimmunity** (Chairs: Jean Francoise Bach and Ludvig Sollid)

**Biochemistry of neurodegeneration** (Chair: Michael Ugrumov)

**Biochemistry of vision** (Chairs: Karl-Wilhelm Koch and Michael Ostrovsky)

### **Further Scientific and Social Programmes**

#### **Young Scientists**

A most important mission of FEBS Congresses is education. Despite revolutionary changes in telecommunication, modern science still requires direct contacts between scientists. Virtual communication cannot substitute for real discussion and live communication between a lecturer and auditorium. A chance for young scientists to attend such a great event, to listen to world scientific leaders, to communicate with them in an informal atmosphere, and to widen the scope of their interests beyond their narrow field of research are excellent features of such Congresses.

FEBS supported attendance of young scientists at St Petersburg in two ways. First, the main Congress was preceded by the **Young Scientists' Forum** (13<sup>th</sup> YSF at St Petersburg), and 117 grants were awarded to talented young researchers to enable them to attend not only the YSF but the main Congress as well. Second, 265 young European scientists were awarded FEBS Bursaries this year that covered the registration fee and hotel accommodation. As scientists working in the country hosting the Congress are not eligible for FEBS Bursaries, 198 grants were allocated by the Russian Foundation for Basic Research to support young Russian scientists. Together with 529 scientists under 35 years of age who paid registration fees themselves at the young scientists' rate (50% of the regular fee), the number of young researchers who attended the event was 1109. We consider this a real success and hope that the 38th FEBS Congress was useful for young people.

### Poster Presentations

The Congress organizers received over 1900 abstracts that were published in electronic form as a Supplement to *FEBS Journal*, and over 1450 abstracts were accepted for poster presentation during the Congress. As an integral part of the Congress scientific program, we also included several satellite and company-sponsored events, among them a Russia–EMBL Symposium 'Russia's Cooperation with European Partners in Life Sciences' and 'NMR in biology'.



Figure 5.1.148 Poster viewing.

### Social Programme

The Congress organizers hope that the 38th FEBS Congress will stay in the memory of all participants not only as a great scientific event but as a unique social and cultural experience. 'Swan Lake' ballet at the Opening Ceremony, the Congress Dinner in the Peter-and-Paul Fortress, tours in St Petersburg and to the nearby



Figure 5.1.149 'Swan Lake' scene from the Opening Ceremony.



Figure 5.1.150 Congress trip to The Hermitage.

imperial palaces and parks of Peterhof and Tsarskoye Selo in the high season of the White Nights, and a post-Congress tour to Moscow presented the best of Russian culture. The night guided tour to The Hermitage allowed Congress participants to enjoy the beauty of world-famous art at a time when the museum was open for our guests only. We are deeply grateful to Prof. Mikhail Piotrovsky, the Hermitage director, who provided Congress participants with this unique chance.

Now, with the FEBS Congress flag transferred to representatives of the French Society for Biochemistry and Molecular Biology, we wish our colleagues in Paris every success in organising the FEBS– EMBO 2014 Conference and hope our experience will be helpful for them.

*Alexander Gabibov*

*Marina Tretyak*

*Congress Organising Committee*

*Photos, except where indicated otherwise, by Anna Novitskaya*

(Basic information extracted from FEBS News September 2013)

### **FEBS Congress Workshops and Events in St Petersburg**

#### **Education Workshop (July 8, 2013)**

At the 38th FEBS Congress, the FEBS Education Committee organized a workshop entitled 'Molecular Life Sciences Education for the Needs of Industry' as

well as a poster session on education in molecular life sciences. The workshop looked at scientific and generic skill requirements, such as communication and commercial awareness, for career success not only within but also outside of academia. Following a brief introduction by Keith Elliott (FEBS Education Committee), the talks of the workshop presented three perspectives on this topic: industry's needs (what does an industrial company look for in its recruits?); how academic research could be developed into applied science and commercialisation; and the university perspective (how can students be prepared for the needs of industry?). At the end, there was an opportunity for open discussion between the speakers and the audience to share experiences—for example, how different countries tackle the problems and how industry and academia can work together.

Prof. Ruth Arnon's inspiring illustration from the Weizmann Institute of Sciences set an excellent example of how academic research could impact on industry. Prof. Detlev Riesner pointed out that the percentage of PhD holders being recruited in universities was relatively low: though figures differ between countries, in Germany, for example, only 4% of PhD graduates were finally recruited as professors, and 2.5% as permanent staff. The rest (93.5%) pursued careers outside universities. These overwhelming figures stressed very well the need for collaboration between universities and industry. It was also agreed that universities should plan ways of preparing students for industry, for which Prof. Tomas Zima from Charles University First Faculty of Medicine described an excellent working model.

This workshop was very well attended, with around 100 participants at all career stages and with representatives from both industry and academia. We hope it not only inspired university academic staff to work more on the issue of industrial collaboration, but also motivated young scientists to think more effectively about the translational potential of their research. Wiley-Blackwell (the publishing partner for *FEBS Journal*) offered book chapters on subjects related to the workshop through a website linked to the FEBS education platform and the workshop participants were able to download these chapters.

The poster session involved all posters related to education in molecular life sciences and provided an interactive platform for discussion. Some of the interesting posters presented were: 'European funding for talented life scientists from anywhere in the world' (European Research Council, Brussels, Belgium), 'Careers and Research Performance of PhD Program Graduates of Health Sciences in Turkey' (Dokuz Eylül University, Izmir), 'Why Iranian students prefer doctoral education in Turkey' (Hacettepe University Ankara, Turkey), and 'Promoting deep learning in biochemistry by diversifying assessment strategies—experience at the university of Hong Kong' (University of Hong Kong, Pokfulam). We look forward to receiving more and more posters on education in future FEBS Congresses.

Finally, in the traditional collaborative activity between the FEBS Education Committee and the Young Scientists' Forum (YSF), Keith Elliott provided CV advice to 35 YSF participants, which we hope will help the young scientists in their bright future careers.

We thank all those who contributed to the success of these FEBS education events in St Petersburg and look forward to meeting with you in future FEBS Education workshops.

*Gül Güner Akdoğan*

*Chair, FEBS Education Committee*

(FEBS News September 2013)

#### **Lectures at the FEBS Education Congress Workshop**

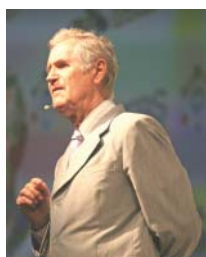
*Detlev Riesner* (Heinrich Heine University of Düsseldorf; and Qiagen, Germany) 'What the industry expects from molecular life sciences graduates'

*Ruth Arnon* (Weizmann Institute of Science, Rehovot, Israel) 'From basic research to applied science'

*Tomas Zima* (Prague University 1st Faculty of Medicine, Czech Republic) 'How medical schools prepare students for the industry.'

#### **FEBS Congress Science and Society Lecture**

One of the more exciting lectures delivered during the 38th FEBS Congress was the FEBS Science and Society Plenary Lecture by Gottfried (Jeff) Schatz. A transcript of this engaging and thought-provoking talk has kindly been prepared by Jeff for this *FEBS News* issue and is available online from FEBS News, September issue 2013. We wish to use this opportunity to repeat our deep appreciation of his continuous support of and involvement in different FEBS activities.



Gottfried Schatz is renowned for his work on mitochondrial biogenesis and mitochondrial DNA. His early research was carried out in Austria, but he moved in the late 1960s to Cornell University, New York. He returned to Europe to join the newly established Biozentrum of Basel University in the 1970s, and in the 1980s chaired this centre and in parallel became Secretary General of EMBO. He has also presided over the Swiss Science and Technology Council. Alongside his research papers, he has published three volumes of scientific essays and the autobiography *Feuersucher*.

*Israel Pecht, FEBS Secretary General*

(FEBS News September 2013)



## 5.2

### FEBS Satellite Meetings

#### 5.2.1

#### Young Scientists Forum (FFYS/YSF)–General Aims

In 2001, at the Lisbon meeting, FEBS Council decided that a FEBS Forum for Young Scientists (FFYS) should be organized on a regular basis as a satellite meeting of the Annual Meeting/Congress. A sum of one hundred thousand Euros was allocated annually for organization of the Forum and travel support of the participants. The program should consist of a few didactic key note lectures by senior scientists, oral presentations by students selected amongst the submitted abstracts, and a panel discussion addressing young scientists' issues. The Forum will provide a direct channel to hear the voice of young European scientists. FEBS has a clear niche to promote PhD students issues, as organizations like EMBO for instance fund postdoctoral students.

Marja Makarow stated: "European countries strive to become knowledge-based societies, characterized by businesses which are based on a high education level of employees, innovation, sufficient public and private investment into research and development, and high quality basic research. Europe cannot afford to lose highly educated young scientists to the United States, where more attractive career prospects are offered than in many European countries. Thus, the specific problems that scientists encounter early on in their careers have to be identified and surveys on their career developments should be carried out. Visions for future solutions should be created and the decision makers informed about the problems and ways to solve them." (FEBS NewsLetter, July 2002)

In 2004, these Satellite Meetings were renamed "The Young Scientists Forum" (YSF).

Presently, in connection with the annual FEBS Congress, FEBS each year brings more than a hundred young scientists together for this two-day satellite meeting. The idea behind it is to enable the students to attend both scientific events and therefore to enjoy different experiences. It is intended to gather PhD students and recently graduated PhDs who are members of a FEBS Constituent Society. All the sites are chosen to provide a relaxing atmosphere, to permit the exchange of ideas among the young scientists and to discuss, in an informal way, issues related to their careers. The Forum is fully sponsored by FEBS, meaning that all successful applicants receive a FEBS Fellowship covering local expenses at the Forum (fees, transportation, meals, and accommodation in a double room). Furthermore, they will be given free registration, accommodation, and partial travel support related to the actual FEBS Congress affiliated to the Forum.

Since a major concern of FEBS activities is related to the possibilities that young scientists have to carry out their careers, these venues provide them with a highly stimulating environment that allows discussion and exchange of knowledge as well as the acquisition of further information regarding the prospects for a career in science.

**Table 5.2.1** Young Scientists Forum.

<b>Date</b>	<b>Location</b>	<b>Motto</b>
2001	Lisbon	
2002, 18–20 October	Istanbul (Turkey) Hotel Ceylan, Istanbul	
2003	Brussels (Belgium) Hotel Tulip Inn, Brussels	
2004, 24–26 June	Warsaw (Poland) Faculty of Biology, Warsaw	
2005, 30 June–2 July	Budapest (Hungary) Visegrád	
2006, 22–24 June	Istanbul (Turkey)	Cytokines an Chemokines, Their Receptors and Response
2007, 5–7 July	Vienna (Austria), Hilton Danube Hotel	Molecular Networks
2008, 26–28 June	Athens (Greece) Loutraki	Cell Harmony
2009, 2–4 July	Prague (Czech Republic)	
2010, 24–26 June	Gothenburg (Sweden) Hotel Gothia Towers	Life of Molecules
2011, 23–25 June	Turin (Italy) Villa Giuliano, Turin	
2012, 1–4 September	Seville (Spain) Costa Ballena, Cadiz	
2013, 3–6 July	St. Petersburg (Russia)	

In conjunction with several FEBS Meetings, satellite meetings organized by the respective hosting Societies were held, mostly in places near the location of the major convention centre (see Table 5.2.1).

## 5.2.2

### Reminiscences from Young Scientists Forums

#### YSF2002 Istanbul

The FEBS Forum for Young Scientists was held from 18 to 20 October, 2002 in Istanbul, Turkey, in conjunction with the 28th International FEBS Meeting. Organizers of this venue were: Marja Makarow (Helsinki, Finland), Tomris Özben (Antalya, Turkey) and Nina Saris (Helsinki). The sessions were composed of twenty presentations chosen from submitted abstracts, and three didactic plenary talks by authorities in the fields of molecular machines for folding, degradation and membrane translocation of proteins. It gathered 111 participants, accommodated at Hotel Ceylan Inter-Continental, Istanbul. Twenty of these were selected to give talks, whereas the rest presented posters. A plenary lecture given by Professor Franz-Ulrich Hartl from Max Planck Institute, Martinsried (Germany), opened the symposium.

One of the innovative features of the Forum was the panel discussion devoted to the problems of shaping a scientific career in Europe. The invited guests gave brief talks to catalyze the discussion, and the participants discussed problems such as: Mobility in science, academic job versus industry, and the quality of PhD education in different countries. This overall idea was adopted by the FFYS following in 2003. (FEBS Newsletter, September 2002).

#### **YSF2003 Brussels**

In 2003, Wim Van der Berghe and An De Naeyer from Belgium together with Marja Makarow and Eeva Sievi from Helsinki organized the second FEBS Forum for Young Scientists. The 100 registered participants were accommodated at Hotel Tulip Inn, Brussels. The plenary lecture was given by Dr Didier Trouche from CNRS, France.

#### **YSF2004 Warsaw**

As the satellite symposium of the 29th FEBS Congress, the Forum for Young Scientists was held in Warsaw, organized by Rafał Czajkowski (Warsaw), Edyta Brzóska (Warsaw), Eeva Sievi (Helsinki) and Marja Makarow (Helsinki). The Forum did not specialise in any particular theme, applicants representing any field of biochemistry and molecular biology could apply. The sessions were to be composed of 10–15 speakers selected from the submitted abstracts. Other participants presented posters.

The participants were accommodated at Hotel Vera, 02–366 Warsaw, and gathered at the Faculty of Biology, Warsaw University. The Keynote Lecture was presented by Ada Yonath (Israel). The panel discussion addressed young scientists' issues, such as shaping a scientific career, funding instruments for young scientists, mobility, workplaces in industry, and bio-business. Again, the meeting was a great success, contributing to the improvement of PhD education and scientific exchange in Europe. (Cf. Feature of FFYS by Rafał Czajkowski, organizer of FFYS 2004, FEBS Newsletter, July 2004).

#### **YSF2005 Budapest**

The 5th Forum for Young Scientists, accompanying the 30<sup>th</sup> FEBS Congress in Budapest, was organized by Miss Elza Friedländer. It was held at Visegrád (Hungary), located at the Danube Bend, one of the most picturesque places of Hungary. Accommodation was provided at the Danubius Spa and Conference Hotel Visegrád. From June 30 to July 2, 2005, this venue gathered hundred PhD students and recently graduated PhDs who are members of a FEBS Constituent Society. As winners of the special IUBMB and Sigma Aldrich Co. Travel Scholarships, 15 students from outside Europe joined them. The Forum intended to give a unique possibility for outstanding young colleagues to get to know each other and to discuss both their research data and career possibilities in an informal way.

### YSF2006 Istanbul

The 6th Forum for Young Scientists, accompanying the 31st FEBS Congress in Istanbul, was organized by Dr. Gunnur Dikmen. The convention took place at the Doga Club, 50 km outside Istanbul on the Asian side.

### YSF2007 Vienna

This year, the Forum for Young Scientists, entitled “Molecular Networks” was organized by students and post-docs from the Vienna Biocenter: Ingrid Frohner (Austria), Denes Hnisz (Hungary), Andrijana Jevremovic (Serbia), Walter Glaser (Austria), Regina Claus (Austria), Stefanie Löser (Germany), and Juan Guinea Viniegro (Spain). The 108 registered participants were accommodated at Hilton Danube Hotel from July 5 to July 7, 2007.

### YSF2007 Vienna



Figure 5.2.1 Announcement of the Vienna YSF.

Among four keynote speakers were Denis Noble, Daniela Corda – who replaced Eileen Furlong on short notice – Ueli Schibler and Tom Rapoport. Six topics were addressed, including Systems Biology, Molecular Clocks and Cell Cycle, in addition to others on Signalling, Structure, and Diseases. Active discussions during three poster sessions documented the lively involvement of the participants. At the end of YSF2007, Poster Awards were given to Oran Erster (Israel) and Anna



Figure 5.2.2 Organizers of the Vienna YSF Meeting.

Rutkowska (Germany). The YSF2007 Award for the best oral presentation was received by Sabine Petry (UK), who also obtained the opportunity to present her outstanding thesis work to more than 1200 participants at the main FEBS Congress during the plenary award session.

The round table discussion was very successful, with the participation of Daniela Corda from ELSO, Giulio Superti-Furga from CeMM, Jan Taplick from EMBO, and Claudina Rodrigues-Pousada (FEBS). Issues on the various opportunities to encourage a career were addressed. The students were very active in asking the panel questions, regarding career development/planning in general, gender-specific issues and the opportunities of fellowships within Europe and across the European borders. The venue concluded with a pleasant dinner at the Viennese Heurigen 'Schübel-Auer' with traditional Austrian food and drinks. A disk jockey pleased the students by fulfilling all music wishes, and a lot of students crashed the dance floor and friendships were born. (Report on FEBS Vienna Congress)

#### **About 2007 YSF and thanks to all the organizers**



By Professor Dr. Claudina Rodrigues-Pousada  
Chairman of the Working Group on the Career of Young Scientists

This year the YSF, entitled *Molecular Networks*, had an organising committee chaired by Ms Ingrid Frohner and took place in the beautiful town of Vienna from the 5th to 7th of July. This team is deeply acknowledged for their efforts to organize the 7<sup>th</sup> YSF.



**Figure 5.2.3** Ingrid Frohner.

The programme was very successful with four key-note speakers namely Denis Noble, Daniela Corda — who at the last minute replaced Eileen Furlong —, Ueli Schibler and Tom Rapoport who delivered plenary lectures.

The symposia were organized on the basis of the submitted abstracts and for the first time it was possible to organize Systems Biology, and Molecular Clocks and Cell Cycle symposia, besides other ones on Signalling, Structure and Diseases. The *round table* was quite successful and had the participation of Daniela Corda from ELSO, Jan Taplick from EMBO, Giulio Superti-Furga from CEO, and myself.

Several issues on the various opportunities the students have to promote their career were discussed. The students were very active in addressing to the panel several questions, mainly regarding the opportunities FEBS and EMBO have to enable them to pursue their studies. They wanted also to know what possibilities they have to go to the USA. Several answers were put forward. Several clarifications were also given about "The FEBS Fellowship Followup Research



**Figure 5.2.4** Student participants of the YSF in Vienna.

Fund” which is a programme intended to help young scientists who have been recipients of a FEBS Long-Term Fellowship to start work upon returning to their country of origin.

As Chairman of the working group on the career of young scientists since January 2005, it was with an enormous pleasure that I witnessed the enthusiasm and high intellectual standards achieved at these events.

All in all the YSF organized under my chairmanship were very good at revealing the enthusiasm of the young students in the organization of an event which is dedicated to them.

I am very happy for having been elected by the council 3 years ago and equally happy that the council has elected as my successor Professor Daniela Corda, who most certainly will continue to improve on these events and reach the ultimate aims of FEBS with regard the Young investigators. Last but not least I would like to leave here a message of thanks to all the young chairmen of YSF, in particular Dr. Julia Costa who was the organizer of the first YSF, Miss Elza Friedländer organizer of the meeting held in Budapest, Dr. Gunnur Dikmen organizer of the one in Istanbul and finally Ms Ingrid Frohner organizer of the one in Vienna. With all of you I learned much of the very different aspects of the organization of YSF, an organization in which all of you have been deeply engaged. This has been a work I really enjoyed doing and from which I learned a lot from everyone, the young participants included.

Thank you all very much and, please, count on me for the future. (FEBS News September 2007)

### **YSF2008 Athens**

In 2005, the Forum for Young Scientists took place in Loutraki in Hellas-Greece, located 80 km away from Athens from 26th to 28th of June, before the FEBS 2008 Congress in Athens. 125 participants had been selected, 100 Europeans and 25 non-European. The symposium was run in co-operation with IUBMB. Therefore, not only was FEBS funding European Young Scientists, funding was

made available from IUBMB for participants from outside of Europe. The topic of YSF2008 was 'Cell Harmony'.



### *Young Scientists Forum*

*By Niki Chondrogianni*

This year the Young Scientist Forum FEBS-IUBMB, entitled "Cell Harmony", took place in the beautiful resort of Loutraki in Hellas-Greece, located 80 km away from Athens from 26th to 28th of June. The Greek organising committee consisted of seven local Ph.D. students and postdoctoral fellows, namely Ioannis Drikos (chairman), Dimitrios Anagnostopoulos, Theodoros Anagnostopoulos, Niki Chondrogianni, Christina Malavaki, Mania Parapouli and Anastassios Vourekas. Although we had to deal with various, unrelated subjects ranging from the scientific program to the menu of lunches and dinners, we were really overwhelmed by joy and we are already missing this magic atmosphere, regardless the stress and the fatigue.



**Figure 5.2.5** YSF Organising Committee: A. Vourekas, M. Parapouli, D. Anagnostopoulos, N. Chondrogianni, I. Drikos, C. Malavaki, T. Anagnostopoulos.

As a farewell of this event, we are pleased to report a few details of this successful forum. We received more than 440 applications from 43 European and 25 non-European countries, which represents the highest number of applications for the Forum received to date. This was the most difficult part of the whole procedure, as we had to select 125 participants, 100 Europeans and 25 non-European, based on the quality of the submitted abstracts and scientific interests. To help overcome these difficulties we received help from the organising committee of the main FEBS Congress as well as from Prof. Daniela Corda (FEBS Chair of the Working Group on the career of Young Scientists), Prof. Knut-Jan Andersen (IUBMB Chairman of the Working Group on the career of Young Scientists) and Prof.

Claudina Rodrigues-Pousada (FEBS Honorary Chair of the Working Group on the career of Young Scientists).

Many of the participants have asked us why we chose to entitle the symposium “Cell Harmony”. Since YSF 2008 would be held in Greece, birthplace of the ancient philosophy, eternal crossroad of three civilisations and active player in the diffusion of knowledge, the YSF 2008 Organising Committee decided to entitle this symposium with world-wide used Greek words. Therefore, we chose “Cell Harmony”. Ancient Greeks were in constant pursuit of the comprehension of harmony, present in the physical Universe, as well as the realisation of harmonic creations throughout the fields of art and science. Heraclitus saw harmony as an inherent quality of Cosmos. Pythagoras recognized harmony in mathematics and music. Hippocrates, the founder of medicine, believed that illness was the result of an imbalance of body fluids. We believe that this title included the diverse scientific fields that should harmonically interact to reveal the secrets of cellular function or malfunction. On top of that, the term “Harmony” further corroborates the need for team work and collaboration to achieve desirable results, either in the molecular or in the macromolecular level.



Figure 5.2.6 Participants of YSF 2008 in Loutraki.

The program had three keynote lectures, delivered by Prof. Cecilia M. Arraiano, Prof. Aaron Ciechanover and Dr. Nektarios Tavernarakis, and we are really honoured and grateful that they accepted our invitation and shared with us their scientific projects and interests. On June 26th, Prof. Arraiano (professor in Instituto de Tecnologia Quimica e Biologica in the University of Lisbon in Portugal) delivered her lecture on “The amazing new world of RNA”. Initially, an overview of the unknown classes of noncoding RNAs (microRNAs, small interfering RNAs etc) that have been recently discovered was presented followed by a detailed report on ribonuclease II (RNase II), a fundamental exoribonuclease that plays a central role in the maturation, turnover and quality control of RNA, thus affecting growth and development



in all organisms. A suggested mechanism for exonucleolytic RNA degradation was presented, thus elucidating the general basis for RNA degradation. On June 27th, Prof. Ciechanover (Laureate of The Nobel Prize in Chemistry 2004, Distinguished Research Professor in Technion–Israel Institute of Technology in Haifa, Israel) delivered his lecture entitled “Why our proteins have to die so we shall live or the ubiquitin system - from bench to bedside”. An overview of the discovery of the ubiquitin system gave us an important lesson on how easy but well-defined and performed biochemical experiments in the hands of open-minded researchers can open their way to the scientific truth. Moreover, during this lecture, we learnt about the extended applications of the ubiquitin system and its manipulation through different inhibitors and antagonistically acting molecules in the battle against cancer and other diseases, revealing a newly explored scientific world that has a lot more to unveil.

Finally, on June 28th, Dr. Tavernarakis (Principal Investigator in the Institute of Molecular Biology and Biotechnology, in Crete, Greece) introduced all our young scientists to the secret pathways of aging. Initially, a brief overview of the model-organism, the soil-dwelling, nematode worm *Caenorhabditis elegans* was given along with the rules that have been shown to govern aging, i.e. the influence of genetic background along with the epigenetic factors. Following this introduction, the pivotal role of protein synthesis on the organism’s lifespan was exhibited, suggesting that by depleting protein synthesis cells save energy that they can invest for maintenance—thus the lifespan of the organism has been shown to be extended.

The oral presentations (24 in total) that were delivered by the selected young scientists were grouped in 5 sessions. Different studies were presented regarding intracellular membrane transport and transcription regulation (session A), cell motility and tumour invasion (session B), molecular pathways and biotechnology (session C), pharmacological approaches (session D) and signalling and diseases (session E). Posters were mounted through the whole Forum Schedule, so the rest of the participants had the opportunity to present their work during the two poster sessions. Three money prizes were awarded to the best oral and poster presentations as rewards for the great effort of the selected participants. The round table was successful and dynamic with the participation of Dr. Jan Taplick (EMBO Fellowships Programme), Prof. Claudina Pousada (FEBS Honorary Chair of the Working Group on the career of Young Scientists), Dr. Carmen Vela (European Science and Technology Assembly–ESTA), Dr. Mike W. Rogers (ETAN-Marie Curie Fellowship) and Prof. Keith Elliot (FEBS Educational Committee). Several issues were raised and discussed. The participants addressed several questions mainly regarding the possibilities of obtaining fellowships from EMBO, FEBS and Marie Curie and the opportunities to jump from the research field to the technological field. A few issues regarding women in science were also discussed.

Apart from the above-mentioned scientific program, YSF 2008 had two additional presentations. Patricia McCabe from *FEBS Letters* and Vanessa Wilkinson

from *FEBS Journal* presented a few details regarding FEBS Publishing Group and its associated journals, thus enlightening the way to publication. Finally, Dr. Tommaso Mancuso from Bio-Rad Laboratories gave a global presentation regarding gene modulation, expression profiling and real-time PCR quantification, opening the dimensions of a new era regarding equipment and technological support to the YSF 2008 participants.

The YSF 2008 was not just science. We had to create the appropriate conditions to make friends and future collaborations. Consequently, following exhausting days of scientific presentations, we had organized a welcome reception and a farewell dinner by the sea that was followed by a party full of dance on the top of the hill of Poseidon Resort. To continue this nice atmosphere in Athens, we also arranged a big party for all our participants, during the main FEBS congress, where dancing, drinking and fun took over science.

YSF 2008 is over now. We keep getting mails from many participants that acknowledge our effort and want to thank us for this event. There is also a flow of photos travelling between us and the participants that verify the friendly and nice atmosphere that characterised the forum. There is no doubt that this experience was enormous and really educational for each one of us. Although the issues and the problems that each organising committee has to deal with are multiple, being part of such an effort with a nice and fruitful outcome just makes all the fatigue and the stress to go away and the only things that are left behind are nice memories and important experience for the future. We all agree that we wouldn't hesitate at all to re-organize an analogous event in the future. The cost seems to be remarkably less than the benefit. However, we would certainly like to thank all the participants for the success of our Young Scientist Forum. Their presence, their support and of course their high spirits were the necessary elements that turned this forum into a memorable meeting.

We hope you all had the time to make new friends and to enjoy every single minute. That's what we did anyway! With our best regards and wishes to meet again in the future. (FEBS News, September 2008).

### ***CV support for YSF participants***

Following the success in previous years, Keith Elliott again was invited to attend the pre-Congress YSF to talk to the participants about making the most of their CVs. This was followed-up by one-to-one sessions at the Congress where the young scientists were able to discuss their CVs with either Keith or Jason Perret (Brussels, Belgium, a member of the Education Committee). We again saw over 30 CVs from individuals resident in 14 different countries (and even more nationalities).

The very positive responses and feedback from the participants were similar to previous years—as were the CVs we saw. However, as shown in the comment below, not all participants were aware of the importance of starting early ... We



**Figure 5.2.7** Keith and Mao Mao, a graduate student from Uppsala, Sweden discussing her CV.



**Figure 5.2.8** Ed Wood with one of the IUBMB YSF Participants at the IUBMB stand.

do not claim to be “experts”, just passing on our experience, and are not sure about the prize, but definitely agree it is never too early to start preparing! It also looks as if our efforts will get a wider audience ... We are already looking forward to Gothenburg in 2010!

Winners of the Free Registration Bursary to the 35th FEBS Congress in Gothenburg 26 June to 1 July 2010 were: Giovanna Grimaldi–Italy; Petar Ozretić–Croatia; Mahesh Madyagol–Slovakia; Beran Yokus–Turkey; Teresa Gabryelak–Poland; Nikolai Sluchanko–Russia; Maksim Erokhin–Russia; Ilona Faustova–Estonia; Carsten Kettner–Germany; A. M. Mata–Spain. (FEBS News, September 2008).



**Figure 5.2.9** Gül Güner and Jason Perret working in tandem with an IUBMB and a FEBS YSF participant at the FEBS stand.

### YSF2009 Prague

The Prague Young Scientists Forum was held as a pre-congress from July 2 to 4. The Forum was devoted to promoting interaction and career of young scientists.

The winner of the 2009 *FEBS Journal* Prize for Young Scientists was Mercedes N. Munkonda from the Rheumatology and Immunology Research Center, Laval University, Québec, Canada (currently at: the Institute of Cardiology and Pneumology, Laval University, Québec, Canada). As part of the FEBS Congress in Gothenburg in June 2010, she described her prize-winning work at the FEBS Publications Awards Plenary Session and received her prize of Δ10,000. (FEBS News, October 2010)

### YDF2010 Gothenburg

The Gothenburg Young Scientists Forum was held as a pre-congress from June 23 to 26. The Forum was entitled 'Life of Molecules' and devoted to promoting interaction between and the career of young scientists.

### CV Support for YSF participants

#### *By Young Scientists Forum participants*

Keith Elliott was again invited to attend the pre-congress Young Scientists Forum (YSF) and to take part in the careers roundtable where he talked about "Preparing your *curriculum vitae*: How to make the most of yourself!" For many of the YSF participants this was the first time that anyone had formally talked to them about preparing a CV. In the roundtable it soon became clear that a well written CV was not only vital for obtaining a job (Karin Lindkvist) but also for successful fellowship applications (Jan Taplick) and even for some grant applications (Stefan Hohmann).

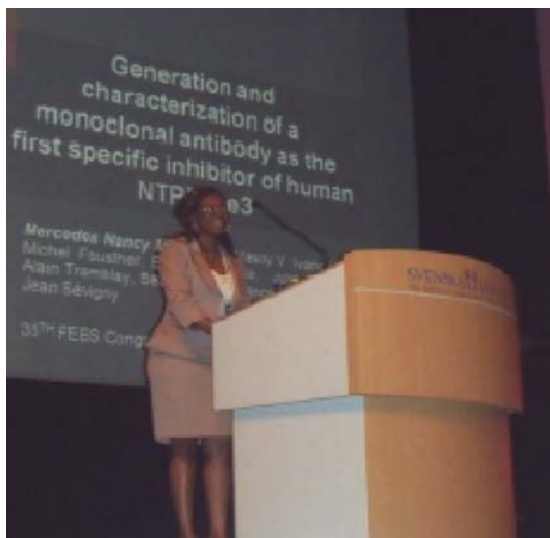


Figure 5.2.10 Mercedes N. Munkonda.



Figure 5.2.11 (A) Getting advice from both Jason (left) and Keith (right); (B) ... and individually.

This year over 50 of the young scientists took advantage of the offer of a one-to-one session at the main congress where either Keith or Jason Perret (or sometimes even both – see pictures!) discussed the CV in detail. This is the largest number of participants we have seen – coming from 20 different countries, and even more nationalities.

The advice and support given was highly appreciated by the YSF participants as it had been in previous years. Many were surprised that there was more to a CV than just academic achievements – it is important to tell the reader about the person writing it. It was again a great pleasure to meet and talk to those we had seen previous years and find out what had happened to them in the intervening period.

We are pleased that we have been invited to participate in the YSF in Turin next year where we hope to meet many more young scientists and perhaps have some small influence on their future success.

Thank you for the presentation! Would you mind if I forwarded it to the PhD students' mailing list in my institute? (The answer was "Yes!") I think it can be useful also for people who did not attend your talk. During our conversation you also encouraged me to think a lot about the content of my CV and what was important, although not of measurable importance for me. *Paulina Jedynak, Poland*

I think the improvements (especially on the structure) you suggested were really good. I find it now much easier to read. I never got professional advice before, but I discussed my CV with my colleagues and searched the internet before I wrote it. In my opinion it was very helpful and I would strongly recommend your cv session to everyone. *Nina Riehs, Austria* (FEBS News, October 2010).

### YSF2011 Turin

#### *The 2011 YSF Meeting in Turin*

*Claudina Rodrigues-Pousada*

*Chair of FEBS Working Group on the Career of Young Scientists*



Figure 5.2.12 Organizers of the 2011 YSF.

This year's FEBS Young Scientist Forum (YSF) – the satellite event for young researchers that precedes the annual FEBS Congress – took place in Turin at the Villa Gualino. The Local Organising Committee, consisting of Francesco Ruas as Chairman, along with his colleagues Andrea Cavagnino, Giovanna Grimaldi, Elisa Lupino, Valentina Sala and Andrea Occhipinti, formed a helpful group that was always ready to solve

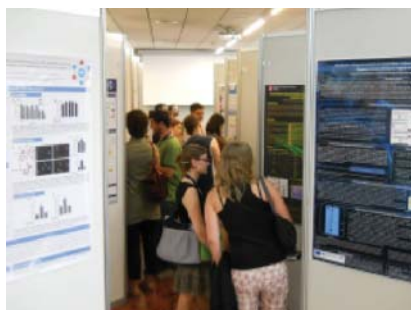
difficulties that emerged – and their interest, dedication and efforts made the workshop a very successful event.

The stimulating atmosphere of the Forum was evident through the commitment of participants to exchanging ideas and addressing questions to the various speakers.



Figure 5.2.13 Gesa Folkers.

Two excellent computer prizes were awarded: for the best oral presentation and for the best poster. The first one went to Amir Mor from Israel, who gave a talk entitled 'Dynamics of single mRNP nucleo-cytoplasmic transport through the nuclear pore in living cells'; and the poster prize went to Gesa Folkers from Germany for her poster 'Structural insights on a new tetracycline resistance mechanism relying on the TetX monooxygenase'.



**Figure 5.2.14** Poster viewing at the Forum.

In addition to the sessions centred on research results, a roundtable discussion was organized to give career advice, focusing on the various possibilities for funding of post-doctoral positions. The panel consisted of Dr Alan Craig (EU mobility programmes), Dr Andrea Hutterer (EMBO programmes), Dr Keith Elliott (How to write a CV) and myself (Vision of FEBS activities). The panel members were asked several questions that demonstrated great interest from the students.



**Figure 5.2.15** 'Roundtable discussion in the open air.

It was decided that next year the 12th YSF should take place at the attractive resort of Costa Ballena (Cádiz, Spain), as part of the Young Scientists Program carried out by FEBS and IUBMB. I really hope that as with previous events this will constitute a remarkable gathering of young scientists. I am firmly convinced that the organising committee, led by Irene Diaz Moreno, will put their energy and know-how into the service of their young colleagues. (FEBS News, September 2011).

### **YSF2012 Seville**

The Young Scientists Forum in 2012 was held in a resort at Costa Ballena, Cadiz, from 2 to 4 September.

#### ***The Young Scientists' Forum 2012 (YSP/12thYSF)***

*By Claudina Rodrigues-Pousada*

*Chair, FEBS Working Group on the Careers of Young Scientists*

As Chair of the FEBS Working Group on the Careers of Young Scientists, it was extremely rewarding to witness the high level of engagement and scientific

understanding at the young scientists' workshop preceding the IUBMB–FEBS 2012 Congress.



**Figure 5.2.16** Participants of Sevilla YSF/YSP in 2012.

This year the annual FEBS Young Scientists' Forum (YSF) was merged with the IUBMB's Young Scientist Program (YSP), and was designated the YSP/12thYSF. The fantastic organization of the event reflected the hard work of its organising committee, led by Irene Diaz-Moreno, who together certainly made the meeting a special one. This event took place from 1st to 4th September 2012 in the nice resort of Costa Ballena (Cádiz, Spain), which provided a relaxing atmosphere that in consequence fostered an enthusiastic and stimulating environment. The attendance of 100 young scientists, selected from a total of 490 applicants, was supported by FEBS grants; in addition, 20 students, selected from a total of 108, were supported by IUBMB grants. The 24 oral presentations were divided into six symposia: protein structure and dynamics; protein function; single molecules and system biology; signalling; gene regulation; and diseases. The new concept of one-minute presentations of participants' posters was very well received, and I hope will be incorporated into future YSFs. Two prizes were awarded: for the best oral presentation and for the best poster. The first one went to Sarah Diermeier from Germany, who gave a talk entitled 'Epigenomic Characterization of the Structure–Function Relation in Chromatin' and the poster prize went to Karina Zillner, also from Germany, for her poster 'Single Molecule Analysis of DNA Methylation Patterns with Epi-combing'.

In addition to the sessions centred on research results, a round-table discussion was organized that dealt with careers, focusing on the various possibilities for funding of post-doctoral positions—with presentations from FEBS (the FEBS Fellowships Committee Chair Vicente Rubio, and me), EMBO (Andrea Hutterer) and Marie Curie Fellowships (Alan Craig). FEBS funding for the YSF comes from income from its publications—*FEBS Journal*, *FEBS Letters*, *Molecular Oncology*



and *FEBS Open Bio*—and it was fitting therefore that there was also a presentation from Pura Muñoz Cánoves, an Editor of *FEBS Journal*, about publishing papers in these journals. In addition, Keith Elliott (FEBS Education Committee) gave a talk on 'Preparing your *Curriculum Vitae*: How to Make the Most of Yourself'; Stuart Levy (Centre for Adaptation Genetics and Drug Resistance and the Department of Biology, Tufts University School of Medicine, Boston, USA) spoke on 'Can an Academic be an Entrepreneur?'; and Mike Walsh (General Secretary of IUBMB) gave a personal view of his career and the need to work in different institutes and countries. A new idea this year was a competition for FEBS-funded participants to write a brief report about their experience of the YSP/12thYSF for publication in *FEBS News*. Nine reports were received, and the report by Karina Zillner was selected for publication (see below); I should say, however, that we greatly appreciated the imaginative writing in many of the reports. Winners at the YSP/12thYSF: Sarah Diermeier, who gave the winning oral presentation; Karina Zillner, who had already won the best poster prize at the YSF, receiving a Kindle prize for her meeting report (an independently judged competition) from Claudina Rodrigues-Pousada. Both winners were from the University Regensburg, Germany. (*FEBS News*, September 2012).

#### **Connection through the scientist's tag**

*By Karina Zillner Universität Regensburg, Germany*

How do you recognize young travelling scientists from afar? Not only by their excitement, but also by their poster tube, the 'tag' that distinguishes them from other travellers. Therefore, getting to know the other fellows for the YSP/12thYSF meeting was easy and started already at the baggage claim in Sevilla. Although not all the bags arrived, the young fellows were happy to be a part of the upcoming event and to meet other passionate scientists from all around the world.

After registration in the beautiful spot of Costa Ballena, the abstract book revealed that although we had the poster tube in common everyone works on a different scientific field: protein biochemistry, structure biology, gene



**Figure 5.2.17** Karina Zillner with Claudina Rodrigues-Pousada.

regulation...Not only was the whole spectrum of nationalities present at this conference, but also the whole spectrum of research topics. This was a challenging new experience and a contrast to the very specialized meetings young scientists normally attend. Therefore, questions were on my mind: Help!

I only had a few classes of structural biology when I was an undergraduate, so would I understand what the other researchers were going to talk about? Would my research be of interest for the other scientists? After the first session, all my concerns were gone. The speakers did an amazing job in presenting their recent data to the audience, always explaining why this research is important to all of us.

After these first experiences, I was sure to visit as many posters as possible, which led to the next problem: which of all the excellent posters should I choose? This was the point where the committee organized the '1 min-poster session', a great concept that should be adapted to all conferences. You have one slide and one minute to introduce your work, making the other scientists eager to go to your poster. This challenge was not only tough, but also a lot of fun trying to reduce your work of several years to one minute.

The sessions on our own research work were complemented with outstanding guest presentations and a career-supporting event. The career talks explained funding possibilities, provided CV advice, and discussed how to found a company out of a good idea.

Overall, the friendly atmosphere paired with the scientific excellence provided a unique opportunity to get to know not only other research fields, but also great people with funny stories. Did you know that some scientists use whiskers of a cat for protein crystallization? Or that salmon sperm is used for Southern blotting? Two of the many fun facts I learned between the sessions. After a big farewell party, we left the YSP/12thYSF with novel experiences and new friends who share the same passion—science.

(*FEBS News*, October 2012).

### YSF2013 St. Petersburg



Figure 5.2.18 Invitation for the 2013 YSF.



**Figure 5.2.19** Speakers and organizer (see text)—Keith Elliott, Robert Klose (EMBO plenary lecturer), Claudina Rodrigues-Pousada, Alexey Belogurov and Vicente Rubio.

This year's FEBS Young Scientists' Forum (YSF) took place in St Petersburg from 3rd to 6th July as a satellite meeting of the 38th FEBS Congress. The venue was the beautiful Russian Academy of Sciences, located next to the River Neva. The presence of over 120 students and young post-docs (~ 36% of the total applicants were selected) surrounded by sculptures and photographs of Russian scientists, including Dmitri Mendeleev (developer of the periodic table), linked the past to the present and made for an inspiring atmosphere. FEBS provided a grant for the organization of the event, and funded the accommodation and most travel costs for YSF participants at both the YSF and the ensuing 38th FEBS Congress.

The local Organising Committee of Alexey Belogurov (Chair), Azad Mamedov (Co-Chair), Igor Eliseev, Dounya Ghorab, Anna Golovina, Anna Gonchar, Denis Ilyushin, Olga Ostroumova and Ivan Smirnov was a pleasant and helpful group, whose problem-solving, enthusiasm and dedication turned the YSF into a very successful event. I should also mention that they were active in seeking extra financial support, in addition to the grant given by FEBS. One fun new idea this year from the Organising Committee was a competitive game involving teamwork, solving of logical puzzles and scientific tasks, as well as a stroll in the beautiful centre of St Petersburg. The contestants were divided into several teams which had to perform four tasks with encrypted locations, such as using the single-letter amino acid code and restriction sites, building an antibody molecule from Lego, guessing different solutions, and so on.

The YSF participants showed a high level of interest and engagement in the scientific sessions of the event, exchanging ideas and asking each speaker questions. Two eBook readers were awarded as prizes: for the best oral presentation and for the best poster. The first one went to Lilach Koren from the Israel Institute of Technology (Haifa), who gave a talk on 'The role of the transcription factor *ATR3* in cardiac hypertrophy'; and the poster prize went to Dani Osman (a FEBS Long-Term Fellow from EPFL, 1015 Lausanne, Switzerland) for his poster 'An exhaustive atlas describing the morphological and functional properties of *Drosophila* adult midgut compartments'.

Towards the end of the YSF, a career advice session was organized for discussion mainly of possibilities for post-doctoral funding, and this received much attention from the YSF participants. The panel consisted of Dr Alan Craig (EU Mobility programs), Dr Andrea Hutterer (EMBO programs), Dr Keith Elliott (how to write a CV), Prof. Vicente Rubio (FEBS Fellowships) and myself (FEBS activities).

*Claudina Rodrigues-Pousada*

*Chair, FEBS Working Group on the Careers of Young Scientists*

(FEBS News September 2013)

### 5.2.3

#### **Annual Meetings of the Third Year FEBS Fellows**

An Annual Meeting of the Third Year FEBS Fellows, who have shown they are very able, has been established and will be held in conjunction with the Young Scientists' Forum, just before the Congress and stay during the Congress, so they'll form an association with one another.

This type of meeting has been approved by the Executive Committee, in 2011, and will certainly add to the atmosphere prevailing amongst the Long-Term Fellows, by bringing them together during the Seville Congress. It will be a basis for the future interactions and networking among these young people who have been benefiting from FEBS fellowships.

#### ***The First FEBS Fellows Meeting (2012)***



**Vicente Rubio**

*Chair, FEBS Fellowships Committee*

This meeting, a new FEBS initiative, involved 24 senior Long-Term or Return-To-Europe FEBS Fellows, three members of the Fellowships Committee (including myself, as Chair) and three invited speakers, who gathered from 1st to 4th September 2012 in the Costa Ballena Atlantic resort near Jerez and Cádiz (Spain). The meeting took place just before the IUBMB–FEBS Congress in Sevilla, and in parallel with the Young Scientists' Program/Forum (the YSP/12thYSF), with which we shared opening and closing events, guest lectures, a scientific career session, coffee breaks, meals and social life.

The invited speakers provided illuminating career examples in talks that brilliantly conveyed their passion for science: Dan Tawfik (Rehovot, Israel) mingled dazzling mountaineering images with a mesmerizing view of protein evolution; Ángela Nieto (Alicante, Spain) recounted her highly successful lifelong saga with the transcription factor Snail; and Behn Lehner (Barcelona, Spain) combined sharp reasoning with high-throughput approaches to explore the significance of biological individuality, exemplified in his talk with pictures of Leo Messi and Cristiano Ronaldo as well as some worms.



**Figure 5.2.20** FEBS Forum's Fellows at a coffee break. The three FEBS Fellowships Committee members are kneeling/crouching; Ariel Colomé (technical secretary of the FEBS Fellowships Committee) and Ángela Nieto (one of the guest speakers) are first and sixth from the left.

The meeting was also a platform for Fellows (and Committee Members) to present their work in 25-min talks, and we were treated to interesting, clear and always mind-stimulating talks on topics from across the broad scope of our discipline, in sessions on plant biology, cell biology, signalling and inflammation, cancer, proteins, signalling and bacteria, stem cells, and 'omics and nano'.

The sessions ran from sunrise to dusk, and the atmosphere was merry, exultant and intense, with questions and discussions continuing in corridors, in the coffee breaks and meals, and even during free time at the beach. Personal contacts and scientific connections were favoured by this atmosphere and also by the interactions with the members of the YSP/12thYSF. About 20 of our Fellows continued the science frenzy for five more days, at the IUBMB–FEBS Congress in Sevilla. I can attest to their enthusiasm particularly since I shared some time with them, including one night outing till the small hours in the temperate and fascinating Sevilla.

A goal of our meeting was to generate a sense of collegiality, and to increase awareness about the work and opportunities of FEBS. We brainstormed several ideas, including creating a 'college' of FEBS Fellows through a FEBS Fellows website/database, instituting a FEBS Fellows' corner at FEBS Congresses, offering a discount to FEBS Fellows for registration to FEBS Congresses, and improving notification about FEBS' activities. Of course, the proposal to organize more FEBS Fellows' meetings was also supported.

Discussion of these proposals was initiated at the FEBS Executive Committee meeting in Sevilla, alongside FEBS' other funding commitments, proposals and concerns. Indeed, the range and characteristics of the journals of FEBS were also



## 5.3.2

## FEBS 3+ Meetings held

## 5.3.2.1 VIII Parnas Conference 2011

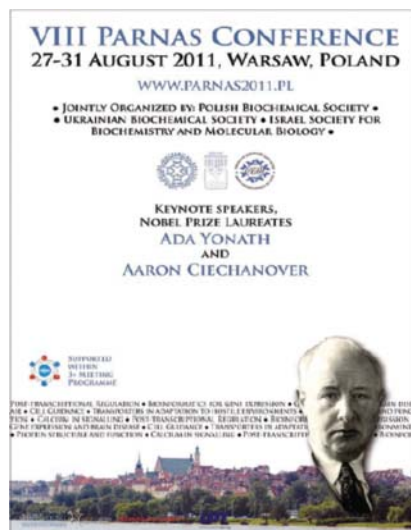


Figure 5.3.1 VIII Parnas Conference.

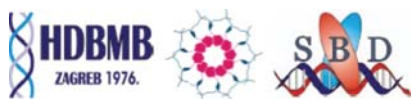
Jakub Karol Parnas. Before World War 2, J.K. Parnas was a professor of physiological chemistry at University in Lwów (now in Ukraine). The Parnas' laboratory was a unique place where in a friendly atmosphere young Polish, Ukrainian and Jewish scientists had studied glucose metabolism. The results of their work were highly appreciated for many years; glycolysis was also termed the 'Embden-Meyerhof-Parnas' pathway.

The first Parnas Conference was organized in 1996 in Lviv by the Ukrainian and Polish Societies, and since then every two years the Conferences have been organized alternately in Poland and in Ukraine. In 2009, Prof. Andrzej Dzujaj, the President of the Polish Biochemical Society, came out with the initiative of joining Israeli biochemists to the Conference organizers to fully acknowledge the roots of J.K. Parnas and his coworkers. And thanks to his efforts, the coming VIII Parnas Conference will be organized for the first time by three national Societies, Polish, Ukrainian and Israel ones. Two Nobel Prize Laureates, Prof. Ada Yonath and Prof. Aaron Ciechanover, and Dr. Alexander Wlodaver confirmed their presence as the keynote speakers. Several fellowships were offered to young researchers from Ukraine, Israel and Poland. (FEBS News January 2001)

### 5.3.2.2 FEBS3+ Meeting: From Molecules to Life and Back, 13–16 June 2012 Opatija, Croatia

The FEBS3+ Meeting 'From molecules to life and back', organized by the Croatian Society of Biochemistry and Molecular Biology (CSBMB), the Hungarian

VIII Parnas Conference, organized by the Polish Biochemical Society, Ukrainian Biochemical Society and Israel Society for Biochemistry and Molecular Biology will be held in Warsaw, August 27–31, 2011. The Conference is under the Honorary Patronage of Mr. Radosław Sikorski, Minister of Foreign Affairs and Prof. Barbara Kudrycka, Minister of Science and Higher Education of the Republic of Poland. The Conference is supported by the Bylaws of FEBS 3+ Programme, and the Nencki Institute of Experimental Biology within Bio-imagine project supported by the EU FP7 Capacities Programme. Parnas Conferences were established in 1996 to commemorate the world known Polish biochemist



**FEBS3+ Meeting:  
From Molecules to Life and Back**  
13–16 June 2012  
Opatija, Croatia

**Figure 5.3.2** Announcement for Opatija.



**Figure 5.3.3** Young scientists attending a lecture on wine production at Kabola winery during a half-day excursion in Istria.

Biochemical Society (HBS) and the Slovenian Biochemical Society (SBS), was held in Opatija, Croatia.

It was supported by the FEBS3+ Meeting Programme, which provides funds for meetings organized through collaborations of at least three FEBS Constituent Societies. Although there have been good relationships among the biochemists from these neighbouring countries for a long time, the need to develop, improve and enhance collaboration on a wider platform, especially among young scientists, encouraged the organizers to gather scientists from all fields of molecular life sciences from Hungary, Slovenia and Croatia. The Scientific Committee, chaired by Prof. Jerka Dumić, President of the CSBMB, and co-chaired by Prof. Marinka Drobnič-Košorok, President of the SBS, and Prof. László Fésüs, President of the HBS, consisted of three representatives from each of the organising societies: Profs Sonja Levanat, Vladimir Mrša and Hrvoje Fulgosi from Croatia; Profs Balázs Sarkadi, László Vígh and Beáta Vértessy from Hungary; and Profs Roman Jerala, Radovan Komel and Vito Turk from Slovenia.

The Organising Committee was chaired by Prof. Zrinka Kovarik while the Local Organising Committee was headed by Prof. Jadranka Varljen.

The meeting was considered to be a National Annual Congress of the CSBMB and HBS. The organizers were honoured to welcome Professors Israel Pecht (FEBS Secretary General) and Jacques-Henry Weil (Chair of the FEBS Science and





**Figure 5.3.4** From left to right: Profs Jadranka Varljen, Zrinka Kovarik, Ada Yonath, Jerka Dumić, László Fésüs, Beáta Vértessy and Marinka Drobníč-Košorok.

Society Committee). The Scientific Programme consisted of nine symposia and five workshops. In addition to four plenary and two Science and Society lectures, 80 presentations were delivered (35 invited lectures and 45 short presentations) and 150 posters were presented in three poster sessions. The Organizers were honoured to host Prof. Ada Yonath, the Nobel Prize Laureate for Chemistry, who delivered the Opening Lecture. Plenary Lectures were delivered by Prof. Kai Simons, Prof. Jozsef Jiricny and Prof. Sandra Oršulić. Prof. Jacques-Henry Weil and Prof. Gottfried Schatz delivered lectures in the Science and Society Sessions. The meeting gathered 283 participants and 96 of them were PhD students. The organizers granted 51 fellowships to young scientists: 15 to HBS members and 21 to SBS members (supported by the FEBS3+ Meeting Programme) and 15 partial fellowships to CSBMB members (supported by CSBMB). Some of the awardees were selected by the Scientific Committee to present their work as short oral presentations included in the main programme. In addition, well-structured poster discussion sessions were organized, where senior scientists in small groups discussed the posters with the poster-presenting authors. Since the main aim of this meeting was to create new and revive old acquaintances in order to establish new collaborations, and to give young scientists the chance to interact with more experienced colleagues, a half-day excursion to Istria, which included a visit to Hum ('the smallest town in the world') and the Glagolitic Alley as well as wine tasting at Kabola winery and a Congress dinner in an agro-tourism farmhouse in Paladnjaki, was organized for all participants. The FEBS3+ Meeting offered a rewarding scientific and personal experience for its participants, especially for young researchers, and an opportunity to improve and enhance collaboration between molecular life scientists from Croatia, Hungary and Slovenia.

*Prof. Jerka Dumić President of the CSBMB; Chair of the Scientific Committee;  
Prof. Zrinka Kovarik Chair of the Organising Committee  
(FEBS News October 2012) (More pictures at <http://febs3plus.imi.hr/>)*

### 5.3.2.3 FEBS 3+ Meeting: IX Parnas Conference: Proteins from birth to death, Jerusalem, September 29–October 2, 2013

The IXth Parnas Conference was hosted by the Israel Society for Biochemistry and Molecular Biology (ISBMB); further participating Societies were those of Poland and Ukraine.

As its title indicates, the conference dealt with central aspects of protein structure and function, from the moment of translation until degradation. In addition to the primary funding provided by FEBS, the conference was co-sponsored by the Institute for Advanced Studies at the Hebrew University, the Israel Science Foundation and Tel Aviv University. The Israeli Academy of Sciences also acknowledged the importance of the meeting by hosting the closing talk of the meeting, given by Nobel laureate in chemistry, Prof. Ada Yonath. Throughout the conference further keynote talks were given by world leaders in protein research: Alan Fersht, Art Horwich and Alexander Wlodawer. A total of 160 participants attended the meeting, among them 41 invited speakers (nine from Poland, eight from the Ukraine, 22 from Israel and 10 from other countries). Among the participants, 41 were from Poland, 19 from the Ukraine and ten from other countries. Fifty of the participants were students and 27 postdocs. Eight speakers were selected to present short talks, from registrants who submitted abstracts for posters. Two poster sessions were organized during the conference in which 70 posters were presented. In order to encourage the attendance of young scientists the organizers provided support to twenty from Poland and Ukraine, with a fellowship covering their registration and accommodation fees. The registration fee of Israeli student members of the ISBMB was also waived. The number of foreign attendees and the high number of posters presented at the meeting are unprecedented for a meeting this size organized in Israel.

The enchanting atmosphere of historical Jerusalem together with the cutting edge science presented at the meeting made for an extraordinarily successful meeting. (FEBS News, December 2013)

## 5.4

### FEBS Constituent Societies' Meetings

#### 5.4.1

##### Armenian Association of Biochemists

*The Young Scientists Conference 2007*, organized under the auspice of the Armenian Association of Biochemists (AAB), was conducted at the H. Buniatian Institute of Biochemistry, of the National Academy of Sciences of the Republic of Armenia, Yerevan, from 25 to 29 of June 2007. The organizers were Prof. Guevork Kevorkian, Director of the H. Buniatian Institute of Biochemistry, Vice President of AAB and Dr. Varduhi Knaryan, AAB Secretary, Dr. Hripsime Hayrapetyan and Dr. Ljudmila Arakelyan. Two postgraduate students affiliated at the Institute of Biochemistry, Nune Hayrapetyan and David Poghosyan, provided extensive and



**Figure 5.4.1** Group of participants at the H. Buniatian Institute of Biochemistry.

invaluable help in each step of the event. Financial assistance has been received from the National Academy of Sciences of RA, Center of Organising Youth Activities of the Ministry of Sports and Youth Affairs of RA, and Delta Ltd. Co (Armenia). The aim of the Conference was to bring together young Armenian scientists, giving them a unique opportunity to present their own studies in front of a large auditorium of their young colleagues and faculty, and to exchange thoughts, share experience of working and teaching in the field of biological sciences. Working languages were Armenian, Russian and English. Participants were students, research fellows, (BSc and MSc degree holders), candidates of biological sciences (PhDs), and faculty from Departments of Biochemistry, Pharmacology, General and Bioorganic Chemistry of the Yerevan State Medical University; Departments of Biochemistry, Biophysics, Microbiology, Plant and Microorganism Biotechnology of the Biological Faculty of the Yerevan State University; and H. Buniatian Institute of Biochemistry of the National Academy of Sciences of RA. In total there were more than 50 attendees with an average age of 35, with 80% prevalence of females. Invited chairpersons were Prof. Hakopyan V.P. (National Academy of Sciences of the Republic of Armenia); Prof. Trchunyan A.H. (High Quality Attestation Committee of Armenia); Prof. Vardevanyan P.H. (Head of the Department of Biophysics, YSU); Prof. Vahradyan H.G. (Department of Biochemistry, YSMU); and Prof. Mardanyan S.S (Institute of Biochemistry). Twenty-five selected candidates presented scientific reports on their studies in enzyme biochemistry, cellular and tissue morphology, biophysics of membrane structures and lipid content in microorganisms, modeling of planar lipid bilayers with patterns of their applications, biochemistry and pharmacology of drug-to-receptor interactions in experimental stress-related conditions. Presentations were followed by intellectual discussions and recommendations for the further development of the initiated projects. The Questionnaires and Voting lists helped to summarize the meeting and select the best presentations. All participants were presented with Certificates, and some received Diplomas with special gifts for the best presentations. The whole meeting took place in a warm and friendly

atmosphere, accompanied with open talks and interactions, especially during delicious coffee and lunch breaks. The Young Scientist Conference in Yerevan celebrated 5 years of AAB in FEBS as an Associate member. The clear advantage was that during the past five years more than 20 young scientists from Armenia benefitted attending FEBS Advanced Courses and Congresses due to travel grants provided by FEBS. Two of them, Hovik Panosyan (PhD) and Konstantin Enkoyan (PhD), briefly spoke about recent FEBS Forums for Young Scientists, where they also took part. Finally, guests and organizers, supervisors and young participants offered enthusiastic speeches, emphasizing the significance and need for this initiative after years of neglect. They outlined that such gatherings could be the way to encourage and attract youth to investigations in biological sciences. All were happy and enjoyed the event; for the vast majority this was the first chance to perform. The hope is to continue this practice and to make further efforts to organize international youth meetings in Armenia. (FEBS News January 2008)

#### 5.4.2

##### **Jubilee Anniversary of the Polish Biochemical Society 2008**

The Polish Biochemical Society was founded in 1958 to promote and support all aspects of biochemistry in Poland. Since then, for 50 years the Society and its members (now ~ 1200) have played an invaluable role in advancement of biochemistry, and biology in general, in Poland. The Society has also been very active internationally, on one hand by being involved in foundation of the Federation of European Biochemical Societies and participation in its board since the very beginning, and on the other hand by cooperation with the biological societies from the former Soviet republics, Ukraine and Belarus. To celebrate the



**Figure 5.4.2** The Mirror Hall is filling up.

50th anniversary of the Society foundation, the Jubilee Session was organized on April 3rd 2009, which took place in the historic Mirror Hall of Staszic Palace of the Polish Academy of Sciences in Warsaw. All the members and friends of the Society were invited from Poland and abroad as well the administrative leaders of government and academic institutions connected with life sciences. To our great pleasure, the Hall for 200 participants was filled up by the Session attendees. Among them were: Prof. Israel Pecht, the Secretary General of the Federation of European Biochemical Societies, Ms. Julia Pitera, Minister of the Polish Government and daughter of late Prof. Kazimierz Zakrzewski, the Society Founding Father, Prof. Jerzy Duszyński, Vice-Minister of Science and Higher Education, Prof. Sergey Komisarenko, President of the Ukrainian Biochemical Society and Andriy Sybirny, President of the Ukrainian Cell Biology Society, Prof. Andrey Moiseenok from the Belarus Biochemical Society, colleagues from several Polish life science societies as well as the Presidents and Chairmen of several Polish universities and life science faculties as well as other distinguished guests, whom, unfortunately, due to space limitations we were not able to list here. After the opening ceremony and delivering the addresses by our eminent guests, Prof. Lech Wojtczak, who served for three terms as the President of the Society, handed over the diplomas for the recently nominated Honorary Members of the Society, namely: Prof. Edward Bańkowski, Prof. Jolanta Barańska, Prof. Andrzej Dzugaj and Prof. Aleksander Koj. Next, Prof. Wojtczak presented a very informative lecture on the history of the Society, mentioning the invaluable contributions of the Founders: Prof. Włodzimierz Niemierko, Prof. Bolesław Skarzyński, Prof. Kazimierz Zakrzewski and Prof. Zofia Zielińska. The scientific part of the session consisted of two outstanding lectures presented by Prof. Maciej Zylicz from the International Institute of Molecular and Cell Biology in Warsaw, the President of the Foundation for Polish Science, and Prof. Grzegorz Węgrzyn from the Faculty of Biology at Gdansk University, Editor-in-Chief of *Acta Biochimica Polonica*. Both the lecturers are the former Laureates of the Jakub Karol Parnas Award, the most prestigious prize given by the Polish Biochemical Society for outstanding scientific achievements. Prof. Zylicz's excellent presentation, entitled: "Protein chameleons", focused on the mechanisms and functions of proteins with unstructured regions. Prof. Węgrzyn in his lecture entitled: "50 years of the Polish Biochemical Society, 150 years of DNA" presented a very interesting and informative outline of history of studies on DNA, both worldwide and in Poland. The official part was followed by the reminiscent one, during which the participants were not only served with excellent food and a glass of wine, but also had a chance to look at a multimedia presentation with photographs from the archives of the Society and its members. Numerous discussions took place, memories were recalled and plans for the future were made in a very pleasant and friendly atmosphere. The participants highlighted the invaluable role of the Society in setting up the high scientific standards and creating a very creative scientific atmosphere among Polish biologists. All of them wished the Society at least fifty more years of fruitful and creative activities. Next evening, the Program I of the Polish Radio broadcasted a discussion on history of Polish biochemistry. Prof. Dzugaj, Prof. Barańska

and Prof. Bańkowski were the ones designated by the Society Board to take place in the programme organized by Krzysztof Michalski from Polish Radio, the 2008 Laureate of the Bronisław Filipowicz Award, given by the Society for the individuals actively engaged in promotion of biological sciences for community. The organization of the sessions would not be possible without a financial support from two Polish Institutes, actively involved since the very beginning in functioning of the Society, the Nencki Institute of Experimental Biology and the Institute of Biochemistry and Biophysics, both in Warsaw, as well as the following biotech companies operating in Poland: Comesa Polska, Sigma-Aldrich, Kendrolab, Carl Zeiss, Kawa.ska, Abo Grazyna Boreysza, A.G.A. Analytical, Millipore, Olympus Polska, Sarstedt and Becton Dickinson Polska.

*Maria Jolanta Rędownicz Secretary, Andrzej Dzugaj President*  
(FEBS NEWS 2008)

#### 5.4.3

#### Golden Jubilee of the Hungarian Biochemical Society 2012

The *Hungarian Biochemical Society* celebrated the 50th anniversary of its foundation on 9th November 2012 at the building of the Hungarian Academy of Sciences. The Society was established as the Hungarian Biochemical Association by the Section of Biology of the Hungarian Academy on 30th June 1962. For the golden jubilee the Society prepared a special issue of its journal *BIOKÉMIA* ('Biochemistry'), summarizing a 50-year history of Hungarian biochemistry and molecular biology, as well as the involvement of the Society with FEBS (including the organization of three successful FEBS Congresses in Hungary). At the anniversary meeting the FEBS Executive Committee was represented by Matthias Sprinzl, who greeted the audience in the Hungarian language. The founding Hungarian Academy of Sciences was represented by Péter Závodszy, Chairperson of the Section of Biology.



**Figure 5.4.3** The 50th anniversary meeting in 2012: Péter Závodszy, Chairperson of the Section of Biology of the Hungarian Academy of Sciences (left); László Fésüs,

President of the Hungarian Biochemical Society (middle); and Matthias Sprinzl, representative of FEBS Executive Committee (right).

The 50th anniversary of the Hungarian Biochemical Society falls within a series of anniversary events around now, including the centennial celebrations of the British and French Biochemical Societies in 2011 and 2014, respectively, as well as the 50th anniversaries of FEBS and EMBO in 2014. Béla Tankó was the founding President of the Hungarian Biochemical Society, who was followed by Ferenc Guba, Gertrúd Szabolcsi, Géza Dénes, Péter Friedrich and László Fésüs. In May 1981, the membership of the Hungarian Biochemical Association was extended to the biochemistry section of the Hungarian Association of Chemists, and as the renamed Hungarian Biochemical Society has continued to serve the Hungarian biochemical and molecular biological community over the past three decades ([www.mbkegy.hu](http://www.mbkegy.hu)).

#### **Society life**

Meetings of the Society have had rather variable forms over the years. In the early years, an annual 'grand assembly' was held, and between the first and second Hungarian FEBS Congresses (1974–1990), Society conferences had different locations—usually in major university cities of the country. Between the second and third Hungarian FEBS Congresses (1990–2005) three very successful 'International Conferences of the Hungarian Biochemical Society' were organized, showing the increased need for and volume of international contacts after the regime change in 1989. Between 1995 and 2005 the molecular biology section of the Society led by László Patthy (a member of the FEBS Publications Committee) organized highly successful annual meetings, and in recent years the signalling and drug biochemistry sections were also very active in organising popular meetings in their fields. Since the 2005 FEBS Congress, annual meetings have been organized, concluding with the FEBS3+ meeting co-organized with Croatian and Slovenian colleagues, in Opatija, Croatia in 2012. In 2013 we will have the first Hungarian meeting fully in English, together with Hungarian geneticists and cell biologists. The variability of Society meetings, and the adoption of novel initiatives such as the symposium on epigenetics in 2012, shows how the Society has adapted well to the changing needs of its membership.

#### **Golden jubilee of the Hungarian Biochemical Society**

Like other scientific societies, the Hungarian Biochemical Society recognizes high-quality research of young scientists and lifetime achievements, by presenting various awards. The most prestigious award of the Society is the Béla Tankó Award named after the founding President. The 2012 awardees were László Buday (young scientist category) and László Gráf (lifetime achievement award). Besides best poster awards, the best publication of the year is recognized by the Bio-Science Award, giving a plenary lecture opportunity to the awardee at the Society meeting.

The Society journal *BIOKÉMIA* has served the membership continuously in the past 35 years, with four issues annually on scientific papers, news items, and papers on research policy and education. At the golden jubilee all issues were published in a digital form on the Society website, [www.mbkegy.hu](http://www.mbkegy.hu).

### ***The Hungarian Biochemical Society and FEBS***

The Hungarian Biochemical Society is one of the founding eight (?) societies of FEBS, and has organized three FEBS Congresses. The 9th FEBS Meeting was organized at the Technical University of Budapest in 1974 by Bruno Straub and his team. The 20th FEBS Meeting was in 1990, right after Hungary changed to a democracy. Organization of an international meeting is rather difficult in 'revolutionary times.' As the Secretary General of the Hungarian Biochemical Society, Pál Elödi, wrote in the Society journal: 'there was no responsible government or city official with whom we might discuss the sponsorship of the organization.' Péter Friedrich, the Chairperson of the Organising Committee, showed his legendary humour describing another sign of changing times: 'the highly skilled Secretary of the organising committee escaped from the sinking vessel of the Congress, and the dynamic, young person replacing him proved to be so over-dynamic that we had to say goodbye to him.' Despite the difficulties made by history, the 1990 Congress was a great success, hosting 60 scientific sessions. The 2005 FEBS Congress was combined with an IUBMB Conference, and had 2650 participants from 95 countries. According to the slogan of the Congress, 'Science is fun!', many accompanying events were organized, including 'Pub Tours', where Nobel Laureates and 90 other distinguished speakers spent an evening with groups of young participants of the Congress in a pub—making a memory for life.

Hungarian biochemists were and are actively participating in the FEBS Executive Committee and other FEBS Committees. Ferenc Guba, Péter Friedrich and Balázs Sarkadi were Presidents of FEBS, while currently László Fésüs is the Chairperson of the Publications Committee and member of the Executive Committee. Fourteen FEBS Advanced Courses have been organized in Hungary, and several Hungarian young scientists have received a FEBS Fellowship. Gábor Farkas was an Editor for *FEBS Letters* in the 1970s and 1980s, while currently László Nagy and Judit Ovádi serve on the Editorial Board of the journal. It is noteworthy also that EMBO has 11 Hungarian members and an additional 10 members whose career started in Hungary.

### ***The history of Hungarian biochemistry in a nutshell***

Hungarian biochemical research started more than 100 years ago. The first real highlight was the school of Albert Szent-Györgyi, who received the Nobel Prize in 1937 'for his discoveries in connection with the biological combustion processes, with special reference to vitamin C and the catalysis of fumaric acid.'

From Szent-Györgyi's students, Bruno Straub, the discoverer of actin, had a decisive role in Hungarian biochemistry in the second half of the 20th century. Prof. Straub established a high-level research institute at the Semmelweis University Medical School in Budapest, and he also founded and led the Institute of Enzymology in Budapest and the Szeged Biological Centre, which became a Centre of Excellence of the European Union. Kálmán Laki indirectly established a school in Debrecen by scholarships and involvement of the Debrecen Research Institute in the Szent-Györgyi research network in the USA. Ilona Banga was a founding



member of the Hungarian Biochemical Society, while Ferenc Guba continued the Szent-Györgyi legacy in muscle research in Szeged. Currently, Hungary has 12 internationally renowned biochemical research/university institutes, demonstrating the strength of this scientific discipline in the country, and recently many of these have moved to new spacious research buildings.

#### ***Trends in Hungarian biochemistry***

In recent years Hungarian biochemistry has developed in several topical areas. Protein biochemistry is traditionally very strong in the country, and this has been extended by modern structural methods as well as by proteomics in recent years. Signalling studies began when this area came to the forefront internationally with the discovery of the importance of protein phosphorylation. A recent trend is lipidomics, which is becoming more and more established in Szeged and Debrecen. Molecular biological methods have been extended by genomics, epigenetics and next-generation sequencing. The billions of data increasingly require bioinformatics approaches and, related to this, network analysis is traditionally strong in Hungary. One very successful application of biochemistry and molecular biology is drug discovery, where Hungarian laboratories and pharmaceutical companies are also traditionally strong. Of course, in recent decades 'biochemistry' has been extended by molecular biology and the term 'molecular life sciences' is becoming more fashionable. However, biochemistry remains crucial in the establishment and understanding of the 'omics-world'—and Hungarian biochemists are looking forward to celebrate the 100th anniversary of their society.

*László Fésüs*

*President, Hungarian Biochemical Society*

*University of Debrecen, Hungary*

*Péter Csermely,*

*Vice-President, Hungarian Biochemical Society*

*Semmelweis University, Budapest, Hungary*

(FEBS News January 2013)

#### 5.4.4

#### **Spanish Society of Biochemistry and Molecular Biology: celebrating 50 years**

Since its foundation in 1963, the objectives of the Spanish Society of Biochemistry and Molecular Biology (SEBBM) have been to foster research, encourage the transfer of knowledge, contribute to the expansion of Spanish science in the international sphere, and establish science as an important element of Spanish society. The commemoration of SEBBM's 50th anniversary in 2013 offers a new opportunity to achieve one of its main goals: bringing science closer to society.

The beginnings of biochemistry in Spain were delayed by the Civil War (1936–1939), and its tentative development suffered from the exile and emigration of many scientists. During the 1940s and 1950s, biochemistry was taught in universities as part of physiology, and a number of young Spanish researchers were trained abroad in this new discipline. Fortunately, many of them returned to Spanish universities fully committed to the development of their own research projects, despite the precariousness of funding.

Among these well-trained scientists were Alberto Sols and Severo Ochoa. These two key figures led other Spanish scientists to discuss the need for a society for promoting biochemistry in Spain, and, as a result, the Spanish Society of Biochemistry (SEB) was born in 1963. A year later, the SEB contributed significantly to the creation of FEBS and became part of the International Union of Biochemistry (IUB).

SEB's international presence grew further in 1969, when Spain became a member of EMBO and the 6th FEBS Meeting was held in Madrid.

Years later, with the arrival of democracy (1977) and Spain's incorporation into the European Union (1986), the improvement of the economy and the associated structural funds further boosted scientific *initiatives* in the country. All these changes were fully supported by SEB, which, since its foundation, has defended the inclusion of specific allocations for basic research projects and scientific training in the general country budget, to nourish biotechnological development in Spain.

SEB, renamed as SEBBM in 1994 to encompass the discipline of molecular biology, has come a long way in these 50 years: with its more than 3800 researchers it is now one of the most important, influential and respected scientific societies in the country. A large number of scientific institutions and commercial and industrial companies cooperate with SEBBM, which also continues to develop fruitful relationships with other international societies. SEBBM organizes an annual national scientific meeting (Congress), and also publishes its own magazine every three months. The Society is structured into different scientific groups or sections covering a rich variety of topics (developmental biology, biomembranes and bioenergetics, metabolic regulation, apoptosis, mammalian transgenesis, genomics and proteomics, etc.). These groups organize meetings, seminars and activities related to their specific topics. Meetings are preferably held coinciding with the annual Congress of the Society, to enable scientists to have a wider forum for exchange of results and discussion of ideas.

#### **Celebrating SEBBM's 50th anniversary**

The celebrations for the 50th anniversary of the SEBBM are also aimed at reaching wide audiences. We would like lay citizens to get closer to and more deeply involved with science. Our main goal is to inform, entertain and promote interest in science, foster scientific vocations among young people—essential for the future development of our country—and contribute to growth of a stronger scientific culture in Spanish society. The neuroscientist Santiago Ramón y Cajal, Nobel Laureate in 1906, once said that the 'Spanish

car of culture lacks the wheel of science'. SEBBM aims to help place that wheel in Spanish culture by organising during 2013 the following scientific activities.

'**50 years, 50 molecules**' is a new section in the SEBBM's website where site visitors including the general public can learn the basic functions of 50 shortlisted biomolecules and vote for their favourite from among these (see figure legend below). Voting will help define the molecules included in the '**Molecules of Life...**' exhibition.

'**Molecules of Life: 50 years of Biochemistry and Molecular Biology in Spain**' is a temporary exhibition that aims to bring basic educational concepts of biochemistry and molecular biology to wide audiences. Its opening will take place on 2nd September 2013 at the National Museum of Natural History in Madrid, concurring with the celebration of the 2013 SEBBM Congress. The exhibition will provide visitors with an interactive display of basic molecules that constitute and play essential functions in the cells of our body, promote our health and affect our daily lives. We are grateful to several companies, including Zeltia, Bio-Rad, MSD and Grifols, for their generous support. After its opening in Madrid, the exhibition will tour Spanish science museums, starting at Sevilla's *Casa de la Ciencia*.

Starting January 2013, a series of **12 Anniversary Lectures** celebrate the 50th anniversary in some of Madrid's most emblematic buildings and museums. With these lectures our aim is to review the history of SEBBM, highlight its role and contributions to the development of modern Spanish society, bring the figures of Santiago Ramón y Cajal, Severo Ochoa and Alberto Sols closer to the general public, and analyse from different perspectives current scientific research and its future directions. The lectures present current research in biotechnology, neurosciences, biomedicine and plant molecular biology among other topics, which include historical and sociological analysis, and discuss the relationship with literature and plastic arts ([http://www.sebbm.es/EN/50-aniversario\\_16/conferencias-cincuentenario-sebbm\\_799](http://www.sebbm.es/EN/50-aniversario_16/conferencias-cincuentenario-sebbm_799)). We are extremely grateful for the generous participation of scientists Jesús Ávila, Carmen Castresana, César de Haro, Carlos Gancedo, Luis Franco, Catalina Lara, Carlos López-Otín, Federico Mayor Zaragoza, María Teresa Miras, Juan Luis Ramos and Margarita Salas, and art restorers María Alonso and Begoña Mosquera. We also thank CIDI+ Biomed for filming the conferences.

The 50th anniversary of our Society will be intimately present at the **SEBBM Annual Congress**, which this year will be held from 3rd to 6th September in Madrid, under the chairmanship of Prof. Margarita Salas Falgueras. Our classic 'Congress in the city' will include conferences for the general public, and other outreach activities at the National Museum of Natural History. With the economic crisis background and strong cuts suffered by research projects, the 50th anniversary of the SEBBM offers a unique opportunity to raise public awareness of the importance of scientific research as a fuel for social and economic development for our country.

For more details, please follow us on Facebook and Twitter, or at SEBBM's website: [www.sebbm.es](http://www.sebbm.es).

*Isabel Varela-Nieto*  
*Gemma Rodríguez-Tarduchy*  
*María A. Pajares*  
*Catalina Lara*  
*Alejandra Galindo*  
*José M. Bautista*  
 (FEBS News May 2013)

## 5.5

### FEBS National Lecture Awards at Constituent Societies' Meetings

FEBS supports plenary lectures to enhance the scientific meetings of its Constituent Societies, through FEBS National Lecture Awards. These enable a distinguished scientist working in a different FEBS country to the one hosting the event to present a lecture at the meeting, by supporting the speaker's travel and accommodation costs. Full details of the scheme are given on the National Lectures sections of the FEBS website.

#### 5.5.1

##### SFBBM-SFB Congress 2012

The Congress, which took place in Grenoble, France, from 21st to 23rd November 2012, was a real success, with 300 participants and a rich scientific program. Under the heading 'From molecular mechanisms to integrated life processes' the Congress covered both new methods and discoveries in the fields of host–pathogen interactions, compartmentalization, signalling, regulation, genomic integrity and proteome plasticity. Prof. Dr Rita Gerardy-Schahn (Institute for Cellular Chemistry, Hannover Medical School, Hannover, Germany) received a FEBS National Lecture Award at this recent SFBBM–SFB 2012 Congress, which was co-organized by the French Society of Biochemistry and Molecular Biology and the French Society of Biophysics, in partnership with the French Society of Photobiology, several thematic groups [Archaea, Biostruc, GGMM (modelling)] and the Grenoble Alliance for Integrated Structural and Cellular Biology (GRAL).

*Christine Ebel, Organizer*  
*Institut de Biologie Structurale, Grenoble, France*  
*Bruno Kieffer, Organizer*  
*Institut de Génétique et de Biologie Moléculaire et Cellulaire, Strasbourg, France*  
 (FEBS News January 2013)

## 5.5.2

**Polish Biochemical Society (PTBioch) and German Society for Biochemistry and Molecular Biology (GBM) 2012**

A first joint meeting between the Polish Biochemical Society (PTBioch) and the German Society for Biochemistry and Molecular Biology (GBM) was held from 11th to 14th September 2012 in Poznań, Poland, organized by the Poznan Branch of the Polish Biochemical Society.

During the meeting, the FEBS National Lecture Award was presented to Prof. Dr Volker A. Erdmann (Institute of Chemistry/Biochemistry, Free University of Berlin, Germany), who gave an outstanding presentation entitled 'The discovery of Spiegelzymes and their potentials in molecular biology and medicine'. Prof. Erdmann and his co-workers designed 'Spiegelmers' in the 1990s, which are mirror image (L-form) high-affinity nucleic acids that can bind target molecules of diverse size. They are similar to aptamers and, given their specific binding and ease of synthesis, are of great interest for molecular medicine as diagnostic or therapeutic tools. One advantage of Spiegelmers is that they are very stable in human sera or living cells, since there are no naturally occurring nucleases that can hydrolyse them.

In his talk, Prof. Erdmann described for the first time mirror image catalytic nucleic acids, which he calls 'Spiegelzymes', that hydrolyse L-RNA molecules in a sequence-specific manner. The mirror image nucleic acid zymes are based upon the known hammerhead ribozyme and DNAzyme structures, but contain L-ribose or L-deoxyribose instead of the naturally occurring D-ribose or D-deoxyribose, respectively. The Spiegelzymes showed similar hydrolytic activities with the same L-RNA target molecules *in vitro* and *in vivo*. Thus, these Spiegelzymes have potential as perfect antidotes against Spiegelmers—for example, to counter drug side effects. Spiegelzymes are of much interest to a range of disciplines—from astrobiology, to chirality research to molecular evolution.

The FEBS National Lecture was not only unique because of its scientific content, but also because it demonstrated a long-lasting collaboration between Prof. Erdmann's group in Berlin and the Bioorganic Chemistry Institute of the Polish Academy of Science in Poznan. It therefore highlighted very well the potential of Polish–German collaborations, which was particularly fitting for this first joint meeting of the Polish and German societies.

For more details on this event, including links to the abstract book and photos see: [www.biochemistry-poznan2012.pl/](http://www.biochemistry-poznan2012.pl/)

*Maria Rybczyńska*

*Chair of Organising Committee, Poznan University of Medical Sciences, Poland*

(FEBS News January 2013)

## 5.5.3

**Hungarian Molecular Life Sciences Conference 2013**

Prof. Ian D. Hickson from the Department of Cellular and Molecular Medicine and Center for Healthy Aging, University of Copenhagen, Denmark gave a FEBS National Lecture entitled 'Chromosomal instability and human disease: role of common fragile sites' in the plenary session of this meeting held at Hotel Azur, Siófok, Hungary, 5–7 April 2013.

(FEBS News May 2013)

## 5.5.4

**SEBBM Society meeting 2013: 50th Anniversary**

The XXXVI meeting of the Spanish Society for Biochemistry and Molecular Biology (SEBBM) gathered over 1000 participants in Madrid from 3rd to 6th September 2013 to commemorate the 50th anniversary of its foundation. The Organising Committee, chaired by Prof. Margarita Salas, put together an exciting scientific programme, consisting of seven plenary lectures and three parallel symposia running in parallel across three days (focusing on 'Structure and function of genes', 'Cell communication' and 'Molecular biomedicine') and involving 36 speakers. In addition, more than 100 oral communications were presented at the specific sessions organized by the thematic SEBBM scientific groups in the afternoons, and the lively poster sessions reached a record of 650 presentations. Topics covered in the different symposia and scientific group meetings were at the forefront of biomedicine and biotechnology, including: the relationship between cancer and metabolism; novel therapeutic targets; communication between cells; aging; plant adaptation to the environment; epigenetics; immune response and tolerance to disease; obesity; and cell reprogramming and therapy. It is worth noting that SEBBM kept registration fees at very affordable prices (Δ150 for members) and provided a significant number of travel grants to encourage the participation of young researchers.

In addition to SEBBM, several foundations, companies and scientific societies supported the meeting by sponsoring plenary lectures, specific symposia and awards for young scientists.

Plenary speakers included Nobel Laureates Prof. Brian K. Kobilka (Nobel Prize in Chemistry 2012), who delivered the opening 'Alberto Sols' plenary lecture entitled 'Structural insights into G-protein-coupled receptor signalling', funded by Fundación BBVA; and Prof. Sydney Brenner (Nobel Prize in Physiology or Medicine 2002), who recapitulated '60 years of molecular biology' at the closing plenary lecture, funded by Fundación Ramón Areces.

FEBS was actively involved in the support of this meeting. A FEBS National Lecture entitled 'Regulation of epidermal stem cell fate by intrinsic and extrinsic mechanisms' was given by Prof. Fiona Watt (Centre for Stem cells and Regenerative Medicine, King's College London), who was introduced by Prof. Miguel Angel de la Rosa, past SEBBM President

and current Vice Chair of FEBS. A FEBS-sponsored Symposium session on 'Pathogens and cell response', coordinated by Prof. J.M. Bautista, involved speakers from The Netherlands, Switzerland, Portugal and Spain. Prof. Israel Pecht, FEBS Secretary General, also addressed the participants before a plenary session to congratulate SEBBM on this special occasion.

The inaugural session of the Congress was attended by Dr Carmen Vela, Secretary of State for Research, Development and Innovation, and other top Spanish officials. This was followed by the SEBBM 50th Anniversary Commemorative Session, in which the current SEBBM President, Prof. Federico Mayor Jr, was joined by eight SEBBM past-Presidents to bring to mind the long journey initiated by a few pioneer scientists in 1963, which allowed consolidation and expansion of biochemistry and molecular biology in Spain.

The SEBBM currently consists of nearly 4000 members from all major universities and research institutions, and is fully committed, particularly in these difficult times for science in Spain, to encourage top-level research, the careers of young scientists and dialogue between Science and Society, so our fellow citizens can ask our political leaders and representatives to support scientific activities as a priority. In this regard, the SEBBM organized satellite activities of the meeting throughout the city, such as the Entrepreneurship Forum, an 'Introduction to Research' workshop for undergraduate students, dissemination conferences for the general public in downtown Madrid, and an exhibition entitled 'Molecules of life' addressed to the young, in collaboration with the National Museum of Natural History.

*José Manuel Bautista (Universidad Complutense, Madrid), Treasurer of the Organising Committee*

(FEBS News September 2013)

#### 5.5.5

##### **Austrian Society (OEGMBT) meeting 2013**

Dr. Asifa Akhtar, Max-Planck Investigator at the Max-Planck-Institute of Immunobiology and Epigenetics, Freiburg, Germany received the FEBS National Lecture Award at the annual meeting of the Austrian Association of Molecular Life Sciences and Biotechnology (OEGMBT) on September 27th, 2013. Over 500 participants discussing current topics in fields including cancer and developmental biology, biophysics, neurosciences or epigenetics attended the annual meeting. The conference was hosted by the two Innsbruck Universities and took place in the novel Center for Chemistry and Biomedicine (CCB).

Dr. Akhtar's FEBS National Lecture entitled "Epigenetic regulation by MSL proteins" focused on the molecular mechanisms underlying the sex-specific X-chromosomal gene regulation. Her groundbreaking work uses dosage compensation by the fruit fly *Drosophila melanogaster* as a model system for epigenetic regulation. Dosage compensation mechanisms regulate the expression

of X-linked genes. To balance the uneven expression of genes encoded by the autosomes, female mammals inactivate one of the two X-chromosomes. In contrast, male individuals of fruit flies counterbalance the lack of a second X-chromosome by upregulating the expression of genes encoded by the single X-chromosome. This is executed by the ribonucleoprotein complex named male specific lethal (MSL), a protein complex that is also conserved in mammals. Dr. Akhtar showed how this complex decorates the male X-chromosome and leads to hyperacetylation of histone H4 lysine 16 by the histone acetyltransferase MOF (male absent on the first), a subunit of the MSL complex. This leads to increased recruitment of RNA polymerase II and increased transcription. In the inspiring seminar, Dr. Akhtar provided novel insights into molecular details of this important epigenetic mechanism. (FEBS News, December 2013)





## 6 FEBS Publications

### 6.1 Overview

FEBS has twin commitments to high-quality publications and the promotion of molecular biosciences. FEBS owns all its publications, from *the FEBS Journal* to *FEBS Letters*, *Molecular Oncology* and *FEBS Open Bio*. They are published on our behalf by Wiley-Blackwell and Elsevier, who return most of the revenue to FEBS, which, as a not-for-profit academic organisation, ploughs all the income into funding our diverse activities: FEBS fellowships; advanced courses and workshops; congresses; and aiding researchers in disadvantaged countries. By publishing in FEBS journals and taking part in reviewing, you are both supporting high-quality science and helping provide an essential income stream to fund education and research. The proliferation of open access journals with ill-defined standards of peer review makes it more important than ever to publish in journals that bear the stamp of respected organisations and publishers.

(FEBS News, January 2012).



*The FEBS Journal* publishes full-length papers describing original research in all areas of the molecular life sciences. Decisions are reached quickly and publication follows without delay. The journal includes reviews and minireviews on a wide range of topics.

*Journal Aims and Scope.* Access the latest Special Issues, Virtual Issues and Podcasts via *the FEBS Journal* homepage.



*FEBS Letters* is the journal for the rapid publication of short reports in molecular biosciences. It publishes original research reports, minireviews and hypotheses that merit urgent publication.



*Molecular Oncology* highlights new discoveries, approaches, as well as technical developments, in basic, clinical and discovery-driven translational research. A main feature of the journal is to provide an international forum for debating cancer issues, and for integrating the input of all the stakeholders.



*FEBS Open Bio* is a new online-only, author-pays, open access journal for the rapid publication of articles in the molecular and cellular life sciences in both health and disease.

## 6.2

### FEBS Publications Committee

A Publications Committee taking care of the FEBS Journals and other publicizing activities was established as early as 1966. It is headed by a Chairman, appointed by Council and composed of five members elected by Council, the FEBS Secretary General, the FEBS Treasurer (both *ex officio*), the Managing Editors of the journals, all with voting rights, except the Managing Editors of

**Table 6.2.1** Members of the FEBS Publications Committee, 1992 to 2003.

Year and Member	Country	Year and Member	Country
<b>1992</b>		Peter Ott	Switzerland
Karl Decker, chairman	Germany	<b>1998</b>	
Richard Buckingham	France	Willy Stalmans, chairman	Belgium
Jon Bremer	Norway	Hendrik Raué	Netherlands
IsraelPecht	Israel	Jaak Järv	Estonia
Vladimir Kostka	Czech Rep.	Helmut Sies	Germany
Peter Friedrich	Hungary	Peter Ott	Switzerland
<b>1993</b>		<b>1999</b>	
Karl Decker, Chairman	Germany	Willy Stalmans, chairman	Belgium
Alessandro Finazzi-Agrò	Italy	Hendrik Raué	Netherlands
Willy Stalmans	Belgium	Bernard Rossignol	France
Richard Buckingham	France	Jaak Järv	Estonia
IsraelPecht	Israel	Helmut Sies	Germany
Vladimir Kostka	Czech Rep.	Peter Ott	Switzerland
<b>1994</b>		<b>2000</b>	
Karl Decker, Chairman	Germany	Willy Stalmans, chairman	Belgium
Alessandro Finazzi-Agrò	Italy	Felix Goñi	Spain
Vaclav Pačes	Czech Rep.	Bernard Rossignol	France
Hans Prydz	Norway	Jaak Järv	Estonia
Willy Stalmans	Belgium	Helmut Sies	Germany
Richard Buckingham	France	Peter Ott	Switzerland
Vladimir Kostka	Czech Rep.	<b>2001</b>	
<b>1995</b>		Willy Stalmans, chairman	Belgium
Karl Decker, Chairman	Germany	Felix Goñi	Spain
Alessandro Finazzi-Agrò	Italy	Wikström Marten	Finland
Vaclav Pačes	Czech Rep.	Jaak Järv	Estonia
Hans Prydz	Norway	Helmut Sies	Germany
Willy Stalmans	Belgium	Glockshuber Rudolf	Switzerland
Richard Buckingham	France	<b>2002</b>	
Vladimir Kostka	Czech Rep.	Willy Stalmans, chairman	Belgium
<b>1996</b>		Felix Goñi	Spain
Karl Decker, Chairman	Germany	Wikström Marten	Finland
Hendrik Raué	Netherlands	Antonio Xavier	Portugal
Alessandro Finazzi-Agrò	Italy	Athel Cornish-Bowden	France
Vaclav Pačes	Czech Rep.	Glockshuber Rudolf	Switzerland
Hans Prydz	Norway	<b>2003</b>	
Willy Stalmans	Belgium	Willy Stalmans, chairman	Belgium
<b>1997</b>		Felix Goñi	Spain
Willy Stalmans, chairman	Belgium	Wikström Marten	Finland
Hendrik Raué	Netherlands	Antonio Xavier	Portugal
Bernard Rossignol	France	Athel Cornish-Bowden	France
Vaclav Pačes	Czech Rep.	Jerzy Duszynski	Poland
Hans Prydz	Norway		

Other Members: Secretary General, Treasurer (*ex officio* Members); Managing Editors of EJB and FEBS Letters. Honorary chairmen of FL; up to 2001 FEBS Bulletin editor; from 2001 on FEBS Webmaster (all latter without voting rights).



**Figure 6.2.1** The Publications Committee in May 2002 in Leuven. Starting at the left one spots sequentially: Felix Wieland, managing editor of FEBS Letters; Athel Cornish-Bowden, member of the Committee; Willy Stalmans, chairman of the Committee; Félix Goñi, member of the Committee; Bas van der Hoek, Publishing Director, Elsevier Fundamental Life Sciences (since June 2002 replaced by Arthur Koedam); Robert Campbell, President, Blackwell Publishing; Richard Perham, chairman of the editorial board

of EJB; Inge Detlefsen, secretary to Julio Celis (took care of the minutes); Iain Mowbray, FEBS treasurer; Simon Rallison, Science Publishing Director, Blackwell Publishing; Amanda McLean-Inglis, Journal Publisher: Science, Blackwell Publishing; Wates Edward, UK Production Director, Blackwell Publishing; Antonio Xavier, member of the Committee; Marten Wikström, member of the Committee (half-hidden); Julio Celis, Secretary General of FEBS. Photograph kindly provided by Willy Stalmans.

the Journals. Members without voting rights are the Honorary Chairmen of FEBS Letters, (formerly) the Editor of the FEBS Bulletin, and more recently the FEBS Webmasters (as long as they were in operation). Since 1999 the publishing directors of the FEBS journals have also been invited to report at the Meetings of the Publications Committee. The chairpersons of the Publications Committee were already introduced in Section 4.2. Unfortunately, there is little or no information available on the members that have actively contributed to the committee's successful work during its whole time of existence, except for the decade prior to FEBS' 40<sup>th</sup> Anniversary (Table 6.2.1) and the period from 2004 to present (Table 6.2.2).



**Figure 6.2.2** Snapshots of Publication Committee Meeting on May 4, 2002, kindly provided by Willy Stalmans.

**Table 6.2.2** Members of the Publications Committee, 2004 to 2014.

Year and Member	Country	Elected in	Start	End
<b>2004</b>				
Willy Stalmans, Chair	Belgium	Istanbul (2002)	01 01 03	31 12 05
Marten Wikström	Finland	Birmingham (2000)	01 01 01	31 12 04
Athel Cornish-Bowden	France	Lisbon (2001)	01 01 02	31 12 05
Antonio Xavier	Portugal	Lisbon (2001)	01 01 02	31 12 05
Jerzy Duszynsky	Poland	Istanbul (2002)	01 01 03	31 12 06
Anna Tramontano	Italy	Brussels (2003)	01 01 04	31 12 07
<b>2005</b>				
Willy Stalmans, Chair	Belgium	Istanbul (2002)	01 01 03	31 12 05
Athel Cornish-Bowden	France	Lisbon (2001)	01 01 02	31 12 05
Antonio Xavier	Portugal	Lisbon (2001)	01 01 02	31 12 05
Jerzy Duszynsky	Poland	Istanbul (2002)	01 01 03	31 12 06
Anna Tramontano	Italy	Brussels (2003)	01 01 04	31 12 07
Miras Portugal	Spain	Warsaw (2004)	01 01 05	31 12 08
<b>2006</b>				
Felix Goni, Chairman	Spain	Budapest (2005)	01 01 06	31 12 08
Jerzy Duszynsky	Poland	Istanbul (2002)	01 01 03	31 12 06
Anna Tramontano	Italy	Brussels (2003)	01 01 04	31 12 07
Miras Portugal	Spain	Warsaw (2004)	01 01 05	31 12 08
Richard Buckingham	France	Budapest (2005)	01 01 06	31 12 09
Christos Stournaras	Greece	Budapest (2005)	01 01 06	31 12 09
<b>2007</b>				
Felix Goni, Chairman	Spain	Budapest (2005)	01 01 06	31 12 08
Anna Tramontano	Italy	Brussels (2003)	01 01 04	31 12 07
Miras Portugal	Spain	Warsaw (2004)	01 01 05	31 12 08
Richard Buckingham	France	Budapest (2005)	01 01 06	31 12 09
Christos Stournaras	Greece	Budapest (2005)	01 01 06	31 12 09
László Fésüs	Hungary	Istanbul (2006)	01 01 07	31 12 10
<b>2008</b>				
Felix Goni, Chairman	Spain	Budapest (2005)	01 01 06	31 12 08
Miras Portugal	Spain	Warsaw (2004)	01 01 05	31 12 08
Richard Buckingham	France	Budapest (2005)	01 01 06	31 12 09
Christos Stournaras	Greece	Budapest (2005)	01 01 06	31 12 09
László Fésüs	Hungary	Istanbul (2006)	01 01 07	31 12 10
Stefan Hohmann	Sweden	Vienna (2007)	01 01 08	31 12 11

**Table 6.2.2** (Continued)

Year and Member	Country	Elected in	Start	End
<b>2009</b>				
Felix Goni, Chairman	Spain	Budapest (2005)	01 01 06	31 12 08
Richard Buckingham	France	Budapest (2005)	01 01 06	31 12 09
Christos Stournaras	Greece	Budapest (2005)	01 01 06	31 12 09
László Fésüs	Hungary	Istanbul (2006)	01 01 07	31 12 10
Stefan Hohmann	Sweden	Vienna (2007)	01 01 08	31 12 11
Mariusz Jaskolski	Poland	Athens (2008)	01 01 09	31 12 12
<b>2010</b>				
Felix Goni, Chairman	Spain	Budapest (2005)	01 01 06	31 12 08
László Fésüs	Hungary	Istanbul (2006)	01 01 07	31 12 10
Stefan Hohmann	Sweden	Vienna (2007)	01 01 08	31 12 11
Mariusz Jaskolski	Poland	Athens (2008)	01 01 09	31 12 12
Manuel Prieto	Portugal	Prague (2009)	01 01 10	31 12 13
Athel Cornish-Bowden	France	Prague (2009)	01 01 10	31 12 13
<b>2011</b>				
Felix Goni, Chairman	Spain	Athens (2008)	01 01 09	31 12 11
Mariusz Jaskolski	Poland	Athens (2008)	01 01 09	31 12 12
Manuel Prieto	Portugal	Prague (2009)	01 01 10	31 12 13
Athel Cornish-Bowden	France	Prague (2009)	01 01 10	31 12 13
László Patthy	Hungary	Gothenburg (2010)	01 01 11	31 12 14
Dimitris Thanos	Greece	Gothenburg (2010)	01 01 11	31 12 14
<b>2012</b>				
László Fésüs, Chairman	Hungary	Turin (2011)	01 01 12	31 12 14
Mariusz Jaskolski	Poland	Athens (2008)	01 01 09	31 12 12
Manuel Prieto	Portugal	Prague (2009)	01 01 10	31 12 13
Athel Cornish-Bowden	France	Prague (2009)	01 01 10	31 12 13
László Patthy	Hungary	Gothenburg (2010)	01 01 11	31 12 14
Dimitris Thanos	Greece	Gothenburg (2010)	01 01 11	31 12 14
<b>2013</b>				
László Fésüs, Chairman	Hungary	Turin (2011)	01 01 12	31 12 14
Manuel Prieto	Portugal	Prague (2009)	01 01 10	31 12 13
Athel Cornish-Bowden	France	Prague (2009)	01 01 10	31 12 13
László Patthy	Hungary	Gothenburg (2010)	01 01 11	31 12 14
Dimitris Thanos	Greece	Gothenburg (2010)	01 01 11	31 12 14
Gerry Melino	Italy	Seville (2012)	01 01 13	31 12 16



## 6.3

## The European Journal of Biochemistry – The FEBS Journal



C. Liébecq, 1967–1988    P. Christen, 1988–1998    R.N. Perham, 1999–

**Figure 6.3.1** Chairmen of the Editorial Board of the European Journal of Biochemistry/The FEBS Journal.

*The 'European Journal of Biochemistry'* – renamed as *'The FEBS Journal'* in 2004 exists to publish full-length original papers on fundamental aspects of biochemistry, molecular and cell biology, and molecular biophysics. It originated in 1967 when, with the support of the German *Gesellschaft für Biologische Chemie*, it replaced the old *Biochemische Zeitschrift* (founded in 1906). To secure publication in the journal, a paper must report a new phenomenon, unravel a new molecular mechanism, throw new light on an old observation, raise an important new concept, or report a new method of widespread interest. Up to the year 1999, the European Journal of Biochemistry was published in collaboration with Springer Verlag. A brief history of the European Journal of Biochemistry appeared in this journal in 1992 (vol. 204, 421–432), written by its past chairman Claude Liébecq. This article is also contained in the FEBS Memoir – 1964–2003, Blackwell Publishers, Oxford, 2003, pp. 81–92.

The Journal prides itself on its speed of publication. Full papers that require no or only modest revision are generally published in less than 4 months, and Priority Papers (essentially full-length articles reporting something deemed to be of immediate importance) where an editorial decision is normally given in two to three weeks, can take as little as two months. The journal also publishes review articles, both solicited and unsolicited. In recent years (since 2002), EJB has been operating a fully online submission and review system, which is driving down publication time still further, and papers are published online ahead of the hard copy of the

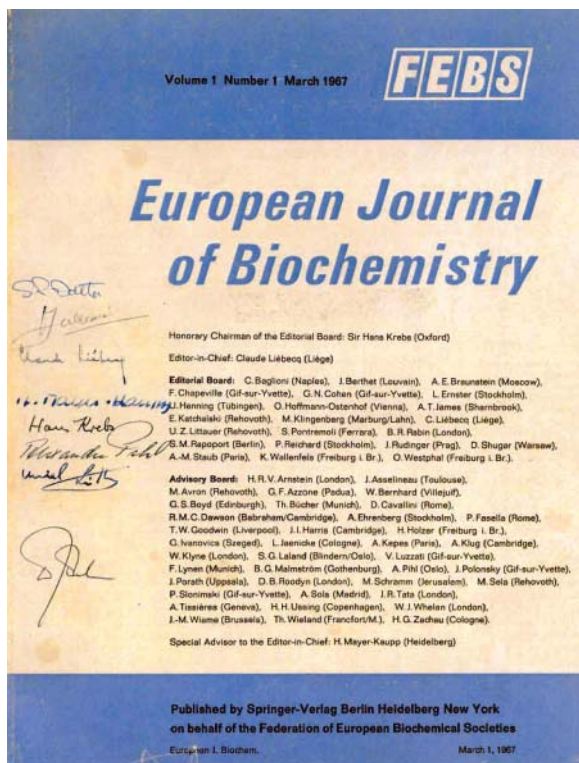


Figure 6.3.2 The first cover of the European Journal of Biochemistry in 1967.

journal. In keeping with FEBS policy, all articles are made available on the web free of charge one year after publication and, as a service to the community, all reviews are published online free of charge and without delay from the time of final acceptance.

From 1999 onwards, the Journal is published in conjunction with Wiley-Blackwell Publishing in Oxford and appears twice a month.

### 6.3.1

#### First 25 Years of EJB

The following 11 pages (pp. 8–18) have already been published in the FEBS 40 Years Memoir.

Eur. J. Biochem. 204, 421–432 (1992)  
© FEBS 1992

With kind regards,  
Claude Liébecq

## A brief history of the *European Journal of Biochemistry* on the occasion of its 25th anniversary

Claude LIÉBECQ, past chairman

(Received January 8, 1992) – EJB 92 0021

The activities of the Federation of European Biochemical Societies (FEBS) developed stepwise but fairly rapidly.

In the summer of 1963, the British Biochemical Society had invited delegates of the European biochemical societies to meet in Oxford. The assembly proposed that a Federation of European Biochemical Societies be set up. The Federation was launched 1 January 1964 with the late Frank C. Happold as first chairman.

The first meeting of the Federation was held in London in March 1964. William J. Whelan acted as secretary of the meeting and S. Prakash Datta acted as treasurer. They were later appointed Secretary General and Treasurer of the Federation and therefore became involved in the subsequent creation and running of the two FEBS journals.

The year 1965 saw the first 'FEBS Summer School' organized in Louvain by Christian de Duve.

Otto Hoffmann-Ostenhof succeeded Happold as chairman of FEBS and organized its second meeting in Vienna in the spring of 1965. Whelan suggested there that FEBS might venture into the field of publication. A subcommittee of the Council was appointed and invited to report to the Council within a year.

At the third FEBS meeting, held in Warsaw in the spring of 1966, the Council accepted the recommendation that a FEBS journal be launched. The first issue of the *European Journal of Biochemistry* (thereafter named 'the Journal') appeared in March 1967.

The year 1968 saw the first issue of the second FEBS journal, named *FEBS Letters* and devoted to the fast publication of short communications.

Thus, in just five years, the initial activities of the Federation were already established. The financial success of the two FEBS journals made possible the subsequent development and funding of the FEBS Advanced Courses, the creation of the Youth Travel Fund and of the FEBS Fellowships.

The subcommittee of the FEBS Council, appointed to examine the feasibility of launching a FEBS journal, consisted of Jean Courtois, Otto Hoffmann-Ostenhof, Uriel Z. Littauer, Pavao Mildner, Peter Reichard, William J. Whelan and myself. It met in Courtois' office in Paris in November 1965.

The recommendation was made to found a conventional journal for the publication of regular extended papers rather than short communications which had been Whelan's original idea. A decentralized structure was proposed, in which each editor was to be responsible for a specific field. Names were listed for such functions and, addressing me at the end of the meeting, Whelan said: "You will be the editor-in-chief."

This was unexpected and a great surprise, to me at least. My wife remembers however that Littauer had told her at the final dinner in a castle near Vienna half-a-year before: "I have a job for your husband; I think he will like it."

I had had some experience in publication while editing the proceedings of the meetings of the Belgian Biochemical Society and the *Proceedings of the Third International Congress of Biochemistry* (Brussels, 1955) published as a book by Academic Press. I accepted the proposal as a challenge without realizing how much it would eventually affect my life.

What happened next turned out to be of great importance. As I was not involved in the discussion, I shall paraphrase Whelan's account of it in the 10th FEBS-anniversary supplement of *FEBS Letters* [FEBS Lett. 40, S154–S159 (1974)]. Whelan writes that Theodor Bücher, invited to lecture at the Middlesex Hospital in March 1966, had, during a convivial evening, explained that he had become the President of the German *Gesellschaft für Biologische Chemie* and was keenly interested in sponsoring cooperation of the type for which FEBS had been designed. Specifically, he wished to propose that instead of FEBS founding a new journal, he would use his best efforts to persuade his Society, in turn, to persuade Springer-Verlag to agree to convert the *Biochemische Zeitschrift* into the FEBS journal. This proposal was very well received by Council when it met a few weeks later in Warsaw under the chairmanship of Kazimierz Zakrzewski.

Negotiations with Springer-Verlag started immediately. Datta, Whelan and myself represented the Federation. Heinz Götze, at the time *Mitnhaber des Springer-Verlags* and Hermann Mayer-Kaupp, *Wissenschaftlicher Verlags-Direktor* represented the Publisher. An agreement was rapidly reached. The possibility of including *Hoppe-Seyler's Zeitschrift für Physiologische Chemie* into the new scheme was envisaged a little later, but abandoned<sup>1</sup>.

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Abbreviations. CBN, IUPAC-IUB Commission on Biochemical Nomenclature; CEBJ, Commission (later named Committee) of Editors of Biochemical Journals of IUB; FEBS, Federation of European Biochemical Societies; IUB, International Union of Biochemistry, recently renamed International Union of Biochemistry and Molecular Biology (IUBMB); IUPAC, International Union of Pure and Applied Chemistry.

<sup>1</sup> We met the delegates of the journal and of their publishers, Walter de Gruyter, in Heidelberg. We only had dinner with them as they had just informed Springer-Verlag of their decision not to join us to keep alive a German biochemical journal where most of the activities of the *Gesellschaft für Biologische Chemie* are still reported. I mention this because I remember having been terribly impressed by the size and appearance of these two gentlemen, Peter Karlson and Joachim König. I have since met Karlson regularly at the annual meetings of the commissions on biochemical nomenclature and found him friendly and pleasant.



**Fig. 1. The creation of the Journal and its early history.** Upper line. Claude Liébecq, delegate of the Belgian Biochemical Society, and Kazimierz Zakrzewski, delegate of the Polish Biochemical Society, attend the second meeting of FEBS Council in Vienna (1965) at which the creation of a FEBS journal was proposed by Whelan (Zakrzewski chaired Council in Warsaw the following year, when the creation of the Journal was decided); Theodor Bücher, President of the (West) German Biochemical Society who suggested that the new FEBS journal might be the successor of *Biochemische Zeitschrift*; Datta and Whelan, together with Brenda Ryman, arrive on the campus of Oslo University in 1967 to attend the fourth meeting of FEBS where the *European Journal of Biochemistry* was displayed for the first time (Brenda recorded the minutes of the Council meetings). Lower line. The negotiators: S. Prakash Datta, Treasurer of FEBS; Hermann Mayer-Kaupp, director of the Science Division at Springer-Verlag; William J. Whelan, Secretary General of FEBS.

Independently of financial considerations, it was agreed that our Journal would not replace *Biochemische Zeitschrift* but would 'continue' its tradition; this is mentioned at the beginning of all issues of the Journal.

The 'continuation' meant, of course, that some members of the Editorial Board of *Biochemische Zeitschrift* would have to join the Editorial Board of the new journal, while others would eventually be invited to join its Advisory Board.

The first Editorial Board consisted of Corrado Baglioni, Jacques Berthet, Aleksander E. Braunstein, François Chapeville, Georges N. Cohen, Lars Ernster, Ulf Henning, Otto Hoffmann-Ostenhof, Anthony T. James, Ephraim Katchalski, Martin Klingenberg, Uriel Z. Littauer, Sandro Pontremoli, Brian R. Rabin, Samuel M. Rapoport, Peter Reichard, Josef Rudinger, David Shugar, Anne-Marie Staub, Kurt Wallenfels, Otto Westphal and myself.

Its first meeting took place in Heidelberg on the 26th and 27th of July 1966. The Board invited Sir Hans Krebs to become Honorary Chairman of the Editorial Board and appointed an Advisory Board. The original decentralized struc-

ture was completely abandoned by the assembly, which decided that the sole editor-in-chief would accept or refuse papers after consultation of appropriate referees, members of the boards or not. The Board adopted the present name of the Journal (*FEBS Journal* had been favoured by the Publisher), its cover, designed by David Thomas, honorary consultant in typography to University College London, its layout<sup>2</sup>, its editorial policy (essentially unchanged since) and handling of manuscripts.

My collaboration with Springer-Verlag has a precise name: Hermann Mayer-Kaupp who has become a friend. He had been trained as a chemist under Heinrich Wieland in Freiburg i.Br. and in Munich where he had obtained his Ph.D. I soon appreciated his experience and his judgment; he was fair and honest in his advice while remaining loyal to his employer.

<sup>2</sup> I remember Littauer insisting that the illustrations should have no grid as had been the tradition in *Biochemische Zeitschrift* and that titles such as 'Prof. Dr. Dr. med. h.c.' be omitted from the postal addresses printed at the end of papers.



**Fig. 2. The first Editorial Board of the Journal.** In alphabetical order, from left to right and from top to bottom: Corrado Baglioni (Napoli), Aleksander E. Braunstein (Moskva), François Chapeville (Gif-sur-Yvette), Georges N. Cohen (Gif-sur-Yvette), Lars Ernster (Stockholm), Ulf Henning (Tübingen), Otto Hoffmann-Ostenhof (Wien), Anthony T. James (Sharnbrook), Ephraim Katchalski (Rehovot), Martin Klingenberg (Marburg), Claude Liébecq, editor-in-chief (Liège), Uriel Z. Littauer (Rehovot), Sandro Pontremoli (Ferrara), Brian R. Rabin (London), Samuel M. Rapoport (Berlin), Peter Reichard (Stockholm), Josef Rudinger (Praha), David Shugar (Warszawa), Anne-Marie Staub (Paris), Kurt Wallenfels (Freiburg i. Br.) and Otto Westphal (Freiburg i. Br.). Not shown: Jacques Berthet (Louvain).

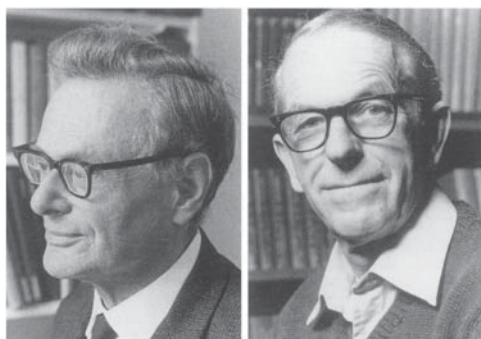


Fig. 3. Honorary chairmen of the Editorial Board. Sir Hans Krebs, Oxford (1966–1981); Frederick Sanger, Cambridge (1985–).

The Editorial Board accepted my proposal to appoint him 'Special Adviser to the Editor-in-chief', a rôle which he assumed even after his retirement<sup>3</sup>.

It had clearly been an advantage to 'continue' a well-established journal rather than start *de novo*: we had 1450 institutional and 350 personal subscriptions by the middle of June 1967 when I first reported to the Council of FEBS in Oslo.

There was a risk, however, that the German contribution would be excessive. The first manuscript was received in September 1966; it came from Marburg and was written in German. By the end of May 1967, we had received 165 manuscripts, one-third only coming from German-speaking countries. Half of them were already in English; the use of the German language spontaneously faded in four to five years. Next came the contribution from France; it represented one-fifth of the total. One-fifth of them only were in English; the use of the French language faded more slowly<sup>4</sup>.

The first volume of the Journal contained a few invited papers, received from S. Ochoa, President of the International Union of Biochemistry, and from B. L. Horecker and E. C. Slater, editors of *Archives of Biochemistry and Biophysics* and of *Biochimica et Biophysica Acta*, respectively.

The volume also contained the description of the 'protein sequenator', by P. Edman and G. Begg. We owed this favour to a trip Samuel M. Rapoport had made to Australia a few months before; he had visited the St-Vincent's School of Medical Research in Melbourne and convinced Edman to offer his contribution for the first issue of the Journal. This soon became one of *Current Contents*' 'citation classics'. It helped establish the reputation of the Journal at once.

<sup>3</sup> On that particular occasion, I told him: *Sie haben die Erfahrung und die Qualität des deutschen wissenschaftlichen Verlagswesens der FEBS zu Verfügung gestellt. Diese Industrie hat wahrscheinlich auch ihre Fehler, aber Sie haben dafür gesorgt, daß wir sie nie bemerkt haben ... Ich bin sicher, daß Ihre erfolgreichen Anstrengungen auf fruchtbaren Boden gefallen sind, und der Zusammenarbeit zwischen dem Springer-Verlag und FEBS einen zuversichtlichen und glücklichen Geist eingegeben hat, der nach Ihrem Ausscheiden fortbestehen wird.*

<sup>4</sup> The Journal still accepts manuscripts written in French or German.

As I had joined the IUPAC-IUB Commission on Biochemical Nomenclature (CBN) a few years before, and as Hoffmann-Ostenhof was its chairman, the volume contained three documents on biochemical nomenclature. The Journal has since published all the nomenclature documents prepared by the successive commissions on biochemical nomenclature of the International Union of Biochemistry (IUB), jointly with the International Union of Pure and Applied Chemistry (IUPAC) in many cases<sup>5</sup>.

In 1968, the Journal applied for corresponding membership of the IUB Commission of Editors of Biochemical Journals (CEBJ). The commission had been created at the time of the 5th International Congress of Biochemistry (Moscow, 1961) when the *Report of the Commission on Enzymes* was presented to the congress. Marcel Florkin, President of IUB, believed that the recommendations of the report would not be followed if they were not accepted by the editors of the major biochemical journals. IUB therefore created its Commission of Editors<sup>6</sup> to consult them. The recommendations were accepted by the Commission. The latter was later consulted regularly on the drafts of the nomenclature documents before approval for publication by IUB.

The Commission met in Bellagio (at the beautiful Villa Serbelloni, owned by the Rockefeller Foundation) in the spring of 1968. It reorganized its structure; a core of ten so-called 'major' journals of general biochemistry became full members and a much larger group of other journals were corresponding members. Our journal was recognized as one of the 'major' journals. E. C. Slater was appointed president of the commission and I became its secretary.

Our editorial office was initially located in my laboratory at the 'Rue des Bonnes-Villes'. It was moved to an apartment at the 'Boulevard de la Constitution' in September 1970 where it remained until the end of September 1988 when it was transferred to its present location in Zurich.

It had been agreed with Springer-Verlag that we would be responsible for the copy-editing of the manuscripts. We therefore looked for a copy-editor and were lucky to secure the collaboration of Sheila A. Brooks, a former Ph. D. student of Datta at University College London. She came to Liège for an interview in July 1967, proved her willingness to collaborate with a continental biochemist by accepting to eat frogs' legs in a restaurant and started working immediately. Sheila is still preparing about a third of the papers accepted by the Zurich office and will celebrate the 25th anniversary of her collaboration with the Journal next summer. I offer her my warmest thanks for her excellent work.

Sheila drafted the Instructions for the copy-editing of the manuscripts, still used by those editing the manuscripts in Zurich. She knows the nomenclature documents better than I

<sup>5</sup> Their list may be found in Table 1 of the Journal's 'Information for Authors'. The Journal has either printed the Recommendations directly, offering one-side prints for offset reproduction in other journals, or reproduced them from previous printing in other journals. This has been common practice among member journals of the IUB Committee of Editors of Biochemical Journals (CEBJ). The Journal has also published the numerous 'supplements' to successive editions of *Enzyme Nomenclature*, the latter published in book form elsewhere.

<sup>6</sup> The commission consisted of the editors of *Annual Review of Biochemistry*, of *Archives of Biochemistry and Biophysics*, of the *Biochemical Journal*, of *Biochimica et Biophysica Acta*, of *Biokhimiya*, of the *Bulletin de la Société de Chimie Biologique*, of *Hoppe-Seyler's Zeitschrift für Physiologische Chemie* and of the *Journal of Biological Chemistry*. Other journals joined later as corresponding members.



**Fig. 5.** Meeting of the officers of IUB and of the members of CBN and of CEBJ in Bellagio (1968). From left to right. Sitting: William Klyne (CBN), Waldo E. Cohn (secretary of CBN), Otto Hoffmann-Ostenhof (chairman of CBN), Pierre Desnuelle (secretary general of IUB), Hugo Theorell (president of IUB), Frank C. Young (treasurer of IUB), John T. Edsall (*Journal of Biological Chemistry* and outgoing president of CEBJ), W. V. Thorpe (outgoing secretary of CEBJ), Sergei I. Severin (*Biokhimiya*), and Bernard L. Horecker (CBN and *Archives of Biochemistry and Biophysics*). Standing: Joseph S. Fruton (CBN), Edwin C. Webb (CBN), Peter Karlson (CBN), Borivoj Keil (CBN), Claude Liébecq (CBN and *European Journal of Biochemistry*, new secretary of CEBJ), Aleksander E. Braunstein (CBN and *Molekulyarnaya Biologiya*), S. Veibel (observer at the CBN meeting), E. C. Slater (CBN and *Biochimica et Biophysica Acta*, new president of CEBJ), Alfred Dillmann (*Hoppe-Seyler's Zeitschrift für Physiologische Chemie*), W. N. Aldridge (*Biochemical Journal*), Edmond H. Fischer (*Biochemistry*) and John C. Kendrew (*Journal of Molecular Biology*). Present at the meeting but not on this photograph: François Percheron (*Bulletin de la Société de Chimie Biologique*).

do. She lives in Bristol<sup>7</sup> where she maintains useful contacts with the biochemists of its university. We sent her to refresher courses and conferences to enable her to keep abreast of new developments.

We had other copy-editors in addition to her: Mary Fox, Jane Sugarman and Diana Steeds, all working under Sheila's supervision. All manuscripts written in English were edited in England until 1988. The manuscripts written in German were edited by Margarete Bülow, a former pupil of Heinrich Wieland, recommended by Mayer-Kaupp. She had been working for Tropen-Werke in Cologne. The manuscripts written in French were edited in Liège.

The number of manuscripts exceeded 50 per month at the beginning of 1971. We needed the help of a young biochemist to become editorial secretary. We advertised the position in *Nature* and received a single application from a young man named Parmjit S. Sood. He had been trained as a biochemist at Chelsea College of Technology in London. He lived in the U.S.A. at the time of his application. Fortunately Shugar, a

member of our Editorial Board, often commuted between Warsaw, where he was established, and Canada, his country of origin. He interviewed the candidate and found him suitable for the job. Sood joined our office in July 1971 and remained four years with us. He was very efficient and we liked him very much<sup>8</sup>. He left for a business career.

We received five or six applications when we appointed our second editorial secretary, Alan S. Beedle, a former Ph. D. student of Trevor W. Goodwin at the University of Liverpool. He stayed from August 1975 until the end of October 1979. He was a reliable and hard worker. He competently compiled the 1978 edition of *Biochemical Nomenclature and Related Documents* which our office prepared for the International Union of Biochemistry. He left to join the Biochemical Society where he is now editorial manager of the *Biochemical Journal*.

Gabor Igloi, his successor, of Hungarian origin, had completed his Ph.D. at the University of York. He came from Friedrich Cramer's laboratory at the Max-Planck-Institut für

<sup>7</sup> Sheila's husband worked on the Concorde project when a long postal strike hit Britain some 15 years ago. This proved very useful as he arranged for his company to fly Sheila's mail to the Rolls-Royce office in Paris wherefrom it was forwarded to Springer-Verlag in Heidelberg. We carried the accepted manuscripts once a week to University College London wherefrom an inter-university mail service brought them to Bristol University.

<sup>8</sup> The only problem was that, being of Indian origin, he had learned geography in Kenya where his parents lived at that time. He did not know much of the European continental geography and had the unfortunate tendency to place all the German cities in the Federal Republic. We bought an atlas to help him discover the cities of the German Democratic Republic.



**Fig. 6.** The managing editors of the Journal. In alphabetic order, from left to right and from top to bottom: Giorgio Bernardi, Paris (1977–1987); Philipp Christen, Zürich (1988–); Michael J. Clemens, London (1988–); J. Ieuan Harris, Cambridge (1976–1978); Cornelis W. Hilbers, Nijmegen (1989–); Eberhard Hofmann, Leipzig (1987–); Louis Hue, Bruxelles (1988–1990); Lothar Jaenicke, Köln (1976–1985); Pierre Jollès, Paris (1979–1989); Hans Jörnvall, Stockholm (1990–); Claude Liébecq, Liège (1966–1989); Walter Neupert, München (1987–1991); David G. Nicholls, Dundee (1986–); Gösta Pettersson, Lund (1989–); Hans-Dieter Söling, Göttingen (1986); Cees Veeger, Wageningen (1975–1988); Johannes F. G. Vliegthart, Utrecht (1990–). Not shown: August Böck, München (1992–); Hugo Fasold, Frankfurt a. M. (1992–); Jean Girard, Meudon (1991–); Wolfram Zillig, Martinsried (1976).







**Fig. 7.** Some of the early members of our editorial or advisory boards. Giovanni F. Azzone (Padova), Wilhelm Bernhard (Villejuif), George S. Boyd (Edinburgh), Richard Braun (Bern), Theodor Bücher (München), Rex U. C. Dawson (Babraham), Karl Decker (Freiburg i.Br.), Walter C. Fiers (Gent), Georgyi P. Georgiev (Moskva), Jean-Marie Ghuyens (Liège), Trevor W. Goodwin (Liverpool), H. Géry Hers (Louvain/Bruxelles), Helmut Holzer (Freiburg i.Br.), Kasper Kirschner (Basel), William Klyne (London), Belisario P. Lisboa (Stockholm/Hamburg), Feodor Lynen (München), Peter Mitchell (Bodmin), Dirk Pette (Konstanz), Jens G. Reich (Berlin), Michael Sela (Rehovot), Alberto Sols (Madrid), Frantisek Šorm (Praha), Aleksander S. Spirin (Pushchino), Jamshed R. Tata (London), Theodor Wieland (Frankfurt a.M./Heidelberg) and Hans G. Zachau (München).

Experimentelle Medizin in Göttingen when he joined us in October 1979. Very able and distinguished, we all liked him at the office. He left in May 1981 to go back to research in Freiburg i. Br. His wife, Marilyn Igloi-Glaisher, is now editing the occasional manuscripts written in German.

The fourth editorial secretary, Sarah L. Meredith, of Welsh origin, had taken a bachelor degree in Aberdeen and the equivalent of a master degree in Strasbourg. She joined us in April 1981. She devised and developed the computer programme introduced in 1988 for the handling of manuscripts, the routine mail and the statistical documentation. She was unable, for family reasons, to accept Philipp Christen's invitation to run the editorial office in Zurich. She is now working for PanEuropean Publishing Company, a division of Elsevier Librico.

John W. Aitken, a Ph.D. and a native of Scotland, is the present editorial manager of the Journal in Zurich. He actually started when the office was still in Liège, to get acquainted with the work. We had received more than 50 applications when we advertised the position in the spring of 1988.

We had probably more than 30 secretaries or typists in the course of more than 20 years of activity in Liège. Their turnover rate was rather high. I only wish to mention our last two secretaries who collaborated with me for more than 15 years, namely Nicole Arnould and Anny Dubois. I thank them for their valuable and faithful contribution, noting in particular that they helped train part of the new staff, thus ensuring the smooth transfer to Zurich.

Important changes for the editorial handling of manuscripts started in 1975 and developed rapidly. It had become difficult for me and for the editorial secretary to select the best possible referees in fields with which we were not familiar enough. I therefore asked the Publications Committee of FEBS to appoint associate editors. I am grateful to Bo G. Malmström, its chairman at the time, for his support in this respect.

Cees Veeger was appointed to deal with physico-chemical and enzymology papers in 1975. This was followed, in 1976, by the appointment of J. Ieuan Harris for protein chemistry papers, of Lothar Jaenicke for chemistry and biology papers and of Wolfram Zillig for molecular biology papers. The latter resigned and was replaced by Giorgio Bernardi who also handled papers dealing with molecular genetics. Pierre Jollès was appointed, after the death of Harris, to handle papers dealing with proteins and glycoproteins.

We eventually formed a board of managing editors which I chaired. The group remained unchanged until 1986 and ensured the successfully diversification of the Journal at a time when newly created journals started competing for European



**Fig. 8.** Our chief copy-editor. Sheila A. Brooks.

papers in the fields of molecular and cellular biology. FEBS should be proud of their invaluable contribution. I thank them for their devoted and friendly collaboration.

I also wish to thank the numerous colleagues who accepted the invitation to join our editorial and advisory boards. Their names are listed in the Appendix. They provided about one-half of all the reports received at the editorial office. The other half came from hundreds of outside referees listed and thanked annually in the first January issue of the Journal. We are most indebted to all of them.

The Journal maintained a centralized office but the fate of submitted manuscripts had become the responsibility of the various managing editors. The wish to decentralize the secretarial machinery was occasionally advocated by some editors but soon abandoned as the result of experimental trials<sup>9</sup>. A permanent office is necessary since manuscripts and corrected proofs arrive at any time of the year, whereas individual editors may be away for lecturing tours or attending congresses.

The publications Committee of FEBS observed that the rôle of the Editorial Board of the Journal had become somewhat redundant as we now had a board of managing editors able to discuss matters of scientific policy and to appoint the

<sup>9</sup> The idea was definitively abandoned when the handling of manuscripts was computerized in the office and complemented by Telefax communications with the editors.



Fig. 9. At the 17th FEBS meeting in Berlin West (1986). The stand of the *European Journal of Biochemistry*. Sitting: Sarah L. Meredith, editorial secretary.

members of the Advisory Board. The Editorial Board was therefore disbanded at the end of 1983.

The Publications Committee also fixed an age limit of 65 years for the managing editors. It later decided that their terms of office should be restricted to two times five years. This led to the progressive renewal of the group of managing editors. All had been replaced at the end of 1989.

Because biochemistry, in the wide sense of the word, continued to expand in various directions, editors rotating out have often been replaced by two persons. Philipp Christen, the present chairman, has in fact rebuilt an Editorial Board, now composed of eleven members: August Böck (München), Michael J. Clemens (London), Hugo Fasold (Frankfurt a.M.), Jean Girard (Meudon), Cornelis W. Hilbers (Nijmegen), Eberhard Hofmann, reviews editor (Leipzig), Hans Jörnvall (Stockholm), David G. Nicholls (Dundee), Gösta Pettersson (Lund), Johannes F. G. Vliegthart (Utrecht) and himself, chairman (Zürich). The Board has an honorary chairman, Frederick Sanger (Cambridge), who succeeded Sir Hans Krebs and an honorary member, myself, occasionally taking the risk of offering 'honorary suggestions'. This Editorial Board differs from the original one in that each of its members has a specific editorial responsibility.

The Journal has published more than 12000 regular papers in 25 years. It has also published most of the Sir Hans Krebs lectures and other plenary lectures given at the FEBS meetings with the exception of the Datta lectures which are published in *FEBS Letters*.

A limited number of 'Letters to the editors' were published some years ago, but this activity was discontinued for lack of interest. The first one, however, provided evidence for the only case of fraud we know of in an earlier paper published in the Journal.

More successful is the publication of some 70 reviews since 1987. This was made possible by the unwearrying efforts of Eberhard Hofmann, reviews editor appointed to this effect.

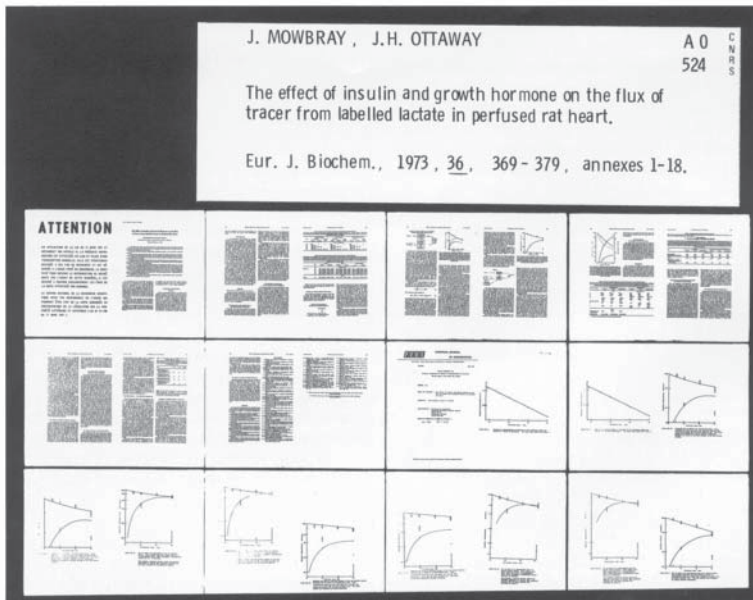


Fig. 10. A microfiche of the *Archives originales du Centre National de la Recherche Scientifique*. The microfiches reproduced the published pages of the paper and the annexes consisting of auxiliary material of interest to a more limited number of readers. They could be ordered as microfiches or as full-size photographs of the successive pages. The scheme was abandoned when I discovered that no microfiche had been sold, although I have been told that some had been ordered. The Journal now prints this auxiliary material in 'very-small print'.

Fanfare on FEBS

FEBS, cet air éternel .....

A CLAUDE LIEBECCQ, notre cher et très estimé rédacteur en chef,  
à l'occasion de son 60<sup>e</sup> anniversaire  
et en reconnaissance de ses efforts multiples et inlassables pour  
EUROPEAN JOURNAL OF BIOCHEMISTRY

Springer-Verlag  
Heidelberg, le 28 septembre 1981

© FEBS owns the right to use this Fanfare on all FEBS congresses and symposia.

**Fig. 11. Fanfare for FEBS.** Springer-Verlag offered the 'Fanfare for FEBS' to the Federation on the occasion of my 60th birthday. FEBS owns the right to use it at all FEBS meetings.

Springer-Verlag reprints the reviews in book form (the *EJB Reviews*) annually since 1989.

There has never been a limit – either upper or lower – to the length of the published papers. The Journal hardly published short papers, as FEBS had created *FEBS Letters* for this purpose. We have always kept close contacts with Prakash Datta, managing editor of *FEBS Letters*, to avoid undue competition in the quest for editors in particular. Datta attended most of the meetings of our editorial board and of our board of managing editors. Would he please accept my warmest thanks for 25 years of most friendly cooperation?

As treasurer of FEBS he also provided the editorial office with the money necessary for its expenses. Together with him, we negotiated a new and far more favourable agreement with Springer-Verlag which took effect in January 1980. The substantial profits of the Journal's operation now represent about one-third of the net income of FEBS.

The Journal owes its success to its authors first, to its editors and advisors, to its copy-editors, to the staff of the editorial office, of the publisher and of the printer, Wiesbadener Graphische Betriebe. I thank them all as they have enabled me to enjoy a wonderful experience.

Sorry to have been too personal.

**APPENDIX**

**Members of our boards: editors and advisors**

I apologize for possible omissions.

- E. Appella (Bethesda, Maryland, USA), Ruth Arnon (Rehovot, Israel), H. R. V. Arnstein (London, England), J. Asselineau (Toulouse, France), F. W. Avilés (Barcelona, Spain), S. Avrameas (Paris, France), M. Avron (Rehovot, Israel), G. F. Azzone (Padova, Italy), C. Baglioni (Napoli, Italy/Cambridge, Massachusetts, USA/Albany, New York, USA), R. Banerjee (Paris, France), Barbara E. C. Banks (London, England), E. K. F. Bautz (Heidelberg, Germany), A. Bax (Bethesda, Maryland, USA), H. Beaufay (Bruxelles, Belgium), L. D. Bergelson (Moskva, Russia), A. Bernardi (Gif-sur-Yvette, France), G. Bernardi (Strasbourg, France/Paris, France), W. Bernhard (Viljeuif, France), U. Bertazzoni (Pavia, Italy), J. Berthet (Louvain, Belgium), H. Betz (Heidelberg, Germany/Frankfurt a.M., Germany), T. A. Bickle (Basel, Switzerland), A. Billiau (Leuven, Belgium), H. Bloemendal (Nijmegen, The Netherlands), A. Böck (München, Germany), L. Boross (Budapest, Hungary), F. Bossa (Camerino, Italy/Roma, Italy), G. S. Boyd (Edinburgh, Scotland), E. M. Bradbury (Portsmouth, England/Davis, California, USA), R. Braun (Bern, Switzerland), A. E. Braunstein (Moskva, Russia), R. C. Bray (Brighton, England), J. Bremer (Oslo, Norway), M. A. Bretscher (Cambridge, England), R. C. L. Brimacombe (Berlin, Germany), H. Buc (Paris, France), T. Bücher (München, Germany), Margaret E. Buckingham (Paris, France), P. H. W. Butterworth (London, England), E. Carafoli (Modena, Italy/Zürich, Switzerland), D. Cavallini (Roma, Italy), M. Chabre (Valbonne, France), P. Chambon (Strasbourg, France), F. Chapeville (Gif-sur-Yvette, France/Paris, France), P. Christen (Zürich, Switzerland), M. J. Clemens (London, England), K. J. Clemetson (Bern, Switzerland), G. N. Cohen (Gif-sur-Yvette, France/Paris, France), J. W. Cornforth (Brighton, England), A. Cornish-Bowden (Birmingham, England/Marseille, France), R. Cortese (Heidelberg, Germany), C. Crane-Robinson (Portsmouth, England), R. R. Crichton (Louvain-la-Neuve, Belgium), M. Crompton (London, England), K. Dalziel (Oxford, England), R. M. C. Dawson (Babraham, England), K. Decker (Freiburg i.Br., Germany), G. H. De Haas (Utrecht, The Netherlands), J. Demaille (Montpellier, France), P. De Meyts (Bruxelles, Belgium/La Jolla, California, USA), B. Dobberstein (Heidelberg, Germany), W. Doerfler (Köln, Germany), L. B. Dolapchiev (Sofiya, Bulgaria), J. O. Dolly (London, England), H. Durchschlag (Regensburg, Germany), J. Duszynski (Warszawa, Poland), H. Dutler (Zürich, Switzerland), J. P. Ebel (Strasbourg, France), A. Ehrenberg (Stockholm, Sweden), H. Eisenberg (Rehovot, Israel), R. J. Ellis (Coventry, England), L. Ernster (Stockholm, Sweden), P. Fasella (Roma, Italy/Bruxelles, Belgium), H. Fasold (Frankfurt a.M., Germany), T. Feizi (Harrow, England), W. C. Fiers (Gent, Belgium), J. Filipiski (Paris, France), J. Finne (Kuopio, Finland/Turku, Finland), A. Fontana (Padova, Italy), B. Fournet (Villeneuve-d'Ascq, France), F. Franěk (Praha, Czechoslovakia), H. Frauenfelder (Urbana, Illinois, USA), E. Fredericq (Liège, Belgium), D. G. Gallwitz (Göttingen, Germany), C. Gancedo (Madrid, Spain), P. B. Garland (Dundee, Scotland/Sharnbrook, England), G. P. Georgiev (Moskva, Russia), G. Gerisch (Martinsried, Germany), S. Ghisla (Konstanz, Germany), J. M. Ghuysen (Liège, Belgium), J. Girard (Meudon, France), F. Goñi (Bilbao, Spain), T. W. Goodwin (Liverpool, England), G. Gottschalk (Göttingen, Germany), D. B. Gower (London, England), L. A. Grivell (Amsterdam, The Netherlands), H. Grosjean (Rhode-Saint-Genève, Belgium), A. A. Hadjiolov (Sofiya, Bulgaria), Anne-Lise Haenni (Paris, France), D. O. Hall (London, England), D. G. Hardie (Dundee, Scotland), J. I. Harris (Cambridge, England), D. Hayes (Paris, France), Edith Heilbronn (Stockholm, Sweden/Sundbyberg, Sweden), L. Heilmeyer (Bochum, Germany), C. H. Heldin (Uppsala, Sweden), E. Helmreich (Würzburg, Germany), P. Hemmerich (Konstanz, Germany), F. W. Hemming (Nottingham, England), U. Henning (Tübingen, Germany), Agnès Henschen-Edman (Martinsried, Germany), H. G. Hers (Louvain, Belgium/Bruxelles, Belgium), J. Higgins (Philadelphia, Pennsylvania, USA), C. W. Hilbers (Nijmegen, The Netherlands), H. Hilz (Hamburg, Germany), B. Hirt (Lausanne, Switzerland/Epalinges, Switzerland), O.

## 6.3.2

## Editorial for EJB in 1999



Richard Perham

Chairman of the Editorial Board

1999 sees some major changes in the *European Journal of Biochemistry*. First, my predecessor as Chairman of the Editorial Board, Professor Philipp Christen of the University of Zürich, retired from the post in July 1998. I felt privileged by the invitation from the Federation of European Biochemical Societies to succeed him. During the 10 years of Philipp's stewardship of the journal, *EJB* has responded to many new developments in the subject and the changing circumstances of the academic publishing world. FEBS is deeply grateful. Likewise, I record my thanks to Dr Jane Roscoe, our new Editorial Manager, who has helped me set up the Editorial Office in Cambridge and has managed the transfer of responsibilities from Zürich with no serious disruption to the smooth service offered to our authors.

Another major change is that of our publishing partners. Since its inception in 1967, the journal has been associated with Springer-Verlag of Heidelberg,



Figure 6.3.3 Cover from EJB for the FEBS Meeting in 2001.

who have given to it over 30 years of dedicated service. I take this opportunity to express my sincere appreciation of the help and advice, not to mention the hospitality, of Dr Dieter Czeschlik and his staff. It was not a decision taken lightly by the Publications Committee of FEBS to place the journal in different hands, but we now welcome a new – and we hope long and productive – association with Blackwell Science. Blackwell Science is one of the world's leading publishers of academic journals, used to working with learned societies, and well placed to respond to the changes, foreseen and unforeseen, that we may wish to undertake.

So, what is happening now? The *European Journal of Biochemistry* will remain an international journal devoted to the rapid publication of full-length papers describing original research in the areas of biochemistry, molecular and cell biology, and molecular biophysics. But we will be broadminded in our interpretation of these terms and keen to pursue exciting new developments in any area of the life sciences that can reasonably claim a proper molecular basis. Preference will be given to papers that advance new concepts or develop new experimental approaches. To help with these new developments, we are recruiting additional members of the Editorial Board to join the existing Editors, all of whom are outstanding experts in their respective specialties. We will be paying special regard to the needs of readers and contributors from outside Europe and especially in North America and the Pacific.

There are significant changes in the outward appearance of the journal, but most importantly there are big advances in our publication schedule. In normal circumstances, we plan to have an evaluation of a conventional paper within 6 weeks of receipt and, with the commitment to rapid publication by Blackwell Science, a time from acceptance to publication of only a further 6 weeks. We believe this remarkable speed of handling, achieved without loss of the traditionally high standards of the journal in copy-editing, typesetting and printing, will be unmatched among major journals devoted to full-length papers. To this we are adding the benefits of no page charges, 50 free reprints, and the possibility of including colour figures free of charge where the Editor judges it to be valuable and necessary.

Another big advance comes with the electronic version of the journal available through the Blackwell Science service *Synergy* (<http://www.blackwell-science.com/synergy>) from 1 January 1999 and on the *HighWire* platform, in conjunction with other prominent journals in related areas of the subject, from 1 March 1999 (<http://highwire.stanford.edu/>). Both Blackwell Science and HighWire Press will provide free access for 3 months to the electronic editions of *EJB*. Associated with this, we have agreed that the electronic version of any paper published via the Blackwell Science service may have any relevant figure in colour free of charge at the author's request.

Although the primary purpose of the journal is to publish original research reports, the reviews and mini-reviews that *EJB* has published in recent years have proved to be very popular and these will be continued and expanded. Professor Ferdinand Hucho, a current member of the Editorial Board, has assumed general responsibility for reviews, and we look forward to a flow of exciting topics,

both submitted by and solicited from potential authors. In 1999 we will provide free access to all review articles published in the journal via the electronic edition available via Blackwell Science.

The *European Journal of Biochemistry* is a FEBS journal, published on behalf of the Federation of European Biochemical Societies. It has a long and distinguished history. With the changes outlined above, we trust that it will continue to grow as an important international forum for the rapid dissemination of exciting new results in the molecular life sciences. Remember: a leading journal taken world-wide with a remarkable schedule of rapid publication, no page charges, 50 free reprints, free colour figures where necessary, a highly accessible electronic version with the possibility of free colour figures on request, and a helpful staff in the Editorial Office in Cambridge to deal with your needs. We look forward to receiving some of your best work now and in the years to come.

### 6.3.3

#### The European Journal of Biochemistry in January 2003



*Richard Perham*

*Chairman of the Editorial Board*

The *European Journal of Biochemistry* has evolved substantially since 1998, not least in its coverage of the new growth points of the subject. Most obviously, perhaps, we have strengthened our presence in the areas of structural biology, molecular cell and developmental biology, neurobiology and bioinformatics.

The Editorial Board has changed likewise. In addition to the retirement of Philipp Christen as Chairman, other long-serving members have also departed. Among them we count Hugo Fasold (Frankfurt, Germany), Jean Girard (Meudon, France), Cornelis Hilbers (Nijmegen, The Netherlands), Hans Jörnvall (Stockholm, Sweden), Gösta Pettersson (Lund, Sweden), Johannes Vliegthart (Utrecht, The Netherlands) and Andrew Wang (Taipei, Taiwan). To all of them, and some of them had served the journal with distinction for many years, FEBS owes a big debt of gratitude. In their place, and in part expanding the Board to address the new challenges and interests, we have welcomed: Rolf Apweiler (Hinxton, UK), Carmen Birchmeier (Berlin, Germany), Wolfgang Hillen (Erlangen, Germany), Nobutaka Hirokawa (Tokyo, Japan), Jan Johansson (Uppsala, Sweden), John Kuriyan (Berkeley, CA, USA), John Lowe (Ann Arbor, MI, USA), John Markley (Madison, WI, USA), Andre Menez (Saclay, France), Hidde Ploegh (Boston, MA, USA), Lynn Regan (New Haven, CT, USA), Hermona Soreq (Jerusalem, Israel), Harald Stenmark (Oslo, Norway), Nicholas Tonks (Cold Spring Harbor, NY, USA), Anna Tramontano (Rome, Italy), Gabriele Varani (Seattle, WA, USA) and Hans Westerhoff (Amsterdam, The Netherlands). Alan Wolffe (Richmond, CA, USA) was briefly

a member of the Board but died tragically in a road accident in May 2001 shortly after his appointment. It is pleasing to record that several members of the 1998 Board remain to provide their own valuable insight and breadth of interests: Ferdinand Hucho (Berlin, Germany), who also acts as Reviews Editor, Christopher Proud (Dundee, UK), and Masahiro Sugiura (Nagoya, Japan).

The impact of electronic journal publishing does not appear to have been as pronounced or as rapid as some were predicting 5 years ago. That is not to say that it has not been important or profound. To judge from the data acquired by Blackwell Publishing and HighWire Press, the online edition of EJB is developing a worldwide penetration far beyond the obvious confines of the hard copy sales. As a matter of policy and as a service to the community at large, in 2002 FEBS took the decision to make all EJB articles available free of charge on the web one year after publication. The review articles indeed are now available free of charge online immediately after publication. With its electronic version developing so well and with this sensible and liberal policy adopted by FEBS, EJB appears to be well placed to contend with the challenge of free-of-charge web-based journals, which have been strongly advocated by some scientists and which are



Figure 6.3.4 Cover of EJB in 2003.



being strongly promoted by some commercial and charitable organizations. Rapid and reliable peer-reviewing will be essential ingredients for continuing success.

The introduction of online submission and review in March 2002 was well received; so much so that the journal rapidly moved to essentially only accepting submissions made online by the autumn of 2002. An updated version of the system, incorporating improvements arising out of the first year's experience, is being planned for introduction during 2003 and should help to overcome such difficulties as were experienced by authors and reviewers and the Editors and Editorial Office. The favourable reception given to the publication of papers online before the make-up of the hard copy of the journal, another step forward introduced in 2002, has also been gratifying. We look forward to a further innovation that is being planned for 2003, namely the provision of a website, again free of charge, whereby mathematical models in papers dealing with such topics published in *EJB* can be accessed by those interested in trying out the models described.

The Editorial Office staff of *EJB* works hard behind the scenes to ensure the success of the journal. In 2000, Dr Jane Roscoe, who as the first Editorial Office Manager did so much to help set up the office, left Cambridge for a post elsewhere for domestic reasons. Her successor is Ms Louise Sanders, who continues to be ably abetted by the Deputy Manager, Dr Vanessa Wilkinson. Mrs Margaret Rawlings and Ms Karen Richardson, two of our original Editorial Secretaries, have also moved on to posts elsewhere and their places been taken by Mrs Ilana Wooster and Ms Laraine Kerr, respectively, who join Ms Jane Bartolozzi. The journal could not function without the valued support of its office staff and this has been particularly true during the arduous time of introducing the new online submission system. Finally, as to the future, at their meeting in Cambridge in October 2002, the Board looked carefully at the state of scientific reporting in the post-genome era. They noted that it is increasingly easy to investigate a situation or property known to exist in one particular organism and to ask whether it exists in another organism, whether the 'same' enzyme has the 'same' properties, whether the 'same' control mechanism operates, and so on. Occasionally such work has merit and the Board agreed that it should be considered favourably for publication in *EJB*. However, the Board also took the view that any paper in the journal must report a new phenomenon, unravel a new molecular mechanism, throw new light on an old observation, raise an important new concept, or report a new method of widespread interest. The Board believe that these criteria are essential if we are to serve our authors and readers well in an era of burgeoning information. The success of the journal is crucial to the financial support of FEBS. The Board are aware of this and will continue to do all in their power to promote the journal as a major and constructive outlet for high-quality work in the molecular life sciences.

## 6.3.4

**Important News from The European Journal of Biochemistry/The FEBS Journal***Richard Perham**Richard Perham and the Editorial Board of the FEBS Journal*

Numerous Editorials as well as short notes have been published in FEBS NewsLetter and in FEBS News after the publishing of the FEBS Memoir giving a historical summary at FEBS' 40<sup>th</sup> Anniversary in 2003.

**6.3.4.1 The Years 2002 to 2004**

First, on 1 March 2002 we introduced a complete ***electronic online manuscript submission/review process***. This provides a new and effective means of submitting papers for publication that we hope will be speedily adopted by all our authors. By allowing us to conduct all the refereeing and editorial processes electronically too, it is enabling us to shorten publication times even more – below the 3–4 months that we had often been achieving already for papers that do not require much revision.

(FEBS News April 2002).

EJB continues to encourage authors to submit ***Priority Papers on 'hot' topics***, which are essentially full-length papers but which undergo an accelerated two-week decision process. A Priority Paper that fails to achieve the necessary criteria can still be considered as a Regular Paper. EJB also publishes a wide range of Reviews and linked Minireview Series, offering coverage of both mature and emerging topics. Authors of reviews are often commissioned, but we warmly welcome the submission of reviews from others. (FEBS News July 2002).

Review articles are an important feature of the service provided by EJB, bringing interesting and up-to-date commentary on a wide variety of topics. Review articles published in EJB may be either a stand-alone survey of a field or a shorter, more specialised article that forms part of a minireview series containing several coordinated articles written by experts in a wider area. All review articles published in EJB can be read and downloaded free of charge on the Blackwell Science service Synergy (<http://blackwell-synergy.com/>) and on the Highwire platform (<http://ejbiochem.org> and <http://highwire.stanford.edu/>).

(FEBS News May 2003).

The online submission system has been improved several times.

(FEBS News September 2003).

EJB will be introducing a new prize in 2004. This prize will be awarded to the graduate student or young post-doctoral research worker (no more than 3 years from the time of award of the PhD degree when the paper is submitted) who is the first author of a paper judged to be the best in EJB during the calendar year. The

choice will be made by the Editorial Board of the journal, whose decision will be final, and a prize of 10,000 Euros will be offered.

(FEBS News November 2003)

Launch of the FEBS Journal – formerly European Journal of Biochemistry (EJB)

**‘The FEBS Publications : *What’s in a name*’**

*By Willy Stalmans*

Over recent decades “biochemists” have enriched their basic science with multiple new experimental approaches. Accordingly, we have noted that, over a period of some 15 years, many FEBS Constituent Societies have changed their name to include “Molecular Biology” besides “Biochemistry”. Nowadays biochemists are also expanding their science with other disciplines like molecular cell biology, bioinformatics, genomics and proteomics, systems biology, molecular medicine, and bio-nanoscience. To accommodate the needs of the modern biochemist, FEBS and the Editorial Board of EJB have decided to replace “European Journal of Biochemistry” by the ‘FEBS Journal’ from January 2005 onwards. This change emphasizes also the complementary nature of the two FEBS research publications: FEBS Journal for rapid publication of regular research papers in the molecular life sciences, and FEBS Letters for the ultra-rapid publication of concise, significant reports in the same broad area.

(Extract from FEBS News November 2004)

**6.3.4.2 The Years 2005 and 2006**

EJB has been transformed into ‘*The FEBS Journal*’ from 1. January 2005.

“The European Journal of Biochemistry has a long and distinguished history stemming from its first issue in 1967 as the new title of another distinguished and even older journal that had played a major part in the earliest days of the foundation of the emerging subject of biochemistry, the *Biochemische Zeitschrift*. The present international nature of EJB can be judged from the fact that papers from authors in more than 60 different countries were published in the journal in 2003, and that well over a third of these came from outside Europe. In the past four decades, biochemistry has changed dramatically. The old subject boundaries are dissolving. We live in exciting times scientifically, when the multidisciplinary approach to the molecular life sciences can be seen to be bringing enormous dividends. In keeping with this spirit of change and new horizons, FEBS and the Editorial Board of EJB have taken the decision to retitlEJB as *The FEBS Journal* from 1 January 2005. Further expansion of an already distinguished Editorial Board will reflect the new broader aims and scope of the journal, not least in the areas of bioinformatics, genomics and proteomics, molecular cell biology and the molecular biology of disease, systems biology and nano science.” (FEBS News 2005/1, p.6)

The beginning of a new era of publishing full-length papers on the molecular life sciences under the FEBS banner started successfully. We hope that you like the new appearance, and the new format and layout. The last issue of EJB was



Figure 6.3.5 Cover of the FEBS Journal in 2005.

23/24 of volume 271 and the first issue of the FEBS Journal has been designated issue number 1 of volume 272. For further details, please visit the FEBS Journal website, <http://www.febsjournal.org>. The online submission system can be viewed at <http://febsj.manuscriptcentral.com>. The complete digital archive of EJB is going live on Synergy and Highwire. All articles published in EJB (and now the FEBS Journal) in recent years are available online (reviews free of charge immediately, other articles one year after original publication).

As a service to our readers, FEBS has now arranged for the whole of the EJB archive, going back to 1967, to be prepared in digital form and mounted both on the Synergy (<http://www.blackwell-synergy.com/>) and Highwire (<http://content.febsjournal.org> and <http://highwire.stanford.edu/>) sites, where it will shortly be possible to peruse it free of charge. Meeting reports will be published in the FEBS Journal.” (Richard Perham in FEBS News 2005/2)

At the end of the year 2005, the electronic version of the journal now has an extraordinarily wide penetration, over and above the hard-copy versions that go to many libraries. The half-life of citations is the longest for any journal in the molecular life sciences other than the major review sources (such as Annual Reviews, etc). (FEBS News 2005/6)

The first issue of the new FEBS Journal appeared on 1 January 2005. It marks the end of the era of EJB, which has served FEBS proudly and well over the past 30 years or more, and the beginning of a new era of publishing full-length papers on the molecular life sciences under the FEBS banner. We hope that you like the new appearance, and the new format and layout. (FEBS News 1/2005)

The **new FEBS Journal** appeared on 1 January 2005; the last issue of EJB was 23/24 of volume 271 and the first issue of the FEBS Journal has been designated issue number 1 of volume 272. For further details, please visit the FEBS Journal website, <http://www.febsjournal.org>. The online submission system can be viewed at <http://febsj.manuscriptcentral.com>. The complete digital archive of EJB is going live on Synergy and Highwire. All articles published in EJB (and now the FEBS Journal) in recent years are available online (reviews free of charge immediately, other articles one year after original publication). As a service to our readers, FEBS has now arranged for the whole of the EJB archive, going back to 1967, to be prepared in digital form and mounted both on the Synergy, (<http://www.blackwell-synergy.com/>) and Highwire, (<http://content.febsjournal.org> and <http://highwire.stanford.edu/>) sites, where it will shortly be possible to peruse it free of charge. Meeting reports will be published in the FEBS Journal (Richard Perham) (FEBS News 2/2005)

The electronic version of the journal now has an extraordinarily wide penetration, over and above the hard-copy versions that go to many libraries. -The half-life of citations is the longest for any journal in the molecular life sciences other than the major review sources (Annual Reviews, etc). (FEBS News 6/2005)

#### 6.3.4.3 The Years 2007 and 2008

The impact factor of EJB in 2007 was 3.579, that of the new FEBS Journal. 3.292. The FEBS Journal has the longest cited half-life of any journal in the field of biochemistry and molecular biology. This is welcome recognition of our traditional and continuing wish to publish papers of enduring worth. (FEBS News 2007/5)

EJB (the FEBS Journal) has the longest cited half-life of any journal in the field of biochemistry and molecular biology with an Impact Factor of over 3, in the ISI Citation Index (9.6 years at 2007). This is welcome recognition of our traditional and continuing wish to publish papers of enduring worth.

In 2008, the impact factor of the journal rose again. That for the 'old' EJB, which turned into the FEBS Journal on 1 January 2005, was 3.579 in 2007, a big increase from 3.164 in 2006. And that for the 'new' FEBS Journal, the first possible under the new title, was 3.033. A unified impact factor for both journals in 2007 was given as 3.292. This was in a year when the impact factor for other major general journals decreased a little. (FEBS News 2008/1)

At the start of 2008, the FEBS Journal launched its new **Online Open service**. Online Open is a pay-to-publish service from Wiley-Blackwell that offers authors whose papers are accepted for publication the opportunity to pay up-front for their paper to become open access (i.e. free for all to view and download without the usual one year embargo applied to all research articles) via the Blackwell Synergy

website. Each Online Open article will be funded by a one-off fee to be met by or on behalf of the Author in advance of publication. (FEBS News 2008/2)

In 2008, the impact factor for the FEBS Journal has risen to 3.396, compared with a unified impact factor of 3.292 last year. This rise is notable in that the impact factors for the other major general journals have generally been falling in recent years. (FEBS News 2008/5)

#### 6.3.4.4 The Years 2009 and 2010

The FEBS Journal is pleased to announce a new aspect to its mission to bring excellent science to our readers: the introduction of '*virtual issues*', consisting of outstanding work recently published in the FEBS Journal in chosen areas, compiled by members of the Editorial Board or Editorial Advisory Board in consultation with others. (FEBS News 2009/1)

The FEBS Journal's Editorial Board are pleased to announce that we shall soon be embarking on the addition of *Structured Digital Abstracts (SDA)* to enhance the content of the FEBS Journal articles. (FEBS News 2009/2)

Authors wishing to publish a paper in the FEBS Journal with immediate open access (i.e. free for all to view and download) will now be charged a reduced, fixed fee of \$ 3000. All FEBS Journal reviews are published online free of charge immediately; regular papers are subject to the usual 12-month embargo to those without a subscription or licence. (FEBS News 2010/4)

#### 6.3.4.5 The Years 2011 and 2012

At the end of the year 2011, the impact factor of the FEBS Journal was 3.129. (FEBS News 2011)

The aims and scope of the journal were recently reviewed by the Editorial Board and the updated version can be found on our new-look website: <http://www.febsjournal.org>. (FEBS News 2012/1)

#### 6.3.4.6 In Memoriam

Claude Liébecq 1921–2013

Claude Liébecq, who died on 16th February 2013, aged 91, played a prominent part in the early days of FEBS as the first Editor-in-Chief of the *European Journal of Biochemistry* (the former name of *FEBS Journal*).

I will concentrate on this aspect, partly because I knew little of Claude's earlier life. I do know that he was mentored by Marcel Florkin, a prominent Belgian biochemist and textbook author and the first President (1955–1961) of the International Union of Biochemistry (IUB), in whose creation Florkin played a prominent role. Claude obtained his MD from the University of Liège, Belgium in 1947, although, so far as I know, he never practised medicine, instead turning to basic research and teaching. With the help of Florkin he was able to study with the prominent biochemists Carl Cori, David Keilin, Otto Warburg and Hans Krebs. He published on oxoglutarate metabolism, adenosine tetraphosphate and, with Rudolf Peters, on the toxicity of fluoroacetate.

In the same year, 1955, that the IUB was officially recognized as a Union, the third International Congress of Biochemistry was held in Brussels. Florkin recruited Claude to play a prominent role in its organization. In this environment Claude found his *métier*, and he was the delegate of the Belgian Biochemical Society when FEBS was founded in 1964.

In 1965 FEBS decided to explore creating a journal. As a member of the committee charged with pursuing this plan, Claude became the obvious choice as the Editor-in-Chief of whatever came along. As the first Secretary General of FEBS and the representative of the UK Biochemical Society, I hoped we might take over an existing journal, rather than start a new one. My wish that this would be the *Biochemical Journal* never progressed. Instead, it was Theodor Bücher, President of the German Society, who convinced his colleagues to join him in persuading Springer-Verlag, publisher of the venerable *Biochemische Zeitschrift*, to offer it to FEBS. This took place, with Springer-Verlag conceding the copyright of the new journal to FEBS in return for continuing as publisher. The journal was renamed as the *European Journal of Biochemistry* (now *FEBS Journal*) and Claude became the first Editor-in-Chief. He held this post for about 20 years and built the journal into a leading international vehicle for biochemical research publications. All this and more I related in an account of the early years of FEBS in *FEBS Letters* (40, S140–S153, 1974).

Claude's abilities were recognized by the IUB, which appointed him Secretary of the Commission of Editors of Biochemical Journals; this, among other things, was the publication outlet for biochemical nomenclature developed by the IUB's commission of that name.

FEBS has lost one of the most prominent developers of its formative years.

*Bill Whelan*

*FEBS Secretary General 1965–1967*

*University of Miami Miller School of Medicine, FL, USA*

(FEBS News May 2013)

#### 6.3.4.7 The Year 2013 – FEBS Journal Today

Address from the Editor-in-Chief

Dear Fellow Scientists,

*FEBS Journal* has published some outstanding Special Issues this year, and there are more in the pipeline for 2013. Special Issues include both reviews and regular research papers on a broad range of topics and we hope you enjoy reading them. Most recently, we have published:

*Proteoglycans: signalling, targeting and therapeutics* (May 2013) compiled by Nikos Karamanos (University of Patras, Greece) and Robert Linhardt (Rensselaer Polytechnic Institute, New York, USA).

*Catalytic Mechanisms by Biological Systems* (June 2013) compiled by Marco Fraaije (University of Groningen, The Netherlands) and Nigel Scrutton (University of Manchester, UK).

*Myogenesis* (September 2013) compiled by Pura Muñoz- Cánoves (Pompeu Fabra University, ICREA and CIBERNED, Barcelona, Spain) and Daniel Michele (University of Michigan, USA).

Look out for our Special Issue on *Signalling*, coming soon!

#### Publication Metrics

*FEBS Journal* does not chase an Impact Factor. We prefer to rely on the intrinsic interest and merit of the papers we publish. Nonetheless, we are delighted to announce a new Impact Factor of 4.250 for *FEBS Journal* this year. The rising Impact Factor and the extremely healthy readership of the Journal (increasing year-on-year and exceeding 3 million downloads in 2012 alone) are public recognition of the interest and high quality of papers we are publishing.

We thank all authors, referees and Editors for their support and contributions to the journal.

#### Winner of this year's FEBS Journal Prize for Young Scientists

The winner of this year's *FEBS Journal* Prize for Young Scientists is Anna-Karin Gustavsson of the Department of Physics, University of Gothenburg, Sweden for her outstanding paper: Gustavsson, A.-K., van Niekerk, D.D., Adiels, C.B., du Preez, F.B., Goksör, M. & Snoep, J.L. (2012) Sustained glycolytic oscillations in individual isolated yeast cells. *FEBS J.* 279: 2837–2847.

Anna-Karin Gustavsson described her prize-winning work in the FEBS Publications Awards plenary session at this year's FEBS Congress in St Petersburg, where she was awarded the prize of €10,000 by Editor-in-Chief of *FEBS Journal*, Professor Richard Perham. We warmly congratulate her not only on her prize but on the excellent plenary lecture she delivered.

#### Latest Virtual Issue

The latest *FEBS Journal* Virtual Issue, on *microRNA*, published in August 2013, was compiled by our Editor Gunter Meister (University of Regensburg). It can be accessed via the Wiley Online Library. It consists of a collection of papers on specific roles of miRNAs in different forms of cancer, stem cell biology, neuronal function or adipogenesis. In addition, the issue includes several publications that identified important mechanistic aspects of miRNA function, and review articles that discuss the fundamental roles of miRNAs in fibrosis and epigenetics.

#### Reviews and minireviews

Reviews and minireviews published in *FEBS Journal* cover a diverse range of topics. Review topics in recent issues are:

- *FEBS J.* 280, Issue 16: Engineering RNA-binding proteins; AMPK $\beta$  in AMPK complex
- *FEBS J.* 280, Issue 15: ADP-ribosylation (minireview series)





Figure 6.3.6 Virtual Issue on Micro-RNA.

- *FEBS J.* 280, Issue 14: Telomere and telomerase (minireview series); Heterochromatin during development.

Reviews and minireviews can be read online and downloaded free of charge on the *FEBS Journal* website from the time of publication.

With best wishes from us all at *FEBS Journal*,  
 Richard Perham, *Editor-in-Chief*  
 Vanessa Wilkinson, *Editorial Manager*  
 Malika Ahras, *Deputy Editorial Manager*  
 Giannina Bartlett, *Editorial Assistant*  
 Juanita Goossens-Roach, *Editorial Assistant*  
 (*FEBS News* September 2013, pp. 22–23)

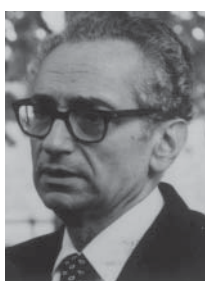
## 6.4

### FEBS Letters

FEBS Letters since its inception in July 1968 publishes concise reports in biochemistry, biophysics and molecular biology where the over-riding criterion is that the communication must be of sufficient immediate importance to the work of other investigators to merit urgent publication. As well as research papers, which must be essentially, complete and final reports, the journal contains topical mini-reviews, meetings reports, commentaries and hypotheses. The average time from submission to appearance in print initially was around 54 days; it has considerably been reduced since.



S.P. Datta, 1968–1985



G. Semenza, 1986–2000



M. Saraste, 2000–2001



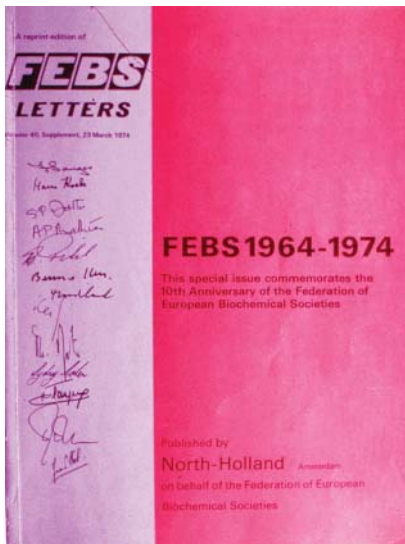
F. Wieland, 2001–

**Figure 6.4.1** Managing Editors of FEBS Letters.

FEBS Letters is jointly published with Elsevier Science Publishers in Amsterdam and appears now bi-weekly. Its first Managing Editor was the founder, Professor S. P. Datta. In 1986, after the retirement of Professor Datta, Professor G. Semenza from the ETH Zürich was nominated Managing Editor, a position he kept until the year 2000. His successor was Professor M. Saraste from the EMBL in Heidelberg, who deceased in March 2001. Since then, Professor F. Wieland from the Biocenter in Heidelberg serves as the Managing Editor. Information on the journal and guidelines for authors are available from the FEBS Letters Editorial Office, Biochemie-Zentrum Heidelberg, Im Neuenheimer Feld 328, 69 120 Heidelberg, Germany.

## 6.4.1

## Founding FEBS Letters



S.P. Datta,  
Managing Editor

The decision to start *FEBS Letters* was taken in 1967 as is related by W.J. Whelan in this issue (*FEBS Lett.* Vol 40, Suppl., pp. 154–159): The *modus operandi* decided upon was that papers might be submitted to any of the Editors who might accept them on his own responsibility, after consulting a referee if he wished. If, however, the first Editor wanted to reject a paper then he had to be supported by a second Editor. This system has continued to operate satisfactorily.

Figure 6.4.2 FEBS Letters 10 Years.

That there was a need for another journal for rapid publication of short, essentially complete, papers is shown by the rapid expansion that has occurred since July 1968, when the first issue was published. Up to the present, 38 volumes of 360 pages have come out. In 1973 about 1323 manuscripts were submitted to the Editors. Although the majority (over 75 %) of the papers published come from Europe the journal is truly international and contains papers from all over the world. The Editors, similarly, are a very international group, being spread from Moscow and Rehovot to Madison, Wisconsin, and Buenos Aires. Although the Journal will publish papers in English, French or German, by far the greatest number are in English. Apart from short original papers *FEBS Letters* has published a number of Review Letters and Meeting Reports. The aim of these has been to provide non-specialists with a convenient way of keeping abreast of developments in various fields. This activity, it is hoped, is of particular value to teachers of Biochemistry.

Main rewards for the Managing Editor have been establishing friendships with the Editors, of which we have had 24, and having contacts with countless authors. The continual flow of papers submitted has never allowed him to wonder how the next issue was to be put together. While it would be wrong to say that there have never been difficulties, *FEBS'* relations with the publishers have always been good and it is grateful to many individuals at North-Holland for their continuing efforts. Particular thanks must go to E. van Tongeren and M. Frank at North-Holland who



Figure 6.4.3 FEBS Letters. Volume 100.

entered into the venture with such enthusiasm and to Miss Anna Straker in the Managing Editor's office who has kept everything in order there.

*FEBS Letters (1974) vol. 40 suppl., p.174.*

6.4.2

The Early Days of FEBS Letters



S.P. Datta

The first issue of *FEBS Letters* appeared in July 1968, twenty years ago. The prime mover in persuading FEBS to start a 'letters' journal was W. J. Whelan who was Secretary General of FEBS in 1967 and who suggested to the FEBS Council in Oslo in July 1967 that FEBS should publish a journal like *Biochemical and Biophysical Research Communications*. There was considerable opposition and the Council, at its first meeting in Oslo, in effect told Whelan that it would be impossible to collect an Editorial Board. He had two days in which to prove them wrong and succeeded in that time in enlisting the support of Hans Krebs, Fred Sanger and a number of others who were willing to serve as Editors. The first 'meeting' of Editors took place in Alex Pihl's house in Oslo, where his unfortunate lady had to provide the assembled company with only half-thawed-out smörebröd to sustain them. Anyway, the Council at its second meeting in Oslo was persuaded that there might be something in the idea of a letters journal and the Secretary General was detailed to seek the views of

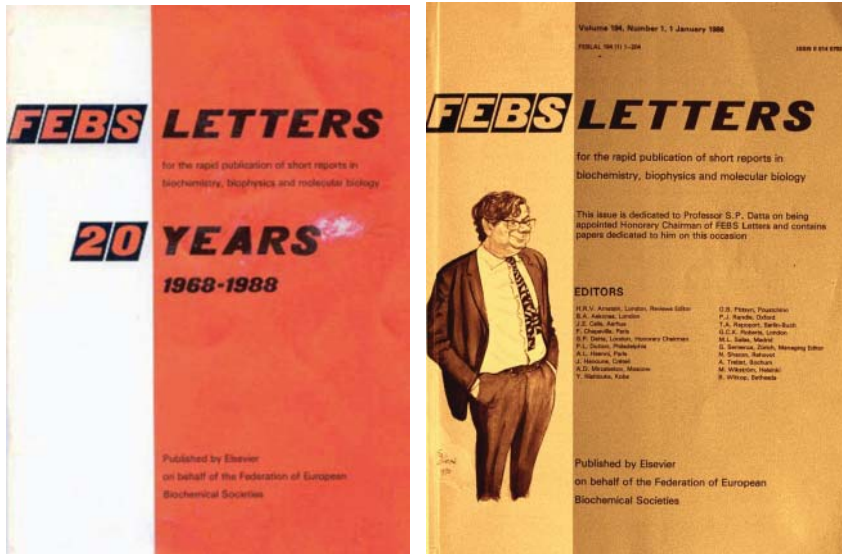


Figure 6.4.4 Covers from *FEBS Letters* in 1988.

Constituent Societies, whose representatives at the Oslo Council Meetings had not been briefed on the idea.

Following discussions through the summer of 1967, and at the IUB Congress in Tokyo in that year, it became apparent that there was support in FEBS for such a journal and various publishers were approached. To the FEBS Publications Sub-Committee the best proposition was from North-Holland which was run at that time by Daan Frank and Bart van Tongeren. Their suggestion was that we should deviate from the *BBRC* format and have all papers retyped, their main argument being that at that time there was not sufficient typewriter 'hardware' in Europe to make direct reproduction of typescripts generally successful.

Because Bill Whelan left Europe towards the end of 1967 to take up an appointment in the USA, the task of Managing Editor of *FEBS Letters* fell to me, a position I held from 1968 until 1985. During this time the journal increased enormously in size from 491 pages in the second half of 1968 to 5550 pages in 1985. I was, of course, greatly **assisted by the Editors who helped during those years**. It would be invidious to mention any by name. However, I shall make one exception of Theodor Bücher who had at heart the idea of European biochemistry despite his somewhat Prussian outlook and entered into the spirit of a European enterprise. All helped enormously, largely because they were conscious of taking part in such an enterprise – to show that *European* biochemistry was a force to be reckoned with.

In those early days one way to persuade potential Editors to join *FEBS Letters* was by using them as referees and always remembering to acknowledge their

reports with well-chosen picture postcards. One potential Editor agreed to join us because I promised to send him a picture postcard for every paper he dealt with, a promise I mostly kept.

We did not confine ourselves to publishing research papers but soon included short reviews, hypotheses, and discussion papers. These became the responsibility of Henry Arnstein who continues to run this very successful part of the journal. Another suggestion by Arnstein was that *FEBS Letters* should publish an annual Index of Biochemical Reviews. The first one of these appeared in 1973, covering the years 1971–1972, and the Index has appeared annually since that time. Over the years a number of supplements have appeared, the first in 1969 on Computing Techniques in Biochemistry was based on a FEBS Advanced Course organized by J.H. Ottaway in Edinburgh. Another supplement in February 1976, edited by Freddie Gutfreund, marked the centenary of the coining of the word ‘enzyme’ by Kühne and in 1980 Hans Kornberg put together a supplement to mark Hans Krebs’ 80th birthday.

In October 1985 Giorgio Semenza took over from me as Managing Editor and the journal continues to flourish under his guidance.

***Editors who served FEBS Letters between 1968 and 1988:***

H.R. V. Arnstein, London, England; B.A. Askonas, London, England; M. Avron, Rehovot, Israel; E. Bock, Copenhagen, Denmark; T. Bücher, Munich, FRG; J. E. Celis, Aarhus, Denmark; P. Chambon, Strasbourg, France; B. Chance, Philadelphia, PA, USA; J. P. Changeux, Paris, France; F. Chapeville, Paris, France; P. Cohen, Dundee, Scotland; S. Cohen, London, England; S.P. Datta, London, England; P. L. Dutton, Philadelphia, USA; J. P. Ebel, Strasbourg, France; O.L. Farkas, Szeged, Hungary; H. Outfreund, Bristol, England; A.L. Haenni, Paris, France; J. Hanoune, Creteil, France; E. Helmreich, Würzburg, FRG; B. Hess, Dortmund, FRG; H. Holzer, Freiburg, FRG; S. Jard, Paris, France; N.K. Jerne, Basel, Switzerland; L.N. Johnson, Oxford, England; B. Keil, Paris, France; D.O. Knorre, Novosibirsk, USSR; J.R. Knowles, Cambridge, MA, USA; H.L. Kornberg, Leicester, England; A. Kotyk, Prague, Czechoslovakia; H.A. Krebs, Oxford, England; H.A. Lardy, Madison, WI, USA; L.F. Leloir, Buenos Aires, Argentina; B.O. Malmström, Göteborg, Sweden; A.P. Mathias, London, England; A.D. Mirzabekov, Moscow, USSR; Y. Nishizuka, Kobe, Japan; J. Nunez, Bicetre, France; Yu.A. Ovchinnikov, Moscow, USSR; M.J. Owen, London, England; A. Pihl, Oslo, Norway; O.B. Ptitsyn, Poustchino, USSR; P. J. Randle, Oxford, England; T. A. Rapoport, Berlin-Buch, GDR; K. Roberts, Leicester, England; M.L. Salas, Madrid, Spain; F. Sanger, Cambridge, England; M. Saraste, Helsinki, Finland; R. Sato, Osaka, Japan; G. Schatz, Basel, Switzerland; G. Semenza, Zurich, Switzerland; N. Sharon, Rehovot, Israel; V. P. Skulachev, Moscow, USSR; A.S. Spirin, Moscow, USSR; F. B. Straub, Budapest, Hungary; A. Trebst, Bochum, FRG; I.M. Verma, San Diego, CA, USA; W.J. Whelan, Miami, FL, USA; O. Wieland, Munich, FRG; T. Wieland, Heidelberg, FRG; M. Wikström, Helsinki, Finland; B. Witkop, Bethesda, MD, USA; T. Yonetani, Philadelphia, PA, USA.

*(Source: FEBS Letters, February 1988)*

## 6.4.3

**An Appreciation of Professor S.P. Datta, Managing Editor of FEBS Letters, 1968–1985***H.R.V. Arnstein*

To start and successfully develop a new scientific periodical of the highest quality is a formidable task and in this competitive world there are few recent examples of journals that have succeeded in achieving the same recognition by research workers as FEBS Letters in the short span of less than two decades.

The success of FEBS Letters is no doubt due to several factors: the surge of activity that followed the foundation of the Federation of European Biochemical Societies in 1964, the support of many constituent Societies and individuals in the Federation, the ability of the publishers to achieve rapid publication without sacrificing style or quality of production, but above all the single-minded dedication, enthusiasm and hard work of the first Managing Editor, Prakash Datta, whose retirement from the post he has held since FEBS Letters was launched in 1968 marks the end of an era. Fortunately, his wisdom and experience will not be completely lost to FEBS as he is continuing not only as Treasurer of the Federation but also as Honorary Chairman of the Editorial Board of FEBS Letters.

Having known Prakash Datta as a colleague and friend for more than 25 years and worked with him on the Committee of the Biochemical Society, on the Executive Committee of FEBS when I served as Secretary-General, and on the Editorial Board of FEBS Letters I am certain that neither FEBS nor FEBS Letters would have become so successful so quickly but for his contributions to both organizations. To assemble a distinguished FEBS Letters Editorial Board at the outset and to get it to function harmoniously was no mean achievement. Equally, to maintain and even improve the quality of the journal over the years required the kind of constant attention to both policy and detail for which only a few people are willing and able to find time and energy. The Managing Editor's workload has been perhaps ten times greater than that of anyone else on the Editorial Board, but somehow Prakash Datta has always managed to deal speedily with new manuscripts or papers sent to him as second editor. His efficiency in keeping manuscripts moving through the editorial channels always set a fine example. Another characteristic over the years has been his willingness to remain receptive to new ideas and thus the journal has continued to evolve. Unflappable in difficult situations, generous and always fair even under pressure, his decisions have invariably been constructive and to the point and his advice on matters great and small worth taking into consideration.

As I contemplate what being an editor of FEBS Letters has meant to me, I recall with pleasure the various postcards that I, and others, received occasionally. These communications from the Managing Editor usually included some pertinent comments and greetings, which somehow seemed to arrive at moments when one's editorial morale might be flagging, for example as a result of an unusually large



Figure 6.4.5 Important Editions of FEBS Letters.

influx of manuscripts during the summer vacation when one would rather be on holiday than engaged in editing papers. This informality in running the journal was also evident at meetings of the Editorial Board, which were always relaxed, but efficiently organized and business-like. There is no doubt that this approach was very successful in creating and maintaining a remarkable unity of purpose amongst editors and an atmosphere in which personal friendships flourished. I still feel that meetings of FEBS editors always have been very much like reunions of old friends.



This very brief account is intended as a tribute not a valediction since, as already mentioned, Prakash Datta will continue to remain closely associated with FEBS. In 1985, on the 21st Anniversary of the Federation, both FEBS and 'Mr FEBS' are still going strong. Long may they continue to do so.

London, November 30, 1985

*FEBS Letters (1986) vol. 194, viii.*

#### 6.4.4

#### FEBS Letters: 30 Years



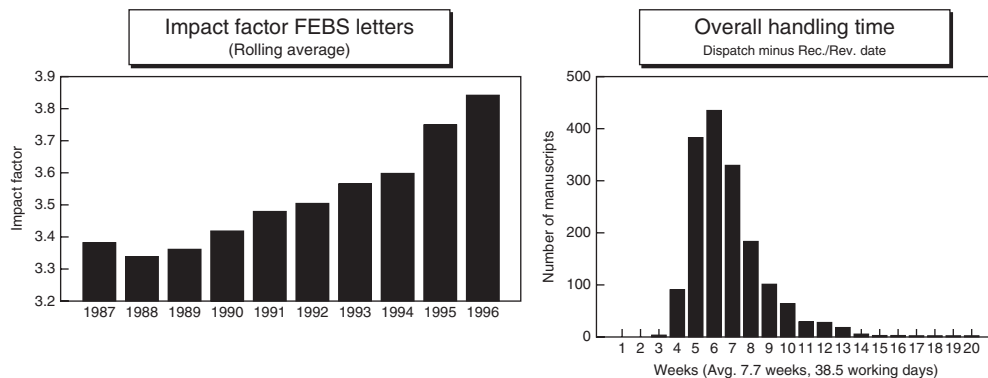
*Editorial by G. Semenza*

The first issue of FEBS Letters appeared in July 1968. Thirty years, it is said, is the bloom of age. It is also the age when one can look back to the past and, at the same time, plan for the future.

The beginnings of the Federation of European Biochemical Societies (FEBS) and of FEBS Letters have been described on earlier occasions [1–5], and I can do no better now. The journal has been a scientific success from the beginning, and subsequently a financial success, undoubtedly due to a number of reasons – not the least the all-pervasive spirit of European collaboration within FEBS itself. A prime example of this spirit was the Managing Editor, S. Prakash Datta, with his 'insatiable energy and enthusiasm', his far-sighted management and 'the way in which his engaging personality has made friends of everybody' (to use the words of W. Whelan [1]).

When I took over from Prakash (1986) I tried to follow his path [6], as I fully shared, and still share, his European spirit. Running this journal, we all know, is one of the ways of fostering biochemistry in Europe. But, as all Editors of a quality journal know all too well, we have to take, along with popular decisions, also unpopular and unpleasant ones: rejecting a paper is unpleasant both for us and for the authors – even if, *in principle*, everybody agrees with Beaumarchais that 'sans la liberté de blamer il n'existe pas d'éloge flatteur'.

FEBS Letters continues to thrive in all aspects, however imprecise each of these may individually be. The (often maligned, but always used) impact factor keeps increasing (Fig. 6.4.6) and, if corrected for the length of the papers, brings FEBS Letters at the level of *J. Biol. Chem.*, i.e., ahead of most international biochemical and molecular-biological journals. Our citation half-life also is essentially the same as that of *J. Biol. Chem.* As compared to last year, we have stepped up four levels in the impact factor list of



**Figure 6.4.6** Overall publication time of all communications published in 1997 (volumes 400–420): date of dispatch from warehouse minus date of receipt of revised manuscript or first editor’s date of receipt when no revision was involved. Average publication time: 38.5 working days; 7.7 weeks.

biochemical and biological periodicals. Other criteria also concur in showing that FEBS Letters is healthy: among others, we receive more and more papers, which unfortunately forces us to ‘approve but not publish’ even some sound papers. The journal cannot grow indefinitely in size and in costs!

Undoubtedly, among the reasons for our journal’s success are: fast publication time (7.7 weeks, or 38.5 working days, date of dispatch minus the date of receipt of the manuscript, or its revised version, if applicable; Fig. 2); serious reviewing and editing processes, quality of printing, etc. Combining speed with quality is not an easy matter and it takes dedication and hard work of **all** parties involved: editors, secretaries, publishers, printers, etc. Last but not least, the co-operation of the authors is essential for a smooth operation; their manuscripts should not only be of good scientific quality, but also follow as closely as possible our ‘Notes to authors’ and conform to our editorial policy, as reported on cover page 2 of each issue.

Technically, also, we have improved the speed by which we reach our scientific audience. The Tables of Contents, Abstracts, and general information on our journal have now been available for some time cost-free via the Internet. This means that the abstracts of accepted papers are available approximately one week before publication, or 5–6 weeks after the date of receipt of the accepted manuscript.

In addition, as of November 1997 the *full* text of FEBS Letters articles can be found in PDF. Access, however, is restricted to individuals working at organizations, which subscribe to FEBS Letters. This service is strictly for personal use. Still, we hope that you will find it useful. We have plans to develop this service further. As soon as it becomes technically feasible, this will be done. (2003, the most recent URL to this service is <http://www.elsevier.com/febs/show/>).

As indicated above, the *raison d'être* of FEBS is that of fostering biochemistry, particularly in Europe. A major goal is that of helping and promoting young biochemists. The income of FEBS, which is a 'charity', is generated essentially by its two journals, FEBS Letters and the European Journal of Biochemistry. It is used for fellowships, Advanced Courses, etc. In this spirit we try to be as co-operative as possible with authors and libraries alike; we levy no page charges, offer 50 free off-prints, ask no charge for half-tone figures; our charge for colour reproduction is moderate, and so is whatever increase in subscription rate we may have to ask for. Consistently for the past thirty years, we have tried to be at the leading edge of modern biochemistry, which presently includes, for example, the borderline towards molecular and cell biology, and the impressive amount of biochemical and biological knowledge which total genome sequencing is making available. (Readers may have noticed that we have published both research letters and minireviews in this expanding area in 1997 and 1998.) Naturally, in doing so, we do not forget, and do not want to forget, the other areas of biochemistry.

We have the unique luck of living in an exciting period of unprecedented expansion and deepening of our knowledge in life sciences. Our journal – and all of us who invest so much time and effort into making it an efficient vehicle for disseminating some part of this fascinating knowledge – thank the authors who have actually generated it. They, indeed more than anyone else, deserve the credit for the success that FEBS Letters has been for the past thirty years and hopefully will be for the next 300!

Let me draw to a close by quoting an American poet, Steven Crane [7], who happened to be the grand-uncle of a respected biochemist:

*I saw a man pursuing the horizon;  
round and round they sped.  
I accosted the man.  
'It is futile,' I said,  
'You can never -,'  
'You lie' -he cried  
And ran on.*

Will we reach the horizon?  
Zürich, June 1998

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7. quoted by Crane, R.K. (1983) in 'Comprehensive Biochemistry' (Vol. 35), "Personal Recollections, I" (Semenza, G., Ed.) Elsevier, Amsterdam, pp. 43–67.



**Figure 6.4.7** Special Issues of FEBS Letters for the FEBS Meetings in 2000 and 2001.

#### 6.4.5

#### A Good-bye and Best Wishes for the Next Millennium from the Managing Editor



*Editorial by Giorgio Semenza*

Dear readers, dear authors,

Having served as the Managing Editor of this journal for 14 years, I will soon pass this task over to Prof. Matti Saraste, EMBL, Heidelberg.

During these 14 years FEBS Letters has continued to proceed in the successful pathway initiated and developed in the 18 years since its conception, under the guidance of its founder and first Managing Editor, Prof. S.P. Datta. It is remarkable, in these years of hard competition (also among journals), that a publication can continue to be an increasing success for so long, as judged by various mutually agreeing criteria. The most recent impact factor of FEBS Letters that of 1998 shows yet a further increase: it is now 3.581. More and more manuscripts are being submitted to our journal – in 1999 there were approx. 3500 submissions. This has forced all our Editors to increase their rejection rate, which is now approx. 51 %; we are sorry that sound pieces of work could not be published, but unfortunately the size of the journal, and its cost, cannot increase indefinitely. Many of us, in the process, have lost quite a few friends!

FEBS Letters' average publication time has been further reduced: it is now approx. 4.5 weeks, the production time at Elsevier being 3.5 weeks: The full text

of accepted papers now appears in electronic form some 5 days after they have reached Elsevier.

In financial terms the journal has also been a success. It contributes very sizeably to the support of the fellowships, advanced courses etc. of FEBS, which is a charity, i.e. a non-profit making organisation. In this respect our journal has also contributed and is contributing to the education and support of young biochemists.

Clearly, the success of a journal is not – cannot be – the merit of one person alone. This is true for FEBS Letters also. The unflagging dedication and fairness of all Editors throughout the years, the friendly and efficient co-operation of our partners at Elsevier (Drs P. Jackson, R. van Charldorp, M. Tanke, B. van der Hoek and A. van der Werf – to name only those with whom we have had day-to-day contact), and the support of the FEBS officers have been essential components in the success of the journal during ‘my’ years. But thanks are also due to all those who, in one capacity or another, are or have been associated with FEBS Letters, particularly to Dr J. Weber, whose dedication and knowledge have been essential in the operation of the Zurich editorial office. And, last but not least, the authors themselves must be thanked: it is the quality of their papers that has made the quality of the journal.

The present, decentralised mode of operation of FEBS Letters sets a heavy burden on each Editor’s shoulders; it has reached (and probably surpassed) the limit reasonably compatible with other activities. My successor plans – as indicated on our web site already – to make changes in the mode of operation of the journal: I am sure that, under the guidance of Matti Saraste, FEBS Letters will thrive on and will continue to cope successfully with the mounting competition, including that of the solely electronic journals.

I am sure that the 1000 new years beginning Jan. 1st will witness further success of our, i.e. your, journal.

Zurich, Dec. 1999

*FEBS Letters (1999) 464, 194*

On July 14, 2000, the present Chairman of the Publications Committee, Willy Stalmans, had organized a fare-well party for Giorgio Semenza at the Birmingham Modern Museum. To return special thanks to Giorgio, he received the covers of two ‘Very Special Issues’ of FEBS Letters (Fig. 6.4.7) designed by Horst Feldmann.

#### 6.4.6

#### **Serving FEBS Letters for 14 Years**

**By G. Semenza**

I took over the task of the Managing Editor at the beginning of 1985. My wife helped me during the first years as a part-time secretary – without her help I (and probably the journal also) would have collapsed. I still remember with horror the days when we were flooded with manuscripts, from both the authors and



**Figure 6.4.8** Poster dedicated to Giorgio Semenza at his retirement as Managing Editor of FEBS Letters.

from Prakash (who used to handle himself nearly one half of the manuscripts). E.g., how do you properly handle 17 manuscripts in two days? Obviously (i) the Editorial Board had to expand, and (ii) the authors had to be convinced to send their manuscripts to that editor who was the closest to him/her scientifically, not geographically (in the latter I was not as successful as I would have liked to be).

In expanding the Editorial Board – obviously with the approval and the support of the Publication Committee – I had the good luck of attracting first class scientists. Without forgetting “classical” areas, by and by we discreetly shifted the emphasis of the journal towards the biological leading edge of biochemistry, i.e., to neighbouring cell and molecular biology and their biophysical correlates. It was clear to me – to us – that biosciences were expanding in this direction.

No doubt this decision, the strict reviewing and the wisdom and hard work of the editors (who from the start had a gratifying “esprit de corps”), the speed (\*) (not long before the end of my time of office the accepted papers became available to the scientific community in the journal’s web page some 7–10 days after they had reached Amsterdam) and the quality of publication were the reasons for the remarkable success of our journal: e.g., the average quotation time became as long as that of the *J. Biol. Chem.*; the impact factor (much maligned, but always used), once corrected for the length of our papers, reached that of the *J. Biol. Chem.*, thereby leaving behind most journals of biochemistry and molecular biology. For years FEBS Letters generated two-thirds of the net income of FEBS (thus contributing significantly to supporting the FEBS Fellowships, the Youth Travel Fund, the Advanced Courses, etc.).

Another sign of success was the uninterrupted increase in the number of manuscripts which we kept receiving: in the last years of my time of office the Editorial Board received more than 3000 mns; as the Editors were approximately 30 in number, that meant that each of them received and handled on the average, some 100 mns per year, or 2 mns per week. In my editorials I repeatedly asked the authors NOT to send us papers which they did not regard top, i.e., NOT to send us papers “for a try”. Even if the majority of papers we received were, in general, of good or excellent quality, we had to become more and more stringent, increasing the rejection rate from 42 to more than 50–52 %. But even this policy failed to discourage the authors – actually, as FEBS Letters was becoming more and more selective, it became more attractive for the authors to publish in. The lesson was that increasing the rejection rate does indeed increase the quality of the journal, but, as a means to reduce the number of manuscripts submitted, is a self-defeating policy. Hence, in the late nineties it was clear that the system of operation which Prakash Datta and B. van Tongeren had worked out some thirty years earlier, and which had led FEBS Letters to its success, had reached its limits – few first-class editors are prepared to handle promptly, i.e. to read, have reviewed, etc., two mns a week. Expanding the Editorial Board would not have been a good idea: the larger the number of editors, the more heterogeneous their scientific standards may become. I thought that, as my time of office was coming to an end soon (and I am firmly convinced that one should do a job only as long as most people think that one does it well, and stop much before one is asked to do so), I had no right to impose onto my successor the scheme with which he/she should chose to operate the FEBS Letters. Matti Saraste was unanimously chosen by the FEBS Publication Committee (now chaired by W. Stalmans) and by the Executive Committees to be my successor. He chose to operate via a central office – a wise decision, I think, also because with the presently available electronic means of communication, the insertion of a central office does not significantly increase the handling time.

Further, he decided to increase the number of topical “special issues”, which undoubtedly increased the attractiveness and the scientific quality of

FEBS Letters. Most sadly, Matti's far too early tragic death prevented him from harvesting the fruit of his new mode of operation and of the changes introduced. His successor and present Managing Editor of the journal, Felix Wieland, together with the central editorial office and the whole editorial Board, is successfully following the tradition of combining speed of publication with quality; soon the most modern electronic means of communication will improve the journal further. I am both grateful and proud of having been appointed as an honorary chairman of the Editorial Board of an international bioscience journal which clearly belongs to the very best ones.

If I look back at my own time of office, I can say that I enjoyed the task that FEBS had entrusted me with. I learned a lot of biochemistry, often in fields which were unrelated to my own, I got in touch with and I made many friends with a number of colleagues in the Editorial Board and among the reviewers. I always had excellent relationships – indeed friendship – with, and support from, the FEBS Executive Committee and, very importantly, from the Publications Committee, chaired first by U.Z. Littauer, then by K. Decker, and finally by W. Stalmans. Most of us biochemists – or, better, “bioscientists” – have much in common, across political or geographical frontiers: little interest in financial matters, but a lot of interest, indeed a passion, for our own work. (As one would say in German, „*unser Beruf ist unsere Berufung*“.) This is a great luck, which we share with only a few other professions; we try to reach the ultimate horizon in biological sciences, even if we are well aware that we'll never reach it – a fascinating challenge.

It is fair to say, though, that there have been less agreeable sides in my activity as the Managing Editor. This kind of a job does require a backbone; one has to be ready to take unpleasant decisions for the good of the journal. Not every author seems to share Beaumarchais' view that “*Sans la liberté de blâmer il n'existe pas d'éloge flatteur*.” I have lost friends among colleagues whose papers I have rejected; I have lost friends among editors and reviewers who were too slow or too careless; I am sure that I have lost friends at Elsevier also. But perhaps all of them were not friends to begin with; they have just been selected out. These losses have been richly compensated by the deeper friendship which I share with those who have remained.

Perhaps the saddest experience in the management of the FEBS Letters has been that of discovering that not all bioscientists seem to have proper ethical standards. Too often bosses have tried (and sometimes succeeded) to publish their postgraduates' work without mentioning them; or, vice versa, young Ph.D.'s have tried to publish results obtained in the supervisor's lab and with his/her support, but tried to ignore their contribution. We have, a couple of times, published forged or “corrected” results; they came to our attention because either the authors had been forced by others to retract them, or because other groups showed unequivocally that such results were (partially or wholly) forged. Naturally, a reviewer can very seldom detect a clever forgery, and such accidents can occur, and



have occurred, in all journals. I could mention more examples of poor behaviour.

There is, however, a specific kind of dishonesty which a fast-publication journal is particularly exposed to and which I have to mention. In a few cases, a group gave the manuscript of a full-paper already accepted by, say, the *J. Biol. Chem.*, to another, supposedly “friendly competing” group – who quickly produced a manuscript for *FEBS Letters*, which naturally appeared before the already accepted *J. Biol. Chem.* manuscript.

It is both discouraging and infuriating to realize that our efforts to serve the scientific community efficiently and fast can lead us to be accomplices of unethical behaviour. Perhaps this is just one of the sad signs that the times have changed for the worse. Ethical behaviour has become fragile, and even some bioscientists (whom I used to regard as the “purest” brand of human beings) have come to think that the goal (i.e., career, money) justifies the means. But this minority should not forget that Machiavel died forgotten, poor and isolated, in spite of the power which he had in his hands for a long time, and in spite of his exceptional intellectual and political gifts. Anyway. “Old soldiers fade away”, they say. There is some wisdom in that.

#### G. Semenza

\*) By 1999, the last year of my office, the publication time, (i.e., date of dispatch of the *FEBS Lett.* issue from the warehouse minus the date of receipt of the revised manuscript or first editor’s date of receipt when no revision was involved) had become as short as **34 working days** (or 6.8 weeks, see ref. 6; actually, it was shortened further by the end of the year, to **32** working days). For the speed and the quality of publication not only editors, reviewers and authors, but also (of course!) our partners at Elsevier and at the printing house should be thanked. I cannot mention them all: let me thank at least P. Jackson, R. van Charldorp, M. Tanke, B. van der Hoek and, last not least, A. van der Werf and his desk editorial office, who, inter alia, translated the authors’ pidgin English (including mine), into a more traditional form of this fascinating and rich language.

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(*FEBS Newsletter* November 2002/4, pp. 4–6)

## 6.4.7

## FEBS Letters – Plans in the New Millennium



Matti Saraste

*Managing Editor of FEBS Letters from 2000–2001*

The following illustrates my first plans concerning *FEBS Letters*. In my view, the editorial operation needs to be changed in order to increase the impact factor further and to secure uniform standards such as similar rejection rates of all editors. The easiest way to implement these needs is to impose a central control on all manuscripts. In addition, the editing of manuscripts should become more transparent both to the editors and the readership of *FEBS Letters*.

**The Journal.** As before, *FEBS Letters* will publish research letters, mini-reviews and hypotheses that have the established format (default: five printed pages). An increasing number of mini-reviews will be solicited but spontaneous submission will also be accepted after a proper review. In the case of mini-reviews, other headings such as “Genomics” can be used when appropriate. Colour printing in mini-reviews should be strongly encouraged and made free of charge. The journal will continue publication of book reviews. A new section “Correspondence” could be included. This would include “Commentaries” which are occasionally published. The main purpose would be (1) to attract response to the research letters and reviews and (2) to provide a forum for short texts that do not represent proper mini-reviews or hypothesis letters (cf. “Scientific correspondence” in *Nature*). The journal could also include a section for “FEBS News” – information on courses, meetings, fellowships etc.

Electronic publishing creates new pressure for the clarity of titles and abstracts. The editors will be urged to pay attention to this matter.

New policies concerning the publication of nucleotide and protein sequences have to be implemented. DNA and RNA sequences will be published only when this is essential for the understanding of the results or discussion. Otherwise, they will be included as entries to databases or reference to a home page. A similar policy will apply to elaborate sequence alignments, assignment of NMR spectra and other voluminous material, which only needs to support the reviewing process.

**Central Office.** The main change is that the editorial handling of the manuscripts will be centralized for all submissions. The exception is the solicited reviews (see below) which will be handled by the editor who makes the invitation.

The central office at EMBL will carry out the first review of manuscripts. It will return about 20 % of the submitted papers to the authors giving policy reasons. The rest will be distributed to the editors and handled according to the current protocol. The individual editors maintain their right to accept papers alone. *The name of the editor will appear at the end of the printed paper.* At the current rate of submission, the office expects to receive about 3000 manuscripts per annum, or 60 per week. The screening and further processing of these manuscripts requires that the office has an Editorial Manager and a Secretarial Assistant. This staff and

the Editor will evaluate the borderline manuscripts by searches in the electronic library and by local consultations, select the appropriate editors for further handling and forward the papers to them, carry out all initial correspondence with the authors, keep the central register of all manuscripts, have facilities for handling of electronic submissions, provide supplementary material (“FEBS News”) for the journal and prepare press releases, monitor individual rejection rates and circulate this information among the editors. Note that the date of reception that will be printed is the date when the acting editor receives the manuscript.

**Editorial Board.** We shall need 20–24 editors with expertise in different fields of biochemistry, biophysics, molecular and cell biology for the handling of ca. 2500 manuscripts per annum. The central office will make an effort to distribute the manuscripts evenly and break any geographical or institutional liaisons (for instance, papers originating from the Eastern Europe will be mainly handled by editors in Western countries). New editors need to be recruited in the areas of molecular cell biology, signal transduction and nucleic acid/protein interactions, in particular.

Central office will be in charge of the minireview/hypothesis section with the help of the selected members of the Editorial Board. These editors are asked to organize thematic ensembles of reviews by invitation, and oversee the handling of spontaneous submissions in collaboration with the central office. A member of the Editorial Board, or an outside Guest Editor, will be appointed to assemble the annual Special Issue.

The individual rejection rates of the editors are currently very different. The central office will monitor these rates 3–4 times a year and distribute this information to all editors.

Heidelberg, June 17, 1999

Due to tragic circumstances, Matti Saraste deceased in March 2001, only two years after he had been appointed Managing Editor of *FEBS Letters*. At the same time, the EMBL at Heidelberg lost a brilliant scientist of its staff and *FEBS Letters* Editorial Board the encouraging successor of Giorgio Semenza.

#### 6.4.8

#### **FEBS Letters in the New Millennium**



*Felix Wieland*

*Felix Wieland*

*Managing Editor of FEBS Letters*

Following Giorgio Semenza’s retirement, Matti Saraste of the European Molecular Biology Laboratories (EMBL) in Heidelberg took over as the new managing editor of *FEBS Letters*. Matti introduced some profound changes in the way the journal was run. In order to distribute each editor’s workload evenly and standardize the editorial process, he decided to centralize

the submission system. This ensured that a manuscript was sent to the handling editor with the nearest area of expertise, rather than to the editor who was geographically closest to the submitting authors. This new operation involved intensive screening of the manuscripts and therefore required the establishment of a professional full-time staff. The timely handling of manuscripts also enabled the centralized editorial office to return those papers not appropriate for publication in *FEBS Letters* directly to the authors within a few days. While it is too soon to see how these changes will influence the impact factor of the journal, the rejection rate has risen over the past few years. This indicates an even further improvement in the already high caliber of papers published in *FEBS Letters*.

After the tragic death of Matti Saraste in 2001, the central editorial office, staffed with two editorial assistants and a secretary, needed a new managing editor. Given that the editorial office had just moved from Zurich one and a half years earlier, the FEBS Publications Committee decided to keep the office in Heidelberg and appoint me as managing editor in June 2001. Staying in line with Matti's vision of the journal, we kept the basic structure of the centralized editorial office the same. We were, however, faced with a couple of technical challenges. As I am affiliated with the Biochemie-Zentrum Heidelberg (BZH), located on the University of Heidelberg's campus, the editorial office could no longer be housed at the EMBL. The EMBL administration was very supportive of *FEBS Letters* and I would like to thank them for not pressuring us to move until we found space at the university campus. We are also grateful to Professor Hans-Guenther Sonntag, Dean of Medical Faculty at the University of Heidelberg, for providing office space at the BZH. This enabled us to relocate the editorial office to the university in January 2003. Additionally, the composition of the editorial office staff has recently changed – Connie Lee, our assistant managing editor, accepted an offer to work as an editor of *EMBO-Journal* and we have hired Kara Bortone, a structural biochemist, to replace her. Together with our assistant editor Eva-Maria Emig and our editorial assistant Anne Mueller, *FEBS Letters* is further evolving by implementing a new electronic submission system. Currently we receive over 95 % of our submissions electronically via e-mail, but we will begin using an automated submission system in the next few months. This customized system will further streamline the handling process between the central office, our editors and referees – thus providing our authors with the most professional, scholarly and high-speed peer review system possible.

Implementing this modern submission system will enable the editorial office to focus on new projects, thereby attracting cutting-edge science and further increasing the impact factor and attractiveness of the journal. One such project is an annual prize to be awarded for the best paper published in *FEBS Letters* by an outstanding young scientist. We have also started a new column entitled "Jeff's View", in which Jeff Schatz, a highly distinguished biochemist of international standing, contributes his thoughts on life science related issues. These contributions have been enthusiastically received and have sparked the discussion of scientific politics. Another focal point of the journal is our "special issues", a concept which originated from the publication of talks given at the annual FEBS

Congress. Under the supervision of Matti Saraste, the office began producing three to four special issues yearly, serving as a collection of reviews and papers on the latest developments in the biological sciences. As these issues are quite popular, we will continue publishing them along with the highest quality research papers and reviews – serving as a reflection of what the FEBS organization embodies.

#### 6.4.9

#### Important Developments in FEBS Letters from 2004 until To Date



*Felix Wieland*  
Managing Editor of FEBS Letters and the Editorial Board  
of FEBS Letters

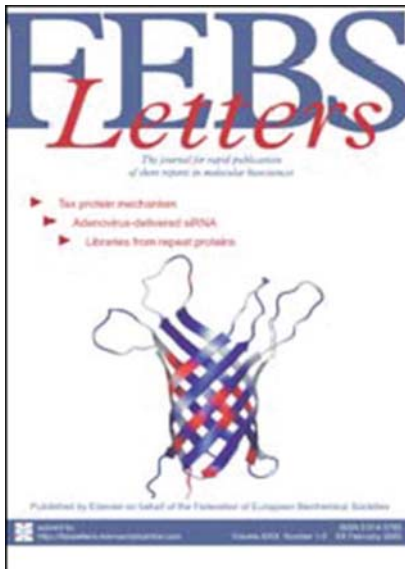
Numerous Editorials and short notices have been published in FEBS NewsLetter and in FEBS News after the publishing of the FEBS Memoir giving a historical summary at FEBS' 40<sup>th</sup> Anniversary in 2003.

*Felix Wieland*

##### 6.4.9.1 The Years 2002 to 2004

A **new submission and peer review system** for FEBS Letters by Felix Wieland (FEBS NewsLetter November 2002)

We would also like to remind you of the **first “FEBS Letters Annual Award for Young Scientists”**. The first award will be presented at the next FEBS conference



**Figure 6.4.9** New cover of FEBS Letters.

in Brussels in July, 2003. It will be awarded to a corresponding author (40 years or younger!) of the best “Research Letter” published in FEBS Letters in 2002. The award will be a sum of 10,000 Euro. (FEBS NewsLetter, November 2002)

FEBS Letters uses an **Online Submission** site since July 2003. (FEBS NewsLetter September 2003)

FEBS Letters has a new look and has been switching to all **electronic handling**. (FEBS NewsLetter January 2004)

In September 2004 FEBS Letters launched their **new website** (<http://www.febsletters.org>). The website was designed and updated by the publisher, Elsevier, and offers fast and easy access to Minireviews, and Editorials, as well as free access to Special Issues and all research papers over 12 months old. One can also look at the table of contents of the current issue and the abstracts of papers in press. (FEBS NewsLetter November 2004)

#### 6.4.9.2 The Years 2005 and 2006

Look out for our second **Nobel Special Issue** that will be published this month. The issue is a collection of papers from the 130th Nobel Symposium “Molecular Mechanisms of Biological Systems” and features contributions from eminent scientists, including Nobel Prize winners. (FEBS News 1/2005)

Starting this month, we will feature a new section in the journal: interviews with our Editorial Board members. Each month we will place a “**Spotlight on...**” their latest research developments, scientific interests, personal views, and careers. As well as making interesting reading, we hope that these articles will help our authors to identify the editorial board member who is best suited to handle their manuscripts. (F. Wieland) (FEBS News 2/2005)

The readers of FEBS Letters should not forget that <http://www.febsletters.org> gives free access to all Minireviews, Special Issues and Editorials, as well as free access to all articles that are over twelve months old. This free access is also available via PubMed and Scopus first by clicking the ‘Elsevier Science-Full Text Article’ symbol and then choosing the ‘Article via FEBS Letters’ option. (FEBS News 3/2005)

In September 2005 FEBS Letters became **full electronic submission**: Accepted manuscripts will be available online (and therefore citable) 3–5 days after acceptance. This means that FEBS Letters remains at the forefront as a rapid publication journal. (FEBS News 5/2005)

#### 6.4.9.3 The Years 2007 and 2008

In 2007, there are 6760 institution libraries with full electronic access to the FEBS Journal, and 5375 with access to FEBS Letters. See discussion by Iain Mowbray below.

#### 6.4.9.4 In praise of ... subscription-based scientific publishing!

**By Iain Mowbray**

In previous issues of FEBS News, I have pointed to the huge developments in scientific publishing pioneered and implemented by publishers: and to the quality

assurance provided by a peer-review process overseen by editorial boards of distinguished scientists. This collaboration between experts in science and experts in communication is the principal element in making experimental data, interpretation and analysis available to other researchers world-wide. It's this collaboration and the sustainability and continued development of the communication process which is now potentially at risk by unfettered "open access publishing"; the proposal that all publicly funded research should be made freely available without restriction on the internet and preferably independently of commercial publishers.

I would here like to consider whether active researchers are really denied access to new findings by subscription-based publishing: and ask who might benefit if we scientists were to seriously damage scientific publishers and, collaterally, the learned societies, such as FEBS, which appoint journal editorial boards in the name of giving unfettered free access to the public (who will not be able to use the information) and to industry such as the pharmaceutical companies (who will use it to generate greater profits from the public).

In surveys conducted by both of our publishers, Wiley- Blackwell and Elsevier, there is no evidence that there is any surge in access to our journals when they are free to all after 12 months. Correspondingly the findings support the conclusion that the rapid access recorded for newly-published material adequately provides for specialist researchers world-wide in biochemistry and molecular biology who regard it important to have subscriptions to our journals: there are 6760 institution libraries with full electronic access to the FEBS Journal and 5375 with access to FEBS Letters. Of course, most research-active institutions have to have periodical subscriptions for access prior to the 12 month embargo on free access agreed among learned society journals in the life sciences and embodied in the Washington DC Principles for Free Access to Science [[www.dcprinciples.org](http://www.dcprinciples.org)].

By contrast, this does not exclude institutes in developing economies, since a joint programme, HINARI, set up by the World Health Organisation and publishers make 3500 online journals either freely available or available at nominal cost depending on per capita Gross Domestic Product [see [www.who.int/hinari](http://www.who.int/hinari)]. A similar initiative of the UN Food and Agricultural Organisation, AGORA [[www.agnetwork.org](http://www.agnetwork.org)], provides the same access for agriculture in the third world.

It is not unreasonable to ask whether these library subscription costs are an unacceptable burden on science for the service they provide. In a study carried out by Phil Davies of the Cornell University Library Taskforce on Open Access [published in *Serials* 19(1) March 2006], the author calculated that the payments for a research-active institute such as CERN would be at least 9 times that spent on library subscriptions if the publishers' costs were entirely covered by open access payments; and at least 5 times the cost of subscriptions if publication were partly covered by journal subscriptions combined with open access payments as in the Springer Open Choice model. The author concludes that in general the open access models currently available would be more expensive for large research institutions than the cost of periodical subscriptions. In other words, the result for

research-active institutions would be to subsidise those who contribute much less to scientific advancement or its free dissemination as do, for example, enterprises driven by commercial secrecy.

The payments to sustain this “open access” policy would need to come from research budgets. In part, some journal subscription rates are subsidised by page charges already and so this is not new. However, were the whole costs to be met by open access payments, this would introduce an additional barrier to publication based on the ability to pay: it is against experience to assume that all good science and the introduction of novel concepts are only done by well-funded research groups. It is with this in mind that FEBS has never sought page charges from authors. Further, most institutional library budgets do not take directly from an individual researcher’s grant even if an overheads charge partly supports this. To transfer these publication costs directly to the grant holder as some open access evangelists suggest can only diminish the funds available for active experimental investigations. The idea of an individual publishing research and making it universally available is beguiling: but we experimental scientists need high-quality, peer-reviewed, focused findings spread across an ever-increasingly diverse literature. There is no evidence that the current information-transfer system denies rapid access to research publications; and the notion that secure archiving and continued evolution can be delivered without the serious involvement of professional publishers who have developed this system seems to defy reason. (FEBS News 2007/6)

**Fast-Track** from the end of 2008: “FEBS Letters is now accepting “Fast-track” submissions. We offer expedited handling of manuscripts that have been rejected from very high-level journals. Authors are encouraged to enclose reviews and comments from the editor of previously reviewed manuscripts to expedite their handling as your manuscript may be accepted based on the previous reviews. Please also include a letter with a point-by-point response to the concerns raised by the reviewer(s). You will receive a final decision from the Managing Editor within a few days of submitting manuscripts with reviews.” (FEBS News 2008/6)

#### 6.4.9.5 The Years 2009 and 2010

**Structure digital abstracts:** “Our most innovative change in 2008 was to publish manuscripts with Structured Digital Abstracts (SDA). FEBS Letters is the first journal to link novel protein-protein interactions that are described in a manuscript directly to a molecular interaction database. An SDA adds a great deal of value to the manuscript, as the reader has immediate access to the “big picture” about their protein of interest. The six month experimental phase was so successful that we have decided to make SDAs a permanent feature of FEBS Letters.” (FEBS News 2009/1)

**Virtual Special Issues:** “FEBS Letters is proud to launch a new series of Virtual Special Issues which will highlight a collection of outstanding articles recently published in the journal, focusing on a selection of topics that we hope will be of



general interest to our readers. The first of the series is a Virtual Special Issue on Molecular Medicine. The topic is deliberately broad, as we believe that this diversity is the strength of our journal, and will be appreciated by scientists from all fields. Read it for yourself at: <http://www.febsletters.com/content/virtual>. (FEBS News 2009/1)

In 2010 the FEBS Letters IF has increased to 3.601. The IF has been steadily increasing over the past few years. (FEBS News 3/2010)

#### 6.4.9.6 The Years 2011 and 2012

***Why it is important to publish your papers in our Journals:*** FEBS has twin commitments to high-quality publications and the promotion of molecular biosciences. FEBS owns all its publications, from FEBS Journal to FEBS Letters, Molecular Oncology and FEBS Open Bio. They are published on our behalf by Wiley-Blackwell and Elsevier, who return most of the revenue to FEBS, which, as a not-for-profit academic organization, ploughs all the income into funding our diverse activities: FEBS fellowships; advanced courses and workshops; congresses; and aiding researchers in poorer countries. By publishing in FEBS journals and taking part in reviewing, you are both supporting high-quality science and helping provide an essential income stream to fund education and research. The proliferation of open access journals with ill-defined standards of peer review makes it more important than ever to publish in journals that bear the stamp of respected organizations and publishers.

(FEBS News 1/2012)

#### 6.4.9.7 The Years 2013 and 2014 – FEBS Letters Today

##### **FEBS Letters Editorial Board 2013**

Jesus Avila, Madrid; Paul Bertone, Cambridge, UK; Peter Brzezinski, Stockholm; Michael R. Bubb, Gainesville, FL; Giovanni Cesareni, Rome; Zhijie Chang, Beijing; Amitabha Chattopadhyay, Hyderabad; Quan Chen, Beijing; Richard Cogdell, Glasgow; Tamas Dalmay, Norwich; Miguel A. De la Rosa, Sevilla; Stuart Ferguson, Oxford; Ulf-Ingo Flügge, Cologne; Takashi Gojobori, Mishima; Christian Griesinger, Göttingen; Barry Halliwell, Singapore; Lukas A. Huber, Innsbruck; Michael Iba, Columbus, OH; Beat Imhof, Geneva; Kazuhiro Iwai, Kyoto; Hans-Dieter Klenk, Marburg; Jacomine Krijnse-Locker, Heidelberg; Ulrike Kutay, Zürich; Veli-Pekka Lehto, Helsinki; Kaspar Locher, Zürich; Dietmar J. Manstein, Hannover; Ned Mantei, Zürich; Noboru Mizushima, Tokyo; Maurice Montal, La Jolla, CA; Laszlo Nagy, Debrecen; Angel R. Nebreda, Barcelona; Judit Ovádi, Budapest; Francesc Posas, Barcelona; Varda Rotter, Rehovot; Robert B. Russell, Heidelberg; Ivan Sadowski, Vancouver, BC; Julian I. Schroeder, La Jolla, CA; Rmgard Sinning, Heidelberg; Vladimir P. Skulachev, Moscow; Sandro Sonnino, Milan; Bing Sun, Shanghai; Michael R. Sussman, Madison, WI; Renee Tsolis, Davis, CA; Berend Wieringa, Nijmegen; Wilhelm Just, Heidelberg; Felix Wieland, Heidelberg;

Dear Fellow Scientists,

We hope you all had a great summer and managed to recharge your batteries for the second half of the year. As usual for this time of the year, July brought the FEBS Congress, this year in St Petersburg, Russia. The highlight of the Congress for the journal was the *FEBS Letters* Young Group Leader Award plenary lecture session. As you probably know by now, the prize was awarded to Dr Susumu Mitsutake, Hokkaido University, Japan for his paper: Mitsutake, S., Date, T., Yokota, H., Sugiyura, M., Kohama, T. & Igarashi, Y. (2012) Ceramide kinase deficiency improves diet-induced obesity and insulin resistance. *FEBS Lett.* 586(9): 1300–1305.

Susumu gave an enthusiastic plenary lecture about his work in front of a full plenary hall. The award was endowed with €10,000 prize money and an invitation to give a plenary lecture at the FEBS Congress.

#### *New Member of the Editorial Board*

We are also pleased to welcome a new Academic Editor, James E. Rothman, to *FEBS Letters*. James is a Professor at Yale University in the Department of Chemistry. His main areas of expertise are the biochemical and biophysical mechanisms of vesicle budding and fusion, cellular regulation of vesicle fusion in exocytosis and synaptic transmission, and structural and functional organization of the Golgi apparatus. James is one of the most prominent researchers in cellular transport and we are looking forward to a productive and successful collaboration in the future.

#### *Special Issues*



Figure 6.4.10 through 6.4.12 Recent Special Issues of *FEBS Letters* (see text).

Finally, we would like to draw your attention to three recent Special Issues:

- *The Many Faces of Proteins*; edited by Wilhelm Just, *FEBS Lett.* 587 (8)
- *St Petersburg Special Issue: Mechanisms in Biology*; edited by Alexander Gabibov, Vladimir Skulachev, Felix Wieland and Wilhelm Just, *FEBS Lett.* 587 (13)
- *A century of Michaelis–Menten kinetics*; edited by Athel Cornish-Bowden and Christian P. Whitman, *FEBS Lett.* 587 (17)

As always, we look forward to receiving your manuscripts.

Best wishes,

*Felix Wieland, Managing Editor*

*Aleksander Benjak, Editorial Manager*

*Daniela Ruffell, Editor*

*Anne Rougeaux, Editorial Assistant*

(FEBS News September 2013, p.24)

### **Prizes awarded by FEBS Journal and FEBS Letters from 2015**

FEBS has given careful consideration to the way in which it supports younger scientists through the prizes awarded to the authors of the papers judged to be the best of their kind published in *FEBS Journal* and *FEBS Letters* each year. It has decided to adopt a new scheme from 2015 that will better complement the overall objectives of FEBS as a charitable organization dedicated to fostering biochemical research, education and scientific cooperation. In 2014, prizes will be awarded in the same way as now (with the recipients selected from papers published during 2013).

From 2015, *FEBS Journal* will continue to award a prize every year to the paper judged by the Editors to be the most meritorious with a first author who is a post-graduate student or post-doctoral scientist of no more than three years standing since the award of the PhD Degree. The prize will consist of a personal gift of €1000 plus an invitation to present the work in a plenary lecture at the annual FEBS Congress.

*FEBS Letters*, on the other hand, will open its prize of €10,000 to the senior authors of all papers published in *FEBS Letters*, regardless of the age or standing of the authors. The *FEBS Letters* prize will be awarded every other year, also with an invitation to present a plenary lecture at the corresponding FEBS Congress.

FEBS believes that this is a timely adaptation of its policy, taking into account an ever-growing financial need to care for the long-term support of the core activities of FEBS. (FEBS News Sept. 2013)

## 6.5

## Molecular Oncology

Molecular Oncology highlights new discoveries, approaches, as well as technical developments, in basic, clinical and discovery-driven translational research.

**MOLECULAR ONCOLOGY OFFERS AUTHORS:**

- No page charges and free colour
- Fast review time, less than 3 weeks
- Online in 5 days, to deliver your work to its audience as quickly as possible
- Connection with an audience of global cancer experts and stakeholders
- Comprehensive and constructive advice for improvements to papers
- Fully automated submission system, allowing you to track the progress of your paper
- open access option

**COVERAGE**  
Reviews, original articles, technical notes, editorials, news & views (commentary, science policy issues, ethical and legal issues), patient organizations, industry needs and alliances, regulatory issues, news items, letters to the editor, conference announcements, advertisements. A main feature of Molecular Oncology is to provide an international forum for debating cancer issues, and for integrating the input of all the stakeholders.

**THEMATIC ISSUES**  
**NEW!**  
Recently Published: Gut-microbiome  
Forthcoming: DNA Damage Response and Cancer • Cancer Systems Biology

www.molecularoncology.org

Figure 6.5.1 Introducing 'Molecular Oncology' in 2007.

## 6.5.1

## The New FEBS Journal in Molecular Oncology

Introducing: *Molecular Oncology*

By Julio E. Celis and José Moreira

“FEBS and Elsevier decided to start Molecular Oncology, a journal that is aimed at scientists and health professionals interested in molecular aspects of the development, diagnosis and treatment of cancer. Molecular Oncology will highlight new discoveries, approaches, as well as technical developments in basic, clinical, and discovery-driven translational research. A main feature of the Journal will be to provide an international forum for debating

cancer issues where researchers, health care providers, patient advocates, and other cancer stakeholders can raise awareness to issues of broad interest. The Journal will publish original articles, reviews, technical notes, editorials, news & views (commentaries, science policy issues, ethical and legal issues, patient organisations, industry needs and alliances, regulatory issues, etc.), and letters to the editor.” (FEBS News 2007/2)

Amsterdam, 14 May 2007 – Elsevier announced today the inaugural issue of a new journal, *Molecular Oncology* – a journal for discovery-driven translational cancer research, published by Elsevier on behalf of FEBS. The quarterly journal will focus on the advances in the rapidly expanding field of molecular oncology. The first issue will appear online today and be available in print in the first week of June 2007. – Editor-in-Chief Prof. Julio E. Celis explains: “The completion of the human genome project, as well as the current availability of novel and powerful technologies within genomics, proteomics and functional genomics promise to have a major impact on clinical practice, as these developments are likely to change the way in which cancer will be diagnosed, treated and monitored in the future. The greatest challenge today is how to effectively bridge basic and clinical cancer research in order to expedite the translation of novel discoveries into clinical applications for the benefit of the patient”. (FEBS News 2007/3)

#### 6.5.2

##### **Molecular Oncology in its Second Year**

*Julio E. Celis, Editor-in-Chief*

Dear Fellow Scientists,

This year marks the second year of existence of *Molecular Oncology*, a journal that was conceived by FEBS to foster the development of discovery-driven translational cancer research. To nurture this emerging discipline – which uses knowledge-based, multidisciplinary approaches to derive new diagnostics and targeted cancer treatments for the benefit of the patient – there is an urgent need to improve the coordination of national and international cancer research strategies. Work focused on developing innovative therapeutic options based on an understanding of the biological processes underlying disease pathogenesis can only be successfully undertaken if stakeholders from all parts of the cancer research continuum speak with one voice. Recognising this fact, in Vol. 2, issue 1 of *Molecular Oncology* we will publish the “Stockholm Declaration”, a statement made by senior representatives of major cancer centres in Europe who have agreed to work together towards the creation of a world-class platform for translational research. This platform will integrate all aspects of the research process to speed up the implementation into clinical practice of new treatments and technologies. Presently, there are no instruments in Europe to establish and support this type of initiative in a sustainable way. For this reason, signatories to the Stockholm Declaration believe it is vital that all stakeholders work in unison to combat the fragmentation and redundancy – both at scientific and

political levels – that currently hinder effective translation of laboratory-derived knowledge into benefits for patients, and to ensure that the patient remains the focus of cancer research. In line with these sentiments, an important objective of this journal is to provide a forum where researchers, health care providers, patient advocates, and other cancer stakeholders can raise awareness about issues that obstruct translational cancer research.

In addition to the journal's high quality scientific content, we encourage the submission of articles on science policy and societal issues to reflect the increasingly multidisciplinary nature of cancer research and to acknowledge the necessity for broader discussions about its risks and benefits, given its growing costs. To fulfil these aims, we are responding with a major step up in editorial activities. As part of this change, we have recently appointed Hannah Brown, former Senior Editor at *The Lancet* and *The Lancet Oncology*, as Managing Editor of *Molecular Oncology*. Hannah brings with her considerable experience in the oncology area as well as expertise in journalism. Hannah will be in charge of the News and Views section which we aim at making a major feature of *Molecular Oncology*. Lately, there have been some other important journal developments that I would like to mention briefly. One is the fact that *Molecular Oncology* has greatly improved its visibility through ScienceDirect; today we have about 3200 accounts with full access. Another is to inform you that we are in the process of submitting an application for inclusion of the journal in Medline, an essential landmark in the future development of the journal. Moreover, we will be present at major cancer congresses this year and in June we will visit Beijing and Shanghai with the aim of introducing the journal to scientists and policy makers in this important part of the world. Finally, I am very pleased to inform you that there has been a significant increase in the number of manuscripts submitted to the journal in the past few months and, as a result, we are currently considering the possibility of increasing the numbers of issues from four to six starting in 2009. Together with Hannah, José Moreira, the other Managing Editor and the Editorial Board we will oversee the expansion of our coverage by identifying upcoming topics, by soliciting reviews on promising new areas of research, as well as by organising special issues on topics of broad interest. Needless to say, the success of the journal depends on your support. We are looking forward to receiving your contributions. (FEBS News March 2008).

### 6.5.3

#### **Molecular Oncology in 2011**

*Julio Celis*

*Editor-in-Chief Molecular Oncology*

Dear Fellow Scientists,

Cancer is one of the major challenges affecting our societies and the situation is set to worsen due to the increasing elderly population. A significant relief of the cancer burden in the short-term may only be possible by concerted actions aimed

at improving prevention and therapeutic strategies that increase cure rates. A multidisciplinary approach to cancer research requires the coordination of basic and clinical research activities and large resources and infrastructures, in addition to the creation of integrated and interdisciplinary environments with the participation of all the stakeholders in the cancer continuum. FEBS and Elsevier started *Molecular Oncology* in response to these challenges, for scientists and health professionals interested in molecular aspects of the development, diagnosis and treatment of cancer. The journal continues to highlight new discoveries, approaches and technical developments, in basic, clinical, and discovery-driven translational research; in addition, it provides an international forum for debate and raising awareness of issues of broad interest. In the past year *Molecular Oncology* published, in addition to standard review papers, two thematic issues, which provide authoritative views of current trends in cancer research in these fields:

Genetic Instability and Cancer Cutaneous Melanoma



Genetic instability and cancer

**Figure 6.5.2** Volume 5, Issue 2 (2011).

In 2011, we also enhanced the editorial board of the journal. As the field of translational cancer research matures, the number of related research areas develops at an ever-growing pace and with it the number of researchers working in the various fields across the cancer continuum. To keep abreast of these new developments, particularly in the area of personalized cancer medicine, we have appointed two Senior Associated Editors – Anne-Lise Börresen-Dale (Oslo, Norway) and Richard Schilsky (Chicago, USA) – who will provide advice on new areas to be



#### Cutaneous melanoma

**Figure 6.5.3** Volume 5, Issue 4 (2011).

covered by the journal and help to further establish *Molecular Oncology* within this competitive field. Moreover, we have recently appointed several new members to the Editorial Board – Ruedi Aebersold (Zurich, Switzerland), Stephen Baylin (Baltimore, USA), René Bernards (Amsterdam, The Netherlands), Anton Berns (Amsterdam, USA), Carlo Croce (Columbus, USA), Hedvig Hricak (New York, USA), Guido Kroemer (Paris, France), Ole C. Lingjaerde (Oslo, Norway), Tak W. Mak (Toronto, Canada), Elaine R. Mardis (St Louis, USA), Martine Piccart (Brussels, Belgium), Jorge S. Reis-Filho (London, UK), and Huanming Yang (Beijing, China) – whose joint expertise, together with that of their existing extensive network of collaborators, will help guide the future development of the journal. Judging from the performance indicators that can sensibly be used to evaluate a journal, we can proudly affirm that *Molecular Oncology* is thriving. The current Impact Factor is 4.25 (compared to 2.665 in 2010) and the inflow of manuscripts and the number of downloads have increased substantially in recent months.

Looking forward to receiving your manuscripts.  
 With best wishes from us at *Molecular Oncology*,  
*Julio E. Celis, Editor-in-Chief*  
*José Moreira, Managing Editor*  
*Dorte Holst Pedersen, Editorial Assistant*  
 (FEBS News 2012/1, 30–31).



6.5.4

**Molecular Oncology Today*****Molecular Oncology Editorial Board***

R. Aebersold, Zürich; K. Alitalo, Helsinki; M. Barbacid, Madrid; J. Bartek, Copenhagen; J. Baselga, Barcelona; B.C. Bastian, New York, NY; S.B. Baylin, Baltimore, MD; F. Belardelli, Rome; R. Bernards, Amsterdam; A.J.M. Berns, Amsterdam; M. Bissell, Berkeley, CA; P. Boyle, Lyon; N. Brünner, Frederiksberg C; C.M. Croce, Columbus, OH; P.P. Di Fiore, Milan; E.P. Diamandis, Toronto, ON; L.M. Ellis, Houston, TX; M. Esteller, Barcelona; S.H. Friend, Seattle, WA; T.R. Golub, Boston, MA; H.B. Grossman, Houston, TX; B. Haab, Grand Rapids, MI; N. Harbeck, Cologne; D.F. Hayes, Ann Arbor, MI; C.-H. Heldin, Uppsala; R.B. Herberman, Blacksburg, VA; H.R. Herschman, Los Angeles, CA; H. Hricak, New York, NY; T. Hunter, La Jolla, CA; E.S. Jaffe, Bethesda, MD; O. Kallioniemi, Turku; D.J. Kerr, Oxford; G. Kroemer, Villejuif; O. C. Lingjaerde, Oslo; E. Liu, Singapore; T.W. Mak, Toronto, ON; R. Marais, London; E. Mardis, St. Louis, MO; J. Massagué, New York, NY; J. Mendelsohn, Houston, TX; G.B. Mills, Houston, TX; E. Oláh, Budapest; M. Oren, Rehovot; M. Piccart, Brussels; J.W. Pollard, New York, NY; D.F. Ransohoff, Chapel Hill, NC; J.S. Reis-Filho, London; U. Ringborg, Stockholm; H. Sasano, Sendai; A. Spatz, Montreal, QC; I.J. Stratford, Manchester; F.C.G.J. Sweep, Nijmegen; D. Tarin, La Jolla, CA; T. Tursz, Villejuif; M.L. Tykocinski, Philadelphia, PA; M. Uhlen, Stockholm; A. Ullrich, Singapore; N. Urban, Seattle, WA; J.E. Visvader, Parkville, VIC; A. Wellstein, Washington, DC; O.D. Wiestler, Heidelberg; C.L. Willman, Albuquerque, NM; H.-M. Yang, Beijing; Y. Yarden, Rehovot; J. Yates, La Jolla, CA; T. Yeatman, Tampa, FL; Q. Zhan, Beijing; T.F. Ørntoft, Aarhus N.

(FEBS News, May 2013)

Dear Fellow Scientists,

*Molecular Oncology* ([www.moloncol.org](http://www.moloncol.org)) highlights new discoveries, approaches and technical developments in basic, clinical and discovery-driven translational research, and one of the main features of the journal is to provide an international forum for debating cancer issues. Through this we intend to encourage and support a coordinated approach to cancer research, with a societal dimension that goes beyond the purely scientific aspects. *Molecular Oncology* aims to influence the political agenda in translational cancer research by promoting current and near-future political news and debate. Hence, we are delighted to report that the Journal Citation Reports (Thomas Reuters) impact factor for *Molecular Oncology* increased to 6.701 in 2012, from 5.082 in 2011. We believe that this steady rise in impact factor since the journal was first indexed reflects an increasing visibility of the journal among scientists, which we hope will translate into our reaching a broader audience and a greater interest in the journal from all cancer stakeholders.

Since its inception, *Molecular Oncology* has provided the scientific community with a coherent body of reviews, combined into thematic issues that address timely topics that we believe will have a significant structuring impact in the field, ultimately for the benefit of cancer patients. In line with these aims, we would like to highlight here our most recent thematic issue 'Mouse models of cancer: Essential tools for better therapies', edited by Drs Anton Berns and Mariano Barbacid, who introduce the collection of articles in their foreword:

In this thematic issue of *Molecular Oncology* you will find a compendium of reviews on mouse models of cancer written by experts in the field. The various chapters deal with mouse models engineered to gain deeper insight into what drives tumor initiation and tumor progression, an aspect that is difficult to study in human tumors. The reviews primarily focus on modeling studies of frequently occurring human tumors. Each review highlights what they have taught us and also how this knowledge has already contributed or can contribute to the treatment of cancer patients...We hope that the information contained in this monographic issue of *Molecular Oncology* will be useful not only to academic scientists interested in understanding the molecular intricacies of tumor initiation and progression, but also to pharma scientists and executives actively engaged in identifying effective therapeutic strategies and to science



Special Issue: Mouse Models of Cancer: Essential tools for better therapies. Guest Editors: Anton Berns and Mariano Barbacid

[www.molecularoncology.org](http://www.molecularoncology.org) | Volume 7 | Issue 2 | April 2013

**Figure 6.5.4** Special Issue: Mouse models of cancer: Essential tools for better therapies. Edited by Anton Berns and Mariano Barbacid, *Mol. Oncol.* (2013) Vol.7, Issue 2.

policy makers...responsible for assuring that we make the most effective use of public funds to fight cancer.

As always, we look forward to receiving your manuscripts.

Best wishes,

*Julio E. Celis, Editor-in-Chief*

*José Moreira, Managing Editor*

*Dorte Perderson, Editorial Assistant*

(FEBS NEWS September 2013, pp. 25–26)

## 6.6

### FEBS Open Bio



**FEBS OpenBio** is the new online only, author pays, open access, peer reviewed journal in molecular and cellular life sciences in both health and disease. The journal is published by Elsevier on behalf of the *Federation of European Biochemical Societies*. As a charity whose objectives are to promote research and education in the Life Sciences, FEBS

aims to meet the growing interest in open access publishing and therefore has established *FEBS OpenBio* for the rapid publication of articles in the molecular and cellular life sciences in both health and disease.



Figure 6.6.1 Logo for FEBS OpenBio.

Peer review by its distinguished editorial board will select manuscripts considered to make a contribution to knowledge. The journal will publish experimental findings, critical analysis, methodological & technical innovations and hypotheses. Novel or innovative work is encouraged. Papers describing sound science of a confirmatory nature in developing fields or extending knowledge of an important topic from one organism to another will also be considered. The eventual importance of these publications will be left to the judgement of the readers.

## 6.6.1

## FEBS Open Bio, a New FEBS Journal in 2011



Mary Purton  
Executive Editor *FEBS Open Bio*, 98 Regent Street, Cambridge,  
CB2 1DP, UK

Dear Fellow Scientists,

***FEBS Open Bio***, the newest journal published by FEBS, was launched in November 2011. I've been appointed as its Executive Editor and have established an office in Cambridge, UK, in the same building as the offices of *the FEBS Journal*. Some of you may remember me from my time as Editor of *Trends in Biochemical Sciences*, or as Book Reviews Editor for *Nature*. I'm pleased to be involved in the launch of this new journal. *FEBS Open Bio* is an open access journal, dedicated to rapid publication of articles across the molecular and cellular life sciences, including both health and disease. It has a much broader scope than the other FEBS publications (*FEBS Letters*, *the FEBS Journal* and *Molecular Oncology*). Its editorial policy is delimited to the evaluation of the originality and technical soundness of papers, leaving the assessment of their impact and importance to the scientific community. *FEBS Open Bio* has been launched as a result of listening to the scientists FEBS serves. Many of the Editors of existing FEBS journals are actively supporting this new launch and have joined the Editorial Board of *FEBS Open Bio*. The journal is open to direct submissions as well as the transfer of articles submitted to other FEBS publications that have been judged as original and technically sound but do not meet the criteria set by the Editors for publication in these journals. Manuscripts transferred in this way will be accompanied by their original reviewer reports and there will be no need for resubmission or reformatting. All articles will be published electronically (there will be no print edition) and will be freely available on **ScienceDirect**. Authors of accepted manuscripts will be asked to pay a fee of €1200 to offset the cost of managing article submissions, electronic publication and indexing, global dissemination, and permanent preservation of published articles. FEBS may be able to offer a fee waiver for authors who do not have funds to cover publication fees. As with all FEBS publications, any surplus income will go to support the other activities of FEBS. *FEBS Open Bio* looks forward to receiving your submissions and welcomes any feedback and suggestions.

Best wishes,

Mary Purton

openbio@camfebs.co.uk

+44 (0)1223 367 011

<http://www.journals.elsevier.com/febs-open-bio/>

(FEBS News, Issue 1 (Feb 2012), p. 32)

## 6.6.2

**FEBS Open Bio Today****FEBS Open Bio Editorial Board**

Senior Editors: Julio Celis, Copenhagen; Stuart Ferguson, Oxford; Richard Perham, Cambridge, UK; Felix Wieland, Heidelberg.

Associate Editors: Alberto Alape Girón, Costa Rica; Edurne Berra Ramírez, Vizcaya; Antonio Castrillo Viguera, Madrid; Gianni Cesareni, Rome; Pierre Cosson, Geneva; Miguel de la Rosa, Sevilla; Takashi Gojobori, Mishima; Kristine Kleivi Sahlberg, Oslo; Dietmar Manstein, Hannover; Laszlo Nagy, Debrecen; Jan S. Potempa, Krakow; Julian Schroeder, La Jolla, CA; Cristiano Simone, Santa Maria Imbaro; Sandro Sonnino, Milan; Michael Sussman, Madison, WI; Tibor Vellai, Budapest; Beáta G. Vértessy, Budapest; Derick G. Wansink, Nijmegen; Alexander Wlodawer, Frederick, MD; Koji Yamanaka, Nagoya; Lei Yin, Ann Arbor, MI.

Dear Fellow Scientists,

*FEBS Open Bio* celebrated the publication of its 100th article in June 2013, 18 months after the launch of the journal. The rate of submissions to the journal is now increasing, and so we hope to reach the 200th article well before the end of 2014.

Open Access is about making an author's work as widely accessible as possible. All articles published in *FEBS Open Bio* are now included in the repositories PubMedCentral (PMC) and Europe PubMed Central (Europe PMC) and indexed in PubMed. Authors can also post the final published PDF in any other repository. Inclusion of the CrossMark logo on these multiple versions will alert readers if and when any changes are made to the 'parent' version on ScienceDirect.

Download requests for *FEBS Open Bio* articles on ScienceDirect have been building steadily since the journal was launched in November 2011. A list of the five most downloaded articles from the 56 articles published in 2011–2012 appears in the box to the right. The first article, by Acuña et al., is still featured in the Most Downloaded Articles list in the past 90 days.

Downloads are one measure of the attention an article gets, but what matters most is citations. As a new journal, *FEBS Open Bio* won't be eligible for an Impact Factor until it has been publishing for over 3 years (citations are counted in Year 3 to papers published in Years 1 and 2). However, from data collected by Scopus and Google Scholar, the number of citations to *FEBS Open Bio* articles is growing at a steady rate (see graph on next page). A list of the five most cited articles in the journal is also given in the box on the next page.

We look forward to receiving your manuscripts.

With best wishes

Mary Purton

Executive Editor

(FEBS News September 2013, p. 26)

6.7  
The FEBS Bulletin



Figure 6.7.1 Jan Škoda.

For many years, *The FEBS Bulletin* was used as an instrument to communicate information on FEBS activities, meetings of constituent Societies, and international meetings and courses, which were of interest to a broader readership among biochemists and molecular biologists. This Bulletin had been established by *Prakash Datta* and for many years was run by Professor *Jan Škoda* from the Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences. It was compiled and published in the form of a poster which was distributed twice yearly *via* the Societies. With the upcoming age of the Internet, the Bulletin was supplemented by a FEBS Website; more recently (in 2002), it has been replaced by

**FEBS** The Federation of European Biochemical Societies Information Bulletin produced twice-yearly by the Biochemical Society No.1 April 1965

**INTERNATIONAL MEETINGS 1965-66**

**Federation of European Biochemical Societies, 2nd Meeting - Vienna, 21-23 April 1965**  
Symposium, 22-23 April: 'Ribonucleic Acid - Structure and Function'  
Colloquia: 21 April, 'Antibodies to Biologically Active Molecules'; 22-23 April, 'Cytosols and Phosphonolipids'; 23 April, 'Synthesis of Aromatic Compounds'  
Registration fee, to members of the Federation, Ds 220; to others Ds 300; associate members Ds 150.  
Information from the Secretariat, Second Meeting of the Federation of European Biochemical Societies (Wiener Medizinische Akademie), Alsterstrasse 4, Wien X, Austria.

**Eighth Latin Biochemical Meeting Lisbon, 28-29 September 1965**  
General theme: Biochemical Aspects of Metabolic Regulation  
Registration fee: 100 escudos  
Information from the Organizing Committee, Eighth Latin Biochemical Meeting, Labor. de Quimica Fisiologica, Fac. de Medicina, Hospital de Santa Maria, Lisboa, Portugal.

**1966**

**'Naturally Occurring Sulphur Compounds'**  
Copenhagen, 26-29 June 1966  
A Symposium arranged by the Danish Chemical Society  
Information from Professor A. Kjaer, Royal Veterinary and Agricultural College, Copenhagen V, Denmark.

**'Carotenoids other than Vitamin A'**  
Tromsø, 24-25 June 1966  
A Symposium arranged by the Norwegian Chemical Society  
Information from Professor K. A. Sæverm, Norwegian Institute of Technology, Tromsø, Norway.

**Fourth International Symposium on 'The Chemistry of Natural Products'**  
Stockholm, 29 June-2 July 1966  
Sponsored by the Division of Organic Chemistry, SPPAC and arranged by the Swedish National Committee for

Chemistry. Information from Dr (Mrs) G. Axil-Ehrman, Natural Product Symposium, Örnthins Kringens Väg 53, Stockholm O, Sweden.

**PRELIMINARY ANNOUNCEMENTS**

**1966**

Third Meeting of the Federation of European Biochemical Societies  
Poland, September

**1967**

Seventh International Congress of Biochemistry  
Tokyo, Japan, August

**1970**

Eighth International Congress of Biochemistry  
Rome, Italy

**MEETINGS OF CONSTITUENT SOCIETIES**

Further information may be obtained from the Secretary of the appropriate Society (see list at foot). Where no details are given the meeting is generally only for the presentation of free papers.

**1 April Germany: Magdeburg**  
1-2 April England: London  
Symposium on 'Insect Biochemistry'  
7th Biophysical Meeting Lecture on 'Growth and Cellular Metabolism' by A. Szent-Györgyi

**28-30 April Germany: Wiesbaden-Badon**  
18th Colloquium on 'Lipids'  
4 May France: Institut Pasteur, Paris  
Symposium on 'Lipid Polysaccharides'  
14 May England: London  
Colloquium on 'Immuno-specificity of Some Enzyme Reactions'  
21-22 May Belgium: Liège  
Symposium on 'La Biochimie Comparée' (Jointly with the Société de Chimie Biologique)

**25-28 May Hungary: Budapest**  
Colloquium on 'Structure and Function of Nucleic Acids' and 'Enzymology of Carbohydrate Metabolism'

**Summer School**

**'Centrifugal Fractionation of Animal Cells: Theoretical Basis and Practical Procedures'**  
Arranged for FEBS by the Société belge de Biochimie and under the direction of Professor C. de Duve. To be held in Louvain, Belgium, on 3-18 June 1965. Application forms from Professor C. Libaux (address below) for a closing date 11 April 1965.  
Registration fee 5000 Belgian francs.

**19 June Scotland: Dundee**  
Colloquium on 'Recent Advances in the Separation and Estimation of Steroids'

**24-25 June Germany: Magdeburg**  
Rund-Tisch Gespräch: Funktionen Biochemie von Zellulären Membranen und Mitochondrien; Regulation der Glykolyse und Citratzyklus; Substrat-Pflanzensäfte; Grundrissliche Fragen der Ausbildung von Biochemikern

**15-17 July England: Oxford**  
Colloquium on 'The Biochemistry and Physiology of the Central Nervous System' (Jointly with the British Physiological Society)

**28-31 July Spain: Oviedo**  
Symposium on 'Microbial Metabolism', 'Enzymatic Regulation', and 'Vitamin Metabolism'

**7-8 September Italy: Santa Margherita**  
Colloquium on 'Control of Metabolism at the Level of Hexose Phosphates' (Jointly with the British Biochemical Society)

**9 October England: London**  
14-15 November England: Manchester  
Discussion on 'Biochemistry in Industry'

**3-4 December France: Marseille**  
Symposium on 'Quelques Aspects de la Biosynthèse des Protéines Spécifiques'

**11 December England: London**  
Colloquium on 'Some Aspects of Lipid Biochemistry of the Nervous System'

**BIOCHEMICAL SOCIETIES OF THE FEDERATION**

The names given below are, mainly, those of the Secretaries of the Societies; where not possible further information about the meetings.

**AUSTRIA (Österreichische Biochemische Gesellschaft)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**BELGIUM (Société Belge de Biochimie - Belgische Vereniging voor Biochemie)**  
Prof. C. Libaux, Laboratoire de Biochimie, Université de Liège, Université de Liège, Belgium.

**BULGARIA (Comité National Bulgare de Biochimie)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**CZECHOSLOVAKIA (Československá Společnost Biochemická při ČA.V)**  
Prof. J. Škoda, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**DENMARK (Danish Biochemical Society)**  
Dr. A. Kjaer, University Institute of Biochemistry, Artillerivej 69, DK-2300, Sønderborg, Denmark.

**ETHIOPIA (Ethiopian Biochemical Society)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**FRANCE (Société de Chimie Biologique)**  
Prof. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**GERMANY (Gesellschaft für Physiologische Chemie e.V.)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**GERMANY (Arbeitsgemeinschaft Biochemie in der Gesellschaft für experimentelle Medizin der DDR)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**GREAT BRITAIN (The Biochemical Society)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**HUNGARY (Magyar Biochemikus Társaság)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**ITALY (Società Italiana di Biochimica)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**THE NETHERLANDS (Nederlandsche Vereniging voor Biochemie)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**NORWAY (Norsk forening for Biochemie og Fysiologi)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**POLAND (Polskie Towarzystwo Biochemiczne)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**PORTUGAL (Sociedade Portuguesa de Biochimica)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**SPAIN (Sociedad Española de Bioquímica)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**SWEDEN (Svenska Biochemiska Föreningen)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

**SWITZERLAND (Société Suisse de Biochimie)**  
Dr. G. Axil-Ehrman, Institut für Organische Chemie, Alsterstrasse 33, Thurn 11, Zentralfriedhof, 1080 Wien, Österreich.

Printed in England

Figure 6.7.2 First FEBS Bulletin 1965.

**FEBS** The Federation of European Biochemical Societies Information Bulletin  
Produced biannually in 35 000 copies

No. 69 April 2000

**18th International Congress of Biochemistry and Molecular Biology**

**Beyond the genome: Understanding and exploiting molecules and cells in the third millennium**

**BIRMINGHAM UK**  
16-20 July 2000

Plenary Speakers:

- Suzanne Cory (Australia) • Anne Ephrussi (Germany) • Dirk Görlich (Germany)
- Luis Herrera-Estrella (Mexico) • George Poste (UK) • Stanley Prusiner (USA)
- Paul Sigler (USA) • J. Craig Venter (USA) • John Walker (UK)

Registration fees – Pre 1 May 2000      After 1 May 2000

University/Academic	£120	£170
Government institutions	£120	£170
Standard (non-academic) delegate	£240	£290
Young scientists* and students	£50	£80

\*Young scientists – under 31 years of age at July 2000

**Hurry – Register before 1 May 2000 for reduced fees!**

**Second and Final Circular**  
The second circular is now available.  
To receive a copy, including information about speakers, registration, the Congress venue, poster presentations, grants, accommodation, travel, satellite meetings, social programme and trade exhibition contact:

18th IUBMB Congress  
Biochemical Society, 59 Portland Place  
London W1N 3AJ, UK  
Tel: +44 171 580 5530, Fax: +44 171 637 7626  
e-mail: info@iubmb2000.org

Full details available at: [www.iubmb2000.org](http://www.iubmb2000.org)

**MEETINGS OF CONSTITUENT SOCIETIES**  
The Biochemical Society, UK:

**FEBS Advanced Courses 2000**

Figure 6.7.3 Last FEBS Bulletin 2000.

the 'FEBS Newsletters', and starting from November 2004 by 'FEBS News' (see below).

## 6.8

### The FEBS Website

#### 6.8.1

##### The 'Early' Years (1995 to 2003)



Figure 6.8.1  
Peter Ott.

A *FEBS Website* was established already in 1995, and until the year 2003 it was kindly maintained by Professor *Peter Ott*, Basel, then a member of the FEBS Publications Committee.

"This website is regularly updated and publicizes information on FEBS and its organization; news on the Annual FEBS Congresses, Advanced Courses, job opportunities, collaborator events, and other venues. Also, FEBS

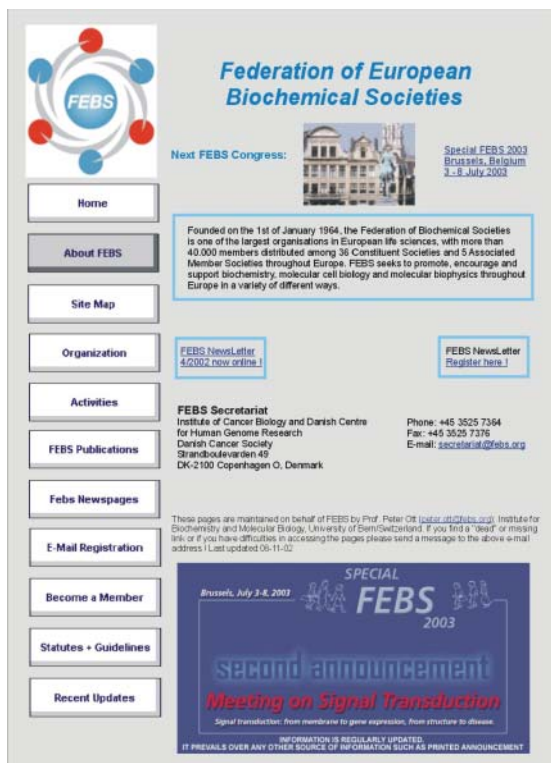


Figure 6.8.2 Layout of the FEBS website (November 2002).

Guidelines are available here. The URL to the website is <http://www.febs.org>.



Figure 6.8.3  
Camilla Krogh  
Lauritzen.

In 2003, Peter Ott had to give up his care for the FEBS website. Since then, it was *Camilla Krogh Lauritzen*, information manager at the FEBS Secretariat in Copenhagen, who took over the jobs of the *FEBS webmaster* as well as that of the editor of the *FEBS Newsletter* (see Section 6.8 below).

Unfortunately, Camilla quit her engagement for FEBS in April 2007 to enter a new occupation. From then on, Louise McSeveny, Secretary to the FEBS Treasurer in London stepped in (see below).

## 6.8.2

### 'Modern' FEBS Website

As reported in the *FEBS News* of April 2007, a new website went online, and *Louise McSeveny* wrote about its creation:





**Figure 6.8.4**  
Louise McSeveny.

Dear Friends,

As you are probably all aware the new FEBS website went online on 1st April. I hope you have had a chance to look at it and are finding it useful. The website was designed by Hannes Davidek at *mission*© in Vienna. Hannes is not only a creative genius – he has been a great support and has worked beyond the call of duty to get this site up and running.

FEBS Advanced Courses Chairman, Prof. Karl Kuchler, took the project on board and worked with Hannes in deciding on the design and layout. A big ‘thank you’ also to our members who participated in our usability study! We looked at all your comments, and implemented many of your suggestions – your opinions were invaluable! I am sure you will have seen the differences between the test site and what went live in April. If you have any further comments or perhaps we missed one of your suggestions, let me know and I will see what I can do! Lastly, the site could not have come together without valuable input from all FEBS officers who wrote reports, and contributed material, ideas and suggestions.

A special thank you to Clarissa Formosa-Gauci, Vanessa Wilkinson, Patricia McCabe, and Adriaan Klinkenberg for all their help! Camilla, Regina Klaus (our Advanced Courses secretary) and I myself uploaded all the information, then it was a matter of formatting, and ironing out any inconsistencies. As there were three of us working on it, I appreciate anyone who notices something that is still not quite right! Please let me know if anything does not make sense to you, and I will correct it. Those of you wondering where the Bulletin Board is – well we do have it, but for the moment I don’t have time to run its administration. I hope the new Camilla will be able to take this on board, otherwise I will get it up and running when the Congress and Advanced Courses are over for the year. My plan is to keep the website as up to date as possible with news, postings and events. I am changing the home page weekly, with current issues of our Journals, news on the progress of the launch of our new Journal, *Molecular Oncology*, as well as FEBS events. You will be alerted to new postings and other announcements in life sciences, and career opportunities. The most important thing is to provide a comprehensive guide on how to apply for our Fellowships, Courses and Travel Grants and keep you informed of the hard work performed by FEBS Officers through our many Committees and Working Groups. We have also provided a more comprehensive and informative section about FEBS member countries and their activities. Of course I can’t keep the site current and fresh without your help – so if you have anything you would like announced that you think will be of interest to FEBS members, let me know.

*Louise*

The screenshot shows the FEBS website homepage. At the top, there is a search bar and navigation links: HOME, ABOUT US, NEWS, MEMBERSHIP, FELLOWSHIPS, COURSES, FEBS CONGRESS, PUBLICATIONS, INITIATIVES, AWARDS. The main heading reads "Welcome to the FEDERATION OF EUROPEAN BIOCHEMICAL SOCIETIES". Below this, there are three main sections:

- About FEBS:** A paragraph describing FEBS as one of the largest organizations in European life sciences, promoting biochemistry, molecular cell biology, molecular biophysics, and related areas. It mentions funding for research, education, and women in science.
- News from FEBS:** A section for brief announcements about FEBS programmes, events, and publications. It mentions updates on autumn education workshops, the IUBMB-FEBS conference app, journal impact factors, and the 2012 FEBS Publications Annual Awards for Young Scientists.
- Journals from FEBS:** A section displaying covers for FEBS Journal, FEBS Letters, and Molecular Oncology. Below the covers is a banner for "Just launched: Submit now" with logos for open bio, OA, and FEBS.

On the right side, there is a sidebar with a login form (Username: \_\_\_\_\_, Password: \_\_\_\_\_) and a "Congress IUBMB FEBS" announcement for September 4-9. Below the login form are links for "Create a user account!" and "Forgotten your password?". At the bottom of the sidebar, there are logos for "FEBS Journal Prize for Young Scientists" and "FEBS Letters Award for Young Scientists".

At the bottom of the main content area, there is a section titled "LINKS TO LATEST ISSUES: FEBS Journal, FEBS Letters, Molecular Oncology, FEBS Open Bio". Below this, there are links for "Latest Virtual and Special Issues" and "The 2012 FEBS Journal and FEBS Letters prizes for young scientists".

Figure 6.8.5 Appearance of the 'new' FEBS website (from April 2007 onwards).

By the end of the year 2011, Louise McSeveny left FEBS. She gave the following short interview

“... And Goodbye to Louise McSeveny”:

Louise McSeveny worked for over ten years in the FEBS Treasury under Dr John Mowbray. Among her various roles there in administering FEBS finances, she had the key ongoing responsibilities of arranging payments for FEBS Fellowships and the numerous FEBS Youth Travel Fund grants – notching up thousands of European banking transactions in the process. She was also kept busy with behind the scenes work on the FEBS website, publicity and a huge number of daily e-mail enquiries. FEBS greatly appreciates her hard work over the years, and wishes her all the best for the future.

*Highs and Lows? High? Great people, great travel and great friends. Lows? That would be telling, wouldn't it?*

*Favourite Congress City? Istanbul – East meets West for bargain shopping!*

*Top tip to YTF applicants? Read the guidelines!*

*What's next for you? A long holiday. (FEBS News November 2011).*

### 6.8.3

#### FEBS Website Since 2012

After Louise's retirement, responsibility for the FEBS website was taken over by Dr. Carolyn Elliss (elliss@febs.org), from the new FEBS Treasury Office.

#### *Impressum*

*Owner and publisher is the Federation of European Biochemical Societies*

This website is dedicated to inform about the activities of FEBS. Information has been gathered and checked with the greatest care and is supplied by FEBS to its best of knowledge and belief. Although all contents are carefully revised no liability for any errors, omissions, etc. is assumed. This website contains also external links for which solely the external provider is responsible. In case this website provides the option to enter personal data (e.g. name, address, e-mail ...), it is deemed to be agreed that the user expressly voluntarily reveals such data.

#### *Registered Address:*

##### *Contact:*

The FEBS Secretariat  
Department of Immunology  
The Weizmann Institute of Science  
P.O.B 26 Rehovot 76100  
ISRAEL  
phone: +972 8 934 4019  
fax: +972 8 9 465 264  
E-mail: info@febs.org 8:00–16:00 (Sunday - Thursday)

*Conception & Design:* mission© - Werkstatt für Marktkommunikation

A-1140 Vienna (Austria), Mauerbachstrasse 95

E: office@mission-c.com | W: <http://www.mission-c.com>

*Application Development and Programming:* create-mediadesign GmbH

A-1040 Vienna (Austria), Taubstummengasse 7/3

E-mail: content@create.at | Web: <http://www.create.at>

*Photos:* Some photos within this website are kindly provided by Wiener Wirtschaftsförderungsfonds (<http://www.wdff.at>)

## 6.8.4

**FEBS Website in 2014**

A new layout of the FEBS Website is planned to appear in 2014. The data of the designer and other details will be published by Dr. Carolyn Ellis.

## 6.9

**FEBS Newsletter – FEBS News**

On top of the FEBS Website, FEBS developed a newsletter, around the same time as the Website appeared. The establishing and aims of the **FEBS Newsletter** are well illustrated by an editorial in its first edition from April 2002.

## 6.9.1

**Good News: FEBS NewsLetter**

*Editorial by Julio E. Celis  
Secretary General of FEBS*

Following a proposal by the Finnish Constituent Society, FEBS has created a NewsLetter to keep their members informed on a regular basis (every second month) of current developments relevant to the wide variety of activities carried out by the organisation (<http://www.febs.org>). When implemented in full, the NewsLetter will provide information on issues related to scientific activities in individual countries, about fellowships, exchange programmes, education, jobs, science and society, the career of young scientists, women in science, networking activities, collaborations with other organisations, as well as highlights from our Annual Meeting. The NewsLetter will also serve as a forum for current discussions as to whether there is a need for Research Council of Europe in our area of involvement. The creation of the European Research Area by Philippe Busquin, Commissioner of Research of the European Union, is expected to have a major impact on the quality and competitiveness of research in Europe and, accordingly, this first NewsLetter provides you with information concerning the launching of Framework Programme 6 (FP6). It is important to respond to the call for Expression of Interest (EoI) for the two main Instruments (i.e. Networks of Excellence and Integrated projects) as future calls will be based on the input they will receive. In addition, this NewsLetter includes information about the European Life Science Forum, as well as messages from the editors of our two journals, EJB and FEBS Letters. Finally, I encourage you to register in the FEBS website as this will ensure that you receive the NewsLetter regularly. Please do not hesitate to contact us if you are interested in contributing to the NewsLetter. Finally, I would like to take this opportunity to thank Jes Forchhammer for preparing the first issue of the NewsLetter. Jes has worked for FEBS for a few

months, but he is now ready to retire. We are grateful for his services and we wish him all the best in the years to come.



In June 2002, the organisational work at the Secretary Generals office was continued by *Camilla Krogh Lauritzen*, who served as an information manager until her leaving in the year 2007. Her responsibilities as FEBS Information Manager implied tasks related to the maintenance and on-going development of FEBS information Platform (the website and the newsletter), as well as tasks related to concepts like *Corporate Communication* and *Corporate Branding*. Central to FEBS is to ensure the availability and usability of information of general interest and relevance to its many members of FEBS. Like the FEBS website, the FEBS NewsLetter had as its objective to act as a forum for knowledge sharing and debate. As such, both the website and this newsletter aimed to do more than 'just' keep its readers updated on various activities, highlights, career opportunities, up-coming events etc. Another aspect that the two elements in the FEBS Information Platform shared is that they highly welcome input from the members of FEBS. FEBS NewsLetter is published every second Monday in every second month (starting January 2003), and available at FEBS website. (FEBS NewsLetter 2002/1)

#### 6.9.2

##### **Better News: The FEBS NEWS**

**FEBS NewsLetter changed its name to FEBS News in November 2004.** It has become apparent that some younger scientists and occasional readers tended to confuse the FEBS NewsLetter with FEBS Letters, the long-standing vehicle (since 1968) for the rapid publication of succinct and especially significant research findings. To eliminate any possibility of confusion the FEBS Publications Committee decided to shorten the name of the Newsletter into "*FEBS News*" – brief and clear. Louise McSeveny at the FEBS Treasurers Office ran the editorial office of FEBS News up to the end of the year 2011. *FEBS News* is now published three or four times a year. E-mail alerts containing a link to *FEBS News* are sent to approximately 16,000 subscribers in more than 50 countries whenever a new issue is out. This issue as well as all former issues of *FEBS News* are available online at <http://www.febs.org>. To subscribe, unsubscribe or change your contact details simply send an email to [newsletter@febs.org](mailto:newsletter@febs.org), stating 'subscribe', 'unsubscribe' or 'change' in the subject line. You can also subscribe online at <http://www.febs.org/index.php?id=364>. Note that we will not distribute, in any way, your data to third parties without your consent. As a service to our more than 40,000 members, FEBS offers **FREE** advertising of academic positions (PhD students, PostDocs and Senior PostDocs) and scientific events in this newsletter and on our website. Questions and suggestions about *FEBS News* should be sent to the *FEBS News* Editor, Carolyn Elliss ([elliss@febs.org](mailto:elliss@febs.org)).

Contributed by editor of FEBS News. (FEBS News 2012/1))



Figure 6.9.1 Title page of *FEBS News* in 2012.



## 7 Educational and Related Activities of FEBS

### 7.1 FEBS Advanced Courses Programme

#### 7.1.1 Initiatives and Developments

As outlined by Henry Arnstein in his article “The first ten years of FEBS” (Chapter 1), the idea to organize FEBS Courses arose as early as in 1964. It was felt that FEBS should organize summer schools, which might serve not only to give advanced instruction in new techniques and other developments but also to bring together young biochemists from all over Europe and thus encourage future co-operation. The first chairman of the newly set up FEBS Summer Schools Committee became Henry Arnstein, and in fact the first summer school was held in 1965. Under Peter Campbell’s chairmanship of the Summer Schools Committee, the number of summer schools increased from each two in 1966 and 1967 to usually four per year. In addition, at his suggestion summer schools were renamed advanced courses, mainly because this description indicated more clearly that the courses were meant to be for postdoctoral biochemists and intending participants would thus find it easier to obtain travel grants from universities and other institutions.

While the early advanced courses had to be financed through generous support by a number of grant-giving institutions, it became possible after FEBS had an independent income from *FEBS Letters* and the *European Journal of Biochemistry* not only to subsidize advanced courses but also to set up a FEBS Youth Travel Fund which provides individual grants to young biochemists to help meet the ever-increasing travelling costs.

At the time when Giorgio Bernardi took over the chairmanship for the FEBS Advanced Courses Programme, the FEBS Statutes laid down new rules for its supervision and the guidelines for applications. FEBS Advanced Courses Programme should be supervised by a FEBS Advanced Courses Committee (ACC), which is composed of the Chairman elected by Council, five to seven members elected by Council and, *ex officio* with voting rights, the FEBS Secretary General and the FEBS Treasurer.



Until the end of the year 1995, only two types of events were subsidized: Advanced Lecture Courses and Practical Courses (which latter were given priority). The amount of money that could be spent per year by FEBS amounted to 1 Mio Deutsche Mark. The duties of the ACC included:

1. To solicit proposals for FEBS Advanced Courses on relevant scientific topics in Biochemistry and Molecular Biology and in related scientific disciplines.
2. To consider proposals for Advanced Courses, to select suitable ones, and to arrange an annual programme of Advanced Courses within the total sum available for this activity.
3. To report, through the Executive Committee, to FEBS Council on the Courses arranged during the previous year and on their success.

In subsequent years, the scope of the FEBS Advanced Courses Programme was broadened as to include other types of events, such as Workshops and Special Meetings. Since 1983, EMBO has supported FEBS Advanced Courses in a partnership.

#### 7.1.2

##### **Guidelines and Financing**

The major aims of the FEBS Advanced Courses Programme are outlined in their Guidelines as follows:

FEBS funds scientific and educational events on advanced topics in the areas as defined by FEBS' aims that focus on promotion of life sciences in Europe and enhancing collaboration between different regions. Applications for financial support of events described below should be submitted to the FEBS Advanced Courses Committee (FEBS ACC) by the announced deadline(s). Organizers of these events may also apply for FEBS Youth Travel Fund (YTF) grants to support participation of PhD students and young scientists from countries with FEBS Constituent Societies, and FEBS Trans-Continental Youth Travel Fund (Trans-YTF) grants to support participation of young scientists from Asia, North and South America, and Africa.

##### 7.1.2.1 **Types and Format of Events Funded**

**FEBS Advanced Lecture Courses** should address topical subjects of general importance and allow participating young scientists to interact with invited scientific leaders in the field during oral presentations, poster sessions, round-table discussions and tutorials. As the focus is on teaching and training, lecturers are asked to present introductory lectures followed by state-of-the-art presentations. The number of participants at these events should not exceed 120, including speakers, while the ratio of speakers to students should be around 1 : 5. Organizers may apply for YTF grants to cover participation costs of young scientists (see below).

**FEBS Practical Courses or Combined Practical & Lecture Courses** should teach relevant, current scientific topics in biochemistry, genetics, biophysics, molecular-, cellular- and developmental biology, as well as systems and quantitative biology. Organizers are also encouraged to consider gender, as well as science & society issues in course programmes if possible or applicable.

Practical Courses are meant to teach participants (15–20) advanced techniques. Emphasis should be on hands-on experiments so that, upon returning, the participating students can apply these techniques in their home laboratories. Lecturers and tutors (4–6) can be invited to present lectures that provide a theoretical background to the experiments. Organizers may ask for YTF grants to support the attending young scientists, except for those living in the country where the course is taking place.

Combined Practical & Lecture Courses should have strong hands-on training elements in order to teach participating students basic and advanced techniques in molecular life sciences, in addition to providing lectures and seminars. Therefore, the number of participants in these courses is limited to 60 and the ratio of lecturers to students should be around 1 : 5. Organizers may apply additionally for YTF grants for eligible young scientists.

**FEBS Workshops.** The FEBS Advanced Courses Committee welcomes suggestions from scientists willing to organize FEBS Workshops on topics of high scientific interest in biochemistry, biophysics, molecular-, cellular- and developmental biology. The purpose is to bring experts and interested people together to discuss the most recent developments in a certain field. To maintain the proper atmosphere of informality and an optimal forum for exchange of ideas, it is advisable to keep the number of participants under 100. Poster sessions, oral presentations and round-table discussions are recommended to insure that all participants are actively involved.

Organizers are also motivated to consider gender, as well as science & society issues in the Workshop if possible or applicable. Organizers may apply for YTF grants to cover attendance costs of eligible young scientists.

**FEBS Special Meetings** should address timely topics of high scientific interest and have a top-level speaker programme featuring the leading scientists in the field, oral presentations based on selected abstracts, and poster sessions. The Meeting should have 250–500 participants, including up to 40 invited speakers, to allow effective and broad discussion between experts and other participating scientists. Unlike other FEBS events, participants of these meetings are not eligible for YTF grants.

**Joint FEBS/EMBO Lecture Courses** have the same focus and format, but are financed jointly by FEBS and EMBO. Therefore both parties need to approve these Applications. Up to five joint events can be financed annually. Attendance of these events should not exceed 120 participants, including speakers, and the ratio of speakers to participants should be around 1 : 5. In addition to the basic grant,

Organizers of Joint Courses may apply for YTF grants as well as for EMBO Lectureships. Further information is given below in the section on Co-funding.

#### 7.1.2.2 Co-financing

FEBS encourages organization of Advanced Courses, Workshops, Practical Courses and Combined Practical and Lecture Courses, as well as Special Meetings that are supported by other relevant funding organizations, assuming that the terms and conditions of co-funding by these financing bodies are compatible with the present FEBS Guidelines, and FEBS is recognized as the main funding organization. There is no limit on the amount of co-funding. However, the status of co-funding (decided or pending grants) should be clearly mentioned in the Application and listed in the Budget form submitted to FEBS. Failure to inform the Advanced Courses Committee about participation of other financing bodies will make the application ineligible for FEBS support.

Starting from 2011, Organizers of FEBS Advanced Lecture Courses, Workshops and Special Meetings may apply for financial support up to 2000 U\$ from the *International Union of Biochemistry and Molecular Biology (IUBMB)* to host one "IUBMB Speaker" from outside Europe for one FEBS event. Organizers should send a brief CV of the nominee to the IUBMB Executive Committee Member for Congresses and Conferences for approval. Guidelines and conditions for financing of IUBMB Speakers can be found on the IUBMB and FEBS websites.

Joint FEBS/EMBO Lecture Courses are funded by both parties and should be approved by the FEBS and EMBO evaluation committees. Besides the basic grant, organizers may apply for FEBS YTF grants for this event. EMBO may finance one Plenary Lecture, one EMBO Young Investigator Program (YIP) Lecture, one Science & Society Lecture and one Women in Science Lecture. In these courses both FEBS and EMBO should be recognized as the main funding organizations.

If applications for financing Practical Courses, Combined Practical & Lecture Courses and Workshops have been submitted simultaneously to FEBS and EMBO and approved by both Committees, the Organizers will have to choose only one funding option. If FEBS is chosen, organizers can receive the basic grant as well as YTF grants under FEBS rules; if EMBO is chosen, Organizers are eligible to receive FEBS YTF grants up to a maximum value of €10 000.

An application to organize a Special Meeting that has also been submitted to EMBO for funding through any instrument is ineligible to receive FEBS support and will not be evaluated by the FEBS Advanced Courses Committee.

#### 7.1.2.3 Submission of Applications

All applications to the FEBS Advanced Courses Programme should be submitted through the online submission system on the FEBS website [www.febs.org](http://www.febs.org). The application deadlines will be indicated in the actual Guidelines. It is important to note that applications for events in the same year are not accepted; and applications for Special Meetings should be submitted more than 12 months before the actual meeting date. Further information, application forms, etc. can be downloaded from the FEBS website.

#### 7.1.2.4 Budget, Available Support, and Reporting

The Application Forms include a budget table to be completed by the main Organizer. The total expenditure shown in this table consists of a FEBS basic grant, income from the registration fee for participants and all other available support. Income from the Youth Travel Fund grants cannot be included in this table. The FEBS basic grant provides funds to cover travel and subsistence of invited speakers and general costs of course organization, including secretarial help and cost of course materials. Please note that FEBS basic grant cannot be used to cover living expenses of students and other participants. FEBS also cannot pay honoraria to speakers or provide funds to cover the costs of professional congress organizers. All budget items must be clearly detailed in the budget form and properly justified in the application. Different events of the FEBS Advanced Courses Programme have the following limits to the basic FEBS grant, and these amounts should be considered when drafting applications:

#### Present maximum funding for

<i>FEBS Advanced Lecture Courses</i>	25 000 €.
<i>Practical and Combined Practical &amp; Lecture Courses</i>	15 000 €.
<i>Workshops</i>	20 000 €.
<i>Special Meetings</i>	40 000 €.
<i>Joint FEBS/EMBO Lecture Courses</i>	40 000 €.

Importantly, these amounts do not include the YTF/Trans-YTF awards and these awards should not be included in the proposed budget. After approval of submitted applications by the FEBS Advanced Courses Committee, the Organizers will receive a Decision Letter from the Advanced Courses Committee Chairman, followed by a Financial Conditions Letter from the FEBS Treasury that includes an Appendix for the Organizer to complete and return to the FEBS Treasurer. By signing the Appendix of the Financial Conditions Letter and receiving the FEBS grant, the main organizer agrees to present a complete Report of the event, and this reporting procedure must be completed within three months after the end date of the event. Standard reporting forms can be downloaded from the FEBS website at [www.febs.org](http://www.febs.org).

#### 7.1.2.5 Youth Travel Fund Grants

As part of their application to the FEBS Advanced Courses programme, organizers of lecture courses, practical courses and workshops can apply for YTF grants to support participation of PhD students and young postdoctoral scientists in their event. These grants cover the registration fee, accommodation and meals for the selected young scientists, and may also support their travel costs.

Following the allocation of a set number of YTF grants by FEBS, the organizer should select candidates on merit, bearing in mind the eligibility criteria set by FEBS (see below). The application procedure for FEBS YTF grants and the FEBS

eligibility criteria should be presented on the course website. The YTF applicants should send their completed applications together with documented proof of their eligibility and a recommendation letter from the current or previous supervisor (if applicable) to the organizer by the deadline announced.

The selected candidates will receive a FEBS Treasury YTF form, to be returned to the FEBS Treasury at least 8 weeks before the event's start date. YTF grants will then be approved by the FEBS Treasury, and will normally be paid by the course organizer at the event.

### ***Eligibility Criteria***

The eligibility criteria for YTF awards are as follows, and only in exceptional circumstances may any of these conditions be waived.

#### **For YTF awardees from the FEBS area**

The applicant should be not older than 35, should be registered as a PhD student at an institute of higher learning in a country where there is a FEBS Constituent Society or should be a postdoctoral scientist within five years of having completed a PhD thesis, working in a country where there is a FEBS Constituent Society;

- The applicant must be a member of a FEBS Constituent Society, [www.febs.org/index.php](http://www.febs.org/index.php);
- The applicant should not have received a grant from the Youth Travel Fund to attend a FEBS Course/Workshop in the current year or previous year, nor a Bursary to attend the FEBS Congress in the current year, nor a grant to attend the Young Scientists' Forum in the current year;
- Awards will only be made to support travel within the FEBS area from the applicant's current country of residence to the country hosting the FEBS event; the applicant cannot be a resident of the country hosting the event.

#### **For YTF awardees from outside the FEBS area**

The applicant should not be older than 35, should be registered as a PhD student at an institute of higher learning in a country where there is an IUBMB-related society or should be a postdoctoral scientist within five years of having completed a PhD thesis, working in a country where there is an IUBMB-related society;

- The applicant must be a member of an IUBMB-related society, <http://www.iubmb.org/index.php?id=16>;
- The applicant should not have received a grant from the Youth Travel Fund to attend a FEBS Course/Workshop in the current year or previous year, nor a Bursary to attend the FEBS Congress in the current year, nor a grant to attend the Young Scientists' Forum in the current year;
- Awards will only be made to support travel from the applicant's current country of residence to the country hosting the FEBS event.

7.1.3

**FEBS Advanced Courses Committee**

The officers who chaired the Advanced Courses Committee during the past 50 years are shown in Figure 7.1.1, and a list of the Committee members for the past 20 years, is given in Tables 7.1.1 and 7.1.2.



**Figure 7.1.1** Chairpersons of the FEBS Advanced Courses Committee.

7.1.4

**FEBS Advanced Courses 1987 to 2004 – Personal Views of Two Chairmen**

**7.1.4.1 FEBS Advanced Courses 1987 to 1995**



*Horst Feldmann, München*

*Chairman of FEBS Advanced Courses Committee, 1987–1995*

The four articles memorizing the 10th, 20th and 25th anniversaries offer an exciting view of the first years after foundation of the Federation of European Biochemical Societies in 1964 as well as its activities and achievements during the years to follow, underlining the importance and merits of an organization like FEBS in the context of international efforts “to advance research and education in the science of biochemistry and molecular biology”.

**Table 7.1.1** Members of the Advanced Courses Committee, 1985 to 2005.

Members	Place and Year of Appointment	From	To
Horst Feldmann (München), Chairman	Berlin (1986)	01.01.87	31.12.89
Levi Kääriäinen (Helsinki)	Berlin (1986)	01.01.87	31.12.90
Günter Kreil (Salzburg)	Algarve (1985)	01.01.86	31.12.89
Costas Sekeris (Athens)	Algarve (1985)	01.01.86	31.12.89
Giorgio Semenza (Zürich)	Moscow (1984)	01.01.85	31.12.88
Antonio Xavier (Lissabon)	Moscow (1984)	01.01.85	31.12.88
Horst Feldmann (München), Chairman	Rome (1989)	01.01.90	31.12.92
Slobodan Barbaric (Zagreb)	Rome (1989)	01.01.90	31.12.93
Karel Wirtz (Utrecht)	Rome (1989)	01.01.90	31.12.93
Julio Celis (Aarhus)	Prague (1988)	01.01.89	31.12.92
Paulette Vignais (Grenoble)	Prague (1988)	01.01.89	31.12.92
Jürgen Lasch (Halle)	Ljubljana (1987)	01.01.88	31.12.91
Vittorio Sgaramella (Pavia)	Ljubljana (1987)	01.01.88	31.12.91
Horst Feldmann (München), Chairman	Dublin (1992)	01.01.93	31.12.95
Sergio Papa (Bari)	Jerusalem (1991)	01.01.92	31.12.95
Karl Tryggvason (Helsinki)	Jerusalem (1991)	01.01.92	31.12.95
Anasthios Evangelopoulos (Athens)	Budapest (1990)	01.01.91	31.12.94
Karel Wirtz (Utrecht), Chairman	Basel (1995)	01.01.96	31.12.98
Maciej Nalecz (Warsaw)	Basel (1995)	01.01.96	31.12.99
Balázs Sarkadi (Szeged)	Basel (1995)	01.01.96	31.12.99
Victor Small (Salzburg)	Basel (1995)	01.01.96	31.12.99
Orestes Tsolas (Ioannina)	Helsinki (1994)	01.01.95	31.12.98
Miguel Guerrero (Sevilla)	Stockholm (1993)	01.01.94	31.12.97
Ben De Kruijff (Utrecht)	Stockholm (1993)	01.01.94	31.12.97
Elmars Grens (Riga)	Dublin (1992)	01.01.93	31.12.96
Anne-Lise Haenni (Paris)	Dublin (1992)	01.01.93	31.12.96
Karel Wirtz (Utrecht), Chairman	Copenhagen (1998)	01.01.99	31.12.01
Helena Santos	Copenhagen (1998)	01.01.99	31.12.02
Richard Giegé (Strasbourg)	Amsterdam (1997)	01.01.98	31.12.01
Sergio Papa (Bari)	Barcelona (1996)	01.01.97	31.12.00
Tomris Özben (Turkey)	Barcelona (1996)	01.01.97	31.12.00
Karel Wirtz (Utrecht), Chairman	Lisbon (2001)	01.01.02	31.12.04
Knut-Jan Andersen (Bergen)	Birmingham (2000)	01.01.01	31.12.04
Wilhelm Ansoerge (Heidelberg)	Nice (1999)	01.01.00	31.12.03
Jan Barciszewski (Poznan)	Nice (1999)	01.01.00	31.12.03
Karl Kuchler (Vienna)	Nice (1999)	01.01.00	31.12.03
Dimitrios Kyriakidis (Thessaloniki)	Nice (1999)	01.01.00	31.12.03
Karl Kuchler (Vienna), Chairman	Warsaw (2004)	01.01.05	31.12.07
Miguel A. de la Rosa (Spain)	Istanbul (2002)	01.01.03	31.12.06
Nazrim Kartal Özer (Turkey)	Istanbul (2002)	01.01.03	31.12.06
Jean-Luc Souciet (Strasbourg)	Lisbon (2001)	01.01.02	31.12.05

Table 7.1.2 Composition of the Advanced Courses Committee, 2004 to 2013.

Members in Year	Country	Elected	Start	End
<b>2004</b>				
Karel Wirtz, Chairman	Netherlands	Lisbon (2001)	01.01.02	31.12.04
Lea Sistonen	Finland	Brussels (2003)	01 01 04	31 12 07
Daniela Corda	Italy	Brussels (2003)	01 01 04	31 12 07
Johannes L. Bos	Netherlands	Brussels (2003)	01 01 04	31 12 07
Miguel A. de la Rosa	Spain	Istanbul (2002)	01.01.03	31.12.06
Nazrim Kartal Özer	Turkey	Istanbul (2002)	01.01.03	31.12.06
Jean-Luc Souciet	France	Lisbon (2001)	01.01.02	31.12.05
<b>2005</b>				
Karl Kuchler, Chairman	Austria	Warsaw (2004)	01 01 05	31 12 07
Jean-Luc Souciet	France	Lisbon (2001)	01.01.02	31.12.05
Miguel A. de la Rosa	Spain	Istanbul (2002)	01.01.03	31.12.06
Nazrim Kartal Özer	Turkey	Istanbul (2002)	01.01.03	31.12.06
Lea Sistonen	Finland	Brussels (2003)	01 01 04	31 12 07
Daniela Corda	Italy	Brussels (2003)	01 01 04	31 12 07
Johannes L. Bos	Netherlands	Brussels (2003)	01 01 04	31 12 07
Tomas Zima	Czech Rep.	Warsaw (2004)	01 01 05	31 12 08
<b>2006</b>				
Karl Kuchler, Chairman	Austria	Warsaw (2004)	01 01 05	31 12 07
Miguel A. de la Rosa	Spain	Istanbul (2002)	01.01.03	31.12.06
Nazrim Kartal Özer (Turkey)	Turkey	Istanbul (2002)	01 01 03	31 12 06
Johannes L. Bos	Netherlands	Brussels (2003)	01 01 04	31 12 07
Daniela Corda	Italy	Brussels (2003)	01 01 04	31 12 07
Lea Sistonen	Finland	Brussels (2003)	01 01 04	31 12 07
Tomas Zima	Czech Rep.	Warsaw (2004)	01 01 05	31 12 08
Madshus	Norway	Budapest (2005)	01 01 06	31 12 09
<b>2007</b>				
Karl Kuchler, Chairman	Austria	Warsaw (2004)	01 01 05	31 12 07
Hans Bos	Netherlands	Brussels (2003)	01 01 04	31 12 07
Daniela Corda	Italy	Brussels (2003)	01 01 04	31 12 07
Lea Sistonen	Finland	Brussels (2003)	01 01 04	31 12 07
Tomas Zima	Czech Rep.	Warsaw (2004)	01 01 05	31 12 08
Madshus	Norway	Budapest (2005)	01 01 06	31 12 09
Michael Brunner	Germany	Istanbul (2006)	01 01 07	31 12 10
Béata Vértessy	Hungary	Istanbul (2006)	01 01 07	31 12 10
<b>2008</b>				
Karl Kuchler, Chairman	Austria	Vienna (2007)	01 01 08	31 12 10
Tomas Zima	Czech Rep.	Warsaw (2004)	01 01 05	31 12 08
Madshus	Norway	Budapest (2005)	01 01 06	31 12 09
Michael Brunner	Germany	Istanbul (2006)	01 01 07	31 12 10
Béata Vértessy	Hungary	Istanbul (2006)	01 01 07	31 12 10
Marc Baumann	Finland	Vienna (2007)	01 01 08	31 12 11
Pascale Cossart	France	Vienna (2007)	01 01 08	31 12 11
Gerrit Van Meer	Netherlands	Vienna (2007)	01 01 08	31 12 11

(continued overleaf)



Table 7.1.2 (Continued)

Members in Year	Country	Elected	Start	End
<b>2009</b>				
Karl Kuchler, Chairperson	Austria	Vienna (2007)	01 01 08	31 12 10
Madshus	Norway	Budapest (2005)	01 01 06	31 12 09
Michael Brunner	Germany	Istanbul (2006)	01 01 07	31 12 10
Béata Vértessy	Hungary	Istanbul (2006)	01 01 07	31 12 10
Marc Baumann	Finland	Vienna (2007)	01 01 08	31 12 11
Pascale Cossart	France	Vienna (2007)	01 01 08	31 12 11
Gerrit Van Meer	Netherlands	Vienna (2007)	01 01 08	31 12 11
Cécilia Arriano	Portugal	Athens (2008)	01 01 09	31 12 12
<b>2010</b>				
Karl Kuchler, Chairperson	Austria	Vienna (2007)	01 01 08	31 12 10
Michael Brunner	Germany	Istanbul (2006)	01 01 07	31 12 10
Béata Vértessy	Hungary	Istanbul (2006)	01 01 07	31 12 10
Marc Baumann	Finland	Vienna (2007)	01 01 08	31 12 11
Pascale Cossart	France	Vienna (2007)	01 01 08	31 12 11
Gerrit Van Meer	Netherlands	Vienna (2007)	01 01 08	31 12 11
Cécilia Arriano	Portugal	Athens (2008)	01 01 09	31 12 12
Efsthatis Gonos	Greece	Prague (2009)	01 01 10	31 12 13
<b>2011</b>				
Jaak Järv, Chairperson	Estonia	Gothenburg (2010)	01 01 11	31 12 13
Marc Baumann	Finland	Vienna (2007)	01 01 08	31 12 11
Gerrit Van Meer	Netherlands	Vienna (2007)	01 01 08	31 12 11
Cécilia Arriano	Portugal	Athens (2008)	01 01 09	31 12 12
Efsthatis Gonos	Greece	Prague (2009)	01 01 10	31 12 13
I. Kuta-Smatnova	Czech Rep.	Gothenburg (2010)	01 01 11	31 12 14
S. Rupp	Germany	Gothenburg (2010)	01 01 11	31 12 14
P. van Dijck	Belgium	Gothenburg (2010)	01 01 11	31 12 14
<b>2012</b>				
Jaak Järv, Chairperson	Estonia	Gothenburg (2010)	01 01 12	31 12 13
Cécilia Arriano	Portugal	Athens (2008)	01 01 09	31 12 12
Efsthatis Gonos	Greece	Prague (2009)	01 01 10	31 12 13
I. Kuta-Smatnova	Czech Rep.	Gothenburg (2010)	01 01 11	31 12 14
S. Rupp	Germany	Gothenburg (2010)	01 01 11	31 12 14
P. van Dijck	Belgium	Gothenburg (2010)	01 01 11	31 12 14
Laszlo Nagy	Hungary	Turin (2011)	01 01 12	31 12 15
Véronique Receveur-Brechot	France	Turin (2011)	01 01 12	31 12 15
<b>2013</b>				
Jaak Järv, Chairperson	Estonia	Gothenburg (2010)	01 01 12	31 12 13
Efsthatis Gonos	Greece	Prague (2009)	01 01 10	31 12 13
I. Kuta-Smatnova	Czech Rep.	Gothenburg (2010)	01 01 11	31 12 14
S. Rupp	Germany	Gothenburg (2010)	01 01 11	31 12 14
P. van Dijck	Belgium	Gothenburg (2010)	01 01 11	31 12 14
Laszlo Nagy	Hungary	Turin (2011)	01 01 12	31 12 15
Véronique Receveur-Bréchet	France	Turin (2011)	01 01 12	31 12 15
Rozmam Damjana	Slovenia	Seville (2012)	01 01 13	31 12 16
P. van Dijck	Belgium	Gothenburg (2010)	01 01 11	31 12 14

Asking myself why it was the early sixties FEBS came into existence, I reckon that this was exactly the period after the war when young scientists in Europe, many of them having just finished their academic education or having started a research career, sought a forum to establish contacts with their colleagues from other European countries. Thus, it was a far-sighted decision and a rewarding initiative of the founders of FEBS in setting up an organization to promote co-operation among European biochemists, by organizing annual meetings and fostering advanced courses that would not only serve to provide training in new experimental strategies but also to bring together young biochemists from all over Europe. Clearly, this concept was to bear fruit: it provided an excellent opportunity among young researchers to exchange their ideas and views, both in scientific and in political terms. I think that scientists have contributed a great deal to overcome national barriers, at a time of building contacts between people from 'Western' and 'Eastern' countries, and to promote the idea of a European Union. I even dare say that in this respect scientists were much ahead of the contemporary political developments.

I became aware of FEBS through their early meetings held in Warsaw, Oslo and Prague. They provided excellent opportunities for a 'beginner' to follow novel developments in biochemistry and molecular biology and to present his own results in short talks. In the years to follow, I had to build up my own research group. I was engaged in educational and organizational duties at our institute and our faculty. As a good compensation, I became involved in the organization of many national and international meetings and courses. During this time, it was largely impossible for me, also for financial constraints, to attend too many general meetings. Rather participation in specialized venues had to have a preference.

In 1983, I was fortunate to be nominated by the Gesellschaft für Biologische Chemie for membership in the Advanced Courses Committee (ACC) of FEBS. The chairman of the ACC at that time was Giorgio Bernardi, who had taken over from Max Gruber in 1978. Giorgio succeeded in continuously raising the number of courses held per year from only a few in the beginning to more than a dozen, before he had to retire in 1987.

Being elected chairman of the ACC by Council in 1986 and starting in 1987, I was lucky to work with a Committee the members of which were enthusiastic in contacting colleagues from all over Europe, who would be willing to run a FEBS Course. Though the funds for FEBS Courses were raised to 1 Mio Deutsche Mark per annum, we had to set certain limits for the amount of money given as a support to each course. So it was highly appreciated if organizers were able to invite co-sponsorship from other grant giving institutions. One particular advantage of running a FEBS Course, however, was that *Youth Travel Grants* were provided to assist attendance at these by younger scientists. As half of the FEBS Courses budget was designed for this purpose, up to 25% of the participants in a lecture course and all of the participants in a practical course could profit from this type of support. In accordance with FEBS' general policy, fellowships were preferably awarded to young scientists from Eastern European countries, who



Vittorio Sgaramella      Levi Kääriäinen  
 John Mowbray              Julio Celis  
 Horst Feldmann            Paulette Vignais  
 Costas Sekeris              Jürgen Lasch

**Figure 7.1.2** ACC Meeting, Athens 1990.

otherwise would have had little chance to receive funds from their national institutions. Another aspect connected to this issue is that the ACC sought to invite colleagues from these countries to organize FEBS Courses at their home institutions, an encouragement that in fact proved successful.

During my time as chairman, the ACC consisted of ten members: eight colleagues from different Constituent Societies as well as the FEBS Secretary General and the FEBS Treasurer. This arrangement has been kept since, but fortunately more colleagues from former Eastern countries are members of the ACC now. The ACC meets twice a year, normally during a weekend to reduce travel costs, one of the members hosting the others at his/her home institution. The evaluation of the applications though is simplified by circulating them to the members of the committee well in advance and decision making usually takes one and a half days. Overriding criteria for approval are significance and timeliness of the topic and a well-balanced budget. In recent years, the ACC received enough applications to sort out inappropriate ones. Priority was given to practical courses, because the committee felt that this type of venue would be of greatest benefit to young researchers who had no other opportunities to experience novel laboratory techniques or to learn techniques that they wanted to apply in new projects. Thus the practical courses complete the intentions of the FEBS fellowships' programme. In 1995, for example, the ratio of practical to lecture courses could be raised to 12 out of 17. Indeed, some of the practical courses were so successful that the organizers and the ACC decided to repeat them, sometimes in a series in subsequent years. I gratefully recollect that for one particular course the organizers repeatedly undertook to transfer all special equipment and instruments needed for this course to a place that had no supplies of this kind. The significance of the Advanced Courses Programme is also documented by the fact that students themselves, the



Jürgen Lasch  
Horst Feldmann  
Thanos Evangelopoulos  
Karel Wirtz    Julio Celis Slobodan Barbaric  
Vittorio Sgaramella  
Paulette Vignais John Mowbray

Figure 7.1.3 ACC Meeting, Athens 1991.



Horst Feldmann                      John Mowbray  
Sergio Papa                              Karel Wirtz  
Paulette Vignais                      Slobodan Barbaric  
Thanos Evangelopoulos    Karel Tryggvason Julio Celis

Figure 7.1.4 ACC Meeting Paris 1992.



Thanos Evangelopoulos      Sergio Papa  
Karel Wirtz                      Slobodan Barbaric  
Julio Celis                        Vito Turk  
Horst Feldmann                Iain Mowbray  
Paulette Vignais                Karl Tryggvason

**Figure 7.1.5** ACC Meeting, Amsterdam 1992.



**Figure 7.1.6** ACC Meeting, Amsterdam 1992.



**Figure 7.1.7** Participants of the FEBS Lecture Course 94-14 in Ascona, February 1994: The Young Scientist's View of Molecular Biotechnology.

Young Scientists movement, took the initiative to organize a successful series of courses entitled 'Young Scientists view of molecular biology and biotechnology'. Personally, I am most grateful to FEBS that they have supported the Spetses Summer Schools on Molecular Biology from 1983 to 1995 in a co-sponsorship with NATO and EMBO, and have decided to give full financial aid to these well-known venues together with EMBO from 1996 onwards.

I am thankful to FEBS that they offered me an opportunity to work for the Advanced Courses Programme. The years in FEBS were always exciting and enjoyable. I was glad to meet and to work with so many nice and enthusiastic colleagues from so many different countries, above all the members of the Executive and the Advanced Courses Committees, but not to forget, the organizers of the FEBS Courses and the numerous student participants at courses which I had a chance



**Figure 7.1.8** Participants of the Spetses Summer School 'Mechanisms in Eukaryotic Gene Regulation', 1992 (FEBS Course 92-08).



**Figure 7.1.9** Participants of the Spetses Summer School 'Mechanisms in Eukaryotic Gene Regulation', 1996 (FEBS Course 96-04).

to attend. I vividly remember the splendid atmosphere at the Committee meetings governed by hospitality and friendship and many exhilarating episodes that occurred at these occasions.

In a way, I miss all these activities, but I am grateful that despite my retirement I have an opportunity to keep in contact with the friends from my time at FEBS. It is a pleasant feeling to know that the ACC is in the best of hands with my successor, Karel Wirtz from the University of Utrecht.

The photographs show the participants of some of the successfully repeated FEBS Courses run during my time.



**Figure 7.1.10** FEBS Course on Yeast Genetics and Molecular Biology, Strasbourg 1999.

#### 7.1.4.2 FEBS Advanced Courses 1996 to 2004



*Karel Wirtz, Utrecht*

*Chairman of FEBS Advanced Courses Committee, 1996 to 2004*

It was Laurens van Deenen, Secretary General of FEBS during the period 1975–1977, who suggested to the Netherlands Society for Biochemistry that I be put forward as a candidate for the ACC. Elected at the Council meeting in Rome (1989) I became a member of this committee in 1990. From the very beginning I liked the jovial atmosphere of the committee and the high standards set by the chairman Horst Feldmann. He was meticulous in dealing with the various proposals and made absolutely sure that each year the courses programme was attractive for a wide spectrum of young researchers.

For me it was a great opportunity to make a contribution to the success of the FEBS Advanced Courses program. It also gave me a chance to make the committee members familiar with the capricious nature of Dutch wind and water. Having been asked to organize an ACC meeting in Amsterdam a 60-foot sailing barge of the early 1900's was chartered. This ship offered a bunk for each member and a spacious room under deck where we could discuss and review the applications. After arriving on Friday, late afternoon, we sailed from Amsterdam harbour the next morning to cross the IJsselmeer. During an 8-hours sailing trip we finished the agenda while a two-man crew made sure we reached the port of



Hoorn at the north side of this large body of water. On Sunday morning we had to hoist the sails again to return to Amsterdam. On our way back, – the wind had picked up to force 7 while heavy showers tested our endurance – Horst being in the kitchen to prepare lunch, lost his balance to become encased knee-deep in macaroni. Somehow he still managed to produce a tasty meal. After a long day of hard work, having finally reached Amsterdam, just before disembarking one



Sergio Papa	Iain Mowbray	
Albert Norrland	Karel Wirtz	Balasz Sakardi
Richard Giegé	Maciej Nalecz	
	Tomris Özben	Orestes Tsolas
		Vic Small

**Figure 7.1.11** ACC Meeting, 9 May 1998 (A) Dinner in Amsterdam before ‘embarking’ (B) The Committee on the floating hotel ‘Moehe Zorn’.

committee member came crashing down on the slippery deck and severely damaged his rib cage.

Although some may have thought that I put the committee unnecessarily in harm's way this hapless event was not held against me as the Executive Committee accepted my candidacy to succeed Horst as the Chairman of ACC. Unanimously elected by council in Basel (1995) I began my chairmanship in 1996 facing the challenging task to meet the high standards set by my predecessor. With the indispensable help and input of the seven-member ACC we have succeeded in continuing to organize an attractive and varied lecture and practical courses programme during



Jan Barciszewski	Dimitris Kyriakidis
Karel Wirtz	Karl Kuchler Sergio Papa
	Tomris Özben
John Mowbray	Floortje Jansen
Richard Giegé	Julio Celis & Partner

**Figure 7.1.12** ACC Meeting, 29 April 2000. (A) Ready to embark, (B) Dinner at Hoorn at the end of the day.

the first two periods of my chairmanship (1996–2001). An important development was the approval by council in Birmingham (2000) that the maximum grant for a practical course be raised to Euro 35,000 (formerly Euro 30,500) and for a lecture course to Euro 28,000 (formerly Euro 25,500). In total the council approved an increase in the annual Advanced Courses budget to Euro 635,000 (formerly Euro 510,000). In line with the recommendation of the FEBS Working Group on Central and Eastern Europe the council also approved an additional budget of Euro 100,000 to organize annually two practical courses in that region for the express purpose to transfer knowledge and advanced technology to local young researchers. An attractive feature of this new initiative is that the course organizers may include in their budget a request for special equipment up to Euro 20,000. As the organizers are allowed to keep this equipment FEBS in its own modest way also helps to upgrade the infrastructure of institutes giving these courses.

In 1997 a special FEBS Meeting on the topic ‘Cell Signalling Mechanisms’ was held in Amsterdam. This meeting was highly successful both in the number of participants (a total of 1330 with 500 persons under the age of 31), the way the participants contributed to the programme (all afternoon sessions consisted of mainly selected oral presentations) and financially in that the FEBS grant of Euro 50,000 was refunded in full. As chairman of this meeting I strongly believe that special meetings are bound to be successful as long as the topics are carefully selected and only the best people in the field are invited as lecturers. It was, therefore, gratifying that the council in Lisbon (2001) approved a proposal of the Netherlands Society for Biochemistry and Molecular Biology that, in addition to the annual FEBS meeting, 1–2 special meetings/workshops can be organized under the auspices of FEBS. Assuming that these meetings will be financially sound, the budget of Euro 100,000 approved by Council will be most likely used for FEBS Youth Travel grants.

Given the sound financial status of FEBS it is of great importance that funds have been made generously available by council to the Advanced Courses programme so that young motivated researchers can optimally develop their talents and become a member of the global scientific family. It is highly rewarding to have the opportunity as chairman of the ACC to help realize these high goals.

#### 7.1.5

#### **FEBS Advanced Courses in the Years 2004–2013**

##### **7.1.5.1 General Note on FEBS Courses Programme**

All data pertinent to the FEBS Advanced Courses Programme for the first 40 years (1964 through 2003) have been published in the FEBS Memoir “Forty Years of FEBS”. Details may also be retrieved from [www.febs.org](http://www.febs.org).

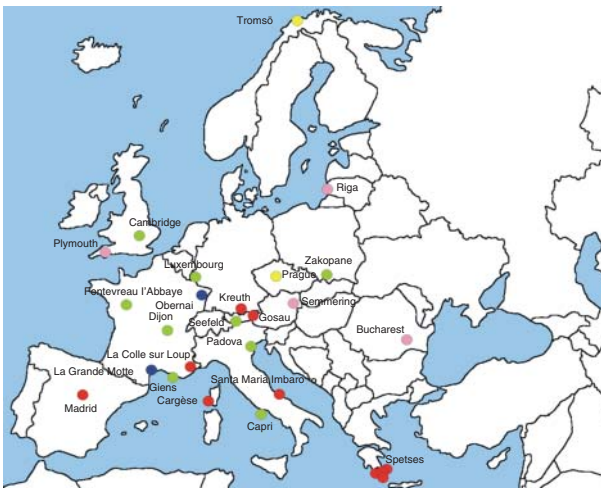
Material to cover the events during the years 2004 through 2013 may be retrieved in detail from [www.febs.org](http://www.febs.org) (Courses/Past Courses). Here we present an overview in a series of pictures for the past ten years.

7.1.5.2 FEBS Courses Programme in 2004



**Figure 7.1.13** Locations of FEBS Advanced Courses 2004. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

7.1.5.3 FEBS Courses Programme in 2005



**Figure 7.1.14** Locations of FEBS Advanced Courses 2005. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

#### 7.1.5.4 FEBS Courses Programme in 2006



**Figure 7.1.15** Locations of FEBS Advanced Courses 2006. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

#### 7.1.5.5 FEBS Courses Programme in 2007



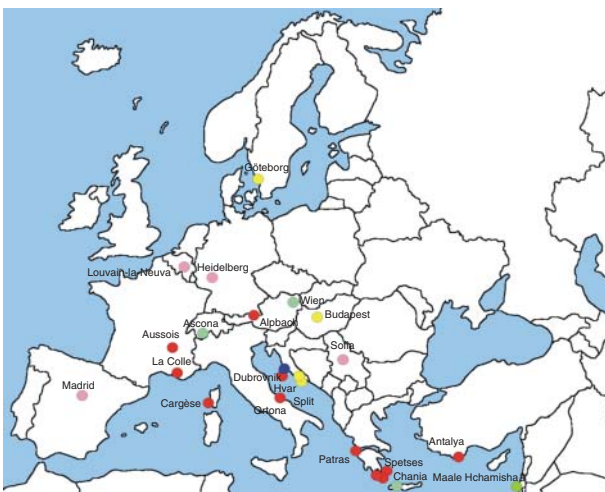
**Figure 7.1.16** Locations of FEBS Advanced Courses 2007. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

7.1.5.6 FEBS Courses Programme in 2008



**Figure 7.1.17** Locations of FEBS Advanced Courses 2008. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

7.1.5.7 FEBS Courses Programme in 2009



**Figure 7.1.18** Locations of FEBS Advanced Courses 2009. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

For each approved Advanced Course and Workshop event, organizers were able to request additional **special transcontinental YTF grants** to cover travel, registration, as well as accommodation and food for up to 2 young scientists from Africa, up to 2 young scientists from South America, up to 4 young scientists from Asia (incl. India, Indonesia, Australia, China & Japan) up to 4 young scientists each from North America (USA/Canada) (FEBS News 1/2009)

#### 7.1.5.8 FEBS Courses Programme in 2010

The FEBS Advanced Course Committee (ACC) programme, headed by Karl Kuchler, offers many opportunities for researchers to exchange information with leading scientists from all over the world. Importantly, young scientists get opportunities to receive training and education in their field of interest, as well as building professional networks with fellow colleagues. Youth Travel Fund (YTF) grants offer unique possibilities for young scientists to get financial support for attending FEBS courses. More than 500 young scientists from many FEBS societies take advantage of YTF support every year. A recent evaluation of the ACC program impressively showed that many scientists have received FEBS grants to organize courses and workshops. However, I emphasize that we wish to have possibly all constituent societies actively participating in the ACC programme. Hence, the ACC strongly encourages and invites applications from scientists representing all FEBS societies. Notably, less-favoured regions can enjoy the privilege of obtaining higher than normal FEBS funds to organize practical courses in their countries. All details, guidelines and application forms can be retrieved from the FEBS website at [www.febs.org](http://www.febs.org) or from the FEBS ACC Flyer. (FEBS News 3/2010)



**Figure 7.1.19** Locations of FEBS Advanced Courses 2010. Red, Lecture Courses; pink, combined Practical and lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

## 7.1.5.9 FEBS Courses Programme in 2011



**Figure 7.1.20** Locations of FEBS Advanced Courses 2011. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

FEBS provides financial support for the organization of a range of courses and meetings on advanced topics in biochemistry, molecular biology and other related bioscience areas. The current objectives are summarized as follows:

- FEBS Advanced Lecture Courses focus on teaching and training. Participants intensively interact with invited scientific leaders in the field during oral presentations, poster sessions, roundtable discussions and tutorials.
- FEBS/EMBO Joint Lecture Courses have the same format and focus, but are organized and financed jointly by FEBS and EMBO.
- FEBS Workshops address topics of high current scientific interest, bringing together experts and interested young scientists. The talks, poster sessions and discussions take place in an informal atmosphere.
- FEBS Special Meetings address timely topics of high scientific interest aimed at a larger number of participants and with a speaker programme featuring the leading scientists in a given field. There are also poster sessions and oral presentations based on selected abstracts.
- FEBS Practical Courses and Combined Practical & Lecture Courses have a strong hands-on training element and aim to teach basic and advanced techniques in molecular biosciences. Therefore, the number of participants in these courses is limited.

Organizers of FEBS courses (with the exception of Special Meetings) can award FEBS Youth Travel Fund (YTF) grants to PhD students and to young scientists who have obtained their PhD within the past five years; these grants cover travel to and





**Figure 7.1.21** FEBS Course on fungal pathogens, La Colle-sur-Loup (C.d'Enfert, 2011).

from the course from another country, registration, accommodation and meals. Course organizers are responsible for the selection of YTF grant recipients. To be eligible for a YTF grant, the recipient must be a member of a FEBS Constituent Society, and must not have already received a FEBS YTF grant in the current or preceding year. (FEBS News 3/2011, pp.13–14)

#### 7.1.5.10 FEBS Courses Programme in 2012



**Figure 7.1.22** Locations of FEBS Advanced Courses 2012. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.



**Figure 7.1.23** FEBS Course on cancer signal transduction, Spetses (J. Bos, 2012).

Over 20 courses and workshops were financially supported in 2012 by the FEBS Advanced Courses programme at interesting locations across Europe, with topics drawing on all aspects of the molecular life sciences – from fundamental studies of biomolecules, to analysis of pathological processes, to bioinformatics.

The courses were organized by outstanding scientists and were of particular benefit to those at an early stage of a career in science. Participation of young scientists and PhD students in most of these events could be supported by FEBS Youth Travel Fund (YTF) grants if applicants are members of FEBS Constituent Societies. Members of IUBMB-related national societies from Asia, the Americas and Africa may be awarded FEBS Trans-Continental YTF grants. Applications for these awards should be addressed directly to the organizer of each course. (FEBS News June 2012)

#### 7.1.5.11 FEBS Courses Programme in 2013

In 2013, FEBS is providing financial support for an extensive range of courses and meetings on contemporary topics in biochemistry, molecular biology and related biosciences, taking place at attractive locations throughout Europe. The full list of events – spanning Advanced Lecture Courses, Practical Courses, Workshops, Joint FEBS/EMBO Lecture Courses, Joint FEBS/Biochemical Society events, and Special Meetings – is set out over the following pages.

As well as providing updates on the latest research, and excellent opportunities for collaborations and networking, most events have a strong educational emphasis and are particularly valuable for early-career post-doctoral scientists and PhD students. A limited number of FEBS Youth Travel Fund grants are available for most courses to assist attendance of young scientists. Further details are available from the individual course websites or course organizers (FEBS News, May 2013).



**Figure 7.1.24** Locations of FEBS Advanced Courses 2013. Red, Lecture Courses; pink, combined Practical and Lecture Courses; yellow, Practical Courses; green, Workshops; blue, Special Meetings.

#### 7.1.6

##### News for Prospective Organizers of Future Courses

Applications to organize future FEBS courses are invited from all scientists who have an international reputation and merits in teaching, and who are keen to distribute knowledge of their field to young people starting their careers in science. Full guidelines about submitting an application can be found on the Courses section of the FEBS website. Differently from previous years, and reflecting the need to reduce the recent high levels of expenditure on FEBS Advanced Courses, we will have only one call in 2013, and so the applications deadline for funding of 2014 courses has been shifted to **1 April 2013**.

FEBS is seeking to extend its cooperation with other societies and organizations in the life sciences for the joint organization of meetings, as in the 'Joint FEBS/EMBO Lecture Courses.' In addition, co-funding/sponsorship of FEBS events by other relevant funding bodies, commercial organizations and industry is welcomed, as before – not only to enhance financial support but also to emphasize the wider scientific and technological importance of the proposed topics (assuming that the terms and conditions of co-funding are in agreement with the FEBS policy).

*Jaak Järv*

*Chair, FEBS Advanced Courses Committee*

(FEBS News January 2013)

## 7.2

### FEBS Fellowships

#### 7.2.1

##### General Aims and Programmes (valid up to 2012)

The FEBS Fellowships programme started in 1979, originally aimed at supporting short-term visits (up to three months) by members of any FEBS Constituent Society to laboratories in another FEBS member country for the purpose of carrying out experiments with special techniques or other forms of scientific collaboration or advanced training, and especially to support developments arising at short notice.

The programme is administered by the Fellowships Officer (later renamed Committee Chairman) assisted by a Fellowships Committee composed of five members elected by Council and, *ex officio* with voting rights, the FEBS Secretary General and the FEBS Treasurer.

The first Fellowships Officer was G. Dirheimer (1979–1983) under whom the programme got off to a good start and became very successful. In the course of five years 200 fellowships were granted out of 298 requested. All FEBS member countries have received or sent fellows, or both. Most of these fellows have been young scientists with a PhD degree and they have been very appreciative in their reports and grateful for the opportunity their fellowship gave them. In 1983, Council decided that fellowships should not be awarded to undergraduate students or those just starting research (a PhD degree or a publication in a peer-reviewed international journal is a prerequisite), nor were senior scientists eligible.

In the years to follow, and thanks to the prospering income of FEBS, the Fellowships programme could be developed. At present, several types of fellowships are available for which the FEBS Statutes define general and specific guidelines. As part of our commitment to young scientists, we offer both *Short-term and Long-term Fellowships to members of our Constituent Societies*, as well as *Summer Fellowships* to promising young students, and *awards and follow-up grants* to past holders of a FEBS Long-Term Fellowship. We also offer *Scholarships* designed exclusively for members of our Constituent Societies in the currently depressed economies of Central and Eastern Europe and *Return-to-Europe fellowships* for post-doctoral scientists wishing to come back to the European area.

FEBS fellowships and scholarships are intended to allow members of our Constituent Societies working in a FEBS country to work in a laboratory in another FEBS country or, in the case of Return-To-Europe Fellowships, to again work in a FEBS country. Because of their young age, applicants for a Summer Fellowship need not be members of a FEBS Constituent Society.

##### **FEBS Short-Term Fellowships**

Short-Term Fellowships are awarded for the purpose of scientific collaboration, advanced training or employing techniques not available at the candidates' usual place of work.

Fellowships are granted for periods of no longer than two or, in exceptional cases, three months.

Applicants must have a PhD or at least one published paper as a main author in an international scientific journal. They should normally be scientists with no more than six years post-doctoral experience.

Applications may be made throughout the year, but should reach the Chairperson of the FEBS Fellowships Committee at least two months before the proposed starting date.

In order to be eligible to apply for a Short-Term Fellowship, applicants need to be members of a FEBS Constituent Society, to be working in a laboratory in a FEBS country and to be seeking to work in a laboratory in a different FEBS country.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines; Guidelines for FEBS Short-Term Fellowships; Application Form for Short-Term Fellowships.

#### ***FEBS Long-Term Fellowships***

Long-Term Fellowships are awarded to support long-term visits for the purpose of scientific collaboration or advanced training.

These Fellowships are originally granted for one year and may be renewed for a further year up to a maximum of 3 years.

Applicants must have a PhD and should normally be scientists with no more than six years post-doctoral experience.

Long-Term Fellowships are awarded twice a year. Applications should reach the Chairperson of the FEBS Fellowships Committee before April 1st or October 1st of the corresponding year.

In order to be eligible to apply for a Long-Term Fellowship, applicants need to be members of a FEBS Constituent Society, to be working in a laboratory in a FEBS country and to be seeking to work in a laboratory in a different FEBS country.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines; Guidelines for FEBS Long-Term Fellowships; Application Form for Long-Term Fellowships, and Frequently Asked Questions.

#### ***FEBS Distinguished Young Investigator Award***

The aim of our Distinguished Young Investigator Award is to give recognition to those FEBS Long-Term Fellows who have conducted excellent research during the tenure of their Fellowship. The Award takes the form of a certificate and a single sum of money which may be used at the discretion of the awardee to buy small pieces of equipment, specific consumable items or to defray conference, publication or similar expenses, but not as a salary.

Applications may be made throughout the year, including during the tenure of the Long-Term Fellowship, but not longer than twelve months after its completion.

In order to be eligible to apply for an Award, applicants need to be members of a FEBS Constituent Society and to have held a FEBS Long-Term Fellowship.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines; Guidelines for the FEBS Distinguished Young Investigator Award.

***FEBS Fellowship Follow-up Research Fund***

The aim of our Fellowship Follow-up Research Fund is to help young scientists who have been recipients of a FEBS Long-Term Fellowship to start work on return to their country of origin after completion of their Fellowship.

The grant consists of a single sum of money which may be used to buy small pieces of equipment and specific consumable items, but not as a salary or to defray travel, conference, publication or similar expenses.

Applications may be made during the tenure of the Long-Term Fellowship, but not longer than eighteen months after its completion.

Grants are awarded once a year. Applications should reach the Chairperson of the FEBS Fellowships Committee before April 1st of the corresponding year.

In order to be eligible to apply for a grant from the Fund, applicants need to be members of a FEBS Constituent Society and to return to their country of origin on completion of their FEBS Long-Term Fellowship.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines; Guidelines for the FEBS Fellowship Follow-up Research Fund; Application Form for the Fellowship Follow-up Research Fund.

***FEBS Summer Fellowships***

Summer Fellowships are awarded to young promising students in a FEBS country wishing to gain practical scientific experience in an institution located in another country within the FEBS area.

Applicants should normally be registered graduate students, in a FEBS country, who have not yet submitted a doctoral thesis.

Summer Fellowships are awarded once a year. Applications should reach the Chairperson of the FEBS Fellowships Committee before April 1st of the corresponding year. In order to be eligible to apply for a Summer Fellowship, applicants need to be registered students in a FEBS country seeking to work in a laboratory in a different FEBS country. They need not be members of a FEBS Constituent Society.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines; Guidelines for FEBS Summer Fellowships; Application Form for Summer Fellowships.

***Collaborative Experimental Scholarships for Central & Eastern Europe***

During recent years, a new initiative called "Collaborative Experimental Scholarships for Central and Eastern Europe" came into existence. These Scholarships are for the exclusive benefit of students engaged in research for a doctoral thesis in the currently depressed economies of Central & Eastern Europe who need to visit a well-founded laboratory in Western Europe for the purpose of carrying out experimental procedures, which would be impossible in their home country because of a lack of resources.

These Scholarships are for scientific collaboration, advanced training or employing techniques not available at the candidates' usual place of work. Scholarships are awarded for periods of no longer than two or three months.

Applications may be made throughout the year, but should reach the Chairperson of the FEBS Fellowships Committee at least two months before the proposed starting date. In order to be eligible to apply for a Scholarship, applicants need to be members of a FEBS Constituent Society, to be engaged in a doctoral thesis in a FEBS country in the currently depressed economies of Central & Eastern Europe and to be seeking to work in a laboratory in a different FEBS country.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines; Guidelines for FEBS Collaborative Experimental Scholarships for Central & Eastern Europe; Application Form for Collaborative Experimental Scholarships for Central & Eastern Europe.

#### ***FEBS Return-To-Europe Fellowships***

Return-To-Europe Fellowships are a newly added option and are awarded to support scientists having left the European area for post-doctoral training elsewhere and wishing to return to Europe for a second post-doctoral position.

These Fellowships are granted for two years.

Return-To-Europe Fellowships are awarded twice a year. Applications should reach the Chairperson of the FEBS Fellowships Committee before April 1st or October 1st of the corresponding year.

In order to be eligible to apply for a Return-To-Europe Fellowship, applicants need to be members of a FEBS Constituent Society having obtained their PhD in Europe and having held a post-doctoral position overseas for no more than 4 years.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines; Guidelines for FEBS Return-To-Europe Fellowships; Application Form for Return-To-Europe Fellowships.

#### ***Chinese European Visiting Fellowships***

FEBS in collaboration with Chinese Scientific Organizations intends to offer Chinese European Visiting Fellowships to allow scientists working in a Chinese University or Research Institute to visit a Biochemical or Molecular Biological laboratory in a FEBS country for up to 3 months for the purpose of scientific collaboration, advanced training or employing techniques not available at the usual place of work but not for attendance at courses, symposia, meetings or congresses.

Candidates should normally be new or prospective group leaders with no more than ten years of post-doctoral experience. The Fellowships are intended to cover accommodation, subsistence and an economy flight. Their value, based on the similar FEBS Short-term Fellowships, will be EUR 5000 (about RMB 50,000).

Applications (in English) may be made at any time but must be at least 3 months before the proposed starting date.

For detailed information, FEBS provides the following items on its Website, which should be carefully read: General Guidelines for FEBS Chinese European Visiting Fellowships; Application Forms for FEBS Chinese European Visiting Fellowships; On-line submission (Login required).

7.2.2

**FEBS Fellowships Committee**



**Figure 7.2.1** Chairmen of the Fellowships Committee.

**Table 7.2.1** Members of the Fellowships Committee, 1984 to 2002.

Members	Place and Year of Appointment	From	To
Carlos Gancedo (Madrid), Chairman	Brussels (1983)	01.01.84	31.12.86
A. Fargo (Hungary)	Brussels (1983)	01.01.84	31.12.87
Erhard Wintersberger (Vienna)	Brussels (1983)	01.01.84	31.12.87
Ferdinando Palmieri (Italy)	Algarve (1985)	01.01.86	31.12.89
R.H. Burdon (Glasgow)	Berlin (1986)	01.01.87	31.12.90
Carlos Gancedo (Madrid), Chairman	Berlin (1986)	01.01.87	31.12.89
Israel Pecht (Rehovot)	Ljubljana (1987)	01.01.88	31.12.91
Walter Fiers (Gent)	Ljubljana (1987)	01.01.88	31.12.91
Carlos Gancedo (Madrid), Chairman	Rome (1989)	01.01.90	31.12.92
Anna Farago (Spain)	Rome (1989)	01.01.90	31.12.93
C. Bron (Switzerland)	Budapest (1990)	01.01.91	31.12.94
W.V. Shaw (Leicester)	Jerusalem (1991)	01.01.92	31.12.95
Gudmundur Eggertsson (Reyjavik)	Jerusalem (1991)	01.01.92	31.12.95
Israel Pecht (Rehovot) Chairman	Dublin (1992)	01.01.93	31.12.95
Sylvain Blanquet (Palaiseau)	Stockholm (1993)	01.01.94	31.12.97
Joachim Seelig (Basle)	Helsinki (1994)	01.01.95	31.12.98
Israel Pecht (Rehovot) Chairman	Basel (1995)	01.01.96	31.12.98
Magnus Ingelmann-Sundberg (Stockholm)	Basel (1995)	01.01.96	31.12.99
Vincenzo Bocchini (Naples)	Basel (1995)	01.01.96	31.12.99
André Sentenac (Gif-sur-Yvette)	Amsterdam (1997)	01.01.98	31.12.01
Ingolf Figved Nes (Norway)	Copenhagen (1998)	01.01.99	31.12.02
Israel Pecht (Rehovot) Chairman	Copenhagen (1998)	01.01.99	31.12.01
Ferdinand Hucho (Berlin)	Nice (1999)	01.01.00	31.12.03
Alexey Bogdanov (Moscow)	Lisbon (2001)	01.01.02	31.12.05
Alberto di Donato (Naples)	Nice (1999)	01.01.00	31.12.03
Maciej Nalecz (Warsaw) Chairman	Lisbon (2001)	01.01.02	31.12.04
Jaak Järv (Tartu)	Lisbon (2001)	01.01.03	31.12.06
Arnoud Ducruix (Paris)	Istanbul (2002)	01.01.03	31.12.06



**Table 7.2.2** Members of the Fellowships Committee, 2002 to 2013.

Members	Country	Elected	Start	End
<b>2002</b>				
Maciej Nalecz, Chairman	Poland	Lisbon (2001)	01.01.02	31.12.04
Jaak Järv	Estonia	Lisbon (2001)	01.01.03	31.12.06
Alexey Bogdanov	Russia	Lisbon (2001)	01.01.02	31.12.05
Alberto di Donato	Italy	Nice (1999)	01.01.00	31.12.03
Ferdinand Hucho	Germany	Nice (1999)	01.01.00	31.12.03
Ingolf Figved Nes	Norway	Copenhagen (1998)	01.01.99	31.12.02
<b>2003</b>				
Maciej Nalecz, Chairman	Poland	Lisbon (2001)	01.01.02	31.12.05
Jaak Järv	Estonia	Lisbon (2001)	01.01.03	31.12.06
Arnoud Ducruix	France	Istanbul (2002)	01.01.03	31.12.06
Alexey Bogdanov	Russia	Lisbon (2001)	01.01.02	31.12.05
Alberto di Donato	Italy	Nice (1999)	01.01.00	31.12.03
Ferdinand Hucho	Germany	Nice (1999)	01.01.00	31.12.03
<b>2004</b>				
Maciej Nalecz, Chairman	Poland	Lisbon (2001)	01.01.02	31.12.04
Angela Nieto	Spain	Brussels (2003)	01.01.04	31.12.07
Margarita Hadzopoulou-Cladaras	Greece	Brussels (2003)	01.01.04	31.12.07
Jaak Järv	Estonia	Lisbon (2001)	01.01.03	31.12.06
Arnoud Ducruix	France	Istanbul (2002)	01.01.03	31.12.06
Alexey Bogdanov	Russia	Lisbon (2001)	01.01.02	31.12.05
<b>2005</b>				
Maciej Nalecz, Chairman	Poland	Warsaw (2004)	01 01 05	31 12 07
Angela Nieto	Spain	Brussels (2003)	01.01.04	31.12.07
Margarita Hadzopoulou-Cladaras	Greece	Brussels (2003)	01.01.04	31.12.07
Jaak Järv	Estonia	Lisbon (2001)	01.01.03	31.12.06
Arnoud Ducruix	France	Istanbul (2002)	01.01.03	31.12.06
Alexey Bogdanov	Russia	Lisbon (2001)	01.01.02	31.12.05
<b>2006</b>				
Maciej Nalecz, Chairman	Poland	Warsaw (2004)	01 01 05	31 12 07
Margarita Hadzopoulou-Cladaras	Greece	Brussels (2003)	01 01 04	31 12 07
Angela Nieto	Spain	Brussels (2003)	01 01 04	31 12 07
Manuela Chaves	Portugal	Budapest (2004)	01 01 05	31 12 08
Arnoud Ducruix	France	Istanbul (2002)	01 01 03	31 12 06
Jaak Järv	Estonia	Istanbul (2002)	01 01 03	31 12 06
Barbara Kofler	Austria	Warsaw and ballot (2004)	01 01 05	31 12 09
Bengt L. Persson	Sweden	Warsaw and ballot (2004)	01 01 05	31 12 09
<b>2007</b>				
Maciej Nalecz, Chairman	Poland	Warsaw (2004)	01 01 05	31 12 07
Angela Nieto	Spain	Brussels (2003)	01 01 04	31 12 07
Manuela Chaves	Portugal	Budapest (2004)	01 01 05	31 12 08

Table 7.2.2 (Continued)

Members	Country	Elected	Start	End
<b>2008</b>				
Henri Grosjean	France	Istanbul (2006)	01 01 07	31 12 10
Achileas Gravanis	Greece	Istanbul (2006)	01 01 07	31 12 10
Barbara Kofler	Austria	Warsaw and ballot (2004)	01 01 05	31 12 09
Bengt L. Persson	Sweden	Warsaw and ballot (2004)	01 01 05	31 12 09
Idit Shachar	Israel	Per mail December 2006	01 01 07	31 12 10
Maciej Nalecz, Chairman	Poland	Vienna (2007)	01 01 08	31 12 10
Georgios Mosialos	Greece	Vienna (2007)	01 01 08	31 12 11
Marina Skok	UA	Vienna (2007)	01 01 08	31 12 11
Manuela Chaves	Portugal	Budapest (2004)	01 01 05	31 12 08
Henri Grosjean	France	Istanbul (2006)	01 01 07	31 12 10
Achileas Gravanis	Greece	Istanbul (2006)	01 01 07	31 12 10
Barbara Kofler	Austria	Warsaw and ballot (2004)	01 01 05	31 12 09
Bengt L. Persson	Sweden	Warsaw and ballot (2004)	01 01 05	31 12 09
Idit Shachar	Israel	Per mail December 2006	01 01 07	31 12 10
<b>2009</b>				
Maciej Nalecz, Chairman	Poland	Vienna (2007)	01 01 08	31 12 10
Georgios Mosialos	Greece	Vienna (2007)	01 01 08	31 12 11
Marina Skok	Ukraine	Vienna (2007)	01 01 08	31 12 11
Manuela Chaves	Portugal	Budapest (2005)	01 01 06	31 12 09
Henri Grosjean	France	Istanbul (2006)	01 01 07	31 12 10
Achileas Gravanis	Greece	Istanbul (2006)	01 01 07	31 12 10
Victor Rubio	Spain	Athens (2008)	01 01 09	31 12 12
Martino Bolognesi	Italy	Athens (2008)	01 01 09	31 12 12
Idit Shachar	Israel	Per mail December 2006	01 01 07	31 12 10
<b>2010</b>				
Maciej Nalecz, Chairman	Poland	Vienna (2007)	01 01 08	31 12 10
Georgios Mosialos	Greece	Vienna (2007)	01 01 08	31 12 11
Marina Skok	Ukraine	Vienna (2007)	01 01 08	31 12 11
Michaela Wimmerova	Czech Rep.	Prague (2009)	01 01 10	31 12 13
Henri Grosjean	France	Istanbul (2006)	01 01 07	31 12 10
Achileas Gravanis	Greece	Istanbul (2006)	01 01 07	31 12 10
Victor Rubio	Spain	Athens (2008)	01 01 09	31 12 12
Martino Bolognesi	Italy	Athens (2008)	01 01 09	31 12 12
Idit Shachar	Israel	Per mail December 2006	01 01 07	31 12 10
<b>2011</b>				
Victor Rubio, Chairperson	Spain	Gothenburg (2010)	01 01 11	31 12 13
Georgios Mosialos	Greece	Vienna (2007)	01 01 08	31 12 11
Marina Skok	Ukraine	Vienna (2007)	01 01 08	31 12 11
Michaela Wimmerova	Czech Rep.	Prague (2009)	01 01 10	31 12 13
Martino Bolognesi	Italy	Athens (2008)	01 01 09	31 12 12
László Buday	Hungary	Gothenburg (2010)	01 01 11	31 12 14
Andreas Hartig	Austria	Gothenburg (2010)	01 01 11	31 12 14
C. Spetea Wiklund	Sweden	Gothenburg (2010)	01 01 11	31 12 14

Continued overleaf

Table 7.2.2 (Continued)

Members	Country	Elected	Start	End
<b>2012</b>				
Victor Rubio, Chairperson	Spain	Gothenburg (2010)	01 01 11	31 12 13
Balog Tihomir	Croatia	Turin (2011)	01 01 12	31 12 15
Campuzano Sonsoles	Spain	Turin (2011)	01 01 12	31 12 15
Soreq Hermona	Israel	Turin (2011)	01 01 12	31 12 15
Michaela Wimmerova	Czech Rep.	Prague (2009)	01 01 10	31 12 13
Martino Bolognesi	Italy	Athens (2008)	01 01 09	31 12 12
László Buday	Hungary	Gothenburg (2010)	01 01 11	31 12 14
Andreas Hartig	Austria	Gothenburg (2010)	01 01 11	31 12 14
C. Spetea Wiklund	Sweden	Gothenburg (2010)	01 01 11	31 12 14
<b>2013</b>				
Victor Rubio, Chairperson	Spain	Gothenburg (2010)	01 01 11	31 12 13
Balog Tihomir	Croatia	Turin (2011)	01 01 12	31 12 15
Campuzano Sonsoles	Spain	Turin (2011)	01 01 12	31 12 15
Soreq Hermona	Israel	Turin (2011)	01 01 12	31 12 15
Michaela Wimmerova	Czech Rep.	Prague (2009)	01 01 10	31 12 13
László Buday	Hungary	Gothenburg (2010)	01 01 11	31 12 14
Andreas Hartig	Austria	Gothenburg (2010)	01 01 11	31 12 14
C. Spetea Wiklund	Sweden	Gothenburg (2010)	01 01 11	31 12 14
Alain Krol	France	Seville (2012)	01 01 13	31 12 16
Markus Grütter	Switzerland	Seville (2012)	01 01 13	31 12 16

## 7.2.3

## The FEBS Fellowships in the Period 1984–1992



Carlos Gancedo

*Chairman of the Fellowships Committee, 1984 to 1992*

I left the FEBS Fellowships Committee in 1992. As such, now is not the time to do a balance of the work of the Committee – something that Council did in each of its meetings –, but instead the time to remember some developments that took place during my time as Chairman of the Committee Developments that may be deemed of some historical value in a moment of accelerated forgetfulness.

At the time I took the office, the financial situation of FEBS was becoming solidly established thanks to the success of its publications *European Journal of Biochemistry* and *FEBS Letters*; this situation allowed us to consider an increase of the money earmarked for Fellowships. At that time only the Short-term Fellowships existed. These fellowships allowed the travel of young scientist to a foreign laboratory to learn a new technique, or to perform experiments that could not be done in their own laboratory. The importance of these fellowships in Europe, in which many scientists were unable to get funding to travel abroad, cannot be overemphasized. Moreover the fact of the fellowships being allocated

by a scientific supranational body, in which Eastern and Western countries were represented, made it impossible to invoke obscure political motivations against them. Perhaps the young scientists of today are facing other types of problems, and may find it difficult to imagine this situation; however, it existed not so long ago.

The increase in the number of fellowships required a certain uniformity in the presentation of the applications. This was achieved by the use of a standard application form and a deeper involvement of the members of the Committee in the evaluation of the applications and the final decision. A smooth review process was established in which in general every application was judged by two members of the Committee and the decision taken after not more than two months; remember that at that time no electronic mail was available and that fax machines only began their expansion and were used only in special cases. The increase in activity of the Fellowships Committee was well received among the FEBS Membership and a steady increase of the number and quality of applications began. Keeping always in mind the quality of the applications, the Committee made a special effort to favour applications of countries with severe difficulties to fund the travel of their scientists. Also a small number of fellowships went to countries that, without being members of FEBS, were considered an area of interest of the Federation. A look at the minutes of the different Council meetings, where the activities of the Committee were presented, reveals this non-written policy.

The health of the FEBS finances and the input of ideas of the FEBS Treasurer, Prakash Datta, made the Committee consider the launching of a new type of fellowship that became an immediate success, the Long-Term Fellowships. A small number in the beginning, their number increased progressively in the next years and also their characteristics and endowment made them increasingly attractive. All Committee members were involved in the final decision of the awards and the discussions to this end were always courteous and scientifically fruitful.

Another idea of Prakash was the Summer Fellowships aimed at students who were either starting their projects or considering starting one. These fellowships allowed these students to grasp how science was performed in laboratories different from their own at an important time in their careers.

My task during this time was facilitated by the work of the different members of the Committee who with their personal involvement made a smooth functioning of it possible. If there is some credit for the work of these years they deserve most of it. As Chairman of the Fellowships Committee I took part in the meetings of the Executive Committee where an interesting interaction with members of other Committees took place. For our Committee it was particularly important to interact with the Advanced Courses Committee to examine topics of current interest and ideas about future developments in a time of great change in Biochemistry.

Looking back from a personal perspective I see my time of service in the Fellowships Committee as one that enriched my experience and that allowed me to be in touch with different aspects of science activities. I hope that the European biochemical community could see also this time as one that resulted in the benefit of the FEBS members.

*Carlos Gancedo, Madrid February 2003*

## 7.2.4

## The FEBS Fellowships in the Period 1993–2001



The following tabular overviews were kindly provided by the past chairman of the Fellowships Committee, Professor Israel Pecht, Rehovot.

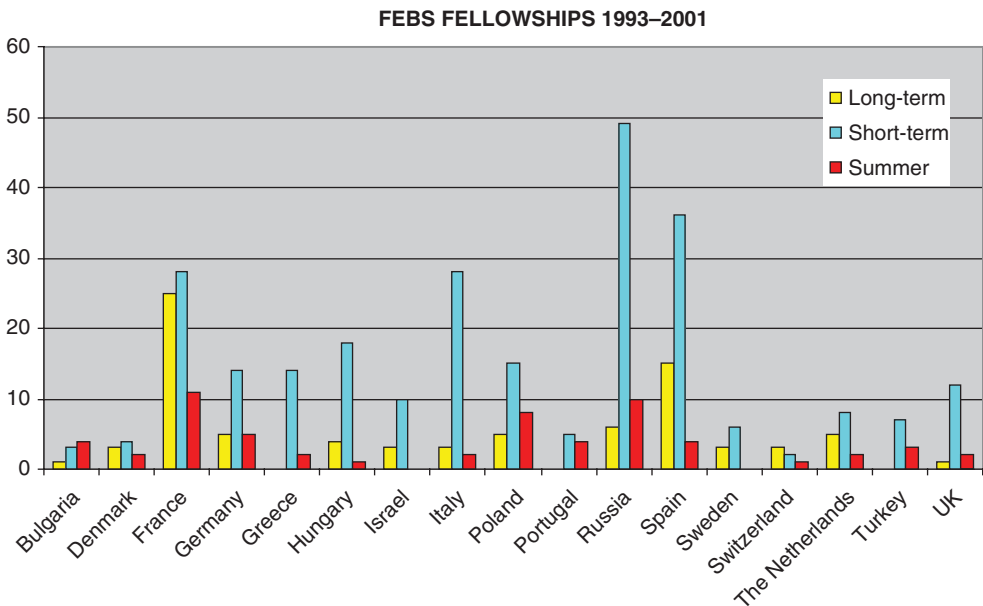


Figure 7.2.2 FEBS Fellowships awarded to candidates by countries..

## 7.2.5

## The FEBS Fellowships in the Period 2002–2004

In **2004**, FEBS granted a total of 558 fellowships to young scientists; 58 of these were Long-Term Fellowships, 49 were Short-Term Fellowships, 12 were Summer Fellowships, 17 were Collaborative Experimental Fellowships, and 297 were Youth travel funds. Finally, 125 fellowships to attend the annual FEBS Congress in Warsaw were granted. Obviously, this is quite a record for a European organization that receives no external funding. (FEBS News 2005/4)

Table 7.2.3 FEBS Long-Term Fellowships Awarded 1993–2001

Country	Applicant											Host									
	93	94	95	96	97	98	99	00	01	tot	93	94	95	96	97	98	99	00	01	tot	
Austria							1		1	2											
Belgium												1									1
Bulgaria							1			1											
Croatia																					
Cyprus																					
Czech Rep.							1	1	1	3			2								2
Denmark																					
Estonia																					
Finland	1									1											
France		1	4		1	5	4	6	4	25	1	2	5		2	5	1	1	1	17	
Germany		1		1		1	1	1		5	2	1	2	2	1	2	1	4	1	14	
Georgia			1							1											
Greece																					
Hungary			1	1			1		1	4											
Ireland										1											
Israel	1	1	1							3	1				1	2		1	1	4	
Italy			2	1						3								1	1	2	
Latvia																					
Lithuania																					
Morocco																					
Norway																1					1
Poland																					
Portugal																					
Romania																					
Russia		2					1	1	2	6											

(continued overleaf)



Table 7.2.4 FEBS Short-Term Fellowships Awarded 1993–2001.

Country	Applicant											Host										
	93	94	95	96	97	98	99	00	01	tot	93	94	95	96	97	98	99	00	01	tot		
Austria			2	3	1	1	1	1		9	1						2	1	1	5		
Belgium	2	2	2			2				8			2						2	4		
Bulgaria		1	1	1						3												
Croatia			2		1	1	4			8									1	1		
Cyprus					1					1												
Czech Rep.	1	1	1	5	1			1		9			1	1		1			1	1		
Denmark							2	1	1	4		1	1	2	2	1	2	1	1	10		
Estonia				1	1	1				3		1							1	1		
Finland	1	1	1							3			1				1	1	1	5		
France	2	2	2	2	6	3	5	4	2	28	9	13	16	5	7	10	7	10	7	84		
Germany	2	1	3	2	2	1	4	1		14	6	4	6	6	11	7	6	2		59		
Greece	2	1	1	2	2	2		4		14												
Hungary	2	1	2		6	1	1	4	1	18	1					1				3		
Ireland								1		1												
Israel					1	4	3	2		10		2	2	2	1	1	2			8		
Italy	6	5	6	1	4	2	2	1	1	28	1	3	1	4	3	2	1	3	2	20		
Latvia	1	1				1			1	4												
Lithuania	2									2												
Morocco	1									1												
Norway			1	1		2				5			1					1	2	2		
Poland	2	1	3	2	1		3	1	2	15					1					1		
Portugal	1				1	1	1	1		5												
Romania		1			1	1	2	1	2	7												
Russia	6	8	4	4	5	8	5	10	8	49												

(continued overleaf)



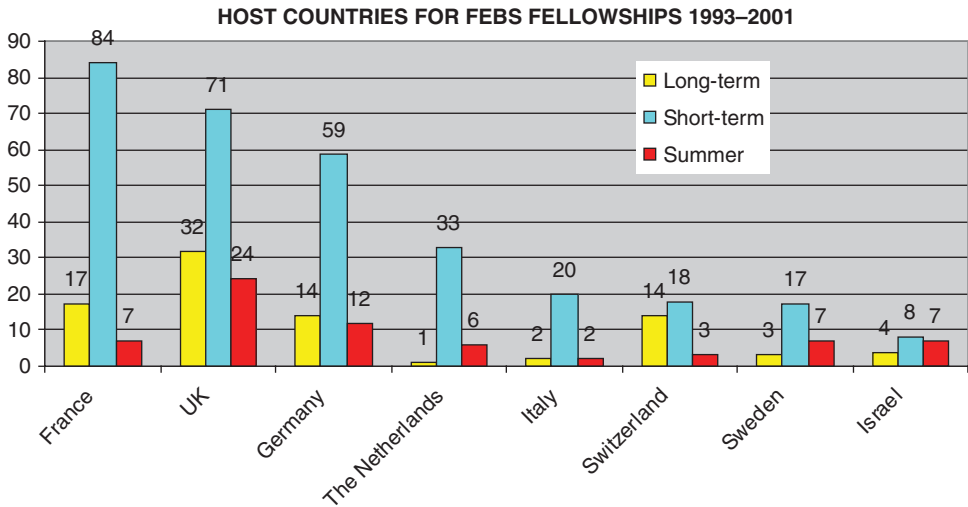


Table 7.2.5 FEBS Summer Fellowships Awarded 1993–2001.

Country	Applicant											Host										
	93	94	95	96	97	98	99	00	01	tot	93	94	95	96	97	98	99	00	01	tot		
Austria				1						1						2	1			3		
Belgium													1						1	2		
Bulgaria	1	1					1	1		4												
Croatia					1		1			2												
Cyprus																						
Czech Rep.		1								1												
Denmark	1		1							2			1						1	2		
Estonia		1								1												
Finland									1	1										2		
France	1	3	1		2	3	1	1		11				2		1	1		4	7		
Germany	1					1	1	2		5		1			2	2	2	3	2	12		
Greece				1					1	2												
Hungary										1												
Iceland								1		1												
Ireland					1					2												
Israel																			1	1		
Italy									1	2		1			2	1	1	1		7		
Kazakhstan		1								1								2		2		
Latvia							1			1												
Lithuania								1		2												
Moldova										1										1		

(continued overleaf)





**Figure 7.2.3** Countries hosting FEBS Fellowship candidates..

#### 7.2.6

##### The FEBS Fellowships in the Period 2005–2009

**Poland rewards architect of centre for molecular biology** On 10 June, 2008, Prof. Maciej Nalecz, Chairman of the FEBS Fellowships Committee and Director of UNESCO Division for Basic and Engineering Sciences, was one of three scientists to be distinguished in this year's Honours list by the President of Poland for their role in the creation and development of the International Institute of Molecular and Cell Biology (IIMCB). The distinction comes 13 years after the signing of an agreement between the Director-General of UNESCO and the Polish Deputy Prime Minister for the creation of the IIMCB under the auspices of UNESCO in May 1995. Two years later, the institute would become a legal entity under the direct supervision of the President of the Polish Academy of Sciences, with the adoption of the Polish Parliamentary Bill. This unprecedented Bill paved the way for a string of other international centres on Polish soil. All would be characterized by an International Advisory Board composed of world-class specialists who were responsible for overseeing the centre's work, a structure absent from earlier national legislation. At the time, Maciej Nalecz was Director of the Marcei Nencki Institute of Experimental Biology in Warsaw, Polish Academy of Sciences. It was thus on behalf of the Polish authorities that he set up the IIMCB and subsequently occupied the first Chair of its International Advisory Board. Even after being appointed Director of the Division of Basic and Engineering Sciences at UNESCO in October 2001, Professor Nalecz continued to serve on the International Advisory Board of the IIMCB but this time in his capacity as Representative of the Director-General of UNESCO, as envisaged by the Parliamentary Bill. (FEBS News July 2008)

**FEBS Return-To-Europe Fellowships** FEBS is pleased to announce a new Fellowship programme, namely that for Return-To-Europe Fellowships. This programme is being started to support scientists who left the European area for post-doctoral training elsewhere and now wish to return to Europe for a second post-doctoral position. They are granted for two years. Return-To-Europe Fellowships will be awarded once a year, beginning in 2009. Applications should reach the Chairman of the FEBS Fellowships Committee before March 1st of the corresponding year. In order to be eligible to apply for a Return-To-Europe Fellowship, applicants need to be members of a FEBS Constituent Society having obtained their PhD in Europe and having held a post-doctoral position overseas for no more than 3 years (extended to 4 years in 2012). (FEBS News 1/2009)

**Chinese European Visiting Fellowships** FEBS in collaboration with Chinese Scientific Organizations intends to offer Chinese European Visiting Fellowships to allow scientists working in a Chinese University or Research Institute to visit a Biochemical or Molecular Biological laboratory in a FEBS country for up to 3 months for the purpose of scientific collaboration, advanced training or employing techniques not available at the usual place of work but not for attendance at courses, symposia, meetings or congresses. (FEBS News 5/2009)

#### 7.2.7

#### The FEBS Fellowships in the Period 2010–2012

**A yearly get-together of Long-Term Fellows:** To increase collegiality, cross-communication and awareness about FEBS, the FEBS Chairperson will organize a meeting of FEBS Long-Term and Return-To-Europe Fellows each year. This meeting will take place immediately before the annual FEBS Congress. (In 2012 from 1st to 4th September 2012 in Costa Ballena, Spain.) (FEBS News 3/2011)

**Return-To-Europe Fellowships: length of stay outside Europe up to four years** Return-To-Europe Fellowships are the newest addition to the FEBS Fellowships portfolio. They are for two years and aim to support outstanding scientists who have left the European area for postdoctoral training elsewhere and wish to return to Europe with a view to pursuing an independent research career. Although still an experimental scheme, the number of applications has been increasing steadily, leading to the recent decision of operating two calls, in spring and autumn (April 1st and October 1st), at the same time as the calls for Long-Term Fellowships. At its last meeting, the Fellowships Committee reflected on the applications received for these Fellowships and the feedback from applicants (and also from excluded would-be applicants) and felt that it would be desirable to accept a longer period outside Europe, of up to four years. Although still needing the endorsement of the Executive Committee of FEBS, this change, together with small changes in the application (inclusion of a brief outline of achievements during the period outside Europe), is expected to be operative for the spring call 2012. (FEBS News February 2012)

**The FEBS Fellowships Committee is extended by three members** As a result of the escalating number of Fellowship applications and the increasing diversity of the topics covered by the FEBS community, FEBS Council has approved an increase in the size of the Fellowships Committee by the addition of three new members. The committee is now composed of the Chairperson, eleven Members and the two Ex-Officio Members (the FEBS Secretary General and the FEBS Treasurer). (FEBS News February 2012)

**FEBS Fellowships news: FEBS Distinguished Young Investigator Awards** FEBS Long-Term Fellowships are awarded to support visits by postdoctoral scientists to a host laboratory in another country within the FEBS area for scientific collaboration or advanced training, for one to three years. The aim of our Distinguished Young Investigator Award is to give recognition to FEBS Long-Term Fellows who have conducted excellent research during the tenure of their FEBS Fellowship. The Award takes the form of a certificate and the sum of €10,000, which may be used at the discretion of the awardee to buy small pieces of equipment, specific consumable items or to defray conference, publication or similar expenses, but not as a salary. Here we are pleased to feature three recent winners of the Distinguished Young Investigator Award – Arnaud Gautier, Emilie Pacary and Areti Pantazopoulou – who briefly outline their FEBS Fellowship work. Applications for the FEBS Distinguished Young Investigator Award may be made throughout the year, including during the tenure of the Long-Term Fellowship, but not longer than 12 months after its completion. (FEBS News June 2012)

## 7.2.8

### FEBS Fellowships News 2013

The number of FEBS Fellowships awarded in recent years has increased markedly, and in 2012 total FEBS Fellowship expenditure was over €2.8 million, with the majority of that arising from the ~70 post-doctoral scientists supported as Long-Term Fellows in host laboratories across the FEBS area during the year. As explained in the Preface of this issue of *FEBS News* (January 2013, page 3), in the light of an anticipated fall in income from its journals, FEBS is now downsizing its Fellowships programme, and particularly the awarding of new Long-Term Fellowships, where FEBS is committed to stipends for up to 3 years. Nevertheless, the full range of Fellowships continues to be offered by FEBS, with new funding in 2013 to be focused on the most outstanding applications.

In 2012, applications for *Long-Term Fellowships* (awarded for 1 year in the first instance and renewable for up to 3 years) continued to increase (up 42% compared with 2008). In the spring call of 2012 there were 86 applications and six were awarded (7%), whereas in the autumn call of 2012 the number of eligible applications was 133 but the number to be awarded has been decreased to no more than four (3%). These figures are significantly down on the success rate of around 16% before 2012. The Fellowships Committee is seeking co-funding support for its Fellowships Programme from 2014, but a single (autumn) applications

deadline is nevertheless anticipated in 2014. Despite the cutbacks in the award of new Fellowships, the standards expected from FEBS Fellows for the award of extensions of Long-Term Fellowships into a second and third year of research will remain as before for existing and new FEBS Fellows.

*Return-To-Europe Fellowships* (awarded for 2 years to support outstanding post-doctoral scientists returning to the European area) are also becoming increasingly competitive. In 2012 there were 18 eligible applications, of which two were awarded. This scheme was added to the FEBS Fellowships portfolio in 2008 on a trial basis and was due for assessment by FEBS Council in 2012. It has passed this initial scrutiny and will now continue for another two years before re-examination in 2014.

In 2013, the FEBS Fellowships Committee expects to award 10 new Long-Term plus Return-To-Europe Fellowships (in total), 25 Short-Term Fellowships, 4 Collaborative Experimental Scholarships for Central & Eastern Europe, and 4 Summer Fellowships. There will be two calls for Long-Term and Return-to-Europe Fellowships (April 1 and October 1). Summer Fellowships applications are also due by April 1, while those for Short-Term and Collaborative Experimental Scholarships can arrive throughout the year.

*Vicente Rubio*

*Chair, FEBS Fellowships Committee*

(FEBS News January 2013)

#### **Portfolio of FEBS Fellowships (2013)**

##### Pre-doctoral Fellowships

- *FEBS Summer Fellowships*: awarded to promising graduate students in a FEBS country wishing to gain practical scientific experience in an institution located in another country within the FEBS area.
- *FEBS Collaborative Experimental Scholarships for Central and Eastern Europe*: awarded to PhD students from Central and Eastern Europe to support experimental work in a laboratory in Western Europe; usually for 2 or 3 months.

##### Pre-/post-doctoral Fellowships

- *FEBS Short-Term Fellowships*: awarded to post-doctoral researchers or advanced pre-doctoral students for the purpose of scientific collaboration, advanced training or employment of techniques not available at the candidates' usual place of work; usually for up to 2 months.

##### Post-doctoral Fellowships

- *FEBS Long-Term Fellowships*: awarded to support long-term visits for scientific collaboration or advanced training; originally granted for 1 year and may be renewed for a further year up to a maximum of 3 years. FEBS Long-Term Fellows are eligible for the:

- *FEBS Distinguished Young Investigator Award* for excellence in research, and FEBS Fellowship
- *Follow-up Research Fund* grants towards research costs on return to work in their country of origin.
- *FEBS Return-to-Europe Fellowships*: awarded to support outstanding scientists who left the European area for post-doctoral training elsewhere but now wish to return to Europe for a post-doctoral position with a view to pursuing an independent research career; granted for 2 years.

### 7.3

#### FEBS Scientific Apparatus Recycling Programme (SARS/SARP)

The aim of the Scientific Apparatus Recycling Scheme (SARS), as this programme had originally been termed and initiated in 1990, was to take reliable apparatus and scientific journals donated by active laboratories as surplus to requirements and transfer them to laboratories in countries which were less well equipped and which faced problems in acquiring research materials at current prices. The collected apparatus, in working order, was offered at regular intervals via lists sent to FEBS Constituent Societies. Orders for items in these catalogues were dispatched free-of-charge in batches to the Societies concerned. Since 1992 batches of equipment and journals have been sent to Hungary, Poland, Romania, Lithuania, Bulgaria, Czech Republic, Latvia, Ukraine and Russia, and when other Central and East European countries became members of FEBS these were included. Some items, which are not in demand by European countries, have been sent with financial support from the Nuffield Foundation to African countries, which were even less well equipped.

#### 7.3.1

##### The Scientific Apparatus Recycling Scheme (SARS)

##### 7.3.1.1 The First Years



*Peter N. Campbell,  
University College London*

I have for long during my career as a teacher and researcher been obsessed by the waste of experimental apparatus in our laboratories. I know that others have shared that view both here in the UK and also in the USA where my friends have often expressed their dismay. Perhaps these thoughts are uppermost in the minds of the older generation that started doing their research just after the war in 1946 when we had little apparatus. I recall that as we got new equipment we used to show it to our foreign visitors even before we spoke about our research.

In part the reason for the presence in our departments of apparatus which has not been used for a long time is the way people apply for grants to do their research.



The procedure is to ask for as much apparatus as you think you can justify to the grants committee; you do not scour the department to see if you could make do with the equipment that is lying in the stores unused.

In 1989 I was invited to attend the Annual General Meeting of the Turkish Biochemical Society. I arrived in Ankara in mid November to find the weather unusually cold. I travelled by coach on a 400 km journey to Antalya where the meeting was to be held at the summer camp of the postal workers union. This was designed for summer and not the winter, which seemed to be imminent. I shared an apartment with Vito Turk, then the General Secretary of FEBS who comes from Ljubljana in Slovenia. One night we had a fearful storm and water poured through the front door of our little apartment. When the electricity failed Vito got me up and asked for my torch, which I had wisely packed. He promptly dropped it and it fell into pieces on the wet floor. No way could we fit all the pieces together and avoid getting soaked in the invading pool of water.

We had previously been shown round the Medical Faculty of Akdeniz University by Prof. Tomris Özben. This was then a new medical school in a modern building but they were clearly in need of equipment. Sleep proved impossible in our dark and flooded apartment so I dreamt up the idea of the "Scientific Apparatus Recycling Scheme" (SARS) to help the biochemists in the poorer countries of Europe. I put the idea to Vito at breakfast, who, coming from Slovenia, was well aware of the needs of the countries I had in mind. I thought we should include the word "recycling" since this was in vogue. Vito was very encouraging and asked me to go ahead.

At the origin of FEBS in 1964 we had been concerned that it should encompass all the biochemists in Europe and be non-political. This was the reason for organizing the annual meeting on either side of the so-called iron curtain in alternate years. In this way, those of us who were concerned with FEBS and the International Union of Biochemistry got to travel in Eastern Europe and to know the leading biochemists as friends. While conditions for biochemical research during the communist days were not as good as those in the west, much good work was done and at least there was a feeling of continuity and reasonable organization. In fact so far as congresses were concerned their ability to overcome difficulties was often impressive. Thus for me to start work on SARS in 1989 was a significant date for in many respects the demise of the USSR was to bring much greater troubles to our colleagues, even though in recompense they gained freedom of speech and were able to travel.

I wrote about my ideas for SARS on 27<sup>th</sup> November 1989. I note that I included the idea that equipment might be returned to the manufacturer for service and subsequently sold to the recipients at a knock down price. For various reasons this idea did not materialise and all items were to be outright gifts. The Treasurer of FEBS, Iain Mowbray, wrote on 31<sup>st</sup> Jan.1990 to say that the Executive Committee had approved of the proposal for SARS and invited me to develop the activity on a small scale to assess its viability. On 14<sup>th</sup> Feb.1990 I wrote to all the constituent societies of FEBS outlining the ideas I had for SARS. In this I emphasised the political changes taking place and that I realised that the idea of recycling

apparatus was not new, merely that FEBS wanted to do its part. Again I suggested that the recipients would pay for refurbished apparatus. I also emphasized that I expected the societies in many western countries to help. SARS was discussed at the FEBS Council in Budapest in August 1990 where it was well received but the idea of recipients making a payment was dropped; FEBS was merely to cover transport costs. Application was made to the European Union under the TEMPUS programme to cover the cost of a two week visit by a representative of Hungary and Poland to survey the situation in the UK and say what apparatus would be useful to them. The application was successful and 3000 Euro were provided. By June 1991 the visits had taken place with Prof. Vera Adam-Vizi from Hungary and Mr Zdzislaw Pliszka from Poland. It was agreed that there was much useful equipment that could be donated but at once the problem of storage and transport was raised. Fortunately The Biochemical Society had some spare warehousing at Colchester and the Society kindly agreed to make this available on a short-term basis. Quite by good fortune, Pickfords, the largest household transporter in the UK, had an office next to the Biochemical Society warehouse and they have played a prominent part in the work of SARS. During the summer of 1992 I added Journals and books to apparatus since these were clearly wanted. At that time there had been no offers of help from countries other than the UK except from Denmark, but in 1993 we were able to pay for the dismantling and transfer of an electron microscope from the *Max-Planck-Institut für Immunbiologie in Freiburg*, Germany to the Institute of Experimental Medicine, in Prague. The dismantling and transport costs were paid with the approval of the Czech Biochemical Society. By 1996 the cost of transport rose to about DM 100,000 and continued at that annual rate to the present time.

Because of my interest in Africa, and the fact that some of the apparatus offered to SARS was not required in Europe, I applied to the Nuffield Foundation in London for a grant to cover the cost of dispatch of items to Africa. We were awarded £ 5000 in March 1993 and so were able to help Kenya, Tanzania and Uganda. I had been impressed by the enormous quantities of unused pipettes I had accumulated and also bench centrifuges. They were asked to support a new Medical School in Blantyre, Malawi. Because, by this time, The Biochemical Society was anxious that we should vacate their warehouse, FEBS assisted in the work in Africa. The Nuffield Foundation provided another grant of £ 10,000 in December 1994 and so the work was extended to Ethiopia and Nigeria. Wherever possible I used Book Aid International, which is a charity in London, which transports and distributes Books and Journals in Africa.

Fortunately the economic situation has improved in some countries in Central and Eastern Europe, in particular Hungary, Czech Republic and Poland and to a lesser extent in Estonia and Slovenia; so dispatches to these countries have dropped off. On the other hand we have had increasing contacts with the countries of the Former Soviet Union (FSU), such as Ukraine, Moldova, Armenia and Georgia. These countries are increasingly interested in joining FEBS. I got help from the "International Association for the promotion of co-operation with scientists from the New Independent States of the Former Soviet Union" (INTAS).

They paid half the cost of transport of loads to the countries of the FSU. I attach a list of all the loads that have so far been dispatched. The costing refers to the sums paid for transport but do not include the internal costs of transportation to the warehouses in the UK. I also indicate where INTAS has helped. Prof. Dirheimer kindly analysed the destiny of the loads and the total costs in £ per country as at March 2002.

The extent of the support given to the various countries has depended very much on the liveliness of the society officials delegated to deal with me. I do not dispatch to societies within the European Union.

FEBS is concerned that the items sent are made available to members of the societies and are not retained for one group. In order to inform myself about such matters I have travelled to many countries, such as Bulgaria, Latvia, Lithuania, Romania, Russia, Ukraine, Moldova and Turkey and I have written reports to FEBS about my findings. In many cases I was fulfilling various jobs on my visits so FEBS did not always incur costs. INTAS has been generous in this respect. In terms of gifts of apparatus and journals we have received much help from universities, especially UCL and industry e.g., Glaxo, Shell, Smith Kline Beecham, Novartis and Government Laboratories. I had in mind originally that the apparatus to be provided should be small, such as bench top centrifuges which we could not use in the UK because of the safety requirement that the tops be locked during use. I was soon involved in the movement of ultracentrifuges and even an Electron Microscope to Romania. I think this was probably a mistake since the safe transport of such large items is difficult and spare parts are often not available. In terms of books our major donator has been the *Trends* office of Elsevier Science, London originally in Cambridge but now in London, who have provided about a thousand new books each year, which would otherwise have been junked. I think the provision of such books has been an increasingly valuable aspect of the work for some institutes in the FSU are bereft of modern literature and even in Lithuania they find it difficult to purchase books. In Yerevan, Armenia and Vilnius, Lithuania substantial libraries have been set up under the FEBS donations. In Yerevan, Prof. Semenza, who retired after some 15 years as Executive Editor of *FEBS Letters*, donated a full run of the journal. While FEBS pays the cost of transport, SARS has never paid custom taxes. This has proved a recurring problem but in most cases we have learnt how to deal with it. Thus in some countries it is essential to list the value of each item in the load and make a total. I will put one centrifuge = £ 1 and make sure the total does not exceed £ 300. The country that has given me difficulties is Russia. In order to avoid custom taxes, which can be as high as 80% of the original price of the goods, it is necessary to get permission to convert the load from "Technical Aid" to "Humanitarian Aid", which may take 6 months. I recall that when I wanted to send the 600 books they wanted me to list all the titles, authors and the original price. I refused but it all took much correspondence. A problem is that Russia is such a large country, and the funds available to the Russian Biochemical Society are so limited, that the Moscow office cannot help with the distribution of gifts to places like St Petersburg and Siberia or even in Moscow. I only had one challenge with the British authorities after I had sent centrifuges

to Lithuania. The UK Customs and the Department of Trade and Industry were concerned lest the centrifuges were to be used for the purification of uranium.

Concerning the finances for SARS I have mentioned that FEBS provides up to about DM 100,000 per year. I only receive a minimal cost for my car, office expenses and the cost of travel to the annual council meeting and some other trips. I have been concerned that someone else should know about the workings of SARS and was pleased when I met Mr Stephen Asbridge who has much experience in Eastern Europe. He from time to time gives a day of his time and receives a consultant fee for the time involved. Most of transport has been arranged by Allied Pickfords, now at Ipswich. They provide storage space while the societies chose items from the lists I distribute. I have been firm in that I deal with the societies and not individuals. The societies are responsible for seeing the loads through customs and distributing the items requested. I think that sometimes the packing has not been adequate but to do this in a fully acceptable manner would have incurred enormous costs and the packing companies often do not arrange dispatch. Only on one occasion, when I used an alternative company, did a load go completely astray; that going to Estonia which was sent via Moscow.

In summary then I think that SARS has been to the credit of FEBS and has certainly been a practical introduction to the newer societies and an indication of the value of joining FEBS. I am a little disappointed that there has not been more support from countries other than the UK but I was pleased when recently Prof. Wirtz sent a load of apparatus from Utrecht to Bucharest. I am aware that the organization has not always been perfect and that sometimes the apparatus provided has not, for one reason or another, met the requirements of the recipients. But I think we have been able to demonstrate to biochemists in some despair in Central and Eastern Europe that we in the west are concerned and ready to help. Based on SARS I have been enabled to travel widely in Eastern Europe and the countries of the FSU and tell them of the work of FEBS. I am not ashamed to be called the Social Worker of FEBS. I am glad that FEBS has been in the financial position to help and I thank the officers for their support and trust.

*Peter Campbell, "Stories and Impressions From around the World"*

#### 7.3.1.2 News of the Scientific Apparatus Recycling Scheme, Spring 2004

During 2003 I sent books to Dr. Mariela Odjakova at the University of Sofia and a mixed load of books and apparatus to Prof. Alexandra Dascaluic at the Plant Physiology Institute at Chisinau, Moldova. I was particularly pleased to be able to make contact with Prof. Leonid Nefyodov at the Department of Biochemistry at the University of Grodno, Belarus. Together we had many bureaucratic obstacles to overcome to get the load accepted as Humanitarian Aid. Another load went to Lviv in the Ukraine but in this case I ran into a series of problems. Prof. Andrei Sibirny at the Institute of Cell Biology showed interest in receiving two Fluorescence Microscopes which had been donated by the University of Plymouth. An American student at Lviv State Medical University had asked me for some books for their library. In the Ukraine you have to get permission from the Government

before you can embark on sending any humanitarian gift. So I and Sibirny struggled to meet all the requirements including the labelling of all 192 books as a "Donation to their Library from FEBS". I then sent the apparatus and the books to Sibirny assuming that the books would be transferred to the Medical University. (It would have cost much more to have divided the load.) Alas the microscopes proved to be too old and then it was impossible to transfer all the books. Since the Institute and the Medical University are under separate ministries, Sibirny felt he was only able to lend some of the books for a period of 5 years. Prof. Alexander Lutsyk, of the Medical University, felt unable to accept the books on these terms and so my naïve intention was defeated. I had a request from Dr. Baumlein at the Institute of Plant Genetics in Gatersleben, Germany to send apparatus to Moldova and also from Dr Reynaud at EMBL to send apparatus to Albania and the University of Cherkasy in the Ukraine. I was pleased about these requests for I would like SARS to help donors and recipients from all over Europe. I made contact with Dr. Ziso Thomollaris of the University of Elbasan in Albania. While I can support these requests, we are having difficulty in finding agents to effect the transport. I am now arranging a load for Prof. Almaz Aldashev in Bishkek, the capital of the Kyrgyz Republic. Bishkek is now a very important junction between Asia and Europe. Some of our medical students last autumn worked happily with Prof. Aldashev who is keen on joining FEBS. He has invited me to attend a NATO conference in September when I can see what other help we can provide. I have also been much concerned with Iraq. In February we had a meeting in London with representatives of 12 Iraqi universities. Irrespective of the background to the present state of Iraq we academics should do all we can to support the universities which formerly had a good reputation. I have been in contact with Prof. Waad Mula-Abed at the College of Medicine in Mosul. He was a brilliant student of clinical biochemistry with us in London, 1981–87. I have been able to send him journals and books, some even of the newest editions, thanks to financial support from The British Council. I can only hope that things continue to improve and that I will before long be able to send simple apparatus for teaching.

*Peter Campbell, SARS Manager (FEBS News May 2004)*

### 7.3.1.3 Obituaries – Peter Campbell (1921–2005)



*By Julio E. Celis  
Secretary General of FEBS*

Professor Peter Campbell passed away the night of February 7, 2005, after some months in the hospital following a car accident. Peter was one of the founders of the Federation of Biochemical Societies (FEBS) and his death is a great loss to his family and the scientific community at large. Peter was born in

Kent, England in 1921. He started to study Chemistry at the University College London in 1939, and received the Ph.D degree in Biochemistry in 1949 under Professor Sir Frank Young. From 1949 to 1954 Peter worked at the

National Institute for Medical Research at Mill Hill in London under T.S. Work and thereafter moved to the Courtauld Institute of Biochemistry at the Middlesex Hospital Medical School in London. In 1961 he received a Doctor of Science degree from the University of London. In 1967 Peter was appointed to the Chair of Biochemistry at the University of Leeds and in 1976 he became Director of the Courtauld Institute of Biochemistry and Courtauld professor of Biochemistry at the University of London. He was also appointed Emeritus Professor of Biochemistry at the University of London. Peter published numerous scientific articles and was widely recognised for his work on protein synthesis. Moreover, he published several books, including *Biochemistry Illustrated*, a much acclaimed student text in biochemistry. The fifth edition of this book, which is co-authored together with Anthony Smith and Timothy Peters, is due in May this year. Peter was founding editor of *Biochemical Education* and *Essays in Biochemistry*, and edited for many years *Biotechnology and Applied Biochemistry* for the International Union of Biochemistry and Molecular Biology (IUBMB). Besides his love for research and teaching, Peter dedicated a great deal of his time to serve the scientific community at large. He was instrumental in establishing FEBS together with P.S. Datta and W.J. Whelan and acted as Secretary of the Biochemical Society from 1958 to 1964. He was the British delegate at the first Council meeting of FEBS in London in 1964 and was later elected Chairman of the Summer Schools Committee – afterwards renamed Advanced Courses Committee. One of Peter's outstanding ideas was to start in 1989 the Scientific Apparatus Recycling Scheme (SARS), a programme that since then has supplied numerous pieces of equipment and literature to Central and Eastern Europe and Africa. Peter was a strong believer in the capacity and potential of scientists in these countries and did his utmost to support them both in educational and scientific matters. Peter was very fond of the people and the countries he travelled to and was passionate about his work with SARS. In Horst Feldmann's book *Forty Years of FEBS – A Memoir*, Peter tells himself in Chapter 6, page 146 about the SARS programme and how it developed under his guidance. In 1999 FEBS started the Working Group on Central and Eastern European Countries, and Peter was a dedicated member of this working group providing much expertise and enthusiasm as well as numerous contacts. In many ways Peter was a true FEBS ambassador. Peter's involvement in science went beyond Europe. He was a founder of the African Societies for Biochemistry and Molecular Biology and served as chairman of the IUBMB Committee on Symposia. Later he founded the Education Committee of IUBMB. In 1981 Peter was awarded the FEBS Diplôme d'Honneur for his invaluable contributions to FEBS and the scientific community. This honour is conferred only to those who have given so much of their time to the benefit of others. Peter received the IUBMB Distinguished Service Award in 2000 in recognition of his services to the Union. We shall miss Peter terribly, and extend our condolences to his wife Molly, his children Alistair and Julia as well as to his many friends around the world.

*Julio E. Celis Secretary General*

(FEBS News 2005/2)

### From the Bottom of Our Heart

*By Prof. Armen Galoyan, President of Armenian Association of Biochemists (AAB),*

*Dr. Varduhi Knaryan, Secretary of AAB,*

*Mrs. Karine Gevorgyan, Secretary of the Council on International Cooperation of NASRA*

“Old scholars retire, but never die...”, W. McGlothlin.



**Figure 7.3.1** FEBS in Armenia.

It is with great sadness and regret we learnt that Prof. Peter Campbell passed away in the first cold days of February 2005. A man of his capacity and importance deserves a few words in his memory on behalf of the Armenian Association of Biochemists and Armenian Academy of Medicine, of which he was a distinguished member. Prof. Campbell was well known for his outstanding contributions to biochemistry, both as a researcher and as a teacher. Serving for science about half a century, he published numerous scientific papers and other articles referring the biosynthesis of milk proteins, role of autoimmunity in thyroidities and anti-insulin factors, which are of great interest for scientists of the related fields. He in collaboration with the others has prepared *Biochemistry Illustrated* and the series of *Essays in Biochemistry*, which along with *Oxford Dictionary on Biochemistry and Molecular Biology*, edited by him, became a valuable and helpful table-book for medical and biological students in many countries in the world, including Armenia. Prof. Campbell was excellent in addressing issues of science policy, which became corner stone of his activity. He was a missionary of integrated science, contributing a lot in the creation of an international scientific network from West to Far East and from South to North. He considered science not just a research work but also a very reliable ground for cooperation and friendship, as indicated in his book *Stories and Impressions From around the World*: “I would like to emphasize the common links we scientists share, irrespective of nationality and, to a large extent, political affiliations”. Throughout his career he endeavoured to unite

people via science and common ideas, which resulted in him being one of the founders of the Federation of European Biochemical Societies in 1964. Our personal relations with Prof. Campbell started in 2000. The next meeting with him was in 2002, and the latest one was in 2004, when he visited us with the FEBS Working Group on Central and Eastern European Countries. From the very beginning his working visits were based on friendly and kind relations. Everybody who knew him and who had the privilege of cooperating with him felt the enthusiasm for scientific problems and could experience the energy and joy, with which he advanced ideas for extension of scientific cooperation and support. Tireless in his intense activity, he always tried to understand the thoughts and expectations faced by Armenian scientists in the period of deprived economical surroundings. Each time he appeared with useful recommendations on how to survive and develop. He delivered a great variety of books, journals and issues to the library of the Institute of Biochemistry of the National Academy of Sciences of Armenia via SARS, which was available to the biochemical community of Armenia. Prof. Campbell encouraged us to join the FEBS community to be integrated into the international scientific community. We all remember his recommendations to attend British Council in Yerevan and learn English. He even did not shy away from convincing authorities to support science and could persuade them with real English diplomacy. He was always firm in his decisions and independent. Peter Campbell was our sincere and good friend. We were eagerly waiting for his visits to Armenia, which he liked very much and recommend to others. He shared our love and respect. With his kind spirit, he broke down the generation barrier and created the atmosphere of friendship and common aim. He strived to communicate closely with everyone: young and old. Everyone who had the privilege of knowing him will remember Prof. Peter Campbell with the deepest feelings. We are praying for the repose of his soul from the bottom of our hearts. That is a way in which we can repay a small part of our gratitude to him. (FEBS News 2005/2)

### 7.3.2

#### **The Scientific Apparatus Recycling Programme (SARP)**

After the tragic death of Peter Campbell in 2005, the vacant position of the Manager of the FEBS Scientific Apparatus Recycling System (SARS) was taken over by Karel Wirtz in 2006. SARS was renamed to the Scientific Apparatus Recycling Programme (SARP).

The same year, FEBS created the “Campbell Lecture”. (cf. Chapter 9)

#### **7.3.2.1 Scientific Apparatus Recycling Programme (SARP) needs your support!**

*By Karel Wirtz*



Since its beginning in 1990 SARP has successfully met its main objective, i.e. collecting and shipping equipment and scientific books to those academic institutes which needed it, mostly located in countries in Eastern Europe and the former Soviet Union. Through the years FEBS has footed the bill which



amounted for the most part to covering transport costs from the U.K. to the constituent society of the recipient institute. It was and still is the responsibility of the national societies to take care of the transport within their own country. In some instances equipment was shipped to Africa with the expenses being paid from a grant of the Nuffield Foundation in London. Successful as SARP has been, and with Peter Campbell as the former coordinator being located in London, I like to point out that up to now the equipment and books were collected from universities and industries in the UK and transported from a storage site in Ipswich. As for an exception, – and let us hope the beginning of a new trend –, apparatus were collected once (in 2001) from Utrecht University and from there transported directly to Romania. (FEBS News 4/2006)

### 7.3.2.2 Campbell Lecture 2008

*Karel Wirtz*

*Chair of SARP (2006 to 2011)*

Visit of E. J. Wood to Lithuania as Peter Campbell Lecturer, to the biannual meeting of the Lithuanian Biochemical Society, 18–22 June 2008.

The Lithuanian Biochemical Society holds a national meeting every two years. This year's was in Toliejai, north of the capital, Vilnius, from 20 to 22 June 2008. The overall theme of the meeting was *Biochemistry and Systems Biology*, and there was a mixture of oral presentations and posters, as well as three commercial presentations about mass spectrometry from companies. About 140 individuals were present including a few BSc students and 4 high school students. The majority of the talks were given in the Lithuanian language but 50% of the posters were in English. (In fact, English is well understood and some of the presenters said that they would have found it easier to give their scientific presentations in English.) In total there were over 30 scientific presentations.

I gave a short talk on the role and activities of FEBS, and also acted as a judge of the posters (about 40 of them). My other talks were a scientific talk: "Vitamin A: Vision, Skin and Cancer", a presentation for the PhD students entitled: "How to Read a Scientific Paper", and I also ran a Workshop on "How Students Learn". It seemed to me that biochemical science in Lithuania is up to date and that good research progress is being made. There is quite a lot of money coming in from the EC to support the refurbishment of labs and for the purchase of equipment. In addition, there are a number of collaborations with scientists in other countries including with expatriate Lithuanians. There is some emphasis on Biotechnology and there are also companies manufacturing restriction enzymes and proteins for medical use, some of these set up during the Soviet period. Most of the young scientists I met were enthusiastic and competent. They were keen to continue research in Lithuania but felt that if they went abroad, for example for a Postdoc, they might find it difficult to return to low salaries. I met Dr Jaunius Urbonavicius who was in receipt of a FEBS Fellowship and a Prize: he is presently working in Brussels. (FEBS News 5/2009)



**Figure 7.3.2** Participants of the biannual meeting of the Lithuanian Biochemical Society. Following an invitation by the Biochemical Society of a Central and Eastern European country, the Peter Campbell Lecturers give one or two lectures and provide information about the various FEBS programmes in CEE countries. Peter Campbell was one of

the founder members of FEBS who devoted much of his effort to encouraging the development of science in deprived economies of Eastern Europe and Africa. He was the founder of the SARP programme to help re-equip these emerging economies with modern scientific apparatus.

#### 7.3.2.3 Shipping of Equipment to Various Locations around Europe (2007–2009)

Equipment (16 pieces) received by Bulgarian Academy of Sciences (Sofia, Bulgaria); Institute of Biophysics (Prof. D. Petkova); Institute of Molecular Biology (Prof. G. Nacheva).

Equipment (8 pieces) received by University of Zagreb (Croatia); Faculty of Pharmacy and Biochemistry (Prof. K. Barisic/O. Kronja), Dept. of Organic Chemistry and Dept. of Analytical Chemistry, Faculty of Food Technology and Biotechnology (Prof. V. Mrsa), (Dept. of Chemistry and Biochemistry), University of Rijeka, School of Medicine (Prof J. Varljen), (Dept of Chemistry and Biochemistry) (from storage in Utrecht).

Equipment (9 pieces) received by State Medical University (Yerevan, Armenia) Center of Medical Genetics and Primary Health Care (Dept. of Molecular Medicine) (Prof. T. Sarkisian). (FEBS News 5/2009)

Equipment (Editions of Scientific Journals) received by Titu Maiorescu University (Bucharest, Romania); (Prof. Opris) Central Unit of University Library (dir. Ioan Caraba) (from Cambridge, UK). (FEBS News 6/2008)

Another 47 pieces of laboratory equipment were in store in Utrecht in 2009. (FEBS News 5/2009)

#### 7.3.2.4 Termination of SARP

At a recent FEBS Executive Committee meeting (2011), it was [also] agreed that the FEBS Scientific Apparatus Recycling Programme (SARP) in its present form

**will be terminated.** However, donations of scientific instrumentation as part of an ongoing collaborative project will be supported by FEBS by covering the costs for transportation. Applications should be directed to the FEBS WGI. (FEBS News 1/2012))

## 8 FEBS Activities in the New Millennium

The first two Sections of this Chapter are meant to memorize the developments of scientific cooperation in Europe, in which FEBS played a decisive role.

From Section 8.3 on, we follow the scheme as used in Section 3.3 to briefly introduce the new **Educational and Social Activities of FEBS developed in the new Millennium**; we wish to substantiate here data on the compositions of the respective Committees and reports on events that took place during recent years.

### 8.1 Cooperation between EMBO and FEBS

#### 8.1.1 Productive Interaction between EMBO and FEBS

Though a co-operation between FEBS and EMBO existed already for many years, both these organisations wanted to confirm closer collaboration in several fields. Therefore, a meeting of representatives from FEBS and EMBO convened on 23 February 2005 at EMBO in Heidelberg to define the future objectives.

Participants from FEBS: Julio E. Celis, Secretary General; Guy Dirheimer, Chairman Working Group on Central and Eastern Europe; Joan Guinovart, FEBS Congress Counselor; Camilla Krogh Lauritzen, Information Manager of FEBS; Karl Kuchler, Chairman FEBS Advanced Courses Committee; Iain Mowbray, Treasurer; Willy Stalmans, Chairman FEBS Publications Committee. Participants from EMBO: Frank Gannon, Executive Director; Mary Gannon, Manager, Courses & Workshops Programme; Les Grivell, Manager Electronic Information Programme; Bernhard Huber, Finance Manager; Andrew Moore, Manager Science & Society Programme; Jan Taplick, Manager Fellowship Programme; Gerlind Wallon, Manager Young Investigator Programme.

#### *Topics and decisions*

- (1) Frank Gannon and Julio Celis explained the overall *structures of EMBO and FEBS* respectively.
- (2) *Fellowships*: Jan Taplick presented information on the EMBO Fellowship Programme. Iain Mowbray summarized the FEBS fellowships. EMBO proposed that a joint operation could be possible in the area of long-term

fellowships, for example with EMBO paying for two years and FEBS paying for one year of an award. Iain Mowbray was concerned that there may be problems with statutes if such a process was established. The possibility of FEBS receiving information on those who were not successful in the EMBO selection, but who were highly placed and came from Central and Eastern Europe, was also proposed by EMBO with the possibility of FEBS that provided fellowships for individuals. This is something that FEBS could consider.

- (3) *Courses & Workshops*: Mary Gannon presented information on the EMBO Courses and Workshops Programme, and Karl Kuchler provided the same background information from FEBS. There were clear opportunities for co-joint actions, particularly in Central and Eastern Europe with the emphasis on the lecture courses. There was also discussion about the usefulness of having a series of targeted practical courses on more basic methods, particularly in countries that were developing scientifically. Arising from the discussion, Mary Gannon and Karl Kuchler were asked to meet to put together some concrete proposals. The possibility of FEBS and EMBO having observer status at each of the respective committees for courses and workshops was agreed in principle, and the possibility to synchronize applications deadlines was proposed.
- (4) *FEBS Congress*: Joan Guinovart presented information on the FEBS Congress. Currently EMBO has an EMBO lecturer present at this Congress, and it was agreed that this was mutually beneficial. The possibility of EMBO sponsoring a symposium or connected session was also discussed with the focus moving towards the role for EMBO Young Investigators being highlighted in this session. Both parties were committed to examining this in greater detail at the EMBO Courses & Workshops Committee and the FEBS Executive Committee. Related to this, there was a question about EMBO paying for exhibition space at the FEBS meeting. It was pointed out that FEBS has to pay for exhibition space at its own congresses. The possibility that EMBO would offer free advertising in The EMBO Journal and EMBO Reports in lieu of payment for the exhibition space was discussed. Joan Guinovart was to examine this possibility to see if such a maneuver could be delivered upon.
- (5) *Science and Society*: Andrew Moore presented the activities that EMBO are involved in, and Julio Celis and Iain Mowbray described the activities that FEBS are starting. One concept that arose from this was the possibility of having a joint meeting at the European Parliament which would have an input at the political level. The topic for the meeting was not discussed in detail, but it was felt that such a meeting would benefit from an initial prior meeting, perhaps as one of an EMBO series.
- (6) The possibility of working together on a *teachers' training programme* was positively reviewed. Andrew was asked to develop this possibility with the

EMBO Teachers' training DVD being used as a template to help other organizers that FEBS would be in contact with, who organize meetings in different locations in Europe. Such meetings would benefit from the EMBO information on teachers and the FEBS local contacts with the scientists. Iain Mowbray mentioned the possibility of FEBS offering fellowships for prospective workshop organizers to attend the EMBO international workshop in Heidelberg and come away with knowledge of how to stage a workshop back home.

- (7) *Young Investigators*: Gerlind Wallon talked about the EMBO Young Investigator Programme (YIP) and linked this with YIP lecturers at FEBS meetings.
- (8) *Women in Science* (please note that the chair of the FEBS WISE committee was absent and that therefore no direct input from that committee was given): EMBO requested that information would be provided on the gender statistics from FEBS, and it was agreed that this should be possible, as it would provide a further input to the analysis which she was performing on this topic. Gerlind also discussed the possibility of having a major survey on why people leave science, but the reaction was muted.
- (9) *Electronic Information Programme*: Les Grivell presented information on the Electronic Information Programme with emphasis on e-Biosci and the Life Sciences Mobility Consultancy. The latter was viewed as being particularly useful, and it was in the interest of all that there would be an increased awareness about this service. FEBS offered to include information on this in their newsletter, and generally both FEBS and EMBO would crosslink their web based information.
- (10) Guy Dirheimer described the activities in addition to those previously mentioned in *Central and Eastern Europe*. Frank Gannon added to this discussion the strategic development installation grants. It was agreed there was a good match of interests, and indeed the potential for actions in this area and that Frank Gannon and Julio Celis would remain in communication about this to see if FEBS could be involved in a cofunding role.
- (11) *Brussels*: Julio Celis stressed his interest in having somebody placed in Brussels who would act as a lobbyist/conduit of information/contact point. This was something that could become a joint office, but first required a clearer definition of the expectations and costs, and if such a position is worthwhile. It was decided that Luc van Dyck should try to put together such a definition and it would then be followed up by both organizations. It was also proposed that if such an office is established, FEBS and EMBO could agree to share the costs equally for about three years in the first instance.
- (12) Closing the meeting, both parties agreed that it was a very productive interaction with a willingness to work together being clear at all times. Follow up actions were required by different managers and members of the executive committee and should be monitored by both sides to ensure that the meeting gave rise to practical outcomes.

The above text is a reproduction of the minutes of this meeting. (Contributed by Guy Dirheimer)

## 8.1.2

**Present Cooperation between EMBO and FEBS**

The willingness to cooperate is manifest through several common activities of both organisations:

- The EMBO Lecture at the annual FEBS Congresses (cf. Chapter 5)
- FEBS and EMBO celebrating their 50<sup>th</sup> Anniversaries together at the Congress in Paris 2014
- Joint FEBS/EMBO Lecture Courses (cf. Chapter 7),
- Joint FEBS/EMBO Workshops on Science & Society (cf. Chapter 8)
- Joint FEBS/EMBO Workshops on Women in Science (cf. Chapter 8)
- The FEBS/EMBO Women in Science Award (cf. Chapter 9)

## 8.2

**FEBS Role in European Cooperation and Research Funding**

## 8.2.1

**ELSF: A Voice for European Life Sciences Organisations**

*Luc Van Dyck European Life Sciences Forum (ELSF)  
Meyerhofstrasse 1, D-69 117 Heidelberg, Germany*

The European Life Sciences Forum (ELSF) is an umbrella organisation recently established to give a public voice to the European life scientist community. It is a coalition of independent organisations representative or supportive of the life sciences, biotechnology and biomedical research communities in Europe with a mission to increase their visibility and impact in the public and policy-making arenas; and to advance research and to promote the contribution of scientists to European society.

1. The *raison d'être* of ELSF

Level of funding of the life sciences and of basic research, ethical issues, public acceptance of science and technology, deficit of research infrastructures, definition of research priorities and programmes tending to prescribe science output, lack of career perspectives for young scientists, lack of interest in scientific careers etc., these issues are major challenges for European research, and often directly affect scientists in their daily activities. Science policy should not be based exclusively on the demands of scientists; however, it cannot be undertaken seriously without their input. In Europe this input is often minimal. On the other hand, scientists are increasingly asked to provide expert information and advice, as well as to justify their research, notably because of increasing societal awareness of the potential of research in the area of life sciences to influence their

lives and environment. Whilst there is thus both a need and an obligation to get involved in science policy and in public debate, the life sciences research community, which is extremely fragmented at both geographical and disciplinary level without a well-established conduit through which to express their concerns, often remains silent in these debates. It is this observation that is at the origin of ELSF. The initiative came from four individual scientists: Julio Celis, Secretary General of the Federation of European Biochemical Societies (FEBS) and Director of the Institute of Cancer Biology (Danish Cancer Society); Frank Gannon, Executive Director of the European Molecular Biology Organisation (EMBO); Fotis Kafatos, Director General of the European Molecular Biology Laboratory (EMBL); and, Kai Simons, President of the European Life Scientist Organisation (ELSO). In September 1999 they convened a meeting of a group of leading individual scientists from different European countries to discuss these topics and new initiatives that could be taken in order to ensure a relevant and coherent input from the scientific community. The meeting resulted in the establishment of ELSF, giving scientists an opportunity to coordinate their efforts throughout Europe and intending to improve the flow of information between the decision-makers, society, and those who have to carry out the research.

## 2. *ELSF membership and organisational structure*

ELSF was envisaged as a mechanism bringing together individual scientists and scientific organisations representative of the various facets of the life sciences. As the Forum, however, is meant to reflect the interests of the life sciences and not of individuals, it was later decided that ELSF membership would only be granted to organisations, and that priority should be given to European-wide structures, *i.e.* European Societies or Federations, to facilitate the consultation of scientists across Europe through their representative organisations. At present, other than the four founding members, nine further scientific organisations have joined, or are in the process of joining, ELSF (Table 8.1).

ELSF membership is not open solely to scientific organisations, but also to other major stakeholders like industry, patients' and consumers' organisations. The support of these influential players could be very beneficial for ELSF, provided that the mission statement of ELSF remains the agenda of the scientific community: with citizens' organisations and industry aboard, the Forum would have more political weight and thus would be more influential. Patients' and consumers' organisations in turn would have a clear interest in seeing research at the top of political agendas. Similarly, industry can have much to gain in supporting the objectives of ELSF, *i.e.* more and better-trained scientists, and the development of the knowledge base that is essential for their R&D. It is noted in this context that in its position paper on European science, the Animal Cell Technology Industry Platform (ACTIP) lists concerns that are similar to those of ELSF 1. Furthermore, the



**Table 8.2.1** List of scientific organisations members of, or in the process of joining, the European Life Sciences Forum. The European Science Foundation (ESF), an association of 67 organisations (research councils, academies and funding agencies) in 24 European countries has a status of observer within ELSF. To achieve its mission related to science policy issues ELSF shall: Provide expert information on the importance of funding research in the life sciences and of long-term, open-ended research, and campaign to expand funding provisions Campaign for front-line issues related to the organisation and planning of research, including the development of research infrastructures, and the career structure of young scientists Monitor and contribute to public policies and research programmes at the European level through recommendations and consensus positions Work to improve public engagement with and public understanding of the life sciences, and contribute to the Science & Society debate, including its ethical aspects To achieve its service mission ELSF shall, notably by means of electronic infrastructures, Collect and disseminate information on research policies and programmes at a European, national and regional level as well as outside Europe, and assist its members when appropriate Collect and disseminate information on the activities of the member organisations Promote communication with the media, policy-makers, public interest organisations and other stakeholders, at national and European levels Help member organisations in their communication with policy makers Provide information and advice to the European Commission, European and national Parliaments, and national governmental bodies.

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European Arteriosclerosis Society-EAS  
 European Cystic fibrosis Society-ECFS  
 European Federation of biotechnology-EFB  
 European Federation of pharmacological Societies-EPHAR  
 European Molecular BioLogY Laboratory-EMBL  
 European Molecular BioLogY Organisation-EMBO  
 European Life Scientist Organisation-ELSO  
 European Plant Science Organisation-EPSO  
 European Society Of Gene Therapy-ESGT  
 Fedaration of European biochemical Societies-FEBS  
 Fedaration of European Microbiological Societies-FEMS  
 Fedaration of European Neuroscience Societies-FENS

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Forum can be a convenient way for industry to talk to the scientific community. In order to preserve the independence of the Forum, it was, however, decided that ELSF membership would be granted to industry platforms, and not to individual companies. To achieve the objectives of the Forum, it was deemed necessary to be professionally organised. Accordingly, a manager was recruited, whose task is to scrutinise and monitor research policies and programmes, liase with member organisation as well as policy makers and funding bodies, prepare ELSF documents, and conduct the daily business of the Forum. In order to ensure the development of the Forum during its gestation period, EMBO, EMBL and FEBS committed themselves to guarantee the budget of ELSF until end of 2003. Other organisations can become members through the payment of a voluntary contribution. Following this transitory period ELSF will be self-financing, with income generated mostly through membership fees.

### 3. *The mandate of ELSF*

The tasks of ELSF as outlined in the Statutes of the Forum are presented in Table 8.4.1. An essential element of the strategy of ELSF is that its activities should not interfere or overlap with the activities of its constituent members. Instead, ELSF membership must deliver added value for the participating entities, in particular through the strong political impact expected from an organisation representing several thousands of researchers and covering the whole spectrum of the life sciences. Therefore, the Forum primarily aims at intervening in science policy making and public debate through the provision of information, recommendations, the generation of position papers, and lobbying policy makers and funding bodies on issues that are relevant for the entire life sciences research community. In addition, the Forum may endorse initiatives of its members, thereby demonstrating the support of the community and contributing to the amplification of their message. Simultaneously, the ELSF will develop electronic infrastructures ('one-stop shop') to provide support service to its constituent members and, through its website, to the life science research community at large.

### 4. *The EC and the scientific community: Tales of a misunderstanding?*

The consolidation of the European unification process, resulting from its greater integration of planning at all levels, includes science. In this respect, the Framework Programmes (FP) of the European Commission (EC), though representing only about 5% of the total public research funding in the EU, have a major impact on the organisation of research in Europe, not only *via* some very successful programmes like the Marie Curie Fellowships, but also because many national funding agencies increasingly design their programmes to facilitate access to EC funds for their scientists. FPs are designed by the EC following consultation with the European Parliament (EP) and the European Research Council (ERC, Council of the ministers in charge of research in the EU member states), and are adopted by the EP and the ERC on the basis of a co-decision process. FP6, the next Framework Programme that will cover the years 2003–2006 and which is currently being drafted [2], is considered a major instrument to establish a European Research Area (ERA), an essential element of the EU strategy to reach its goal to become the most competitive, knowledge-based economy in the world [3]. An early task of ELSF was therefore to enter into communications with the European Institutions, primarily with the EC and the Members of the EP (MEPs). The Forum presented them with recommendations addressing some of the major concerns of the scientific community, chiefly a career development scheme allowing young, promising scientists to establish their first, independent research group, increased support for open-ended research, and new procedures for the evaluation of proposals. In September 2001 the EC published a Consultation Paper 'Towards a Strategic Vision of Life Sciences and Biotechnology in Europe' addressed at the Stakeholders, which should result in an EU policy document [4].

**Table 8.2.2** Tasks of ELSF as outlined in the Statutes of the Forum. The EU 6th Framework Programme: Call for Expression of Interest. For your information, a Call for Expression of Interest (Eol) for Networks of Excellence and Integrated Projects has been launched. This call is an opportunity for the scientific community to contribute to the preparation of the first calls of FP6. As stated by the Commission, respondents may optimise their chances of having a particular topic included in an early call by submitting an Eol. The response should take the form of administrative information plus a 5-page description of the proposal indicating Need and relevance; Excellence, Critical mass and expertise engaged; and Integration and structuring effect. It should not be a detailed proposal. No feedback on individual Eols will be published or sent to the submitters: it is not a pre-selection but an exercise to identify the scope of the first calls, i.e. what is the scientific community prepared to do and with whom!!! No consortium must be pre-established. Indicative timetable: • 7 June 2002: deadline for submission; • June-July: assessment of the submissions, which will be posted on the Commission's Web-site in September; • Autumn: First calls for proposals New FP6 instruments: 1. Networks of Excellence: The objective of the networks is to structure European research potential by integrating existing capacities through joint research activities, integrating new activities, spreading of excellence and training, and common management. This instrument does not aim to sponsor research activities! Commission Officials have had a hard time trying to make us understand what these networks will be, for the simple reason that they do

not really know what to expect (hence the call for expression of interests). The document: "Two new instruments for the Sixth Framework Programme (2002–2006): Integrated Projects and Networks of Excellence" <http://europa.eu.int/comm/research/nfp/networks-ip.html> gives an idea of the concept; however, it is only a provisional document. Notably, it is not yet defined how the integration of the participants will be evaluated. Furthermore, the grant calculation method (number of researchers to be considered in the network) is not yet established. The duration will be five years or more if required. Participants will have the autonomy to distribute the grant between them, and use the money as they want. With regard to management, the consortium will be expected to establish a management group comprising the research leaders, and a governing council composed of representatives from the partners, the funding bodies, and the Commission. 2. Integrated Projects: IF YOU ARE LOOKING FOR MONEY TO DO (BASIC) RESEARCH, THIS IS WHAT YOU HAVE TO GO FOR. The objective of the IPs is to strengthen EU competitiveness and to address societal needs. The working document of the Commission <http://europa.eu.int/comm/research/nfp/networksip.html> gives a good idea of what an IP will be like, especially in terms of autonomy and flexibility of management and implementation, and expected outcome. Participants will have the autonomy to distribute the grant between them, and use the money as they want. Luc Van Dyck European Life Sciences Forum (ELSF) Meyerhofstrasse 1, D-69 117 Heidelberg, Germany E-mail: [luc.vandyck@elsf.org](mailto:luc.vandyck@elsf.org).8.4.1

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To achieve its mission related to science policy issues ELSF shall:

- Provide expert information on the importance of funding research in the life sciences and of long-term, open-ended research, and campaign to expand funding provisions
  - Campaign for front-line issues related to the organisation and planning of research, including the development of research infrastructures, and the career structure of young scientists
  - Monitor and contribute to public policies and research programmes at the European level through recommendations and consensus positions
  - Work to improve public engagement with and public understanding of the life sciences, and contribute to the Science & Society debate, including its ethical aspects.
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Table 8.2.2 (Continued)

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To achieve its service mission ELSF shall, notably by means of electronic infrastructures,

- Collect and disseminate information on research policies and programmes at a European, national and regional level as well as outside Europe, and assist its members when appropriate
  - Collect and disseminate information on the activities of the member organisations
  - Promote communication with the media, policy-makers, public interest organisations and other stakeholders, at national and European levels
  - Help member organisations in their communication with policy makers
  - Provide information and advice to the European Commission, European and national Parliaments, and national governmental bodies
- 

ELSF acknowledged the importance of this EC consultation initiative, and prepared a comprehensive response, which is available on the Forum's website. During the preparation of its response, ELSF was confronted with many scientists who proved to be disillusioned by the EC and its programmes – notably because of their lack of continuity and of genuine perspectives for basic research – and were therefore reluctant to get involved in any EC consultations. The reason for this misunderstanding between the EC and the scientific community deserves some attention. The EC is not insensitive to the needs and recommendations of the scientific community and its proposal for the FP6 indeed contains some interesting novelties in this respect. For instance, it includes provisions for a career development scheme and mechanisms to facilitate the trans-national access to research infrastructures to palliate deficits. However, on the other hand scientists may have been mistaken to consider that the EC is a source of science funding similar to national research agencies. The EC has political objectives: on one hand, to integrate and to strengthen European research; on the other hand, to support research establishing the science base of EU policies, for instance on food safety and quality, environment.... Its programmes are designed to meet these goals. Therefore, in FP6 the EC does not seek to sponsor basic research *per se*, but aims at integrating it at a European level: basic research is seen as one of the components of European research. For instance, mechanisms like the Networks of Excellence will provide funds – 'topping-up money' – to encourage networking and integration of research capacities at a European level 2. Even though this particular strategy may be questioned, other mechanisms included in the FP6 proposal, like the financial support for the mutual opening-up national programmes, seem to be steps in the right direction [2, 5].

##### 5. *Towards a European Life Sciences Research Council*

Given these considerations, it may be appropriate to consider the establishment of a European Life Sciences Research Council. Such a Council would not replace national agencies, which have a crucial role in maintaining national strengths and priorities, but should be seen as an opportunity to provide funding for excellent trans-European research through a flexible

scheme, free from constraints. Participating countries could contribute a percentage of their research funds to the budget of this Council. Preliminary discussions on this topic have been initiated at the level of the European Molecular Biology Conference (EMBC; an intergovernmental body gathering representatives from 24 European countries, which financially supports EMBO and established EMBL), and the European Science Foundation (an association of 67 organisations – research councils, academies and funding agencies – devoted to scientific research in 24 European countries which co-ordinates a wide range of pan-European scientific initiatives). ELSF could be instrumental in supporting and lobbying national bodies for the establishment of a European Life Sciences Research Council, in addition to its efforts to strengthen the dialogue with the EC on issues where the input of the scientific community is essential – public understanding and acceptance of the life sciences, ethical issues, training and education, technology transfer policies etc...

#### 6. *Concluding remarks*

Almost a year after its implementation, ELSF is about to reach its cruise speed. Missions and Statutes have been clearly defined, and communication lines have been established with the European Commission and Parliament. The ELSF website will be fully operational by the end of February 2002. A ELSF Task Group has been set up to determine the positions of ELSF. This Task Group was deemed necessary, considering the short deadlines of EC consultations and to secure scientists' contributions, but also to carry out perspective work seeing that the agenda of ELSF should not be exclusively dictated by the EC.

The wide adhesion from scientific organisations to ELSF indicates that the Forum responds to a so-far unmet need. Equally important, the EC calls for an initiative aiming at a wide, trans-disciplinary organisation of the life sciences research community in Europe, and MEPs welcome a new source of information, which complements – or counter-balances – the efforts of other lobbying organisations from industry or of activists groups. It is now up to ELSF, with the support of its constituents and of the European life scientists, to deliver on its promises, and to make it a success story.

#### References

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## 8.2.2

**A Visit to INTAS in Brussels**

*P. Campbell, SARS Coordinator Biochemistry and Molecular Biology University College London*

INTAS is short for “International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union”. In summary, it is an independent association that promotes international scientific cooperation between scientists of its Member states and of the New Independent States (NIS). INTAS consists of 30 member States and 12 partners in the NIS. Under the Scientific Apparatus Recycling Scheme (SARS) I have been co-operating with INTAS over many years for we have had very similar objectives. On many occasions INTAS paid for half the cost of transport of loads to countries of the NIS, like Russia, Ukraine, Moldova, Armenia and Georgia. INTAS has also often covered my expenses for visits to some of these countries. INTAS was established in 1993 and from 1996 to March 2001 the Secretariat was headed by Dr David Gould with whom I worked. His successor is Dr Jaak Sinnaeve. Having settled all outstanding arrangements in autumn 2001, he wrote to me to say that INTAS would not in future support SARS but that he would be happy to meet me in Brussels to see if there were opportunities for co-operation. A meeting was arranged for the morning of 19th March. I met not only Dr Sinnaeve but also Dr Antoinette Gyll-Murray, Scientific Officer for Chemistry and Dr Ingmar Schmidt in charge of Life Sciences. I was also told about Hazel Jeffery, Program Logistics Manager. There are two people in charge of Physics whom I did not meet. I asked about the relationship of INTAS and the ISTC (International Science and Technology Centre) since it seemed that their roles overlapped. It was explained that ISTC was set up to encourage scientists in the NIS who were previously engaged in weapons activities to change to peaceful pursuits. The EU, USA and Japan financially support the ISTC. It was then suggested that the EU should also be helping those scientists in the NIS who had been engaged on peaceful research and hence INTAS was set up. To day ISTC also seems to be supporting such scientists as I have experienced and hence the roles of the two organisations to some extent overlap. In the case of ISTC I was approached to suggest partners in the UK who are prepared to act as Collaborators. I cannot be sure but I think INTAS has a budget of about 20M Euro per year. Of its budget about 90% comes from the EU Framework budget and hence they are very concerned about the new plans for the EU's Sixth Framework Programme for Research and Technological Development for the period 2002–2006. It may be helpful to FEBS if I briefly indicate the main activities of INTAS for there may be opportunities for collaboration. INTAS will lend its support to conferences like the NATO Advanced Study Institute in Spetsai and those organised by the ESF. The proviso is that the young participants must come from the NIS. INTAS will also help with Conference Grants provided that not less than 5 current or recently completed INTAS projects are being presented. The conference must be held in the NIS or a member State. Dr Sinnaeve said that

a major effort had gone into removing all problems of access to electronic information from the scientific journals required in the NIS. I mentioned the WHO agreement with the 6 largest publishers but he rightly said that they wished to cover journals of no interest to WHO. They would be prepared to help in a small way with computer equipment for librarians. I said that FEBS was interested in helping with the access to the internet and it is possible that there could be cooperation here. This support comes under the heading "Support for Infrastructure actions". It also includes contributions to repair, update of apparatus. Most of the income of INTAS goes on project grants, the success rate being about 20%. The largest number of applications for collaborations comes from Germany and the UK with the UK getting most grants. INTAS provides the host with about 20% of the grant but this will probably go up to 30%. They pay some addition to the salaries of the scientists in the NIS. For the current year, 2002, they are not calling for any new projects (except for Young Scientists and Conferences) but they hope to invite new applications for project grants in 2003. They have negotiated agreements whereby the countries of the NIS free of duty receive all goods. Salaries are paid free of tax and they have agreements with the banks to pay the grants direct to the grantees. They plan to extend their activities to countries of the NIS east of Georgia but they get increasing problems. They do have requests from the university library in Bisket, which they will transmit to me. INTAS has a fellowship programme for young NIS scientists. This even covers those not engaged in INTAS funded projects. (1) As mentioned before they can apply for a conference grant. (2) Those approaching the 2nd year of a PhD can apply for support for years 2 and 3. (3) NIS Post Doctorals within 3 years of the award of the PhD can apply for an award to continue their research. (4) More advanced Post Docs who have a min. of 3 publications in decent journals can apply. All applicants must be less than 35 and must be citizens of a NIS country. The number of eligible applications, about 168 last year, is much less than expected. The success rate is high with 125 funded. They have also started "Young Scientist Summer Schools". Details on the Web-site [intas.be/Funding Opportunities](http://intas.be/Funding%20Opportunities).

In summary I found them a lively organisation and it is good to make contact. I was a bit surprised by the rather modest income but I could have got the wrong impression. I have lots of good literature if anyone is interested for they are aware that their activities should be better known. (FEBS Newsletter April 2002)

### 8.2.3

#### **The 6th Framework Programme – a Brief Status**

*Julio E. Celis FEBS Secretary-General of FEBS*

As you may be one of the many scientists that submitted an Expression of Interest (EoI) to the 6th Framework Programme (FP6), you must be wondering what has happened since June 7, the deadline for the submissions. In the following you will find a brief personal account of the consultation process viewed from my participation in two of the assessment panels. The Commission received about 15 000 EoI's, of which 3000 were for the life sciences. The number was

much larger than expected, underlining the enormous interest in the scientific community to actively contribute to the establishment of the European Research Area (ERA). Expert reviewers assisted the commission in (1) identifying key research subject/topics, (2) in assessing the readiness of the scientific community to submit actions in these areas through the new instruments, (3) in evaluating the European dimension and competitiveness of such an initiative, and (4) in defining the scope of the first call for proposals. Based on the reviewers recommendations, the next step for the Commission, is now to set up the Work Programmes, and to define the scope of the calls for proposals. This will result in a document, which will be presented to the Program Committee for approval in October this year. Provided that the programme is approved, the Commission envisages the following calendar of events:

- **November 2002:** Conference on launch of 6FP and first call for proposals.
- **February 2003:** Deadline for submission of applications.
- **End 2003:** First contracts. (FEBS NewsLetter September 2002)

#### 8.2.4

#### European Research Council (ERC)

##### 8.2.4.1 Creation of an ERC

*By Prof. J.E. Celis, Secretary General of FEBS*

European science is experiencing one of its most exciting times in recent years with the beginning of the new millennium being marked by a renewed interest in basic, fundamental research as a means to sustain a knowledge-based society. Currently, there are great expectations for the possible creation of a European Research Council (ERC) for all sciences, a new funding instrument for supporting high-quality fundamental research that may become a cornerstone of a new knowledge-based society. The European scientific community has discussed the initiative at various occasions during the past year and has eagerly awaited the report of the ERC expert group (ERCEG), appointed during the Danish presidency of the EU in 2002, as well as the communiqué from the European Commission on basic research, respectively. The report of the ERCEG, now known as the 'Mayor Group', proposed the establishment of a European Fund for Research Excellence and an ERC to manage it. Furthermore, the report suggested that the sum of 2 billion euro per year would be necessary to make an impact on basic research. This money should come directly from the EU as a specified item in the budget for the next Framework Programme (FP), rather than from other existing national and European programmes. Most importantly, the report emphasised the need to safeguard the autonomy of the ERC, as well as to fully involve the scientific community both in the peer review system and in defining the delivery mechanisms. The Commission paper also recognised the need for supporting basic research in Europe and proposed to introduce the new funding mechanism along the lines delineated by the Mayor Group in the budget of FP7.



The communiqué also underlined the need for infrastructures, for increased support to develop human resources, and for increased collaboration and networking. To achieve these goals, the Commission plans to initiate debates with the scientific community, as well as within the Council and the European Parliament in early 2004. Thereafter, there will be a second communiqué with the view of putting forward a proposal for FP7. Considering the above described developments, one would expect the scientific community to be thrilled about the prospect of having additional funding made available, allowing it to compete for and to deliver on the political expectations of making Europe a highly competitive knowledge-based society. Unfortunately, however, this is not the case as many leading European scientists feel that they will be plunged into complex and heavy bureaucratic machinery if the new funds are implemented through the Commission programmes. According to the Mayor Group, the new Fund should support “investigator-driven research of the highest quality selected through European competition”, which may not be possible according to the present rules. Writing a successful application for FP6 requires a lot more than just good science, and as a result many scientists have decided not to apply to the new EC instruments. It is still possible, however, that through the forthcoming consultations with the scientific community the Commission may take a more radical look at the way it runs the FPs, and will implement mechanisms that will ensure that funds are granted solely based on scientific excellence. This may not be simple, but even if so, I still think that many scientists would prefer to have the ERC at arm’s length from the Commission. To administrate the ERC is one thing; to manage the science involved is another.

*Julio E. Celis,*  
*Secretary General of FEBS*  
 (FEBS News, 2004/2)

#### **8.2.4.2 Life Sciences in the European Research Council – The Scientist’s Options** *By Prof. J.E. Celis, Secretary General of FEBS*

The possibility of establishing a European Research Council (ERC), complementary to the European Commission (EC) Framework Programmes and National Research Council programmes, to support high quality basic research, has been a matter of intensive discussion during the last few months. In October, the Danish presidency of the EC organised a meeting in Copenhagen, to discuss the initiative, as an ERC was considered to be an important instrument for strengthening the European Research Area (ERA). The Summary Report of the Copenhagen meeting was sent to the EU ministers for research. At their meeting on November 26, 2002, they discussed the progress made towards the creation of ERA, as well as explored various options for setting an ERC in motion. The Council agreed to “continue discussions on a concrete basis, on the purpose and scope of ERA, and to explore options for its possible creation, in co-operation with relevant national and European research organisations”. Representatives from the Danish Research Councils, in consultation with other research organisations in the member states,

suggested establishing a small group of experts to look into the matter. Following their advice, Helge Sander, the Danish Minister of Science, Technology and Innovation, has now invited professor Federico Mayor to chair such a group. The expectation is that this group, in a year's time, will present various options on how to create an ERC. Following up this exciting development, ELSF, in conjunction with EMBO, FEBS and the Division of Basic and Engineering Sciences of UNESCO, is organising an important meeting in Paris on February 19, 2003, to discuss the prospect, from the scientists' point of view, of having an ERC. Prominent life scientists, as well as representatives from national and international funding agencies, intergovernmental organisations, scientific societies, and the EC will attend the meeting. The outcome of the discussions will be presented to the European Commissioner, Philippe Busquin, and will be widely circulated among the scientific community. (Excerpt from FEBS Letters, Volume 561, Issue 1–3, pp. 1–2; Excerpt from FEBS NewsLetter, January 2003/1, p. 3)

As you might be aware of, FEBS' involvement in the debate on the European Research Area (ERA), and a possible European Research Council (ERC), most recently resulted in a major joint meeting in Paris. Based on the feedback received from people, who attended, I believe it is safe to say that this meeting indeed managed to serve the intended purpose; having scientists, officials and politicians among the speakers and audience, it provided a forum for a balanced and constructive debate on ERA and a possible ERC. (FEBS News, March 2003).

#### **8.2.4.3 Strong Support from the Scientific Community to the Idea of Establishing a European Research Council within the Life Sciences**

*By Prof. J.E. Celis, Secretary General of FEBS,*

In October 2002, the Danish presidency of the EC organised a meeting in Copenhagen to discuss the perspectives in establishing a European research council (ERC), complementary to the European Commission (EC) Framework Programmes and National Research Council programmes. As the ERC will focus on supporting high quality basic research, it is considered to be an important instrument for strengthening the European Research Area (ERA).

The Summary Report of the Copenhagen meeting was sent to the EU ministers for research, who at their November 26 meeting agreed to explore options for its creation, in co-operation with relevant national and European Research Organisations. As a result, Helge Sander, the Danish Minister of Science, Technology and Innovation appointed Federico Mayor, ex Director General of UNESCO and member of the Executive Committee of FEBS, to chair an expert group that will present various options on how to create an ERC by the end of 2003.

Recently, leaders of the scientific community, including Nobel Laureates, met in UNESCO, Paris, for a meeting organised by the European Life Sciences Forum on behalf of several organisations, to discuss the prospects of creating such an ERC. Various stakeholders (EC, Research Councils, foundations, and international organisations) attended the meeting. There was an overall support for the establishment of an ERC, and, in particular, Commissioner Busquin's full support of the

idea was greatly appreciated by the participants. Many obstacles related to funding and structure were identified, but there was a clear willingness to join forces to make a reality of this now mature idea. A summary of the conclusions will be circulated shortly, and a follow-up meeting to discuss concrete initiatives is being planned for the summer.

Needless to say, this initiative will have a major impact on basic research, as it is expected to help Europe realize its full scientific potential, and the ultimate dream of becoming a knowledge-based society. You are encouraged to contribute to the success of establishing an ERC by making national authorities aware of your support, and by letting your ideas be known through relevant channels (e.g. via the FEBS or ELSO website, [www.febs.org](http://www.febs.org) and <http://elso.org>, respectively).

As far as FEBS is concerned, we are committed to work for the realization of an ERC, and we have recently established a working group on ERA that will focus on that. In addition to members of the Executive Committee, this working group includes P. Chambon, A. Finazzi Agro, J. M. Gago, F. Kafatos, M. Lazdunski, C. Martinez-A, D. McConnell, W. Neupert, M. Osborn, V. Paces and P Van der Vliet. The group will start its activities shortly. (FEBS NewsLetter 2003/2, p. 3)

#### 8.2.4.4 ERA and the ERC – Constructive Debating

FEBS is actively engaged in the European Research Area (ERA), including discussions related to the possible establishment of a European Research Council (ERC). At a meeting focusing on the perspectives in a future ERC – this meeting took place in Paris on Feb. 19, 2003 – it became apparent that there is a need to identify and define operational proposals for an ERC. And so it was decided to arrange a follow-up meeting to address this need. The follow-up meeting will take place in Venice on May 28–29, 2003, and is jointly organised by ELSF, UNESCO, EMBO, EMBL and FEBS. The stated objective is to discuss three major issues identified during the Paris meeting, in order to come up with detailed proposals. The issues in question are (a) definitions of the research grants that should be allocated, (b) the support for infrastructures, including centres of excellence, and (c) ERC delivery mechanisms, including calls for and evaluation of proposals, and ERC organisation. The outcome of the meeting will be widely circulated in the appropriate *fora*, including this newsletter. In addition, issues related to ERA – including the ERC – will remain to be areas of attention within FEBS' Working Group on ERA, which includes J. M. Gago, M. Osborn, M. Lazdunski, P. E. Van der Vliet, W. Neupert, A. Finazzi Agro, F. C. Kafatos, P. Chambon, D. Martinez-A, V. Paces and D. J. McConnell as well as the members of FEBS' Executive Committee. (Highlights in FEBS NewsLetter May 2003/5, p. 3)

#### 8.2.4.5 The European Union: A knowledge-based economy

*Federico Mayor,*

*President of the European Research Council Expert Group (ERCEG)*

*Chairman of the FEBS Science and Society Committee, Member of FEBS'*

*Executive Committee*

In the Lisbon Summit Meeting held in October 2000, the European Commission determined that to compete with the most technologically advanced countries, in particular the United States and Japan, it should become “the most competitive knowledge-based economy in the world” by the year 2010.

Almost a year and a half later, in the Summit Meeting held in Barcelona in March 2002, it was established that to achieve this objective the European Union would have to invest 3% of its GNP (Gross National Product) in research and development (R&D) by 2010. Without this investment the present gap between scientific research and corresponding patents will further increase and the competitive opportunities of the European market will fall to “unrecoverable levels”.

Consequently, a swift reaction of member states was expected, which would bring about appreciable changes in the promotion of R&D. This has not been the case. In Spain, about 1% of the GNP is invested in these activities, approximately a third of which is devoted to military development. The incorporation of the “i” of “innovation” to R&D has been an attempt to mask this deficit. R&D&I accounts for about 1.6% of the GNP. A similar situation has been observed in France: in a recent article in “Le Monde” entitled “Research: how far will it decline?”, the Nobel Prize Winner François Jacob points out that the scientific potential of a country is the only guarantee of appropriate development in industrial, agricultural, health and military sectors. The United States not only promotes in-house science but also “imports the most brilliant scientists from around the world”. A recent report by the European Commission states that 400,000 European researchers and engineers now work in North America. In Europe, the number of researchers accounts for 5.36 per 1000 active population; in the United States and Japan this figure is 8.66 and 9.72, respectively. The figures for patents in France and the number of “exiled” scientists bring to light the pressing need to correct these trends both nationally and internationally. The political commitment of the European Union requires very clear accounts and precise decisions. It has been calculated that, on average, the research effort in European countries must double in 7 years to reach an investment of 3% of the GNP by 2010. In 2000 and 2001 European expenditure on research was 1.93% and 1.94%, respectively. The United States invests around 2.8% and Japan 3%.

The European Statistics Office (EUROSTAT) has informed that in 2001 the European Union invested 171,000 million Euros in R&D compared to 164,000 million in 2000. In the same period the United States invested 287,000 million Euros and Japan 154,000 million Euros (which represents 2.98% of its GDP). These figures call for the adoption of a true research policy, to be adopted on the basis of consultation with members of parliament at both national and European level. These issues are too important to be met by the simple strategy of “getting by”, without facing the great challenges of society. Because of its temporal projection, scientific development is a matter of State and its maintenance and efficacy cannot be included in the ever-changing priorities of local and community authorities. Many are the failed research projects but undoubtedly of greater importance are the many life projects wrecked by political “to-ing and fro-ing”.

Several days ago, the European Commissioner for Research, Philippe Busquin, whose efforts to improve the situation deserve recognition, stated that to fulfil these objectives by 2010, the European Union will need 500,000 more researchers. To avoid the “brain-drain”, 1,580 million Euros will be assigned to the VI Framework Programme 2002–2006 for training, mobility and development of European Community research, with a special emphasis on young scientists. It is “of the utmost importance to improve the recognition and working conditions of this profession”, stated Busquin. In Spain, the Minister of Economy, Mr. Rodrigo Rato, recently announced tax relief as of this fiscal year to encourage investment from the private sector.

The private sector lacks the rigor that is now urgent. This sector either exaggerates its strengths – almost all D and no R – because of interests in the stock exchange and financial transactions or it classifies quality control facilities as investments in R&D installations... In the case of Spain, the COTEC should promote investment in R&D&I rather than provide yearly figures on the low “scientific activity” of Spanish industry in general. An analysis of scientific activity should cover companies in Spain and not only Spanish companies: the excuse that research is carried out in the “parent company” is unacceptable. All companies, whether national or international, should be offered fiscal incentives to promote research activity in Spain.

Biotechnology is one of the most solid guarantees for business because it reaches all walks of life and its main applications, nutrition and health, are the two cornerstones of a future with increased quality of life. Spain, with few exceptions, is well behind the effort that corresponds to it for its economic development, and is dangerously accustomed to living at the expense of research and technology from other countries.

Several years ago, the President of the Spanish Association of Biocompanies (ASEBIO) stated, “We need bio entrepreneurs, people able to transform ideas and the results of their research into products that sell”. The scientific contributions and trade agreements that took place from 8 to 11th April at the II World Forum of Life Sciences – BioVision – Lyon, France, demonstrated the extraordinary present and future importance of this industrial sector.

To successfully face the coming challenges that the European Union has identified, the following measures are essential: to inform the population, members of parliament and governors, through effective media, as to the benefits derived from increased scientific and technical research; to promote transdisciplinary groups, including, of course, “humanities”; to draw together reliable data on the current status of the ERA (European Research Area) in order to avoid repetition of activities and to foster promotional efforts, providing assistance to teams that have demonstrated scientific excellence and the capacity to incorporate promising young scientists; to ensure that R&D investment figures in the private and public sector are audited and made available to the public to guarantee that they are duly destined to basic research; to establish an independent European Research Council funded by the European Union to ensure fulfilment of the objectives mentioned for 2010; this Council becoming a contact point for several European

institutions (ESF: European Science Foundation; FEBS: Federation of European Biochemical Societies; EMBO, European Molecular Biology Organisation) so that they can provide valuable contributions to the establishment of priorities, selection of applications, etc.

The present draft of the European Constitution does not clearly reflect the priority of science nor does it authorise specific procedures for the attribution and regulation of financial resources for its promotion. This is why the ERCEG has proposed a text for the autonomy of the entity and the recognition of several mechanisms of action that are both agile and transparent – that is in accordance with the challenges that they must meet. The political and social commitment to research must be backed by corresponding financial and logistic support. Health and nutrition, cornerstones of quality of life, call for an effective channel of communication between parliament members and governors and the scientific community and the business sector. These, in turn, should be constantly in touch with the needs of society. The present lack of communication is being remedied by occasional informal meetings. This strategy will not allow the European Union to fulfil its objective of becoming “the most competitive knowledge-based economy in the world” by the year 2010. (FEBS NewsLetter 2003/5, pp.6–7).

#### 8.2.4.6 A European Research Council for All Sciences: A Dream that Might Come True

*By J.E. Celis*

On October 21 and 22 this year, the scientific community represented by the life sciences, physics, mathematics, social sciences and humanities met at The Ireland Academy for the Sciences and Humanities, to discuss the European Research Council (ERC) initiative and to generate a document reflecting the views of the whole scientific community on the creation of an ERC, its general principles and its structure, as well as the specific needs of each discipline with respect to research grants and infrastructures. An important outcome of the meeting was the realization that the scientific community, through its economic support and engagement, had provided a much-needed Forum to discuss science policy issues. The Forum has been instrumental in maintaining the continuity in the ERC discussions, and has grown to accommodate the opinion of all the stakeholders. There was a clear consensus among the participants about the need to think European, to join forces, and to set-up clear directions for how to proceed in order to assure the success of the ERC initiative. Towards this aim the assembly appointed a working group that consists B. Andersson (ESF), J. E. Celis (FEBS, ELSF), J.P. Connerade (Euroscience), J.M. Gago (FEBS working group on the European Research Area), F. Gannon, (EMBO), F. Kafatos (EMBL), P. Tindemans (Euroscience), R. van Duinen (ESF), and L. van Dyck (ELSF). The group will have its first meeting in Brussels on November 4, 2003 to discuss the preparation of a joint draft document stating the position of the whole scientific community concerning the ERC. (FEBS NewsLetter 2003/6).

#### 8.2.4.7 The European Research Council, for, against, don't know

*By Prof. Peter Campbell, Department of Biochemistry and Molecular Biology, University College London, London WC1E 6BT.*

In the FEBS Newsletter No. 5 (2003/5) Federico Mayor wrote a most interesting article on "The European Union: a knowledge-based economy". Among the matters he raised was the objective of the Union to invest 3% of its GNP in research and development by 2010. He noted that for Spain the figure was at present 1%, 1.6% if innovation is included, and he said the situation in France was similar. In fact we have been hearing of severe cuts in the funding of the CNRS. In Germany the situation is far from rosy and in Italy we read about the major brain drain of scientists because of lack of support. After years of comparative neglect it is good to report that the British Government has substantially increased the science budget even though we scientists do not always welcome the strings attached. Moreover, our salaries continue to be pathetic compared with other professions. Among Federico's suggestions for amelioration of the lack of support for science is the creation of an independent European Research Council (ERC).

What then is one to make of the present attempts to promote an ERC? I certainly have much sympathy for those scientists who need support in countries that cannot afford a respectable research budget. This will surely become more acute with the expansion of the EU, involving the so-called "accession countries". Academia Europaea has called for the ERC to be funded by new money, not funds earmarked for thematic research schemes, such as the Framework Programmes. They also request that "any ERC should not be tainted or burdened by the need to respond to political expediency". Our experience in the UK suggests that it is rather naïve to think that new money could be found that had no strings attached.

The way forward is discussed in a splendid article by Luc van Dyck "Footing the bill" (EMBO Reports 4, 544–546). As I have mentioned one of his suggestions has already been initiated by EMBO. Another is to incorporate the basic concepts for an ERC within a modified European Science Foundation which already fulfils many of the functions of an extended ERC. The response mode grants should give priority to applications from the accession countries and the poorer countries of Europe linked with a partner from a wealthier country. All grants must be peer reviewed by a well understood procedure. This road map seems much to be preferred to the setting up of yet another separate organisation. (FEBS News 2003/6, p. 7)

#### 8.2.4.8 The European Research Council: The 'Mayor Group' Report and the Commission's Views on Basic Research and Its Impact

*By Prof. J.E. Celis, Secretary General of FEBS*

*Institute of Cancer Biology and Danish Centre for Translational Breast Cancer Research (DCTB)*

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European science is experiencing one of its most exciting times in recent years with the beginning of the new millennium being marked by a renewed interest

in basic, fundamental research as a means to sustain a knowledge-based society. Currently, there are great expectations for the possible creation of a European Research Council (ERC) for all sciences, a new funding instrument for supporting high-quality fundamental research that may become a cornerstone of a new knowledge-based society. The European scientific community has discussed the initiative at various occasions during the past year and has eagerly awaited the report of the ERC expert group (ERCEG), appointed during the Danish presidency of the EU in 2002, as well as the communiqué from the European Commission on basic research. These communications can be found at <http://www.ercexpert-group.org/> and <http://europa.eu.int/comm/research/whatsnew.cfm>, respectively.

The report of the ERCEG, now known as the 'Mayor Group', proposed the establishment of a European Fund for Research Excellence and an ERC to manage it. Furthermore, the report suggested that the sum of 2 billion euro per year would be necessary to make an impact on basic research. This money should come directly from the EU as a specified item in the budget for the next Framework Programme (FP), rather than from other existing national and European programmes. Most importantly, the report emphasised the need to safeguard the autonomy of the ERC, as well as to fully involve the scientific community both in the peer review system and in defining the delivery mechanisms.

The Commission paper also recognised the need for supporting basic research in Europe and proposed to introduce the new funding mechanism along the lines delineated by the Mayor Group in the budget of FP7. The communiqué also underlined the need for infrastructures, for increased support to develop human resources, and for increased collaboration and networking. To achieve these goals, the Commission plans to initiate debates with the scientific community, as well as within the Council and the European Parliament in early 2004. Thereafter, there will be a second communiqué with the view of putting forward a proposal for FP7.

Considering the above described developments, one would expect the scientific community to be thrilled about the prospect of having additional funding made available, allowing it to compete for and to deliver on the political expectations of making Europe a highly competitive knowledge-based society.

Unfortunately, however, this is not the case as many leading European scientists feel that they will be plunged into complex and heavy bureaucratic machinery if the new funds are implemented through the Commission programmes. According to the Mayor Group, the new Fund should support "investigator-driven research of the highest quality selected through European competition", which may not be possible according to the present rules. Writing a successful application for FP6 requires a lot more than just good science, and as a result many scientists have decided not to apply to the new EC instruments.

It is still possible, however, that through the forthcoming consultations with the scientific community the Commission may take a more radical look at the way it runs the FPs, and will implement mechanisms that will ensure that funds are granted solely based on scientific excellence. This may not be simple, but even if so, I still think that many scientists would prefer to have the ERC at arm's length from



the Commission. To administrate the ERC is one thing; to manage the science involved is another.

*Julio E. Celis,*

*Secretary General of FEBS*

(Excerpt from FEBS Letters, Volume 561, Issue 1–3, pp. 1–2)

(FEBS NewsLetter 2004/2, p. 3)

#### 8.2.4.9 Special Session at the FEBS Congress in Warsaw – the ERC

*By Prof. Guy Dirheimer, Chairman of FEBS Working Group on Central and Eastern Europe*

*Member of the French Society for Biochemistry and Molecular Biology*

A special session of the FEBS Congress in Warsaw was devoted to the European Research Council (ERC). It had been organised on June 29 by Luc Van Dyck, Executive Coordinator of the European Life Science Forum (ELSF), and by Julio Celis, Secretary General of FEBS.

First Prof. Celis detailed the historical background and reasons to establish an ERC as well as the expectations of the scientific community (see his recent paper: Promoting basic research in Europe. FEBS Letters 563 (2004), 1–2), and the excellent document published in October 2003 by the ELSF: ERC – the life scientist’s view. He described the characteristics of ERC that are subject to consensus. He particularly insisted on the need to reform European and National science policies in order to promote basic research to face the challenge posed by the European Research Area (ERA), which is to be attained in 2010, and the goal of European leadership in the “knowledge based economy”. He also emphasised the need to increase research infrastructures and the number of centres of excellence.

Prof. Kurt Wüthrich, Nobel Laureate, declared that scientific excellence should be the sole selection criterion in ERC programmes. This can be achieved in the centres of excellence (7–10 in Germany in the life sciences). A model which can be followed is that of the National Science Foundation in the USA. Professor Federico Mayor, president of the ERC Expert Group and former Director General of UNESCO, discussed the recommendations of the Expert Group. It defines the role of ERC which should be to support investigator-driven research of the highest quality selected through European competition. He emphasised that, with the active and imaginative initiative of FEBS from the beginning, this has achieved the full support of the scientific community and the understanding and commitment of the Commissioner Philippe Busquin and his team. The role of the Universities has been emphasised before the European Parliament as well as the absolute requirement for specific administrative mechanisms. He underlined once again the immense brain drain to the USA. The exodus of European talents is the main argument for action (about 150,000 European researchers flew out in the past 25 years), as well as the relocation out of Europe of the research laboratories of many industrial corporations and the powerful emerging scientific development of China and other countries. He insisted on the financing of basic research. (There is no applied science if there is no science to be applied.) The fund for ERC should

be of 2 billion euros per year and should appear in the financial perspectives of 2007–2012. It is up to the European Parliament to change the financing procedures of research. It appears that now most of the actions must concentrate on the political level where the initiative took place.

The last speaker of the first part of this session Dr Anastasia Andrikopoulou, Principal Administrator with the European Commission, raised the legal problems which will appear if ERC is administered by scientists. She stated that if EU money finances ERC it must be administered by an EU body. There is no model so far for an independent organisation financed by EU, except the Galileo programme. ERC could be part of the FP7, for which the proposals will be asked for early 2005. The decision on FP7 will be taken in 2006 and the first funding will start in 2007.

The second part of the session was devoted to the views of the new EU Member States on the ERC. It is evident that a funding instrument based essentially on competition, without just retour, creates fear in countries where research system performs less well, suggesting that scientists in these countries would have fairly low chances to be successful. In the life sciences, however, the example of EMBO programmes, which are also based exclusively on scientific excellence, shows that Eastern and Central European countries perform, proportionally, rather well: the quality of the science and the scientists is there. On the other hand, the ERC will offer real possibilities for training, networking, technology transfer and mobility. According to Prof. Maciej Nalecz, Director of the UNESCO Basic and Engineering Sciences Division, a restructuring of national science policies, practices and systems is required in the new EU Member States. The best practices exemplified by the ERC may contribute to this and should trigger national investments. He, however, regretted that the politicians often do not understand that one can invest in something which will only be fruitful 20 years later. It is the duty of the scientists to make them understand it.

Prof. Andrzej Legocki, President of the Polish Academy of Sciences, insisted on the high level of education in the CEE counties. Poland has a number of Centres of excellence; however, only 0.74% of the GDP is devoted to basic research. Professor Vito Turk from Ljubljana (Slovenia) gave three pieces of advice to prepare for ERC: (i) lure back excellent young scientists from the USA by building incubator houses for research i.e. competitive and independent centres with stipend and infrastructure where young promising scientists will set up research groups which will be transferred after 5, maximum 10 years, to Universities or Research institutes, (ii) help women scientists more, (iii) find and commit excellence early i.e. already in high schools. In this context Prof. Péter Csermely from Budapest pointed to the Hungarian Research Student Association and the Network of Youth excellence (see FEBS NewsLetter 3/2004), which is helped by FEBS. Similar associations should be started in other European countries.

In conclusion, this Special session was very interesting and showed, as stated by Julio Celis, that FEBS has an important role to play in the new Europe of science as our membership comprises both young and established researchers from the whole of Europe. (FEBS NewsLetter 2004/5, p. 5–6)

#### 8.2.4.10 The Outcome of ERC in 2007 and 2008

ERC was officially launched in 2007 under the EU's Seventh Framework Programme for Research (FP7). FEBS can be proud of having contributed financially, but foremost by personal engagement, to its founding.

In 2007, ERC announced that 9167 proposals have been submitted by young researchers to the call for ERC Starting Grants, of which 27% were in the broad domain 'Life Sciences'. 559 were selected for the second stage of the peer review evaluating process. In December 2007 ERC announced that 299 early-career researchers will receive grants. The average age of the grantees was 35.

In 2008, ERC decided to sponsor research laboratories headed by senior researchers (ERC Advanced grants). The average age of the applicants was 51, ranging from 36 to 76. 2167 applications were received and 275 were selected, i.e. about 1.2%, to which 242 million euros were distributed. Concerning the different domains, the Physical and Engineering domains got 41.4% of the aids, Life sciences 30.5%, Human and Social Sciences 17.5%, Interdisciplinary sciences 10.5% ([erc.europa.eu](http://erc.europa.eu)).

### 8.2.5

#### Challenges for European Science

In the following statements, opinions of young researchers from the European area are reflected. They were published as a series of documents in FEBS NewsLetter.

##### 8.2.5.1 Challenges for European Science (I/II)

*By Mihai Nita-Lazar, Member of the Romanian Biochemical Society  
One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

There are many challenges and demands that European scientists will have to face in the nearest future. In my opinion, two of the issues require special attention.

The first challenge, most important for me personally, as a scientist coming from Eastern Europe, is a big change after the countries of the former East Block join the European Union. This event will change a lot in the balance of the EU. The Eastern European countries educate each year a significant number of scientists with excellent knowledge and intellectual abilities and therefore have enormous human potential in science. When those people join the pool of scientists able to compete on equal rights with the EU scientists for the permanent academic positions, the job market will certainly change. Many people like me, current post docs for whom the next career step would be looking for independent position, are very concerned because of this fact. It may be necessary to increase the budget and availability of fellowships, maybe by collaborations with pharmaceutical and biotechnological companies which would be willing to invest in basic research. On the other hand, new international scientific centres and institutes should be built there and the new job opportunities created. It is to the great credit of FEBS that the Society organizes conferences and courses which allow the people to exchange information, not only about their research progress, but also about opportunities to do research in, sometimes very different, European countries.

The additional problem is the objective evaluation system in the appointments to the higher academic positions. Surely, the normalization of the criteria in the whole EU will change the system also in Eastern European countries, in which the scientific world, like other fields, is still very prone to corruption and frozen in the old structures. The second important issue is the

growing interest of the non-scientific world in the ethical aspects of innovations and discoveries. Recently, *in vitro* fertilization, cloning of animals and humans, and genetically modified food are the first-page topics in the newspapers. The newspaper articles, however, are often misleading and politically manipulative. Because of increasing awareness, the need for reliable, genuine information increases too. Already some institutes organize “open days” and special public lectures, but organizing special courses for the non-scientists (explanations of biotechnology procedures, goals and significance) as well as for the scientists (bioethics, science popularisation) could be useful in making the communication between science and public easier. There are certainly many more challenges, but the above two seem to be the most prominent ones in the nearest future. (FEBS NewsLetter 2004/2, p. 4)

#### 8.2.5.2 Challenges for European Science (II/II)

*By Vesna Vucic, Member of the Yugoslav Biochemical Society*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

In my opinion, European science grows up very fast, but there are still a lot of things that have to be explained. While the European science develops very fast, Serbian science develops slower. Constant financial problems in our country make our experimental work very hard. The equipment is very old, and we often cannot buy commercial kits, which give faster and more precise results. The good thing is the Internet – now we can read new articles and contact colleagues from other countries, which are usually very helpful in advice and sometimes in chemicals. During my Master and PhD studies I’ve had a lot of problems in my experiments, but I think that most of problems can be solved by contacts with colleagues who have much experience. Especially, great meetings like FEBS can be important for scientists worldwide, maybe even more for young scientists. We can meet each other, discuss our scientific problems, exchange literature and experience, and also we can make some contacts for specialized courses, help in practical education or even getting older equipment from better laboratories. But I don’t expect all of these, I expect to be with people who love the same things I love – biochemistry; and maybe some useful advice about my work. (FEBS NewsLetter 2004/2, p. 5)

#### 8.2.5.3 Challenges for European Science (III/IV)

*By Marina Knyazeva, Ph.D. and Professor of Biochemistry Department in Kharkov National University, Member of the Ukrainian Biochemical Society,*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

Greatly appreciating the significance of FEBS informational letters in uniting biochemists and molecular biologists of the world, I would like to call attention to the problem we are facing in our country (Ukraine). I have devoted 23 years of my life to the problems of applying biochemistry in Orthopaedics and Traumatology, oncological gynaecology, cardiology and cardiovascular surgery (see e.g. <http://www.mknyazeva.narod.ru>).

Unfortunately the teaching and training programmes in biochemistry at Medical departments of our Universities do not provide a course of clinical biochemistry as a special subject (see the materials of the VIII Ukrainian Biochemistry Congress, Chernovtsy, 2002//The Ukrainian Biochemical Journal. Vol.74, N4a (Supplement 1), 2002.-P.196–208) which results in a considerable gap between theoretical knowledge and clinical practice.

Since biochemical methods of investigation provide a considerable part of diagnostic information, the practitioners’ inability to interpret the results of biochemical analyses may cause grave diagnostic mistakes. That is why it is utterly necessary to work out a programme including a special course of “clinical biochemistry” to develop a sort of “clinical thinking” – a system of methods of applying biochemical data in therapy.

Exchanging experience with our European colleagues at the FEBS-2004 Congress might be of great help to us and I look forward to joining in the celebration. (FEBS NewsLetter 2004/3, p. 6)

#### 8.2.5.4 Challenges for European Science (IV/IV)

*By Ranjan Ramasamy, Prof., The National Science Foundation, Sri Lanka Member of the Biochemical Society*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

I do not believe that shortage of funds will constitute a major limitation in most European countries for science. However, the challenges may be listed as the following:

1. Continuing to attract the more capable students into scientific research.
2. Improving career structure and security for young scientists.
3. Minimising bureaucracy in funding.
4. Greater cooperation and coordination in European science.
5. Taking up challenges of renewable energy, sustainable development and of the third world populations, in the European science effort.
6. Coping with the new scientific information being generated worldwide.
7. The increasing compartmentalisation of expertise given the information overload and diversity of scientific effort.
8. Helping to develop molecular life sciences in poorer and less fortunate countries.

FEBS can help by:

1. Giving greater publicity to these issues among scientists.
2. Actively canvassing decision makers and politicians.
3. Tasking members to develop suitable strategies to overcome these problems.
4. Activating efforts to coordinate science within Europe and for helping poorer countries.

(FEBS NewsLetter 2004/3, p. 6)

#### 8.2.5.5 Challenges for European Science (V/V)

*By Tatiana Borisova, PhD*

*Member of the Ukrainian Biochemical Society*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

Nowadays the investigation of functioning and dysfunction of the brain, in order to gain new insight into mental processes, to combat neurological disorders and diseases, and to improve brain repair has a priority in Europe. The related area of research, which is the study of the molecular and cellular bases of brain function and damage under altered gravity conditions, does not play a profound role. At the same time this area seems to be very important to provide further insight into neurochemical changes in central nervous system of animals exposed to extreme conditions and to identify neurochemical basis for plasticity and repair, developing strategies for prevention and management of neurological disorders and diseases. This direction is not in the main stream of the European research, but it appears to attract certain attention in the US. Therefore, it seems to be of advantage for European Science and scientific bodies, FEBS in particular, to pay attention to above mentioned area.

The long-term staying in altered gravity conditions leads to the changes of a wide variety of neuronal systems ranging from motor to hypothalamic. Such changes likely involve both functional and morphological alterations in brain. The influence of altered gravity on the process of nerve signal transmission is essentially unknown. Most of the research has shown that exposure of animals to centrifuge-induced hyper gravity leads to changes in cerebral blood flow, arterial oxygen saturation etc. Since these alterations can cause a brain hypoxia, it is important to study the synaptic processes in brain under high-G exposure. There is substantial evidence linking excessive glutamate neurotransmission to the development of neuronal death

following hypoxic-ischemic events (Diemer 1993, Schwartz-Bloom 2001). Disturbance of the transmembrane gradient of Na<sup>+</sup> concentrations is an important factor in hypoxia-induced neuronal damage and corroborates the participation of the glutamate and GABA transporters in hypoxia-induced neuronal injury (Yamaguchi 1998). Not surprisingly, the neuroprotective efficacy of drugs that modulate or block glutamate neurotransmission in animal models has been a major area of study. While many neurotransmitter systems play a role in hypoxic-ischemic neuronal injury, the GABA-ergic system may be of particular import because it functions in opposition to that of glutamate. Neuroprotective strategies to increase GABA neurotransmission target preventing GABA reuptake in synapse. For the first time we have recently demonstrated that hyper gravity stress affects nerve signal transmission. Comparative analysis of uptake and release of glutamate and GABA showed that hypergravity loading evokes oppositely directed alterations in excitatory and inhibitory signal transmission. The studies of maximal velocities of high-affinity Na<sup>+</sup>-dependent plasma membrane transporter activities of glutamate and GABA revealed the significant lowering of glutamate and more than twofold enhancement of GABA transporter activities. We have also shown significant changes in the exocytotic release of neurotransmitters. Depolarization evoked Ca<sup>2+</sup>-stimulated release was essentially decreased for glutamate and was more abundant for GABA after exposure of animals to artificial gravity loading. Changes occurred in depolarization-evoked exocytotic release seem to be in a concordance with alterations of plasma membrane transporters activity observed. Perhaps, lowering of glutamate transporter activity and increase of the velocity of GABA uptake correlated with diminution and augmentation of exocytotic release of these neurotransmitters, respectively.

Together all these data indicate that exposure of animals to hyper gravity had a profound effect on synaptic processes in brain. It is possible the changes observed in the activity of the processes responsible for the uptake and release of excitatory and inhibitory neurotransmitters are physiologically important and reflect making protective mechanisms more active for neutralization of harmful influence of hyper gravity stress. (FEBS NewsLetter 2004/4, p. 3)

#### 8.2.5.6 Challenges for European Science (VI/VIII)

*By Edward Irobi, PhD, Member of the Biochemical Society,*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

It is my pleasure to write about my view on the challenges that European Scientists are facing in the future, and what keeps me awake at night, and the role I see FEBS playing in facing the challenges. The major challenge I can visualize is finance. Scientific researches across Europe should have adequate financial support from EU and various individual nations. With this, quality of research will increase and the massive exodus of European Scientist to the United States of America will be reduced. Apart from laboratory equipment, a good and attractive pay package should be offered to Scientists while also programmes and avenues to encourage young scientists should be created.

What keeps me awake at night is the massive exodus of eminent European scientists from Europe's renowned institutions moving to America and Canada in the name of seeking for "greener pastures." FEBS should engineer a mechanism of liaising with the EU and other member countries to tackle this problem from the grassroots level.

Advocacy should be made for greater financial involvement by EU and as well as other constituent member nations. Furthermore, FEBS should continue in its numerous good and laudable scientific programmes and fellowships to encourage both old and young scientists. (FEBS NewsLetter 2004/3, p. 7)

#### 8.2.5.7 Challenges for European Science (VII/VIII)

*By Knorre Dmitry, PhD, Member of the Russian Biochemistry Society,*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

The main problem of the future, I believe, would be informational overload. I propose that scientists of the future could resist this with the use of virtual cell models. Even now scientists attempt to create computer models of bacteria, erythrocyte or eukaryotic cell organelles. However, so far they were unproductive. I believe that in the future the amount of information will reach a point at which we have enough critical data to make models that can actually be used for precise predictions.

Excess of information provides another problem. I am inclined to believe that scientists should be absolutely sincere about their scientific interests. However, questions of common interest seems much more interesting to some researchers than special problems. On the other hand the scientific community has more concern to such special problems, and thus these are easily granted.

I see FEBS' role in providing scientific community integration. This will reduce effect of hyper specialization, and provide the appearance of integrated databases. In the future such integrated databases could be transformed to virtual cell (or even organism) prediction services. (FEBS NewsLetter 2004/5, p. 7)

#### 8.2.5.8 Challenges for European Science (X/XII)

*By Toni Gabaldon Estavan,*

*Member of the Spanish Biochemical Society and the Royal Netherlands Chemical Society*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

European leaders have recently expressed their commitment to transform this continent into the most competitive and dynamic knowledge-based economy in the world. To accomplish this ambitious plan is necessary not only a significant increase in the research spending (with a 3% of the Gross Domestic Product set as an objective for 2010) but also major changes in the European research structure. With more countries joining the European Union this year and many others following similar policies this transformation is likely to affect most of the continent. Initiatives such as the implementation of a European Research Area (ERA), the creation of excellence centers or the harmonization of the legislation to protect intellectual property rights will definitely affect the every-day lives of researchers in Europe.

All these represent great challenges for the scientific community in the years to come. At the end of the day, the scientists are indeed the essence of the research structure, the ones that produce the knowledge that is supposed to drive the society. The way the researchers will use the newly available resources, their commitment to transfer knowledge to industry and society and the success of their groups in attracting good researchers from elsewhere are factors that can determine the success of creating a more competitive research in Europe. To know that an important stage in my scientific career is going to take place in such conditions is keeping me awake at night.

In this scenario FEBS and other European scientific societies will have a very crucial role. First of all they can drive the building of a common European research area by creating connectivity and tighter cooperation between scientists and groups around Europe. Moreover they can serve as a communication channel that informs the scientists about new opportunities created or changes that will affect them. And last but not least, societies can be the discussion platform used by researchers to have a say in scientific policy. (FEBS NewsLetter 2004/6, p. 4)

#### 8.2.5.9 Challenges for European Science (XI/XII)

*By Mariana B.L. Carvalho and João P.R. Abecasis,*

*Members of the Portuguese Biochemical Society*

*Two of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

Fresh out of college we are now taking our first steps as scientists in the biochemical field. What we can expect of the future is of major concern to us and keeps us awake many nights, for sure! Back

here in Portugal, we are facing an economic crisis that is affecting almost every aspect of our lives. Research is almost exclusively supported by the government and EU funds. Young scientists face either jumping from grant to grant for a career or going abroad by themselves and trying their luck elsewhere. We lack scientific jobs and positions at research labs and scientific research funded by private companies is almost nonexistent. These same problems are affecting other countries throughout Europe.

As a whole, European scientists face fierce competition from the other side of the Atlantic and European governments have made it their quest to turn Europe into the most competitive knowledge based economy in the world by 2010. It will be the responsibility of each of us to bring about such an endeavour and FEBS will certainly have a role in expressing the scientific community's concerns and opinions on government's policies. Public awareness is ever more important. Life scientists, in particular, must answer society's concerns about stem cells research, cloning and other issues that arise as science progresses. This is both about informing the public by demystifying issues and answering concerns on security and ethical issues. We expect FEBS to be a key player in this area, promoting conferences between scientists and the general public and through other public information campaigns. We expect FEBS to continue having an important role promoting the interchange of ideas and people both inside and outside of Europe, while coordinating common efforts of its constituent societies. Namely, promoting the mobility of young scientists and helping constituent societies ensure their countries welcome them back when they wish to return. We believe FEBS will be the glue that keeps us together and the network through which we will communicate. We see great potential for web-based bulletin boards that FEBS already promotes at their website. Maybe it will turn into a key portal for biochemists all over.

At the end of the day we believe things will get sorted in the future and turn out for the best. We wish the best for the next 40 years of FEBS and hope we will be able to contribute and help achieve its goals! (FEBS Newsletter 2004/6, p. 4–5)

#### 8.2.5.10 Challenges for European Science (XII/XII)

*By Mykhaylo Artamonov*

*Member of the Ukrainian Biochemical Society*

*One of the winners of a free registration to the 2004 FEBS Congress in Warsaw*

Trends in modern biochemistry: I think that comprehensive view on the challenges that European Scientists are facing in the years to come is very hard to voice because nowadays biochemistry and molecular biology are being developed fantastically fast and priority tasks are being constantly changed. Besides, it is difficult to cover all fields. Therefore, I want to try to observe foreground task in the field of my scientific interests namely in lipid biochemistry.

The notion of "genome" was first employed more than fifty years ago and the term "proteome" appeared almost 10 years ago. But only two years ago the term "lipidome" was used at first and now this paradigm is being formed. It includes the precision identification of lipid composition and role of lipids in cellular organisation (subcellular compartments and domains); the studying of biochemical mechanisms which have mediate lipid-lipid and lipid-protein interaction, conformation and dynamic; determination of quantitative changes of lipid composition after cell perturbation. Also it is necessary to emphasize the importance of lipids in cell vital functions, development and passing of different pathological states such as ischemic heart disease, diabetes, neurodegenerative states and malignancies. In my opinion the solving of these scientific problems occupies the important place among main research problems facing the European scientists. The serious background for the existence of such a standpoint is the scientific meetings, conferences, advanced courses of recent years that have been headed by FEBS and other scientific organisations. An essential part of them was dedicated to lipid biochemistry, namely, lipid signalling, cellular membrane machinery, lipid transport, lipid oxidation etc. That is the necessary presuppositions for progress in the lipidome paradigm in Europe.

Among the all tendencies of lipidomics I would like to single out two trends. One of them is the lipid rafts conception. It is difficult to overestimate the importance of lipid rafts for



receptor functioning, protein traffic, signal transduction and structure of cell membrane itself. Another one is a striking conception which links two signalling systems – cannabinoid and NO-signalling system. This conception was proposed in 2003 and speculates the existence of an innate physiological response, so-called 'relaxation response', that is opposite to the stress response. (FEBS NewsLetter 2004/6, p. 5)

## 8.2.6

### **Initiatives for Life Science in Europe – ISE and ELSO**

#### **8.2.6.1 The Initiative for Science in Europe (ISE) – A Reality**

*By J.E.Celis Secretary General of FEBS*

At a recent meeting organised by the Initiative for Science in Europe (ISE) group at the UNESCO Headquarters in Paris, delegates representing a large number of organisations and institutions across the life sciences, natural sciences, humanities and social sciences, agreed to join forces to establish a platform to promote independent scientific advice in European policy making, and to stimulate the participation of European scientists both in the design and implementation of science and technology policy. The assembly unanimously supported the appointment of Jose Mariano Gago, ex Portuguese Minister of Science and Technology, as chair of the ISE platform, which for the moment has the ERC as the main item on its agenda. FEBS is delighted with this development as it fulfils a long-term objective of our organisation as a stakeholder in the European Research Area (ERA), a vision put forward by Commissioner Philippe Busquin at the Lisbon Summit in the year 2000, to address the fragmentation of science in Europe. Early in 2001, FEBS together with The European Molecular Biology Organisation (EMBO), the European Molecular Biology Laboratory (EMBL), and the European Life Science Organisation (ELSO), created a model organisation, the European Life Sciences Forum (<http://www.elsf.org>) in an effort to stimulate scientists to take a more active role in strategic and science policy issues, and to take joint action in matters of common interest. Now that a larger platform has been established, there may not be a need to continue with the ELSF as a formal organisation, as the ISE embraces all sciences, social sciences and humanities included. In my opinion the ELSF has played a key role in the discussions leading to the current state of affairs concerning the ERC, and it is now up to the whole of the scientific community to finish the task. EMBO, EMBL and FEBS have pledged to continue full support of the ISE secretariat until July 2005, thus securing a smooth transition. Thereafter, FEBS is planning to divert some of these funds to establish an office in Brussels, as approved by Council, to provide information and advice concerning the Framework programmes to colleagues from developing countries in Europe. Also, the ERC, if implemented, will have an impact on these countries and FEBS wants to make sure that they see this new instrument for funding basic research as an opportunity, rather than a threat. (FEBS NewsLetter, November 2004)

### 8.2.6.2 The future of the initiative for Science in Europe (ISE)

*By Julio Celis*

As mentioned in the previous issue of FEBS News, Jose Mariano Gago, Chair of ISE became Minister of Science, Technology and Higher Education in the Portuguese Government. As a result, he has step down as Chair of ISE and has proposed to host a general meeting of the organisation in Lisbon (late May, early June) in order to elect a new Chair and Executive Committee, as well as to discuss the future agenda. Jose Mariano has already attended the Luxemburg meeting of the Competitiveness Council where there was a unanimous political agreement to support the European Research Council (ERC). FEBS will continue supporting the ISE as this organisation has proven to be instrumental in unifying the views of the European scientific community as far as the ERC is concerned. (FEBS News 2005/3)

### 8.2.6.3 FEBS – A Charity at the Cross-Roads to the Future of Life Sciences in Europe

*By Karl Kuchler Chairman of FEBS Advanced Courses Committee*

More than 40 years of FEBS history started in 1964, when several biochemical societies founded what today has become THE European umbrella society, with more than 42 000 members in more than 40 constituent and several associated societies. The FEBS charity has been very successful in fostering biochemistry and molecular biology across Europe, and in particular in Eastern countries. The beginning integration of Eastern countries into the European research landscape at large poses new challenges for both scientists and scientific societies. A closer look at the current situation clearly illustrates the dramatic situation in Europe. Hence, it is imperative for Europe to recognize the relevant problems now and address the requirements in the training of the next generation of scientists without delay.

In recent years, biomedical research experienced numerous exciting revolutions and remarkable progress. Unravelling the genetic blueprints from many species sparked new technologies including genome-wide and large scale approaches, microarrays, protein chips or today's high-end mass spectrometry, and the waves of innovations keep rolling. The "-omics" progress, biotechnology, nanotechnology, nano- and biomedicine, and last but not least, systems biology, prompted high-flying promises for medicare and drug discovery, motivating numerous funding bodies to increase support of applied science. Unfortunately, this occurred at the expense of basic research, which has been traditionally suffering from severe underfunding already. Many research institutions or funding bodies have been chronically slow or unable to deal with this situation, mainly because of inadequate budgets, outdated infrastructures, sprinkle-funding strategies, and often vague priority definitions. Today, European science seems more fragmented than ever. Many countries on their own lack the ability or resources to keep up, all in all diminishing European competitiveness in basic science, with only a few islands remaining as top in the world.

How can Europe regain competitiveness in basic science or at least get a bit closer to reaching the Lisbon goals? The inauguration of the European Research

Council (ERC) may be one appropriate way to reboot basic science. FEBS, other renowned institutions including EMBO, EMBL, ELSO, ELSE, ISE, as well as many visionary unnamed individuals, were instrumental in establishing the ERC. The way ERC is set up is a great start and unique chance indeed, since funding is confined to basic research, and grant-giving will be based purely on the excellence of applicants and their proposals. However, the bad news is that the ERC will need about 20–30 times more money to finance basic research in all disciplines comparable to the levels provided by leading countries in the world. Basically, the ERC requires “only” political courage for permanent implementation. However, it will nevertheless be a delicate and most difficult task for EC politicians to fully and unconditionally hand over control of the ERC to scientists, yet at the same time secure the enormous funds necessary to make the ERC successful in a global context in the years to come.

Naturally, universities will also play critical roles in paving the way for Europe to become a competitive player again. In addition to having state-of-the-art infrastructures for research, universities must train countless brilliant, dedicated and motivated, simply the best scientists in many fields just to satisfy the ever-increasing demand for researchers.

But how can we motivate today’s high school generation kids to become scientists when many countries, and often even their political decision makers, do not really value basic science except for some infrequent media hypes? How can we as scientific community convince governments, the EC commission and national funding bodies that time is slowly running out? How can one accomplish the integration of Eastern countries when little or no infrastructures are locally available, not even speaking about the costs to establish new research institutions?

In fact, many Eastern countries have experienced almost a stand-still in science in recent decades due to political turmoil, instability, mismanagement, and in most cases simply a complete lack of money. Defragmentation strategies by the European commission have not worked so far due to ill-defined concepts or artificial and inefficient networking strategies. Young scientists bring in motivation and hands but they NEED perspectives, opportunities as well as modern infrastructures. Hence, a joint EUROPEAN research agenda covering both applied and basic research funding, as well as training and education seems the only feasible solution. Although this appears out of reach for the moment, it is nevertheless mandatory for Europe to realize the need and gradually work it out. The continuing European brain-drain is the direct consequence of fragmentation, a lack of vision and limited opportunities. However, the good news is that a braindrain can easily be converted into a brain-gain, since opportunities (i.e. sufficient funding) will keep European students in Europe, but at the same time draw scientists from all over the world to Europe.

Scientific societies will also play important roles in reshaping European science. For instance, a major focus of FEBS has been postgraduate training of young scientists across Europe. FEBS provides research fellowships and travel grants to support student attendance at meetings, conferences or advanced lecture and practical courses. Several thousand students take advantage of FEBS’ support

every year. Of course, integrating young scientists from the “new” countries into the highly competitive Western European research landscape has been a major aim and yet very difficult to achieve. Hence, FEBS has to step up these efforts, since many more Eastern European scientists must reach qualification levels enabling them to start and run independent research groups. FEBS must pick up the words of the European commission promising more money for young scientists. Therefore, in addition to FEBS’ charity funds, we should also receive substantial support from future EC framework programmes to boost our invaluable efforts in mobility and networking. FEBS should also seek and establish strategic alliances with institutions such as EMBO or ESF to create additional synergies. This way, FEBS, EMBO and ESF may gain a stronger voice and possibly aid decision-making in setting research policies. In fact, today FEBS is in a historic position to play a crucial role in this process, since FEBS is perhaps the only organization with established and reliable networks in Eastern European countries.

No question, the devil is always in the details and FEBS will face difficulties and drawbacks, as success in the past never guarantees the same in the future. However, FEBS will prevail, since we shall act as a modern and flexible society, with crystal clear definitions of excellence and transparent decision-making processes. The FEBS Advanced Courses Committee is certainly ready to face the challenges ahead, because the road map is simple. We have to provide chances for as many as possible, but support only the gifted, particularly students whose thinking is not fenced by borders in their heads when talking science in EUROPE. The downstream benefit of removing borders is a greatly facilitated spreading of excellence. Thus, mobility is a key buzz-word, but so is building confidence in young scientists. Only well-trained, mobility-oriented and open-minded researchers can create opportunities for themselves, as well as for Europe to eventually become THE top knowledge-based society in the world as laid down in the Lisbon declaration. Europe simply cannot afford to miss out on these chances, because we have got an incredibly large pool of highly talented students. No doubt it will take many years, but the FEBS Advanced Course Committee is ready to contribute its part in building the next generation of young European scientists. (FEBS News November 2005)

#### 8.2.6.4 Science Policy – Working Together to Shape Our Future

*By Luc Van Dyck Secretary, Initiative for Science in Europe (ISE), and Executive Coordinator, European Life Science Sciences Forum (ELSF).*

In Europe, science policies and programmes are the result of a complex interplay between national and European decision-making. For instance, funding stem cell research at a European level is subject to a moratorium because it is prohibited in some member states, whilst an EU directive on research animal welfare is imposed on national legislations.

The division of work between national and European level should be based on the principle of subsidiarity, whereby the EU would get involved only if it brings added value to the national level. Interpreting this principle, however, is not trivial. Until the recent proposal to establish a European Research Council (ERC), basic

research, for instance, was considered a national scope, similar to higher education. On the other hand, national programmes and priorities are often selected on the model of the EU Framework Programme.

Scientists should engage themselves in the science policy process both at a national and European level because it determines their career and future. This mantra has been repeated very often, but with limited success. Very understandably so, for without a dedicated instrument to structure and convey their message, it is very difficult for individual scientists to get involved.

This is why FEBS, in conjunction with EMBL and EMBO, in 2000 established the European Life Sciences Forum (ELSF), a platform of scientific organizations meant to become the voice of the life scientists' community in the policy arena. But a structure without agenda is useless, and defining an agenda common to life sciences organizations turned out to be extremely difficult. The breakthrough came with the debate on the ERC, an instrument to fund basic research on a bottom-up basis at a European level. The ERC is now about to be established: An executive agency will be created by the EC and funding will be provided by the EU budget. Most importantly, scientific leadership will be in the hands of a council composed of prominent practicing scientists. The lobbying of the scientific community has paid off. Undoubtedly, ELSF has played a pivotal role in this success, alone initially, then by catalysing the involvement of European organisations in all disciplines under the flagship of the Initiative for Science in Europe (ISE).

Several lessons can be learnt from this:

1. Visionary scientific leaders must provide the initial impetus and long-term commitment.
2. A professional structure with dedicated staff must be implemented to coordinate and carry out the actions, which implies that financial means must be made available (it is a good investment for the future, as shown by the creation of the ERC).
3. Being truly representative, both in term of number of scientists/organizations and legitimacy, of the scientific community is essential to be influential.
4. The agenda must be relevant to all partners (specialized issues should be dealt with by specific organisations), timely and realistic.

Does it mean that individual scientists are useless in this process? Certainly not! As organizations such as ELSF/ISE work on behalf of the scientific community, scientists must provide input and endorse their initiatives. Engaged scientists can also provide useful contacts and convey the message at a local, national and European level. Finally, and most importantly, senior scientists must play a key role in educating and raising awareness on science policy issues amongst the younger generation. ELSF and ISE have become a very useful tool for the scientific community and a recognized partner for the Commission and Members of the Parliament. On these premises, ELSF is now preparing for the next crusade: The development of research infrastructures and their crucial role in the future of the life sciences.

ELSF and ISE have become a very useful tool for the scientific community and a recognized partner for the Commission and Members of the Parliament. On these premises, ELSF is now preparing for the next crusade: The development of research infrastructures and their crucial role in the future of the life sciences. (FEBS News 2006/1)

## 8.2.7

### The European Research Area (ERA)

#### 8.2.7.1 FEBS Science and Society Committee: Debating Funding

One area of interest of the FEBS Science and Society Committee is that of European science funding policies, particularly as the European Union's 7th Framework Programme enters its final stages and the start of the 8th Framework Programme, in 2014, draws closer. At the Science and Society Committee's meeting from 3rd to 4th November 2011 in Barcelona, Spain, Dr Lars Rask from the Swedish Foundation for Strategic Research presented his personal views on how to strengthen the EU Framework Programmes, mainly based on discussions within the Swedish academic research community; the principal points from his talk are presented here. (FEBS News February 2012)

#### 8.2.7.2 What lessons can be drawn from the 7th Framework Programme to optimize its successor?

*Dr Lars Rask Executive Director of the Swedish Foundation for Strategic Research Member, FEBS Science and Society Committee*

The 7th Framework Programme for research and technological development (FP7) is the European Union's main instrument for funding research in Europe in the years 2007–2013. This programme, like its predecessors, was developed after extensive consultations with business sector communities, the scientific community, and research and policy-making institutions within EU countries. It has a considerably larger budget than the 6th Framework Programme and also some noticeable differences compared with the latter – the most conspicuous being the creation of the European Research Council as an important part of the programme. This article summarizes observations on FP7 from the perspective of scientists mainly involved in basic research, and, as well as commenting on strengths, makes suggestions to amend some of the perceived problems.

***The European Research Council*** The European Research Council (ERC) was created in 2006 to be the flagship of the 'Ideas' part of FP7. Its mission was to support the highest quality research in Europe through competitive funding and to support investigator-driven frontier research. The term 'frontier research' should be interpreted as research activities 'directed towards fundamental advances at and beyond the frontier of knowledge'. Thereby, the ERC expects that its support should result in new and unpredictable scientific and technological discoveries. The ERC targets scientists already active in Europe as well as scientists willing to move to Europe. It is clear that European scientists regard the

ERC to be a success story. There are several reasons for this. The ERC supports research within all areas of science, scholarship and engineering. It emphasizes the quality of the idea rather than the research area and it works in a truly 'bottom-up' process. At the same time, the ERC has the ambition to 'nurture science-based industry and to create a greater impetus for the establishment of research-based spin-offs' – goals shared by all European countries. The ERC programme portfolio is efficient by offering applications both to younger scientists ('Starting grants') and to their more experienced colleagues ('Advanced grants'). The newly introduced 'Synergy grants' to small groups of researchers nicely complement the individual-type grants. The fourth ERC funding scheme, called 'Proof of Concept', is open to researchers who have already been awarded an ERC grant. They can apply for additional funding to establish the innovation potential of ideas arising from their ERC-funded research projects. An equally important factor in the high regard European scientists has for the ERC is that its reviewing process is perceived to be fair, conscientious and effective. In addition, the ERC has a 'hands off' approach to grant management, something that facilitates the lives of both the grantees themselves and their host institutions. The ERC budget amounts to approximately 15% of the total budget for FP7 and has increased since the start of the programme: in 2007 it was €300 million, and in 2013, the last year of FP7, it will reach €1700 million. Investigator driven 'frontier research', within the framework of activities commonly understood as 'basic research', is a key driver of wealth and social progress, as it opens new opportunities for scientific and technological advance, and is instrumental in producing new knowledge leading to future applications and markets. The very high quality of the research projects funded within ERC programmes and the possibilities of obtaining ground-breaking results of large importance for new industry argue for the budget for the ERC within the 8th Framework Programme to be significantly increased, maybe to reach 25% of the total budget for that programme.

**Collaborative research** The bulk of EU research funding in FP7 is going to collaborative research within a programme with the demanding title 'European Excellence'. Its objectives are to establish excellent research projects and networks able to attract researchers and investments from the entire world. Participation in this type of programme is often regarded by scientists as a good way to achieve sustained international collaborations with important actors within many research areas. Other potential positive outcomes might be increased mobility of researchers, facilitated recruitment of young researchers, access to resources that allow new and large initiatives that few countries can finance on their own, and possibilities for developing and improving commercial and non-commercial applications to society. Nevertheless, university researchers experience several problems with the collaborative research programmes, and the main ones are summarized here. First, the process for the selection of research areas to be announced in calls for application is seen as partly non-transparent. Distrust of scientists towards the selection of areas and writing of programme texts for the 'Collaborative research' programmes is potentially dangerous since it lowers the credibility of that idea, which in itself is good. Most university scientists question

the influence of the large business sector organizations and their lobbyists on the selection of areas for calls and even on the announcement texts themselves. Their influence is too strong compared with that of university researchers, since business organizations are much more professional in their ways to influence the commission than groups of scientists, national research funding organizations and the like. Maybe it would be possible to use a more transparent process for the selection of research areas and for the writing of the texts for calls for proposals based, for example, on consultations with the national research councils. Second, the application procedures seem unnecessarily complex. Scientists usually have no difficulties describing the scientific part of the applications, but often need help with the writing of the 'soft' sections explaining how the EU benefits from their project or describing project management, or their university and department. Accordingly, many universities offer their scientists special templates with examples on how such sections should be written. Other universities engage consultants, who compose such sections. This situation must be regarded as undesirable. European scientists are not stupid. It is imperative that the format of the applications is simplified to allow trained scientists to write the entire applications on their own, without the need to hire well-paid consultants. Also, the project reports to the commission ought to be simplified. Third, many scientists also find that the timeframes during which the calls for proposals are open are too short. Research groups that already have an established European network and ongoing national projects can cope with that, in contrast to groups that have a new project idea or young scientists who have not yet built a contact network. This might lead to a conservation of the research financed. Some researchers find that the areas open in the calls for proposals are too specific and narrow, such that their fields of interests are outside the calls. Within rapidly expanding fields like biotechnology, calls sometimes target specific topics that already are regarded as out of date before the call is closed. Fourth, researchers often criticize grant evaluation processes in general, and, indeed, the decision process for funding collaborative research projects is sometimes found to be unclear. Some researchers maintain that established contacts might be of importance for success in these programmes. If so, this is certainly unacceptable. Anyhow, there is room for improvements regarding the evaluation process. The commission should operate in line with the procedures used by the ERC for selection of evaluators, setting up large databases of evaluators from both academy and industry who are known to be highly competent within their specific areas. Under no circumstances should evaluators who volunteer to do the job be engaged.

***European Strategy Forum on Research Infrastructures*** The overall objective of the 'Research Infrastructures' part of the FP7 Capacities programme is to optimize the use and development of the best research infrastructures in Europe. Furthermore, it aims to help to create new research infrastructures of pan-European interest in all fields of science and technology. Given the importance of infrastructure development in Europe, it is encouraging that most scientists seem to have strong confidence in the roadmaps produced by the European Strategy Forum on Research Infrastructures (ESFRI) and also in the research strategies published by



it. That is probably due to the fact that the national representatives in ESFRI are well anchored in the national research councils and that they keep the national research communities well informed about ongoing priorities. In several countries, the ESFRI roadmap has been taken into account in the development of the national roadmap for infrastructure. It seems most efficient to limit the responsibility of ESFRI to heavy equipment facilities, such as accelerators, astronomic observatories and so on, and to leave the discussions on other facilities such as national health registers and biobanks to other organizations, since health registers and biobanks containing human blood or tissue samples in most countries are under strict legal regulations that are more or less specific for the different European countries.

***In conclusion*** One of the strongest political arguments for the framework programmes is their importance to strengthen European competitiveness both economically and scientifically. The programmes should function as an incitement for increased collaborations between scientists from the various European countries. It is therefore important to facilitate active participation of the scientific community in the formulation of calls for proposals within the programmes, to simplify application procedures and to develop transparent evaluation procedures of the resulting applications. Only then will the large sums of money spent within the framework programmes lead to research results of the highest international standard. The procedures used by the ERC, which definitely deserves a higher budget, can serve as good examples. (FEBS News 2012/1)

#### 8.2.7.3 News from the Initiative for Science in Europe 'Strengthening the European Research Area' Barcelona, Spain; 3–4 May 2012

*Wolfgang Eppenschwandtner Executive Coordinator, ISE*



**Figure 8.2.1** Octavio Quintana-Trias, European Commission; and Helga Nowotny, President of the European Research Council.

Scientific activity has always been international. More than a third of all scientific publications in the EU have authors from at least two different countries. Research

funding, however, does not follow – over 90% of research funding is still national. To develop solutions for cross-border research funding, the Initiative for Science in Europe (ISE) therefore recently welcomed high-level representatives from EU member states, the European Commission and the European Parliament for discussions with scientists at a conference in Barcelona entitled ‘Strengthening the European Research Area: What does science need to flourish?’ ISE unites European learned societies and scientific organizations, including *FEBS*, to advocate the involvement of scientists in European science policy. To achieve most impact in Europe, a stronger role for Europe-wide funding schemes seems to be the way forward, where the best ideas compete for funding and there is no penalty for projects involving research teams from different countries. The European Research Council (ERC) shows that a central approach can work in a science-driven and efficient way. However, we have to face political reality: the EU-budget will not be increased substantially. Therefore, a different approach is rapidly gaining importance: coordination of national research money. For that purpose, more and more structures, multilateral funding schemes and instruments are evolving. As the complexity of the system increases, it is getting more difficult for the individual researcher to keep up to date on the calls, funding rules and regulations. One of the recommendations of the conference was therefore to maintain a tool that lists the calls suitable for applications from individuals. Another key conclusion of the conference was to ensure a strong role of scientists in the establishment of the research agenda (e.g. through structures such as Joint Programming Initiatives). A full report of the conference conclusions will be available on the ISE website shortly. (FEBS News June 2012)

### 8.3

#### FEBS Committee on Science and Society

##### 8.3.1

##### Initiatives and Objectives



*Federico Mayor*

The idea behind establishing the Working Group on Science and Society was to bridge the gap between scientists and society so that FEBS can identify and deal with those issues that arise as a result of research developments. People on the street do not understand the world of science; they act on emotions rather than on knowledge. Therefore, it is important to dedicate resources to educate the public as well as politicians. Council agreed and the committee was set up; Professor *Federico Mayor*, former Director General of UNESCO, agreed to be the chairman.

The 41st FEBS Council in Lisbon, July 3, 2001 adopted the terms of reference for the committee, which are:

Table 8.3.1 Members of the Science and Society Committee.

Member and Year	Country	Elected	Start	End
<b>2001</b>				
Federico Mayor, Chairman	Spain	Birmingham &(2000)	1.1.2001	31.12.2003
Georg Glaser	Germany	Birmingham &(2000)	1.1.2001	1.3.2004
Noëlle Lenoir	France	Birmingham &(2000)	1.1.2001	1.3.2004
Giorgio Semenza	Switzerland	Birmingham &(2000)	1.1.2001	1.3.2004
Alexandre Quintanilha	Portugal	Birmingham &(2000)	1.1.2001	1.3.2004
<b>2002</b>				
Federico Mayor, Chairman	Spain			
Noëlle Lenoir	France	Birmingham &(2000)	1.1.2001	31.12.2003
Georg Glaser	Germany	Birmingham &(2000)	1.1.2001	1.3.2004
Giorgio Semenza	Switzerland	Birmingham &(2000)	1.1.2001	1.3.2004
Alexandre Quintanilha	Portugal	Birmingham &(2000)	1.1.2001	1.3.2004
<b>2003</b>				
Federico Mayor, Chairman	Spain	Birmingham &(2000)	1.1.2001	31.12.2003
Georg Glaser	Germany	Birmingham &(2000)	1.1.2001	1.3.2004
Noëlle Lenoir	France	Birmingham &(2000)	1.1.2001	1.3.2004
Giorgio Semenza	Switzerland	Birmingham &(2000)	1.1.2001	1.3.2004
Alexandre Quintanilha	Portugal	Birmingham &(2000)	1.1.2001	1.3.2004
<b>2004</b>				
Federico Mayor, Chairman	Spain	Brussels &(2003)	1.1.2004	31.12.2006
Georg Glaser	Germany	Lisbon &(2001)	1.1.2002	31.12.2005
Giorgio Semenza	Switzerland	Lisbon &(2001)	1.1.2002	31.12.2005
Alexandre Quintanilha	Portugal	Lisbon &(2001)	1.1.2002	31.12.2005
<b>2005</b>				
Federico Mayor, Chairman	Spain	Brussels &(2003)	1.1.2004	31.12.2006
Georg Glaser	Germany	Lisbon &(2001)	1.1.2002	31.12.2005
Noëlle Lenoir	France	Lisbon &(2001)	1.1.2002	31.12.2005
Giorgio Semenza	Switzerland	Lisbon &(2001)	1.1.2002	31.12.2005
Alexandre Quintanilha	Portugal	Lisbon &(2001)	1.1.2002	31.12.2005
<b>2006</b>				
Federico Mayor, Chairman	Spain	Brussels &(2003)	01 01 04	31 12 06
Tuula Kallunki	Denmark	Budapest &(2005)	01 01 06	31 12 09
Elisabeth Waigmann	Austria	Budapest &(2005)	01 01 06	31 12 09
Georg Glaser – co-opted Budapest 2005	Germany	Budapest &(2005)	01 01 06	31 12 09
Giorgio Semenza – co-opted Budapest 2005	Switzerland	Budapest &(2005)	01 01 06	31 12 09

Table 8.3.1 (Continued)

Member and Year	Country	Elected	Start	End
<b>2007</b>				
Federico Mayor, Chairman	Spain	Brussels &(2003)	01 01 04	31 12 07
Tuula Kallunki	Denmark	Budapest &(2005)	01 01 06	31 12 09
Elisabeth Waigmann	Austria	Budapest &(2005)	01 01 06	31 12 09
Georg Glaser	Germany	Budapest &(2005)	01 01 06	31 12 09
GiorgioSemenza	Switzerland	Budapest &(2005)	01 01 06	31 12 09
<b>2008</b>				
Giorgio Semenza, Chairman	Switzerland	Vienna &(2007)	01 01 08	31 12 10
Tuula Kallunki	Denmark	Budapest &(2005)	01 01 06	31 12 09
Elisabeth Waigmann	Austria	Budapest &(2005)	01 01 06	31 12 09
Georg Glaser	Germany	Budapest &(2005)	01 01 06	31 12 09
<b>2009</b>				
Giorgio Semenza, Chairperson	Switzerland	Vienna &(2007)	01 01 08	31 12 10
Tuula Kallunki	Denmark	Budapest &(2005)	01 01 06	31 12 09
Elisabeth Waigmann	Austria	Budapest &(2005)	01 01 06	31 12 09
Joan Guinovart	Spain	Athens &(2008)	01 01 09	31 12 12
Lars Rask	Sweden	Athens &(2008)	01 01 09	31 12 12
<b>2010</b>				
Giorgio Semenza, Chairperson	Switzerland	Vienna &(2007)	01 01 08	31 12 10
Jacques H. Weil	France	Prague &(2009)	01 01 10	31 12 13
Marta Agostinho	Portugal	Prague &(2009)	01 01 10	31 12 13
Lars Rask	Sweden	Athens &(2008)	01 01 09	31 12 12
Joan Guinovart	Spain	Athens &(2008)	01 01 09	31 12 12
<b>2011</b>				
Jacques H. Weil, Chairperson	France	Gothenburg &(2010)	01 01 11	31 12 13
Marta Agostinho	Portugal	Prague &(2009)	01 01 10	31 12 13
Lars Rask	Sweden	Athens &(2008)	01 01 09	31 12 12
Joan Guinovart	Spain	Athens &(2008)	01 01 09	31 12 12
<b>2012</b>				
Jacques H. Weil, Chairperson	France	Gothenburg &(2010)	01 01 11	31 12 13
Marta Agostinho	Portugal	Prague &(2009)	01 01 10	31 12 13
Lars Rask	Sweden	Athens &(2008)	01 01 09	31 12 12
Joan Guinovart	Spain	Athens &(2008)	01 01 09	31 12 12
<b>2013</b>				
Jacques H. Weil, Chairperson	France	Gothenburg &(2010)	01 01 11	31 12 13
Marta Agostinho	Portugal	Prague &(2009)	01 01 10	31 12 13
Jerzy Duszyński	Poland	Seville &(2012)	01 01 13	01 01 16
Emmanuel Fragoulis	Greece	Seville &(2012)	01 01 13	01 01 16

1. To discuss and advise the Executive Committee on problems arising or foreseen from advancements in science.
2. To participate in public debates and make recommendations on behalf of FEBS.
3. To interact with other organisations engaged in similar activities.
4. To organize a symposium or colloquium at the annual FEBS Meetings.

Four members of the committee were appointed in Lisbon for a period of 4 years starting January 1, 2002. These are N. Lenoir (France), G. Glaser (Germany), G. Semenza (Switzerland) and A. Quintanilla (Portugal), the Secretary General and the Treasurer of FEBS being *ex officio* members.

At the 27th FEBS Meeting in Lisbon a session on “Impact of Biochemistry on Society” took place; and at the 28th Meeting in Istanbul, there were 3 sessions on “Science, Society and the Media”, “Ethics of Modern Genetics” and “Patent Rights in Biochemistry and Molecular Biology”.

### 8.3.2

#### Activities of the Science and Society Committee

##### 8.3.2.1 Report from Warsaw Congress 2004

A Workshop on “The Use of Stem Cells in Research and Future Medical Practice” arranged by FEBS Working group on Science and Society was held at the Warsaw FEBS Congress, 2004.

##### 8.3.2.2 Report of the Science and Society Committee, Vienna 2007

FEBS/EMBO Science & Society Workshops Sunday 8th July

Topics included: ‘Aging of the Brain’ (Chair: Elizabeth Waigmann; Speakers: Konrad Beyreuther and Michal Novak) and an ELSF/ERC/FP7 Policy Workshop.

Science & Society Lectures were also embedded in scientific workshops:

*Lipids: From diseases to aging*

Chair: Georg Wick; Speakers: Elisabeth Steinhagen-Thiessen, Rudolf Zechner, and Joseph Witztum

*Bioinformatics: Evolution and Databases*

Chair: Arndt von Haeseler; Speakers: Doron Lancet, William Martin, David Kreil & Philip Khaitovich

*Chemogenomics & Drug Discovery*

Chair: Geherd Ecker; Speakers: Hugo Kubinyi, Adriano Henney, Jordi Mestres

Science and Society in Public Places

The Science and Society Committee of FEBS organised together with ‘dialog gen-technik and media partners’ two round table discussions, themed “*Re-emerging diseases – a global threat?*” (at Vienna Natural History Museum; discussion leader: Birgit Dalheimer, a member of the Austrian broadcasting cooperation, ORF; panellists: Douglas Holtzman, Bill & Melinda Gates Foundation; Alexander von Gabain, Intercell AG; Stefan H. E. Kaufmann, MPI for Infection Biology;) and “*Stem cells in and for Society*” (at Vienna, Museum Moderner Kunst; Pavel

Kovarik, MFPL; Mary Maxon, California Institute for Regenerative Medicine, Meinrad Busslinger, IMP, Christine Mannhalter, Bioethikkommission für den Österreichischen Bundeskanzler, Georg Weitzer, MFPL). The round table discussion “*Stem cells in and for Society*” addresses the societal implications of this promising, but controversial field of research.

These events were part of the new format “*Science and Society in Public Places*” which aims to bring together leading scientists, politicians, science policy makers, opinion leaders and media people to discuss hot topics”.

### 8.3.2.3 Report of the Science and Society Committee, Athens 2008

#### 8.3.2.3.1 Public Support of Biosciences in Europe

*By Giorgio Semenza, Chair of the FEBS Science & Society Committee*

For the FEBS Meeting in Athens, the Science & Society Committee has organised a session, which we believe is of general interest and of the highest quality. Its subject is the Public Support of Biosciences in Europe. The quality of the speakers is obvious to anyone: F.C. Kafatos (“Support for frontier research in biosciences in Europe: The perspective of the ERC before support”); J. Guinovart (“Mind the gap”; see my comment below); F. Mayor-Zaragoza (“Biosciences in the European Community”). A commentary for your benefit: The title of Guinovart’s talk is meant to puzzle the reader’s mind. Joan has succeeded in mobilising the Spanish political parties, and has had them sign a “Pact for Science” BEFORE the elections. Even if (naturally) the promises were not totally fulfilled afterwards, positive steps were taken. Moreover, he has also succeeded in making a kind of a union among the Spanish scientific societies and sensible politicians should now take this electoral force into their planning. In a few other countries scientists also have been active in lobbying – but I have the impression that, in general, they have achieved less than the Spaniards.

### 8.3.2.4 Report of the Science and Society Committee, Prague 2009

#### 8.3.2.4.1 A few words of introduction and thanks

*By Prof. Giorgio Semenza, Chair, FEBS Science and Society Committee*

Since its inception, under the guidance of its chairman, Prof. Federico Mayor, the FEBS’ Science and Society Committee organize at each yearly FEBS Congress a session on subject(s) at the borderline between biosciences and society. Following this tradition, we have chosen for the 2009 FEBS Congress an area in which our Czech colleagues are particularly active: stem cell research. Specifically, our session on “Ethics and Legislations in Stem Cell Research” will not overlap what is presented in sessions devoted to the biology of stem cells, but rather complement them. We hope that we can duplicate the success which our sessions have harvested in previous years. I wish to thank the active cooperation of the Czech colleagues who organized all the rest of the FEBS congress; that of the elected members of our own committee, i.e., J. Guinovart, T. Kallunki, L. Rask and E. Waigmann and that of the ex-officio members, i.e. I. Pecht, I. Mowbray and A.

Szewczyk. T. Kallunki and E. Waigmann will unfortunately phase out of our committee at the end of 2009. I wish to thank them most heartily for their engagement and successful work through the past years.

**The ranking of values as a basis for ethical decision making in ethical controversies: the case of stem cell research**

*Göran Hermerén, Medical ethics, Biomedical Centre, Lund University, Sweden*

What is the basis of the principles used to support decisions on ethically contested issues? In my presentation I will argue that these principles can be based on values of various kind, and perhaps ultimately have to be based on such values. The challenge is then not only to clarify the meaning and intended field of application of these values, but also to rank them in order of importance. This approach to decision-making raises problems of how to understand the concept of value, about the (semantic, logical and causal) relations between values and the possibility of trade-offs between values – as well as whether some values are non-negotiable and how the ranking orders identified are to be established and interpreted. I will comment briefly on some of these problems. To illustrate this approach focussing on ranking orders of values I will refer to the on-going debate on different kinds of stem cell research. Moreover, if basic values are an important part of the cement that keeps a culture together – identifies “us” versus “them” – these raise a number of important issues in the age of globalization about European identity and European values, which I will also comment on. I shall suggest that there is a family of widely accepted ranking orders in Europe, in which certain values rank high (though not always equally high), and which differ in some way from ranking orders outside Europe. High-ranking values in Europe include human dignity, solidarity, transparency, equity and equality as well as social justice.

**Import of embryonic stem cell lines**

*Dietmar Mieth, Katholisch-Theologische Fakultät, Univ. Tübingen, Germany*

The question of import of embryonic stem lines is related to the situation of countries in which, like in Germany, research on supernumerary embryos is forbidden or in which the scientific resources for the development of embryonic stem cell lines are not yet existent. On the other side there may be promising experiments with adult stem cells or with animal models which cannot be meaningfully continued – like the concerned scientists say – if embryonic stem cell lines cannot be used. The German solution of this problem in the Embryonic Stem Cell Law of 2003 was that as before in the Embryo Protection Law of 1990, Research on embryos and on embryonic stem cells remains forbidden. There is only one exception under great restrictions: the import and the following research on embryonic stem cell lines (only lines!). The restrictions are the following: no embryonic stem cell lines which are created after the 1. January 2002, so that no embryo is used for research in the intention of this import, no alternative for the planned step of research, high ranking medical purposes, strict application of the restricting laws of the country where the lines are coming from, no prohibitive regulations existing of the German Constitution, obligatory counselling by a national ethics committee (instituted for this cases: 5 scientist or physicians, 4 ethicists; opinion not binding the executive body!). This regulation was changed in 2007 with a new deadline for the creation of embryonic stem cell lines. An ethical discussion of this solution has different aspects to take into account. On one hand the restriction on existing stem cell lines after a fixed date, combined with the added restrictions, may formally be in correspondence to the embryo protection law in which this case was not foreseen. On the other hand the symbolic effect of the new law may be that the acceptance of creating supernumerary embryos and research on them may increase against the intention of the embryo protection law. The coherence to this law will be seen different, depending from the ethical presuppositions. The solution of restricted import without accepting research on supernumerary embryos will remain under discussion, also for scientific objections which fear that the deadline for the import will diminish the “quality” of the imported stem cell lines. In my contribution I will continue this discussion under the main aspect of Human Dignity.

### **Ethics and Legislations on Stem Cell Research: Examples of European Legislations on Stem Cell Research**

*Christiane Druml, Ethics Committee of the Medical University of Vienna, Austria*

Research is conducted internationally in a quest for the discovery and the development of a source of tissues and organs to make it possible to advance regenerative medicine. The research on stem cells raises high expectations in this field as stem cells have the potential to differentiate into different cells and tissues. Stem cell research still involves basic research. While research on adult stem cells, umbilical stem cells or foetal stem cells is conducted without major ethical problems, the research on embryonic stem cells is ethically controversial. The situation within the European Member States shows that there is a great degree of variation of legal systems and regulations between the single EU member states ranging from a liberal permissive position to a very restrictive position. There are divergent views of the moral legitimacy on research on human embryos and on human embryonic stem cells within Europe as well as within the single European member states. Austria has no specific law for research on hESC, except implicitly in legislation concerning reproductive medicine. Austria's position can be judged as rather restrictive as it has voted against hESC research during Council decision for the research frameworks. The Austrian Bioethics Commission has so far issued an opinion in 2002 on stem cell research in the context of the EU FP6 for research. This opinion is not unanimous but includes two diverging positions. Currently the Austrian Bioethics Commission is discussing the issue of stem cell research again, and has issued an opinion regarding cord blood banks in May 2008.

#### **Ethics of stem cells in the Czech Republic**

*Eva Syková, Institute of Experimental Medicine, Academy of Sciences of the Czech Republic*

Human embryonic stem cell research (hESC) in the Czech Republic represents a unique combination of research success and an advanced regulatory framework. Already seven hESC lines have been established in the Czech Republic. The main features of hESC governance in the Czech Republic were established by national legislation based on European legislation. The law no. 227/2006 Coll., dealing with human embryonic stem cell research and related processes and changes to the related law, came into effect on the 1st of June 2006. The law defines the scope of research on human embryonic stem cells, which can be obtained only from so-called redundant human embryos. These embryos are not suitable for assisted reproduction use, meaning that they are designated for death. The law proposal also regulates many processes related to research, particularly the import, export, transport and registration of human embryonic stem cell lines. The law proposal has a definite anti-corruption character, due to in-built mechanisms guarding against the misuse of research and the manipulation of embryos in contradiction with the law. The law specifies that research can not lead to the manipulation of embryos in such a way as to lead to the creation of a new individual, thus so-called reproductive cloning is forbidden. The law even establishes a new criminal act – the illegal handling of a human embryo and the human genome. Human embryonic stem cell research, conducted according to the conditions cited in the law, brings hope for future applications in human health protection, especially for serious and, until now, untreatable diseases.

#### **8.3.2.5 Report of the Science and Society Committee, Gothenburg 2010**

Sessions organised by the FEBS Science and Society Committee: *Giorgio Semenza (Chair), Marta Agostinho, Joan Guinovart, Lars Rask, Jacques-Henry Weil.*

#### **Nature's way to exploit dihydrogen as an alternative fuel**

*Bärbel Friedrich Institute for Biology, Humboldt University Berlin, Chausseestrasse 117, D-10 115 Berlin*



Hydrogen, an attractive microbial energy source, is released into the anoxic environment by fermentation where it gets immediately consumed by anaerobic organisms. Both hydrogen evolution and hydrogen consumption are catalyzed by metal-cofactor containing hydrogenases. In order to use these catalysts for efficient production of sunlight-driven hydrogen from water, a number of requirements have to be met. Particular challenges are: (i) tight coupling of the electron flow between the algal or cyanobacterial photosystems and the hydrogenase protein and (ii) tolerance of the hydrogenase towards oxygen that unavoidably escapes during the water splitting process. The majority of hydrogenases are sensitive to oxygen and either irreversibly damaged or inactivated by oxygen. A few [NiFe] hydrogenases, resident in aerobic hydrogen-oxidizers, tolerate ambient oxygen during catalysis. The molecular basis for oxygen tolerance is diverse and may depend on the access of oxygen to the active site, on the interplay between various metal cofactors, their protein environment and their redox potentials. Insights into these mechanisms open new strategies for genetic engineering of an optimal hydrogenase catalyst suitable for biotechnological applications. Some account of this work has been published in a recent review article.

References: O. Lenz, M. Ludwig, T. Schubert, I. Bürstel, S. Ganskow, T. Goris, A. Schwarze, B. Friedrich. H<sub>2</sub> conversion in the presence of O<sub>2</sub> as performed by the membrane-bound [NiFe]-hydrogenase of *Ralstonia eutropha*. *ChemPhysChem* (2010) DOI:10.1002/cphc.200901002; M. J. Lukey et al. *J. Biol. Chem.* 285, 3928–3938 (2010). A Kinetic and Thermodynamic Understanding of O<sub>2</sub> Tolerance in [NiFe]-Hydrogenases; J. A. Cracknell et al. *Proc. Natl. Acad. Sci. USA* 106, 20 681–20 686 (2009).

#### A Chemist's View of the Challenges for Biohydrogen

*Fraser Armstrong, Department of Chemistry, University of Oxford, Oxford*

The popular notion of a future 'hydrogen economy' is much criticised but there are some important positive factors. Despite its low energy density H<sub>2</sub> is an immediate product of splitting (energising) water - an abundant resource covering most of our planet. Furthermore, the fact that H<sub>2</sub> is a light gas rather than a liquid fuel means that it can be continuously removed during photosynthetic (or electrochemical) production; its combustion may also be safer than liquid fuels. Hydrogen is the essential raw material for numerous industrial processes, including ammonia synthesis (Haber) and hydrocarbon fuel production (Fischer-Tropsch). Photosynthetic microorganisms are being viewed for possible development in continuous H<sub>2</sub> production using sunlight. The metalloenzymes known as hydrogenases which are responsible for catalysing H<sub>2</sub> production in microorganisms are highly active when measured in vitro, but they are sensitive to O<sub>2</sub>. Although headway has been made in understanding the battle between H<sub>2</sub> and O<sub>2</sub>, the hydrogenases so far established to be most tolerant to O<sub>2</sub> tend to be H<sub>2</sub> oxidisers rather than H<sub>2</sub> producers. Biohydrogen is thus linked to chemistry at the atomic level through the need to understand the mechanism of H<sub>2</sub> cycling and identify O<sub>2</sub>-damage-limitation features built into the enzyme during evolution - features that could be enhanced by engineering. This lecture will discuss the prospects for engineering enzymes for producing H<sub>2</sub> in the presence of O<sub>2</sub>.

References: Electrochemical Kinetic Investigations of the Reactions of [FeFe]-hydrogenases with Carbon Monoxide and Oxygen. G. Goldet et al. *J. Amer. Chem. Soc.* 131, 14 979–14 989 (2009); How Oxygen attacks [FeFe] Hydrogenases from photosynthetic Organisms. S. Stripp et al. *Proc. Natl. Acad. Sci. USA* 106, 17 331–17 336 (2009); How *E. coli* is equipped to Oxidize Hydrogen under Different Redox Conditions M. J. Lukey et al. *J. Biol. Chem.* 285, 3928–3938 (2010); A Kinetic and Thermodynamic Understanding of O<sub>2</sub> Tolerance in [NiFe]-Hydrogenases. J. A. Cracknell et al. *Proc. Natl. Acad. Sci. USA* 106, 20 681–20 686 (2009).

#### Accumulation of Triglycerides in Green Microalgae: A Potential Source for Biodiesel

*Uri Pick, Department of Biological Chemistry, The Weizmann Institute of Science, Rehovot Israel*

Microalgae are recognised as a promising future source for large-scale biodiesel production. Certain strains of microalgae accumulate large amounts of oil (mainly triglycerides, TG) that can be extracted and converted by a simple chemical process into biodiesel. Microalgae display very high growth rates and oil productivity surpassing all oil crop plants and they do not compete with agricultural lands or water resources. The major drawbacks for economical biodiesel production

from microalgae are partly technological, including the high cost of algae cultivation and processing, and partly biological, the difficulties in keeping stable cultures for extended periods, the poor state of knowledge about regulation of TG accumulation and the lack of efficient genetic tools to manipulate most oil accumulating algae species. On-going research in universities and commercial companies is aimed to improve biomass productivity and oil levels in microalgae by genetic manipulations that includes improving light utilization in dense cultures by decreasing the light harvesting antenna size, improvement of carbon assimilation at high CO<sub>2</sub> levels, up regulation of rate-limiting enzymes in TG biosynthesis, identification of the signaling mechanism that controls TG accumulation and development of herbicide-resistant lines to defeat contaminations. Our strategies to maximize oil productivity from microalgae are to utilize salt-resistant fastgrowing strains suitable for extended out-door cultivation, enhancement of TG biosynthesis by external metabolic intervention and attempts to convert starch accumulating into TG accumulating strains by genetic engineering.

#### **Understanding starch biosynthesis in plants: the potential to improve raw materials for bio-fuel production**

*Samuel C. Zeeman* Department of Biology, ETH Zurich, Switzerland

Starch is our primary source of nutrition and a key renewable resource used by industry (e.g. as a feedstock for bioethanol production). It is composed of branched and linear glucans with an architecture that allows the formation of insoluble, semi-crystalline granules. Understanding the metabolism of starch in plants gives us options for starch crop improvement by altering starch structure and properties, and by increasing yields. Much progress has been made by studying starch metabolism in model species such as *Arabidopsis thaliana*. In *Arabidopsis*, as in most plants, starch is a primary product of photosynthesis in leaves, where it is temporarily stored in chloroplasts for use during the night. Functional genomic studies have advanced our understanding of both starch synthesis and breakdown. Recent data are consistent with the idea that starch synthesis requires both synthetic and degradative enzymes to create the correct glucan structure to allow crystallization. A wealth of data from different systems shows that starch structure can be manipulated in a rational way by altering the complement of these enzymes. As a result, glucans with altered properties can be obtained (e.g. crystalline or soluble, the ease of hydrolysis to fermentable sugars), some of which may be better suited to biofuel production than wild-type starches. With this knowledge, it should be possible to improve starch crops through breeding and/or biotechnological modification to tailor them to the biofuel market.

#### **A brief discussion on bioethanol production**

*Em. Prof. Marc Van Montagu* Institute Plant Biotechnology for Developing Countries (IPBO), Gent University, Belgium

Transport and energy are vital to economic development. Poverty reduction cannot be achieved without drastically raising the energy use. The challenge is to make it affordable while avoiding intolerable environmental disruption. This requires a global effort in energy innovation in a wide-range of energy sources in which biofuels have huge potential to play an important role. Bioethanol accounts for 85% of total global biofuels production. However, sugar-derived ethanol has limited potential growth, due to restricted land availability, government policy, and competition with food/feed production. The production of biofuels must be renewable, sustainable, as well as technically and economically viable. Renewability corresponds to using lignocellulosic feedstocks as source of fermentable sugars, but the processes are still complex and costly, the main issue being the lack of efficient ligno-cellulolytic enzymes. A variety of organisms have evolved to take advantage of lignocellulose as nutrient source, including the free-living organisms and symbiotic animal–microbe consortia present in biomass-rich environments, many of which are difficult-to-culture microbes [1]. In this context it is important to stress the value of wide approaches such as metagenomics to assess the information encoded in the genome of such microorganisms to the development biofuel production systems. Plant biotechnology has much potential to burst cellulosic bioethanol production, including the improvement the crop quality to achieve higher biofuel yields, the increase of biomass yield per hectare while reducing the needs for production inputs, the reduction of losses from biotic and abiotic stresses, as well as the

expression of cellulases and hemicellulases in crop plants. The integration of biochemistry and molecular genetics can make the process of cellulosic ethanol production more environmentally friendly than first-generation biofuels. Still, the best of our scientific skills will not bring any benefit to our world if we are not able to communicate to society the potentials of this new science and particularly stress that refusing GM-technology will hold back efforts to alleviate poverty and hunger, to save biodiversity, and protect the environment.

Ref. 1 Rubin E. (2008) Genomics and cellulosic biofuels. *Nature* 454: 841–845  
(*FEBS News June 2010*)

### 8.3.2.6 Report of the Science and Society Committee, Turin 2011 FEBS Science & Society session: Genetic Diseases

*Jacques-Henry Weil (Chair), Marta Agostinho, Joan Guinovart and Lars Rask*

As the theme of the FEBS Congress 2011 is “Biochemistry for Tomorrow’s Medicine”, it was considered appropriate and timely to choose “Genetic Diseases” as the topic for the Science & Society session of the Congress. The session comprises four talks and took place on Tuesday 28th June, 13.00–15.00. There are a very large number of genetic diseases, and at least 4500 single-gene disorders are currently known, which result from mutations (such as point mutation, gene deletion, trinucleotide repeat expansion, chromosomal aberration) in an identified gene. There are still many genes responsible for genetic diseases that remain to be identified (this is being speeded up by introduction of whole-exome sequencing). Meanwhile, important progress has recently been made in diagnosis and, thanks notably to advances in comparative genomics, in the treatment of a number of genetic diseases.

The molecular diagnosis of many genetic diseases is now possible (postnatally, or prenatally in families at risk) and has even become routine in many European countries. As far as treatment is concerned, for a small but growing number of diseases, conventional drugs or methods such as protein (enzymes, coagulation factors, peptide hormones) replacement therapies exist that can much improve the condition of the patients. An ultimate goal would be the replacement of the defective gene, or at least the correction of the consequences of the gene defect, by introducing a correct version of the gene, in order to restore the missing biochemical and cellular function. While the concept of gene therapy appears simple, it has proven very difficult to put into practice successfully, and it is only recently that it has become possible for a still small number of genetic diseases. On the other hand, the development of models of many genetic diseases in the mouse or even in *Drosophila* has allowed the identification of unexpected pathomechanisms that are good targets for conventional drugs. In the Science & Society session examples will be given to illustrate the scientific and medical advances that have allowed the identification of the defective gene and its mutations, the understanding of the mechanisms by which the gene defect causes the alteration of a particular biochemical and cellular pathway, and the development of innovative and successful gene therapy or drug therapy approaches.

But in addition to these scientific and medical aspects, there are other considerations important to society – for instance, ethical, social and legal aspects. Early

diagnosis is a very important issue, including prenatal or even pre-implantation genetic diagnosis, now that in vitro fertilization methods are frequently used in human reproduction and that prospective parents want to choose an embryo free of a particular gene defect (when this defect is known to exist in the family). Genetic counselling is required for such applications. The last talk of this session, entitled “Organization of care for genetic disease in a diverse Europe?” will focus on these aspects, which are obviously important for society but are not easy to deal with, given the diversity of cultures and laws that exist in various countries, even within Europe.

*Jacques-Henry Weil, Chair of FEBS Science and Society Committee* (FEBS News, June 2011, pp. 5–7)

J.H. Weil reported that in 2012 the Committee will participate in the new FEBS initiative FEBS +3 meeting in Opatija, Croatia which is organized by the Croatian, Hungarian and Slovenian Societies. The title will be: “What it takes to succeed in science and how our European institutions can help?” Second, in Seville, FEBS will organize a session on AIDS and IUBMB will organize a session on Malaria.

#### 8.3.2.7 Report of the Science and Society Committee, Sevilla 2012

The *Science and Society workshops* in Seville discussed AIDS and Malaria, stressing both the scientific aspects of the diseases and their social impact. The FEBS Science and Society Committee have also sponsored two lectures at the FEBS 3+ meeting in Opatija, Croatia, in June 2012 (a joint meeting of the Croatian, Hungarian and Slovenian FEBS Constituent Societies): ‘What it takes to succeed in science – and how Europe’s institutions could help’ (Gottfried Schatz, Basel, Switzerland) and ‘Genetically modified plants – are they useful and safe?’ (Jacques-Henry Weil, Strasbourg, France).

The workshops focusing on AIDS and malaria were organized by FEBS and the IUBMB, respectively. Over 30 million people worldwide are infected with HIV, with 95% of cases in developing countries, but antiretroviral treatment and HIV transmission prevention strategies are beginning to have an impact.

The FEBS lectures on HIV/AIDS will be: ‘Recent highlights from HIV research’ (Simon Wain-Hobson, Paris, France) and ‘Civil society activism and science: experiences gained fighting the HIV/AIDS epidemic’ (Peter Hale, Washington DC, USA). Huge strides have been made in malaria control in recent years, but around half the world’s population is at risk of this disease and it still kills vast numbers (WHO estimate: 655,000 deaths in 2010) – mostly African children. The IUBMB lectures on malaria will be delivered by Virander S. Chauhan (New Delhi, India), Case McNamara (San Diego, CA, USA) and Shem Wanding (Nairobi, Kenya). Also at the IUBMB–FEBS Congress, the FEBS Science and Society Committee is jointly hosting two workshops on biochemistry and molecular biology education with the FEBS Education Committee – for more details see the next section.

*Jacques-Henry Weil Chair, FEBS Science and Society Committee*  
(FEBS News June 2012)



**Figure 8.3.1** Jacques-Henry Weil, on the left of the picture, leading the 'Meet the Expert Session' on 'Science and society dialogue', attended by educators and young scientists.

### 8.3.2.8 Report of the Science and Society Committee, St Petersburg 2013

The FEBS Science & Society session of the 38th FEBS Congress (July 9, 2013) was focused on personalized (molecular) cancer medicine, a new approach allowing the development of therapies tailored to the patient on the basis of the genetic alterations carried by his/her cancer. The four lectures covered the scientific/medical and societal aspects of this topic, describing recent progress in approaches to prevention, diagnostics and treatment.

The first speaker, Dr Alexander Eggermont (Cancer Center Gustave Roussy, Villejuif, Paris-Sud, France) defined the objectives, namely providing the right drug to the right patient at the right time and at the right dose, and he said that this approach will have a strong influence on cancer prevention and diagnostics. He mentioned that success has been obtained especially in cases where a dominant (single) mutation is the main driver in a cancer. Targeted agents often produce impressive but short-lived responses that have little impact on survival. Innate as well as acquired resistance remains a problem with targeted drugs, and a rational strategy for drug combinations remains to be developed. He insisted on the fact that a very advanced bioinformatics infrastructure is needed to analyse the large amount of data generated per patient, and stressed the fact that the fundamental challenges with the development of targeted drugs with big impact on relatively small populations are far from being resolved.

Dr Serena Nik-Zainal (Wellcome Trust Sanger Institute, Cambridge University Hospitals, UK) reported that huge progress in DNA sequencing technologies has allowed access to the entire genome of a cancer patient and has revealed 'mutational signatures' or imprints of the multiple mutagenic process operative in cancers, determined by the underlying sources of endogenous and exogenous DNA damage and DNA repair. Studying the detailed architecture of cancer genomes reveals the complexity and heterogeneity between patients, and even within a single cancer patient. The detailed analysis of genomic data can provide a panoramic view of each person's cancer and take us a step closer to tailored, individualized treatments.

Dr Anne-Lise Borresen-Dale (Institute for Cancer Research, The Norwegian Radium Hospital, Oslo, Norway) reminded the audience that breast cancer is a complex disease caused by accumulation of genetic alterations leading to a disturbed balance between proliferation and apoptosis, genetic instability and acquisition of an invasive and resistant phenotype. Her team has analysed 1000 tumours using high-throughput genome-wide technologies and has generated data at several molecular levels, such as mRNA and miRNA expression, copy number alteration, DNA methylation, paired-end sequencing, protein expression and metabolic profiles. They were able to show that, by combining three or more molecular levels, patients could be classified into groups that provide the best predictive value with respect to prognosis, and they have identified key molecules and stromal signatures. By integrating data from the patient's own phenotype with the multiple layers of data derived from the primary tumour, the different subclones within the tumour, as well as the metastases, they seek to reach a fundamental understanding of the biological dynamics of breast cancer. This should facilitate identification of risk factors, search for novel cancer diagnostics, prediction of therapeutic effects and prognosis, and identification of new targets for therapy, which should lead to a more personalized treatment of breast cancer.

Dr Cornelia Ulrich (Dept of Preventive Oncology, National Center for Tumor Diseases, Heidelberg, Germany) said that for a large number of cancers risk factors are well established, for instance dietary factors such as folate, which can have complex relationships to carcinogenesis and depend on genetic factors. Obesity is strongly linked to increased risks of cancers of the colon, breast (after menopause), oesophagus, liver and others. Energy imbalance and obesity can also directly lead to a chronic inflammatory status in the body, which can facilitate growth of tumours. In return, exercise, weight loss, or use of medications that reduce inflammation can inhibit carcinogenesis. Non-steroidal anti-inflammatory drugs (NSAIDs), such as aspirin, are protective against many cancers (particularly of the gastro-intestinal tract), but can have side-effects, so one needs to define groups of individuals who are most likely to respond and have the least risk of adverse reactions. Therefore, developing personalized prevention strategies is important, which can be done through an assessment of lifestyle risk factors or by use of inherited genetic polymorphisms that influence NSAID metabolism or response to these drugs (pharmacogenetics). We are entering an era where prevention guidelines will be personalized to obtain the greatest benefits and lowest risks.

The Congress organizers agreed to open this session not only to the registered Congress participants, but also to the public; however, it is difficult to tell how many people took advantage of this.

*Jacques-Henry Weil*

*Chair, Science and Society Committee*

**FEBS Congress Science and Society Lecture**

One of the more exciting lectures delivered during the 38th FEBS Congress was the FEBS Science and Society Plenary Lecture by Gottfried (Jeff) Schatz. A transcript of this engaging and thought-provoking talk has kindly been prepared by Jeff for this *FEBS News* issue and is presented below. We wish to use this opportunity to repeat our deep appreciation of his continuous support of and involvement in different FEBS activities.

Gottfried Schatz is renowned for his work on mitochondrial biogenesis and mitochondrial DNA. His early research was carried out in Austria, but he moved in the late 1960s to Cornell University, New York. He returned to Europe to join the newly established Biozentrum of Basel University in the 1970s, and in the 1980s chaired this centre and in parallel became Secretary General of EMBO. He has also presided over the Swiss Science and Technology Council. Alongside his research papers, he has published three volumes of scientific essays and the autobiography *Feuersucher*.

*Israel Pecht, FEBS Secretary General*

## 8.4

### FEBS Committee on Education

#### 8.4.1

##### Initiatives



*Jean Wallach*

The FEBS Education Committee had its roots in the FEBS “Working Group on Teaching Biochemistry”, which was founded in 2001 by Prof. Jean Wallach (Lyon, France). In April 2001, the Working Group on Education came forward with a programme to:

1. Stimulate the European Biochemical Societies to create in every country a working group on education.
2. Organize during each FEBS Meeting, in association with the local organizer, a session on education in order to promote new aspects of teaching via workshops and demonstrations.
3. Provide information on the FEBS web site about meetings on education in Europe, teaching programs, local expertise etc.
4. Develop FEBS workshops on education particularly in Central and Eastern Europe.

Generally, the FEBS Education Committee has the mission of promoting education of the highest quality in Biochemistry and Molecular Biology in Europe at both the undergraduate and postgraduate levels.

In order to realize this important mission:

1. We encourage the development of innovative teaching methods
2. We disseminate advice on educational resources

3. We arrange at least one education event at each FEBS Congress
4. We arrange other educational events from time to time such as workshops on educational issues in FEBS member countries on request.

Unfortunately, no full account on Members of the FEBS Working Group on Teaching Biochemistry in Europe (having been started in 2001 and existing through the year 2006) can be provided. It is known that Jason Perret (Belgium), Peter Ott (Switzerland), Jean Wallach (France, Chair) and Gül Güner (Turkey) belonged to this Working Group for several years. Exact data became available after inauguration of the FEBS Education Committee in 2006.

**Table 8.4.1** Members of the FEBS Education Committee.

<b>2007</b>				
Edward Wood, Chairman	United Kingdom	Istanbul &(2006)	01 01 07	31 12 09
Jean Wallach	France	Istanbul &(2006)	01 01 07	31 12 10
Gül Güner	Turkey	Istanbul &(2006)	01 01 07	31 12 10
Keith Elliott	United Kingdom	Brussels &(2003)	01 01 04	31 12 07
Peter Ott	Switzerland	Warsaw &(2004)	01 01 05	31 12 08
Jason Perret	Belgium	Brussels &(2003)	01 01 04	31 12 07
<b>2008</b>				
Edward Wood, Chairman	United Kingdom	Istanbul &(2006)	01 01 07	31 12 09
Jean Wallach	France	Istanbul &(2006)	01 01 07	31 12 10
Gül Güner	Turkey	Istanbul &(2006)	01 01 07	31 12 10
Constantin Drainas	Greece	Vienna &(2007)	01 01 08	31 12 11
Peter Ott	Switzerland			31 12 08
Jason Perret	Belgium	Vienna &(2007)	01 01 08	31 12 11
<b>2009</b>				
Gül Güner, Chairperson	Turkey	Istanbul &(2006)	01 01 07	31 12 10
Jean Wallach	France	Istanbul &(2006)	01 01 07	31 12 10
Miguel Castanho	Portugal	Vienna &(2007)	01 01 08	31 12 11
Karmela Barisic	Czech Rep.	Athens &(2008)	01 01 09	31 12 12
Jason Perret	Belgium	Vienna &(2007)	01 01 08	31 12 11
Constantin Drainas	Greece	Athens &(2008)	01 01 09	31 12 12
<b>2010</b>				
Gül Güner-Akdogan, Chairperson	Turkey	Prague &(2009)	01 01 10	31 12 12
Jean Wallach	France	Istanbul &(2006)	01 01 07	31 12 10
Constantin Drainas	Greece	Athens &(2008)	01 01 09	31 12 12
Miguel Castanho	Portugal	Vienna &(2007)	01 01 08	31 12 11
Karmela Barisic	Czech Rep.	Athens &(2008)	01 01 09	31 12 12
Jason Perret	Belgium	Vienna &(2007)	01 01 08	31 12 11
<b>2011</b>				
Gül Güner-Akdogan, Chairperson	Turkey	Prague &(2009)	01 01 10	31 12 12
Constantin Drainas	Greece	Athens &(2008)	01 01 09	31 12 12
Miguel Castanho	Portugal	Vienna &(2007)	01 01 08	31 12 11
Karmela Barisic	Croatia	Athens &(2008)	01 01 09	31 12 12
Jason Perret	Belgium	Vienna &(2007)	01 01 08	31 12 11



**Table 8.4.1** (Continued)

<b>2012</b>				
Gül Güner-Akdogan, Chairperson	Turkey	Prague &(2009)	01 01 10	31 12 12
Tomàs Zima	Czech Rep.	Turin &(2011)	01 01 12	31 12 15
Angel Herráez	Spain	Turin &(2011)	01 01 12	31 12 15
Karmela Barisic	Croatia	Athens &(2008)	01 01 09	31 12 12
Wolfgang Nellen &(Member elect)	Germany	Turin &(2011)		
<b>2013</b>				
Gül Güner-Akdogan, Chairperson	Turkey	Seville &(2012)	01 01 13	31 12 15
Tomàs Zima	Czech Rep.	Turin &(2011)	01 01 12	31 12 15
Angel Herráez	Spain	Turin &(2011)	01 01 12	31 12 15
Frank Michelangeli	United Kingdom	Seville &(2012)	01 01 13	31 12 16
Wolfgang Nellen	Germany	Seville &(2012)	01 01 13	31 12 16
<b>2014</b>				
Gül Güner-Akdogan, Chairperson	Turkey	Seville &(2012)	01 01 13	31 12 15
Tomàs Zima	Czech Rep.	Turin &(2011)	01 01 12	31 12 15
Angel Herráez	Spain	Turin &(2011)	01 01 12	31 12 15
Frank Michelangeli	United Kingdom	Seville &(2012)	01 01 13	31 12 16
Wolfgang Nellen	Germany	Seville &(2012)	01 01 13	31 12 16

## 8.4.2

**Activities of the FEBS Education Committee****8.4.2.1 Reports 2001–2006**

Between 2001 and 2006, the FEBS Education Committee was active in promoting educational events at yearly FEBS Congresses. A workshop on “New frontiers in teaching Biochemistry” was organized at the 27th FEBS Meeting in Lisbon and was well attended. In Istanbul at the 28th FEBS Meeting, a Symposium “Multi-media approaches in biochemical education” was organized including workshops and demonstrations. At the FEBS Special Meeting in July 2003 in Brussels, the Working Group proposed a session on the theme “Teaching metabolism and cell signalling” with demonstrations and round tables. For the FEBS Congress in Warsaw (2004) a session devoted to “Problem based learning in Europe” had been chosen and one devoted to “Post-graduate Biochemical Education” was proposed for the future.

At the Council Meeting held in Istanbul in 2006, the “FEBS Working Group on Teaching Biochemistry” was converted into the “FEBS Education Committee”, with Prof. Edward Wood (Leeds, UK) as the founding Chair.

**8.4.2.2 Report on the Activities of FEBS Education Committee in 2007****8.4.2.2.1 Education and Teaching Workshop – CV Clinics**

*By Dr Keith Elliot*



The Education Committee of FEBS, jointly with the Austrian Biochemical Society, organised a workshop entitled “How to go from biochemical research to commercial biotechnology” aimed to interest those considering changing from academic



**Figure 8.4.1** Gül Güner and Ed Wood (left), and Jason Perret and Keith Elliott (right) in discussion with two of the YSF participants at the Blackwell's stand – thanks to them for providing the space on the busy Monday evening.

life to working in (or even founding) start-up small biotech companies. The aims was to give information about the skills needed and how to raise finance, IPR issues and patenting, etc., and three speakers presented their experiences and views. Joachim Seipelt (Green Hills Biotechnology, Vienna) and David Bunton (Biopta Ltd, Glasgow) were both active academic biochemists. They discussed how they had both, in different areas, translated their experiences in academia to set up companies and develop products for the market. Martino Picardo (Manchester Incubator Company Ltd) had moved from biochemical research in academia and industry to supporting academics in their efforts to set up commercial biotechnology. The workshop was very well attended and the speakers made themselves available for a considerable time at the end for questions from interested people.

*CV Clinics for Young Scientists:* Throughout the congress the Education Committee offered CV Clinics for participants at the Young Scientists Forum. This initiative was based on experience from the UK Biochemical Society Careers Conferences where students and post-docs bring their *curricula vitarum* (or resumés) to be discussed with an experienced individual. It was led by Keith Elliott and Ed Wood (both members and past chairmen of the UK Biochemical Society Education Committee) ably supported by other members of the FEBS Education Committee (see photos).

Some 30 young scientists, from 14 different countries (and even more nationalities!) attended for individual discussions. For the vast majority of participants this was the first time anyone had discussed their cv, or even given them any advice on producing one.

**8.4.2.2.2 The FEBS Education Committee has set up a virtual classroom!** The FEBS Education Committee has followed up their Congress success by developing an online classroom. The site is maintained by Prof. Peter Ott, Institute of Biochemistry & Molecular Biology, Bern.

The first two courses up and running are:



**Figure 8.4.2** Serious personal treatment – Peter Ott (left) also gets involved.

#### *Symposium on Problem Based Learning*

This Workshop site contains the lecture slides of the sessions on problem based learning organised during the FEBS Congress in Warsaw in June 2004 and provides an online support and discussion forum for the participants.

#### *Workshop on Database Searching*

This Course contains the material of the Workshop on database searching held during the FEBS Congress 2006 in Istanbul. A discussion forum is included to stimulate topic-specific discussion among students and the moderators of the Course.

### **8.4.2.3 Report on the Activities of FEBS Education Committee in Athens, 2008**

#### **8.4.2.3.1 The Education Committee of FEBS and Workshops on Education**

*By Prof. Ed Wood, Chair of the FEBS Education Committee*

Successful education is not just about “giving” information to passive students and then assessing whether they can repeat the information in an examination. In recent years, in several countries, there have been “Assessments of the Quality of Education” in universities, often instigated by governments anxious to assure themselves that university teaching is receiving proper attention. This has resulted in lecturers and professors reviewing how they teach (and perhaps trying to do better in the light of psychological and educational studies about how people learn), and of universities examining the procedures by which teaching quality is assured. Some years ago the Committee on Education of the International Union of Biochemistry and Molecular Biology (IUBMB) was in the habit of offering Workshops on Education on request from member Societies. These Workshops, organized by Professor Frank Vella, typically took place over three days, were held in many countries of the world, and the issues discussed were concerned with increasing the effectiveness of teaching and enhancing students’ experience of teaching so as to improve their learning. There was no set formula for the activities and the issues discussed were very varied. The Workshop “team” usually consisted of three individuals from different countries who had some expertise in

teaching. There was discussion of teaching to large classes, laboratory practical teaching, small-group teaching, computer-aided instruction, problem-based learning, postgraduate education [1], training for reading the scientific literature, and many other topics. Indeed, all the issues concerned with teaching, learning and assessment were up for discussion. Usually members of the visiting team gave one “scientific” lecture on their research topic, and often some local individuals (for example at the post-doc level) were invited to speak about their research or prepare a brief critical summary of a current paper from the literature for presentation. The main activity, however, was not “scientific” – it was concerned with the process of teaching, sometimes called ‘pedagogy’ [2], and how the activity could be made more effective. The Education Committee of FEBS now proposes to try to offer similar Workshops and may do this in collaboration with IUBMB. Since the original IUBMB Workshops mentioned above, things have moved on considerably in the world of university education. Although at that time we had “distance education”, we now speak of “E-learning” [3] and “E-assessment” because we now have the Internet and email, making distance communication easier and more immediate. This has changed the way that we teach and the way in which students learn. Less may happen in formal classes, students may not be physically present on a campus, and may do their learning at their convenience at any time of the day or night depending on their other activities [4]. Less and less do students use libraries because they have Google and Wikipedia, and one suspects that they are less skilled in critically appraising the information that they get hold of. In addition, many of us have been faced with increasingly larger classes of less well prepared or less committed undergraduates, making the task of teaching effectively more challenging as well as increasing the assessment load. There are also questions about assessment: what are the ‘best’ methods, linking assessment to teaching and learning? How do we make the best use of our time? And what about giving feedback – a process which is widely held to be extremely important in encouraging effective learning? So, there are many ‘new’ issues in pedagogy to be dealt with alongside the ‘old’ ones. The FEBS Education Committee is still discussing how Workshops might be run and what the financial implications might be. In the IUBMB-sponsored Workshops, typically IUBMB provided the travel money for the visiting team, and accommodation was paid for locally, often in campus guest houses, sometimes in modest hotels. Sometimes it was possible to obtain additional funds to support the travel and accommodation of participants, sometimes not. Sometimes individuals from neighbouring countries could be invited and sometimes the Workshop Team visited several countries in a region. Usually Reports of the Workshops were published in *Biochemical Education* (and these can be read in back-numbers of that journal). If you, through your local Biochemical Society, would be interested in discussing the possibility of a Workshop – perhaps with a view to reviewing the teaching methods used in your institution – then in the first instance please contact me, and we can begin to consider the possibilities and feasibility of a visit.

**References:**

1. The IUBMB produced a document “Standards for the PhD Degree in the Molecular Biosciences”, available as a download from their website: [www.iubmb.org](http://www.iubmb.org).
2. Pedagogy: Frank Vella tells me that a paedagogus was a Greek slave employed by wealthy Romans so that their children could become bilingual in Greek and Latin?
3. The FEBS Education Committee has organized a Workshop on E-learning to take place at the FEBS/IUBMB Congress in Athens in June/July of this year when individuals who have organized e-learning courses will speak about their experiences and the problems they faced, to be followed by a round-table discussion. This workshop is scheduled to take place at 17.40–19.40 on Sunday 29th June.
4. Another word is andragogy which implies ‘teaching to adults’ rather than to children, in other words treating our students as adults who take responsibility for their own learning.

(FEBS News March 2008)

**8.4.2.3.2 Education of Young Researchers – Events at the FEBS Congress in Athens**

E-Learning Session, June 29th, 2008,

Designing and Running e-learning Courses

Chairpersons: E. J. Wood, Peter Ott: Introduction, E. J. Wood; Keith Elliott;

J.-P. Kraehenbühl; Group work on designing e-learning courses

Biomedical Education, June 30th, 2008, Chairpersons: Edward Wood, Vassilis

Zannis; What skills do graduate students need for their PhD (and beyond)? by

Heather Sears; PhD supervising skills by Edward Wood; Excellence in graduate

education in biological sciences by Anne Ephrussi; Enriching doctoral education

with interdisciplinary and inter-institutional training by Fotis C. Kafatos; Council

of Education of the European Universities Association by Jean Chambaz; The

impact of evaluation/accreditation the funding and the Bologna Directives on the

graduate education in biological sciences in Europe by Vassilis Zannis; Questions

and Comments: Panel Discussion.

**Education Group Activities in Athens** *By Ed Wood, Chairman of the FEBS Committee on Education and Keith Elliot*

*Workshop on E-learning*

The Education Committee organised a 2-hour workshop on e-learning. (Most of the organisation was done by Peter Ott [University of Bern, Switzerland] who in the event was unable to travel to Athens.) It was hoped that participants could work in the workshop using their laptops and with wireless in the Megaron Conference Centre. However, few attendees brought their laptops, and in any case the wireless system was too slow to make this practical. There was a brief introduction by Ed Wood, who reminded the audience that courses by “correspondence” (i.e. distance education) had started over a hundred years ago – the precursor to e-learning – and mentioned some of the advantages. These included students working asynchronously and at their own pace, and the possibilities for individual tuition by email. He also warned of the dangers of many different institutions “reinventing the wheel” as they developed their own web courses. Keith Elliott then gave a presentation about a new course which he had organised at

Manchester University. This is a fully interactive course in which different medically related students work together asynchronously to produce a health promotion leaflet. Students found it difficult to work together online as it was quite a change from face-to-face interaction. In addition there were presentations by Graham Parslow (University of Melbourne, Australia) who reminded us of the situation in Australia and gave an account of what he saw at the advantages of e-learning in his particular situation, and a brief description of some Japanese developments was given by Yasuo Kagawa (Kagawa University, Tokyo). There were about 80 participants present at the start of the Workshop.

#### *Symposium on Post-Graduate Education*

The Education Committee organized this Symposium jointly with the Hellenic Biochemical Society and the session was chaired by Vassilis Zannis (University of Crete) and Ed Wood. There were six speakers and the hall was full with over 200 individuals present. The topics discussed ranged from the skills expected of post-graduates and of their supervisors, to advice about careers and the importance of excellence in research. There was also much information given about the Bologna Process, and about mobility in Europe at the postgraduate level, including EMBO studentships as well as the possibilities of registering at two institutions. The first speaker was Heather Sears from the University of Leeds (Staff and Departmental Development Unit) on what skills and abilities are expected of graduate students and this was followed by a talk by Ed Wood on what skills and abilities are expected of supervisors. He also discussed the role of others such as advisors, thesis committees and departmental postgraduate committees. Both of these speakers pointed out that IUBMB had produced a very valuable booklet "*Standard for the PhD Degree in the Molecular Biosciences*" available on the IUBMB website [www.iubmb.org]. Fotis Kafatos (Imperial College, London) gave a talk entitled "Enriching doctoral education with interdisciplinary and inter-institutional training", and Anne Ephrussi (Heidelberg, Germany) gave a presentation about excellence in graduate education in biological sciences. Jean Chambaz (Council for Doctoral Education, European University Association, Paris) spoke about reforming doctoral education in Europe as a response to global challenges, and finally Vassilis Zannis gave a wide ranging talk covering the likely impact of the Bologna Directives, and well as thoughts on evaluation and accreditation as well as about funding. It was planned to have a question-and-answer session at the end of the Symposium, but unfortunately there was very little time remaining for this activity at the end of a long session.

As can be seen from the above very brief account, there was so much material presented in this Symposium that it was agreed by all the speakers that their PowerPoint® presentations would be placed on the FEBS website.

#### *CV criticism sessions*

Following the successful pilot last year in Vienna, Keith Elliott, with the support of other members of the Education Committee, again ran CV criticism sessions for participants at the Young Scientists Forum. This year Keith was able to give a presentation at the Forum in Loutraki and meet the young scientists before the

main congress. Thanks go to the YSF committee, in particular the local organiser, Ioannis Drikos, and Daniela Corda for making this possible. As was prophesised last year by one of the participants, Oram Erster, there was an even greater take-up with over 50 CVs being submitted by young scientists from over 30 countries and even more nationalities. With the inclusion of the IUBMB they came from as far afield as Australia, Canada and Bangladesh, as well as most European countries. The issues raised were very similar to last year – mainly a concentration on detailed academic records without reference to anything that told the reader about the person. All too often interesting information (like organising an international conference!) only came out during the discussion on the CV. Again the young scientists were very appreciative of the sessions – many saying again that no-one had ever talked to them before about their CVs. At the YSF there were also industrial representatives who were able to lend support to the need for more information – one commenting that they use recruitment agencies and do not even see many CVs if they do not look interesting! We hope to repeat the sessions again in Prague in 2009, perhaps with even more participants and maybe, at the request of the young scientists, some discussion of the covering letter.

(FEBS News September 2008)

**Education Workshops in Sofia 2008 and Cluj-Napoca 2009** A very stimulating Workshop was held on Biochemistry Education under the auspices of the Bulgarian Society for Biochemistry, Biophysics, and Molecular Biology, in Sofia University, 16–17 October, 2008 (workshop organisers: Ed Wood, Keith Elliott, Gül Güner-Akdogan, coordinated by Ganka Kossekova and hosted by Diana Petkova and Genova Nacheva). A one-day similar workshop was held in Cluj-Napoca, Romania, on September 30, 2009 (workshop organisers: Gül Güner-Akdogan, Keith Elliott, and Jason Perret, coordinated by Carmen Socaciu) under the auspices of



**Figure 8.4.3** Gül Güner and Jason Perret working in tandem with an IUBMB and a FEBS YSF participant at the FEBS stand.



**Figure 8.4.4** Keith Elliott with two satisfied FEBS customers in a rather more informal setting!

the Romanian Biochemistry and Molecular Biology Society, in conjunction with their yearly Biochemistry Congress.

#### 8.4.2.4 Reports on the Activities of FEBS Education Committee in 2009

##### 8.4.2.4.1 Sad News

*By Gül Güner-Akdogan, Acting Chair of the Education Committee FEBS Education Committee Members: Karmela Barisic, Miguel Castanho, Costantin Drainas, Jason Perret, Keith Elliott (Co-opted), Israel Pecht, and Iain Mowbray*

The FEBS Education Committee faced a very sad event last year – the passing away of Ed Wood in December 2008. **Prof. Edward J. Wood** was elected as the first Chair of FEBS Education Committee in Istanbul FEBS Council, in 2006. FEBS Education Committee had the privilege of working with him since 2001, first as a member of FEBS Working Group on Teaching Biochemistry (chaired by Jean Wallach) till 1 January 2007 and since then, as the Chair of FEBS Education Committee. He was a deeply respected colleague and a good friend. Ed has done a tremendous job to enhance biochemical education in Europe, as well as in the whole world. We have Ed's legacy on “the Science of Biochemical Education”. This legacy we will uphold and advance.

##### 8.4.2.4.2 FEBS Education Committee Events 2009

*By Gül Güner-Akdogan and Keith Elliott*

The activities of the Education Committee in Prague were overshadowed by the sad and premature death of Ed Wood at the end of 2008. A special edition of FEBS News in honour of Ed was produced for the Congress and distributed at the education sessions and at the FEBS booth. To ensure continuity and that momentum was not lost, Gül Güner-Akdogan was asked to take over as temporary chair (and was subsequently elected chair at the Council in Prague) and we were able to build



on the solid foundation provided by Ed to have a very successful Congress. Two workshops, both with interactive sessions, took place along with the CV support sessions that are becoming a regular feature of the Education Committee activities.

### ***Ethics Education Workshop 2009***

The Education Committee is indebted to IUBMB for cosponsorship and we were pleased to welcome the President and the General Secretary of IUBMB, Angelo Azzi and Jacques-Henry Weil, who attended and actively contributed to the workshop. The session started by Keith Elliott paying tribute to Ed Wood – appropriately because much of Ed's enormous international impact on biochemistry education was through his work with IUBMB. Göran Hermerén (Lund, Sweden) and Barbara Maier (Salzburg, Austria) presented their experiences of teaching different aspects of Ethics. Göran dealt with the important area of teaching research ethics raising (and suggesting answers to) the questions ... "What, why, how and when?" He showed how new scientific breakthroughs will raise new issues and so ethics will change with time. Barbara concentrated on ethics within the training of physicians arguing that ethically trained physicians are likely to handle cases and issues in a professional way. The second half of the session was interactive, led by Chris Willmott (Leicester, UK – organiser and co-chair with Gül Güner-Akdogan, Turkey), based on his use of case studies to engage bioscience students. Lively discussions took place in small groups, with various differences of opinion, around three case studies all based on present or likely future scenarios. As might be expected of an interactive workshop on such a controversial area of education the participants perhaps went away with more questions than answers. This gives us plenty of scope for future activities!

### ***Teaching Systems Biology***

Systems Biology is playing a vital role in the development of modern bioscience. However, teaching it creates significant challenges at all levels of education as a full understanding requires knowledge of and familiarity with both the biology and the mathematics – something many students and even experienced researchers find difficult. How can we rise to these challenges? David Fell (Oxford, UK – organizer and co-chair) introduced the audience to the challenges. The subsequent talks addressed the problems at different levels of education. Rui Alves (Lleida, Spain) showed how he had introduced Systems Biology within a Bioinformatics course as part of a Biotechnology first cycle (undergraduate) degree. A problem-based approach is used, which has caught the imagination of the students with a number wishing to continue working in the lab in the semester following the course. At present it is probably more common to find Systems Biology taught at post-graduate level. Vicky Buchanan-Wollaston (Warwick, UK) described an approach taken within the Warwick Systems Biology Doctoral Training Centre (WSB-DTC) where PhD students work in interdisciplinary teams within a dedicated and supportive environment. Students from diverse backgrounds in biological and physical sciences work together to solve complex problems, learning the important skills from the complementary disciplines. It is important that training continues

beyond the formal academic degrees and David Fell reviewed existing examples of international cooperation across Europe. Amongst these are the FEBS Advanced Workshops (one of which he had only recently taught on) that help meet the need for further training in Systems Biology. Finally in the first section of the workshop, Simon Moon (London, UK) gave an insight into his personal journey as a “Biologist transformed into a modeller”. He argued strongly that the best way to introduce and teach biologists the required mathematics and computation is by getting students to work on real problems. Despite a break of nearly 24 hours nearly half the participants returned for discussions around three major themes of Systems Biology, Undergraduate Education, Postgraduate Education and International Training, facilitated by the speakers. The outcomes of the groups were recorded and we hope will feed into future education sessions (possibly in Gothenburg) and other areas of FEBS activities.

#### *Discussions groups in the Systems Biology workshop*

The outcomes of the groups were recorded and we hope will feed into future education sessions (possibly in Gothenburg) and other areas of FEBS activities.

#### *CV support for YSF participants*



**Figure 8.4.5** ‘Round-table discussion’: Ed Wood, Jason Perret (Brussels – Ed Com), Jean-Pierre Kraehenbuhl (Lausanne, Switzerland – speaker at Ed Com Symp), Graham and Di Parslow (Melbourne).

Following the success in previous years Keith Elliott again was invited to attend the pre-Congress YSF to talk to the participants about making the most of their CVs. This was followed-up by one-to-one sessions at the Congress where the young scientists were able to discuss their CVs with either Keith or Jason Perret (Brussels, Belgium, a member of the Education Committee). We again saw over 30 CVs from individuals resident in 14 different countries (and even more nationalities). The very positive responses and feedback from the participants were similar to previous years – as were the CVs we saw. However, as shown in the comment below, not all participants were aware of the importance of starting early . . . . We do not claim to be “experts”, just passing on our experience, and are not sure about the prize, but definitely agree it is never too early to start preparing!

#### 8.4.2.5 Commemorates of ED WOOD

##### 8.4.2.5.1 Wood as a chairman

*Gul Guner-Akdogan, Acting Chair of FEBS Education Committee*

It was an honor for me to attend, in the name of FEBS Education Committee, the Memorial Gathering for Prof. Ed Wood, late Chair of FEBS Education Committee. The Memorial was organised by Ed's family and the University of Leeds, on February 3rd, 2009 which was his 68th anniversary. The ceremony was organised with great care. There were around 120 participants. Firstly, Ben Wood, Ed's elder son, made a welcome talk and described Ed as a "Father" and a "Human Being". He added that the whole family was happy to have made their last extended vacation with Ed in Turkey, a country which Ed liked so much. Lin Elliott and I were invited by Helen Wood to the family table. Following an elegant lunch, Ben Wood gave the chair to people who wanted to talk about Ed. I believe that a summary of this important event will be useful from the point of view of sharing, with the biochemical community, the characteristics of Ed as a colleague, as a friend and as a human being. The first speaker was Prof. Donald Nicholson, who knew Ed since a very long time. He described Ed's different features; Ed had taken wholeheartedly the responsibility of displaying Nicholson's metabolic pathways in FEBS and IUBMB Meetings. We learned that the red tie which Prof. Nicholson wore on that occasion was a gift that Ed had brought to him from Thailand. Secondly, I was invited to talk in the name of FEBS Education Committee. It was an honorable and, at the same time, a difficult task. I read the messages of thankfulness, recognition, and respect from:

- FEBS Education Committee, of which he was the First Chair (*FN Special Issue 2009, p. 7*);
- VOET & VOET, the editors of BAMBED, the journal which followed Biochemical Education, of which Ed was the Editor for over 20 years (*FN Special Issue 2009, p. 9*);
- Turkish Biochemical Society (*FN Special Issue 2009, p. 12*), with which Ed was closely associated over many years;
- Bulgarian Biochemical Society (*FN Special Issue 2009, p. 13*), which highly esteemed Ed Wood in many ways, and;
- Sofia University, for which Ed had planned and organised the Biochemistry Education Workshop (*FN Special Issue 2009, p. 13*), which he could not attend, due to health reasons.

Then, Ed's second son, Dominic Wood read the warm letter from Prof. Frank Vella who was a colleague and a good friend of Ed for many years. This had a more informal tone than the Tribute which appeared in BAMBED. *FN Special Issue 2009, p. 8*. Briefly, in this message, Frank tells that he knew Ed for more than three decades; that a "brotherly" relationship had formed between them, besides the "scientific collaboration", and that, during Frank Vella's Chairship of IUBMB Education Committee which lasted nine years, and between the years 1985–1992, they organised together Biochemistry Education Workshops in the following cities: Karachi, Porto, Manila, Dubrovnik, Thessaloniki, Ankara,

Kuala Lumpur, Cali and Lima, Bucarest, Melbourne, and Izmir. During these workshops, an intense sharing of information and experience occurred and colleague and friendship ties were formed. The workshop reports written and shared with the entire biochemistry community were, in my opinion, facts which will always be important from the aspect of "History of Biochemical Education." J Cunliffe, a dermatology professor in the Medical School of Leeds University, who was Ed's collaborator in the dermatological biochemistry field, talked about Ed's scientific merits, his role on the research team, and about their multidisciplinary work which ended in fruitful results. The final talk was done by Prof. Harry Hassall (*FN Special Issue 2009, p. 10*) who had worked with Ed in the Department of Biochemistry, University of Leeds, for many years and who, after retirement in 1991, had handed over the Chairship to Ed. With his overtaking style, he shared with the audience the following: Prof. Hassall had known Ed when he was around 30; throughout long years, Ed had never lost his motivation, optimism, and work-capacity; he always had a future to plan and the serious health problems and operations were esteemed as minor, thus rendering the "Loss" as an unpredictable reality. Ed's loss was as if "the light was turned-off and gone suddenly"; however, in retrospect, the warning signs were there. The participants were holding their breath. Prof. Hassall concluded his talk by reading a poem by Primo Levi, which he did not know if Ed knew, but which he thought it reflected the feeling Ed had for his friends and numerous people whom he met throughout his life. (*FN Special Issue 2009, p. 10*). (As published in *Biochemistry and Molecular Biology Education*, Vol. 37, No. 2, pp. 71–73, 2009 and in *FEBS News July, 2009*)

#### 8.4.2.5.2 Tributes to E.J. Wood 1941–2008

A special edition of FEBS News in honour of Ed was produced for the Congress and distributed at the education sessions and at the FEBS booth. (see 8.4.2.5 ff and FEBS News Special Issue July 2009).

##### Obituary – IUBMB

As published in *Biochemistry and Molecular Biology Education*, 37 (2), pp.71–73, 2009

E.J. Wood 1941–2008. A Tribute

Graham Parslow<sup>1</sup> and Frank Vella<sup>2</sup>, <sup>1</sup>University of Melbourne, Australia. <sup>2</sup>University of Saskatchewan, Canada.

##### Obituary-FEBS

1st published in FEBS News January 2009. Written by Prof. Anthony Turner, Institute of Molecular & Cellular Biology, University of Leeds.

##### Memorial for Ed Wood - An Overview

Gül Güner-Akdogan, Chair of FEBS Education Committee

##### FEBS Dedication

By the FEBS Education Committee

As presented to Mrs Helen WOOD, Mr and Mrs Benjamin WOOD, Mr and Mrs Dominic WOOD 3 February, 2009

##### IUBMB Dedication

*Letter from Prof. Frank Vella read by Dominic Wood at the Memorial Gathering for Ed Wood, February 3rd, 2009*

**Donald and Judith Voet Dedication**

Presented at Ed's Memorial Service

**Prof. Harry Hassall Dedication**

Presented at Ed's Memorial Service

**Turkish Biochemical Society Dedication**

Tribute: Prof. Ed Wood (1941–2008) A Colleague and a Dear Friend to Turkish Biochemists

**Centre for Bioscience, University of Leeds Dedication**

*By Jackie Wilson*

**Enquiry from the Centre for Bioscience, University of Leeds**

*The Wood family gave the proposal its full support.*

**Medical University Sofia Dedication**

**Bulgarian Biochemical Society Dedication**

**Messages of condolence from many friends were received by Keith Elliott via email**

**8.4.2.6 Reports of the Education Committee Gothenburg, 2010**

**8.4.2.6.1 Education Committee Events at FEBS Congress 2010**

*Gül Güner-Akdogan (Chair), Jason Perret, Miguel Castanho, Karmela Barisic, Costas Drainas with kind support of Keith Elliott.*

This year at FEBS Congress, the Education Committee has organised three interesting workshops, with experts in the field: two on "Research Education" (at the undergraduate level and at high schools) and one on "Practical Systems Biology", thanks to Stefan Hohmann, who kindly supported with his team.

*Workshop: "The Researching, Teaching and Learning Triangle at Universities: Unite or Divide?"*

(Co-sponsored by IUBMB) **28th June:** Chairs: **Miguel Castanho**, University of Lisbon and **Gül Güner-Akdogan**, Dokuz Eylül University

**Programme:** Miguel Castanho – Context, motivation and timeliness of the theme – Ana Sebastião (U. Lisbon, Portugal) – Research in undergraduate medical education – Jane Saffell (Imperial College, UK) – Research in the early stages of scientific curricula – Jorge Guimarães (CAPES, Brazil) – Nationwide programme for undergraduate research: The long Brazilian experience – Susan Hamilton (President, Academic Board, University of Queensland, Brisbane, Australia) – The Advanced Study programme in science: Exposing motivated and interested students to the research culture of the University of Queensland – Panel discussion with the speakers (Moderator: Jason Perret, Laboratoire de Chimie Biologique et de la Nutrition, Faculté de Médecine, Université Libre de Bruxelles, Belgium)

**Workshop "Research-Oriented Education at High Schools"**

28th June: Chairs: Jane Saffell, Imperial College, London and Gül Güner-Akdogan, Dokuz Eylül University. Participants: High school science teachers from different European countries, faculty involved in research education at undergraduate and/or graduate levels, PhD students, etc.

Programme: Jane Saffell – Introduction to the Workshop; Gül Güner-Akdogan – Coordinating Research Project competitions between High School students in the Izmir region: Short Presentations from the science teachers (if requested)

Topics of Small Group Discussions: 1. How research-oriented education is carried out at high schools? 2. What are some problems? 3. What are the solutions? 4. How can research education at high schools be integrated with universities? Report to the whole group and whole group discussion. Conclusions of the Workshop (Jane Saffell, Gül Güner-Akdogan).

*Workshop “Practical System’s Biology; an Introduction to Mapping and Modelling of Cellular Signal Transduction”*

29th June: Chair: Stefan Hohmann Göteborg University; Coordinator: Marcus Krantz Göteborg University The attendees will be introduced to different visualisation strategies for signal transduction pathways, and how to use pathway maps as a base to create mathematical models. The workshop will contain a brief introduction to mapping and modelling and to the software used. This will be followed by independent work with a set of small case studies that demonstrate the basic methodology. The workshop will be basic as regards mapping and modelling and assume no prior knowledge of the methods or software used. However, it will assume a good understanding of the principles of cellular signal transduction. A brief introduction to the problems and strategies for visualisation of signal transduction pathways can be found in: *The Systems Biology Graphical Notation* by Le Novère et al. (PMID: 19 668 183). (Excerpt from FEBS News June 2010)

#### **8.4.2.6.2 FEBS Workshop on Biochemistry Education in 2010**

*By Gül Güner-Akdogan (Chair, FEBS Education Committee)*

As part of a continuing project to provide opportunities for discussion of developments in biochemistry education, the Education Committee held a FEBS Workshop on 14th May at Institut Pasteur in Athens, hosted by Costas Drinas, the President of Hellenic Society for Biochemistry and Molecular Biology (HSBMB) as well as a member of FEBS Education Committee. The Chair of the Education Group of HSBMB, Prof. DA Kyriakidis, coordinated this workshop with Gül Güner-Akdogan, Chair of FEBS Education Committee. The workshop was attended by around 30 participants, who were mostly faculty members, along with some PhD students, representing a number of institutions from all over Greece. Israel Pecht, FEBS General Secretary, was also present and provided an overview of FEBS. The HSBMB selected the topics of Problem-Based Learning (PBL) and postgraduate supervision from the range offered by the Education Committee. After an introduction to PBL and how it is applied in Manchester (Keith Elliott) and Izmir (Gül), participants split into groups to find out what it is like to be a student in a PBL session. The participants formed two small-groups

and two cases, representing two different approaches to case writing, were used for discussion. While both cases were excellent for motivating learning through problem-solving, there were differences in the way the cases were written. The Izmir case, Melis Bora, a case on obesity, was structured in consecutive sections, each giving new data on the case, and asking questions for discussion. This case represented the “New Mexico” style. The case from Manchester on diabetes was designed with a different approach, being less structured and allowing more space for independent learning. Both groups worked well and enjoyed the way the PBL functioned. Both groups were observed to be very enthusiastic about the process of PBL. The participants played the role of students and tried to think the way students would receive this active learning process. They asked questions of each other, discussed, formed hypotheses, approached the limit of their knowledge, and, finally formulated learning issues on which to work independently till the next session. At the end there was a discussion session for the whole group and this time the participants discussed the philosophy and mechanism of PBL from the pedagogical aspect. The participants assessed the sessions as “excellent”. To quote from a written feedback form: “.. Keep on doing it..” In the afternoon, a second session was delivered on “Post-graduate Education”. It started with Gül Güner-Akdogan who gave an overview on the quality of post-graduate education, including the results of European projects in this area.

Then, Costas Drainas gave a brief analysis of the status of post-graduate education in Greece. Jason Perret (Bruxelles) followed with an excellent lecture on “What abilities are needed by the student and what skills are needed by the supervisor”. Small Group Discussions were carried out on the topics: “Student abilities and supervisor’s skills”, “Role of the supervisory committee”, “PhD curriculum”, and “Experimental research-based thesis”. The Workshop was well received by the participants, as observed from the oral and written feedback. Keith, Jason and Gül were also treated to exceptional Greek hospitality by Costas Drainas and PA Kyr-iakidis. The Workshop was accompanied by very tasty dinners representing the Greek cuisine; included here is a photo of the group at one of the dinners. After the workshop, the FEBS Education Committee held its spring meeting, where Iain



**Figure 8.4.6** Education Committee for Dinner at Gothia Towers.

Mowbray, Israel Pecht, Karmela Barisic and Peter Ott also joined. FEBS Education Committee will hold its next workshop at Opatija near Rijeka, Croatia, on September 18–19, 2010. This workshop will be hosted by Karmela Barisic from FEBS Education Committee. (Excerpt from FEBS News June 2010)

#### 8.4.2.7 Report of the Education Committee in Turin, 2011

##### 8.4.2.7.1 Education Events at the FEBS Congress *Gül Güner-Akdoğan Chair of FEBS Education Committee*

The FEBS Congress 2011 witnessed a number of educational events, organized by the FEBS Education Committee with strong support from the organizers – the Italian Society of Biochemistry and Molecular Biology (ISBMB).

The two FEBS workshops are briefly summarized below; more details, including slides from the talks, are available on the FEBS Education Platform via <http://edu.febs.unibe.ch>. A third workshop, organized by the ISBMB and targeted at an audience including science teachers from the region, was held in Italian on ‘High school scientific education: a bridge towards medicine, biology and biotechnology university courses.’

##### *Workshop I. PhD training in Europe: where are we heading?*

This workshop, co-chaired by Gül Güner-Akdoğan (Izmir; Chair, FEBS Education Committee) and Jason Perret (Brussels; Member, FEBS Education Committee), presented an opportunity for dialogue between academia and industry on the fundamental issue of post-graduate education. It was attended by about 120 participants, both faculty and PhD students, from all over Europe. Stimulating presentations from the two invited speakers – Prof. Michael Mulvany (Aarhus University Graduate School of Health Sciences, Denmark, and Vice- President, ORPHEUS) and Prof. Detlev Riesner (Düsseldorf Heinrich-Heine-Universität, and Co-Founder and Chairman of the Supervisory Board Qiagen NV Hilden, Germany) – were followed by lively discussions with the interested participants. Michael Mulvany’s talk, ‘European vision in PhD education’, focused on present European trends in PhD education. Inclusion of the PhD in the Bologna Process (working towards comparable higher education across Europe) has supported efforts to improve the structure of PhD training, with clear 3–4-year time limits, and relevant course work. The new structures also recognize that only a minority (~ 15%) of PhD students continue to an academic research career, emphasizing the need for courses in transferable skills. However, as pointed out by the European Universities Association (EUA), the research basis of PhD education makes it fundamentally different from pre-graduate education. These considerations, together with a dramatic increase in the number of PhD students in Europe, indicate the need for standards in PhD education – to safeguard the reputation of the PhD as a research degree, and also to strengthen career opportunities for those with PhD degrees. Initiatives to produce standards have been taken by a number of organizations including EUA-Council for Doctoral Education and ORPHEUS (Organization for PhD education in Biomedicine



and Health Sciences in the European System). Detlev Riesner's talk, 'What industry, in particular Pharma-Biotech industry, expects?', began by looking at the career paths of PhD graduates in Germany, stressing the fact that only 4% of PhD graduates finally reach professor positions and 2.5% other permanent staff positions in academia. He presented a very interesting comment: 'talent outweighs experience in industry'. He explained thoroughly, using lively examples, the core competencies sought in candidates by industry: innovation/creativity, problem solving, customer focus, business impact, accountability (character), and, for leadership, planning/research management and people management. He mentioned that experience in another country is important for industry candidates. He also discussed the possible collaborations between university and industry. It could be direct, by focusing together on some problems; however, he suggested the best way was through 'spin-off' companies from the university. Following Riesner's talk, many participants were active in asking questions. From the lively discussions, which continued up to the very end of the workshop session, and from the feedback of the participants, it was concluded that the workshop had been well received. We thank deeply our two invited speakers for presenting their expertise in both a modest and a brilliant manner.

#### *Workshop II. Integrating molecular bioscience education with medical training*

This workshop, co-chaired by FEBS Education Committee Members Karmela Baršić (Zagreb) and Keith Elliott (Manchester), was attended by about 45 participants, mostly faculty members from science and medicine interested in learning more about integration. The first talk, from Dr Karen Mattick (Universities of Exeter and Plymouth, UK), aimed to explain why medical programmes should integrate scientific and clinical learning within undergraduate medical curricula, focusing on the evidence base available via the educational literature to determine whether curriculum integration led to better learning outcomes than more traditional 'pre-clinical/clinical' curricula. She explored the educational theories that suggest that integration should work and then presented four 'good news' studies that suggest that curriculum integration is working as intended. She highlighted that further research into the impact of curriculum integration on educational outcomes, and a better understanding of the mechanisms underlying any impact, is urgently required. The second and third talks focused on how training could be integrated. Prof. Jan F. C. Glatz (Director of Education, Biomedical Sciences, Maastricht University, The Netherlands) described the solution to the question 'How do we learn best?' at Maastricht, emphasizing the approaches and methods used in integration in a completely problem-based learning curriculum. Prof. Tomáš Zima (Dean of the 1st Medical Faculty, Charles University Prague, Czech Republic) discussed integration of the curriculum at Charles University Prague and presented an excellent example of an 'e-learning platform' designed to enhance integration and learning in an international network.



**Figure 8.4.7** Education Committee workshops 2011: Speakers and organizers from 'Integrating molecular bioscience education with medical training' (T. Zima, G. Güner-Akdoğan, J. Glatz, K. Barisic, K. Elliott and K.

Mattick; by kind permission of J. Glatz). A lively panel discussion followed. We thank wholeheartedly the three speakers who presented the experiences from their teaching programmes.

#### *Support for CV preparation*

Keith Elliott was again invited to attend the pre-congress Young Scientist Forum (YSF) and to take part in the careers roundtable discussion, where he talked about 'Preparing your curriculum vitae – how to make the most of yourself!' For many of the YSF participants this was the first time that anyone had formally talked to them about preparing a CV. This year, 55 young scientists, from 23 different countries, took advantage of the offer of a one-to-one session at the main Congress, where Keith (and Jason Perret) discussed the CV in detail. This is the largest number of participants we have seen. We will participate in the Young Scientists Program next year during the IUBMB–FEBS Congress, where we hope to meet many more young scientists and perhaps have some small influence on their future success. (FEBS News September 2011)

**8.4.2.7.2 Slovakia (Smolenice–Bratislava): 12–13 September 2011** This two-day workshop, conceived during a FEBS WGI (Working Group on Integration) visit to Bratislava in October 2009, focused on three significant areas in education, as requested by the Slovak Society of Biochemistry and Molecular Biology (SSBMB): 'post-graduate education', 'problem-based learning', and 'quality of education'. Keith Elliott, Jason Perret and Gül Güner-Akdoğan, supported by Mathias Sprinzl, were the workshop leaders from FEBS. The arrangements in the splendid castle of Smolenice were in the excellent hands of the SSBMB, represented by Prof. Jan Turna (President) and Prof. Marta Kollarova (Comenius University), and coordinated by Assoc. Prof. Katarina Mikusova.

There were around 45 participants from all over Slovakia, as well as a few from the Czech Republic, with registration and accommodation for all participants kindly offered by the Society. Postgraduate education was discussed from the point of view of training programmes, supervision (skills required in supervising and expectations from PhD candidates), student perspectives, and quality, including on-going European projects addressing this. A brief introduction was given on problem-based learning (PBL) and its applications. The main characteristics of PBL were compared with other educational methods. Two different ways of approaching PBL, the first with a lot of freedom and a second, more-structured approach, were presented. Keith Elliott and Gül Güner-Akdoğan demonstrated PBL applications in Manchester, UK, and Izmir, Turkey, respectively. Small groups of participants enjoyed working on real PBL cases to understand the mechanics. 'What is facilitation?' and 'How is it different from other educational techniques?' were points discussed after the PBL session. In addition, a brief discussion ensued on designing a PBL curriculum. Finally, the topic of 'quality indicators for education' was discussed in an interactive, stimulating session, over coffee. In oral and written feedback obtained from the participants, over 90% of the participants rated the workshop as 'excellent' or 'very good'. The FEBS workshop leaders found the experience stimulating and productive. Our appreciation goes to our Slovakian hosts and the participants.



**Figure 8.4.8** Participants in Smolenice.



**Figure 8.4.9** Audience at the Education Workshop in Smolenice.

**8.4.2.7.3 Slovenia (Ljubljana): 3–4 November 2011** This workshop arose from discussions at a FEBS Council Meeting with Professor Marinka Drobnič-Košorok, President of the Slovenian Society of Biochemistry and Molecular Biology, and was very well coordinated by Assoc. Prof. Blaž Cigić, responsible for the educational activities of the Society. The workshop was held in the stimulating atmosphere of the large lecture room of Biotechnical Faculty, Jamnikarjeva 101, Ljubljana, using seminar rooms and laboratories for the small-group discussions. There were around 55 participants, mostly young scientists and PhD students, from all over Slovenia. The workshop leaders from FEBS were Keith Elliott, Peter Ott, Karmela Barisic and Gül Güner-Akdoğan; in addition, support was kindly given by Felix Goni (Past Chair, FEBS Publications Committee), Michel Claessens (Communication Head, ITER Organization, France) and Keith Burdett (Manchester University, UK). The topics of the two-day programme were ‘problem-based learning’, ‘scientific communication (writing a scientific article)’ and ‘communication of science to nonscientific audience’, as requested by the Society. The PBL session was run in a similar way to the Slovakia workshop. The participants formed two small groups, and two cases, representing two different approaches to case writing, were used for discussion. While both cases were excellent for motivating learning through problem solving, there were differences in the way the cases were written. An Izmir case on obesity was structured in consecutive sections, each giving new data on the case, and asking questions for discussion, whereas the Manchester case on diabetes was less structured and allowed more space for independent learning. Both groups worked well and enjoyed the way the PBL functioned. Teachers played the role of students and tried to think how students would receive this active learning process. They asked questions, discussed, formed hypotheses, approached the limit of their knowledge, and, finally, created learning issues on which to work independently till the next session. At the end, there was a discussion session for the whole group, and this time the teachers discussed the philosophy and mechanism of PBL from the pedagogical points. Scientific communication was a new theme for the FEBS Education Committee to cover in a workshop. A great deal of thought was put into this session and the following objectives were set:

- to provide an overview of new science,
- to present recent developments related to science communication that are particularly (but not exclusively) relevant in Europe.

#### 8.4.2.7.4 In Memoriam Constantin Drainas 1950–2011

##### *HSBMB Secretariat*



Constantin Drainas, President of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB), died tragically in a car accident on 5th July 2011. He was Professor of Biochemistry at the University of Ioannina, Greece, and a distinguished and active member of the HSBMB for several decades, representing the Society as a delegate in FEBS and serving as a member of the FEBS Education Committee. Prof. Constantin (Costas) Drainas was born in Athens in 1950 and graduated from the Department of Biology, University of Patras, Greece, in 1972. He received his PhD from the University of Glasgow, Scotland, UK, in 1978, under the supervision of Prof. J.A. Pateman, for work on the metabolism of L-asparagine in *Aspergillus nidulans*. As a postdoctoral fellow he worked in the Department of Chemistry and Biochemistry, UCLA, USA, on the metabolism of arginine in *Neurospora grassa* with Prof. R.L. Weiss. He then moved to the Department of Biochemistry and Microbiology, University of St Andrews, Scotland, UK, supported by an EMBO long-term fellowship, to work on glutamate metabolism in *Aspergillus nidulans* with Dr J.R. Kinghorn. In 1982 he was appointed Lecturer at the Department of Chemistry, University of Ioannina, and became Professor of Biochemical-Molecular Genetics and Biotechnology in 1997. In his academic career he focused on both basic and applied research in the biochemistry, molecular biology and genetics of microorganisms of industrial and environmental interest. More specifically, he studied osmoregulation mechanisms and worked on the development of gene transfer and reporter systems for microorganisms of industrial or environmental interest, as well as on the development of genetic tools for studying gene expression. He also conducted research on conjugal mobilization mechanisms in bacteria, molecular classification of microorganisms involved in biodegradation of pollutants, membrane lipid metabolism in microorganisms, and biochemical and genetic regulation of new metabolic pathways of xenobiotic compounds. His significant contributions in these fields resulted in the publication of over 65 papers in peer-reviewed international journals. Prof. Drainas played an active and important role in organizing biochemical education at the University of Ioannina. He taught many undergraduate classes in biochemistry, molecular biology, genetics and evolutionary biology in the Departments of Chemistry and Biological Applications and Technologies, as well as post-graduate seminars on the biotechnology of microorganisms. He supervised a large number of students, many of whom followed in his footsteps and developed successful

scientific careers. He also played a prominent role in the administration of the University of Ioannina, serving over the years in numerous positions, including Member of the Senate, Director of the Sector of Organic Chemistry and Biochemistry, Deputy Director of the Department of Chemistry, and Member of the Research Committee. Outside the University, Prof. Drainas served as the National Representative to the DGXII of the European Union and as a member of the Council of Research and Technology of Greece. Prof. Drainas was a distinguished member of the HSBMB. He was first elected as a member of the Board in 1994 and served as President during 2003–2005 and from 2007 until his death. As President of the Society he hosted the very successful 33rd FEBS Congress and 11th IUBMB Conference in Athens in 2008. He was also an active member of FEBS, representing the HSBMB on several occasions and serving as a member of the Education Committee. The European biochemical community is deeply grieved by the loss of Prof. Drainas and will always remember him not only for his outstanding scientific contributions but also for his warm and remarkable personality. (FEBS News September 2011)

#### 8.4.2.8 Activities of FEBS Education Committee in Sevilla, 2012

##### 8.4.2.8.1 Educational Events during IUBMB-FEBS Congress 2012

###### *Gül Güner-Akdoğan Chair, FEBS Education Committee*

Events at the IUBMB–FEBS Congress in Sevilla focusing on teaching and learning in biochemistry and molecular biology attracted a large number of participants from all over the world. In various collaborations with the IUBMB, the Spanish Society for Biochemistry and Molecular Biology and the FEBS Science and Society Committee, the FEBS Education Committee organized three workshops, a poster session and CV advice.

###### *Workshops*

- (1) The first Sevilla Workshop, ‘Teaching Molecular Evolution; A Unifying Principle of Biochemistry’, which was attended by about 150 participants consisting of both PhD students and faculty, provided a primer on molecular evolution and also explored how it can be intricately woven into the teaching of biochemistry. First, Juli Peretó (Professor of Biochemistry and Molecular Biology, University of València, Spain) shared his teaching of ‘metabolism with an evolutionary flavour’ in a talk entitled ‘Teaching on the origin of life or the emergence of biochemical functions’. Next, Peter Schuster (Professor Emeritus, Vienna University, Austria) drew on his research on *in silico* evolution at molecular resolution to give a fascinating talk on ‘Molecular evolution as a unifying principle of biochemistry’. The ensuing panel discussion allowed the audience to express their thoughts and experiences, focusing on the significance of this concept in understanding basic biochemical mechanisms.
- (2) The second workshop, ‘Research into Effective Learning Strategies: What Biochemistry is Learning from the Other Sciences’, looked at learning practices in related science fields, and resulted in stimulating discussions. In the first talk, Roy Tasker (Professor of Chemical Education, University of

Western Sydney, Australia) shared his interests in how and what students learn in chemistry using interactive multimedia resources – in particular, from learning designs that develop student mental models of the molecular world. Then, Helen Keates (Lecturer in Veterinary Science, University of Queensland, Australia) explained how she used different strategies for assessment to drive student learning outcomes and how high grades in written work could be better translated to logical thought processes in clinical problems – thereby promoting veterinary science education in her school, as well setting an example for other sciences.

- (3) A third Workshop, 'Science in School – Biodiversity and Evolution', aimed at local high-school teachers was held in Spanish with a simultaneous translation into English. The workshop was attended by around 120 participants altogether, with at least 60 high school teachers – a great success!

#### *Other events*

New this year was a poster session on molecular life sciences education; six excellent posters were received and lively discussions were generated during this session. In addition, Keith Elliott from the FEBS Education Committee took part in a careers roundtable discussion at the YSP/12th YSF and 46 young scientists, from 29 different countries, took advantage of one-to-one CV sessions with him (and Jason Perret) at the Congress. (FEBS News June 2012)

#### **8.4.2.8.2 Further FEBS Education Workshops in 2012**

**Education Workshop in Izmir 2012** The FEBS Education Committee encourages the development of innovative teaching methods in biochemistry, molecular biology and related areas, disseminates advice on educational resources, and arranges workshops on educational issues.

A FEBS 'Workshop on Biochemistry and Molecular Biology Education: Trends and Tips' recently took place in Izmir, Turkey. This workshop, conceived by the late Prof. Ed Wood when he was Chair of the Education Committee, was hosted by Prof. Nazmi Özer, President of the Turkish Biochemical Society, and expertly coordinated by Prof. Ferhan Sagin, Chair of the Educational Activities of the Turkish Society of Biochemistry. The workshop provided an excellent platform for presentation and discussion of 'trends' in undergraduate education such as integration, problem-based learning (PBL) and task-based learning (TBL), as well as 'tips' for postgraduate students for excellence in research, and for science communication in various settings. It was attended by 105 participants (including the workshop leaders and speakers). Speakers at the workshop were FEBS Education Committee members (Keith Elliott, Tomáš Zima, Angel Herráez, Wolfgang Nellen, Karmela Barišić and Gül Güner-Akdoğan), Jacques-Henry Weil (Chair of FEBS Science and Society Committee), Félix Goñi (Former Chair of FEBS Publications Committee), Detlev Riesner (Quiagen, Germany), Karen Mattick (Peninsula Medical School, UK), Ferhan Sagin (Izmir), Tomris Ozben (Antalya, Turkey) and Hakan Abacioglu (Izmir). The scientific programme was made more interactive

with 'Meet the Expert Sessions', organized according to the choices of the participants. The issues discussed included: PBL in Dokuz Eylul, Izmir (Gül Güner-Akdoğan), PBL in Manchester, UK (Keith Elliott), TBL (Ferhan Sagin), 'New technologies and making educational use of them' (Angel Herráez), 'Medical faculties network' (Tomáš Zima), 'Internet searching' (Angel Herráez), 'CV writing' (Keith Elliott), 'Funds and programmes' (Tomáš Zima), 'How to make a scientific presentation' (Hakan Abacioglu) and 'Science and society dialogue' (Jacques-Henry Weil). In addition to these sessions, a poster display (encompassing 55 posters) on educational issues attracted much attention and provided the opportunity for more interaction. At the closing session, prizes were presented for the three best posters. The workshop concluded with a gala dinner, overlooking the beautiful Izmir bay. Postgraduate student participation in the meeting was (happily) dominant (two-thirds of the participants) and made possible by strong local support. The Turkish Foundation of Science and Technology provided internal travel and accommodation fellowships for 25 PhD students from all over Turkey. In addition, the City of Balçova (Izmir) offered registration for 40 students living in the Izmir region. In a pilot project, chapters of textbooks from Wiley (the publishing partner of *FEBS Journal*) related to the workshop themes were made available to workshop participants via the FEBS Education Platform (accessible from the FEBS website education page, and managed by Peter Ott). The arrangements in the fascinating Thermal Hotel of Kaya-Izmir were very well organized by the Turkish Biochemical Society Izmir Branch, and smooth running of the meeting was aided by the student support team (wearing orange t-shirts, as seen on the cover of this issue of *FEBS News*), chaired by Ferhan Sagin. Our appreciation goes to everyone who made this workshop possible. In oral and written feedback, obtained from all participants, 88.2% rated the workshop as 'excellent' and 11.8% as 'very good.' (*FEBS News* June 2012)

**Education Workshop in Yerevan 8–9 October 2012** This workshop, arising from discussions during the visit of the FEBS Working Group on Integration to Yerevan in October 2011, focused on 'Student-Centred Learning (Biomolecular Education and Scientific Skills) for Postgraduate Students and Young Scientists'. The event was organized by the FEBS Education Committee in collaboration with the Armenian Association of Biochemists (AAB), chaired by Prof. Guevork Kevorkian, and the Armenian Young Biologists Association (YBA), chaired by Arsen Gasparyan.

There were around 70 participants, mostly from Yerevan (with registration fees kindly taken care of by the AAB); in addition, FEBS provided a fellowship to support attendance of a young participant from outside of Yerevan.

Introductory talks from FEBS and from the AAB (in which we learned of the recent sad loss of the late President Prof. Armen Galoyan) were followed by a key presentation by Dr N. Hovhannisyan (Yerevan State University) on 'Integrated Learning Curriculum in Biosciences'. The ensuing student-centred learning sessions then focused on 'Problem-Based Learning' and 'Tools in Basic Science Education – New Educational Technologies'. Next, the participants were divided into small groups for structured round-table discussions on various topics,





**Figure 8.4.10** FEBS Yerevan education workshop participants with FEBS trainers (Keith Elliott, UK; Angel Herráez, ES; Tomáš Zima, CZ; Wolfgang Nellen, DE; and Gül Güner Akdogan TR; supported by Mathias Sprinzl, DE). The arrangements in the splendid Youth Centre of Yerevan (supported by

the Youth Foundation of Armenia) were well organized by the Assistant to Secretary of the AAB, Flora Sarukhanyan, PhD, and coordinated by Hovakim Zakaryan (Secretary of External Communications Committee of the YBA).

as selected by the participants: ‘Problem-based learning (PBL)’, ‘Educational technologies’, ‘Science for the public’, ‘Funds & programmes’, and ‘Critical Reading of Scientific Literature’.

The second day of the workshop included sessions on ‘Trends in PhD education’ and ‘Scientific skills’ (Finding one’s way in the internet; Tips for reading and writing a scientific article; Tips for writing a research project proposal). A session on ‘Professional development of young scientists’ (Preparing a CV; Student self-organization; Best-practice example from Armenia) was particularly well appreciated by the young scientists. Again, at the end of the day, small-group structured round-table discussions were held, where each participant had the opportunity to attend a different topic.

In feedback on the event, over 95% of the participants rated the workshop as ‘excellent’. All slides, and reading material from selected Wiley–Blackwell book chapters, were uploaded on the FEBS education platform.

Our appreciation goes to our Armenian hosts and the participants in addition to FEBS, the AAB and the YBA for making this exciting event possible. (FEBS News January 2013)

**Education Workshop in Cambridge UK 17–18 December 2012** The Cambridge workshop, held jointly with the UK Biochemical Society, focused on improving the student experience and the teaching of transferable employment skills. It was hosted

in the historic surroundings of Gonville and Caius College, Cambridge University, thanks to Prof. Sir Alan Fersht, FEBS Treasurer (and the college Master).

The workshop was the first to be jointly organized by the FEBS and the Biochemical Society's Education Committees. It was dedicated to the memory of Prof. Edward J. Wood (1941–2008), who was the founding chair of the Education Committees of both the Biochemical Society and FEBS. The event included a heartfelt tribute to his accomplishments in science and education, given by Gül Güner Akdogan and attended by his family in addition to the workshop participants.

Participation in the workshop was from across the educational establishment, encompassing probationary lecturers, postgraduate students, post-doctoral fellows, teaching fellows and academics. Together with the invited speakers and the administrative staff, there were around 70 participants. A third of the participants were from the FEBS region outside of the UK, including Armenia, Belgium, Croatia, Czech Republic, Estonia, Germany, Georgia, Hungary, Ireland, Poland, Spain, Sweden, Turkey and Ukraine, and there was also one participant from Nigeria. FEBS allocated bursaries for partial support of two PhD students from Armenia, one young scientist from Turkey, and one young scientist from Georgia. This event was approved by the Society of Biology (UK) for the purpose of Continuing Professional Development (CPD) and is counted as 45 CPD credits.

The two-day workshop was divided into four main sessions. 'Session 1: Improving student engagement' included talks on the use of enquiry (Natalie Rowley, Birmingham, UK), technology (Neil Morris, Leeds, UK) and shadow modules (Sheila Dargan, Cardiff, UK). Talks in 'Session 2: The acquisition of key generic and scientific skills' encompassed 'Virtual practical classes' (Gus Cameron, Bristol, UK), 'Bridging the gap between practical classes and research projects' (Francesco Michelangeli, Birmingham, UK), 'Using podcasts to aid communication' (Jeremy Pritchard, Birmingham, UK), and 'Bioscience Horizons, an undergraduate journal' (Neil Morris). 'Session 3: Assessments and feedback' included stimulating talks from Erica Morris (The Higher Education Academy, UK), Jon Scott (Leicester, UK; student and staff engagement with feedback) and Julian Park (Reading, UK; different methods for giving feedback). In 'Session 4: Careers and improving employability' Detlev Riesner (Düsseldorf, DE) described what employers want from bioscience graduates, Wolfgang Nellen (Kassel, DE) focused on communication with a nonscience audience as a key employment skill, Chris Willmott (Leicester, UK) gave interesting information on careers and careers fairs, and Richard Reece (Manchester, UK) discussed accreditation of bioscience degrees.

In addition to learning from these presentations, attendees participated in discussion groups each day and benefited from a poster session. The publishers Wiley-Blackwell and Portland Press also gave informative and helpful presentations.

Excellent feedback was received from the participants in general, as well as good suggestions for improvement, such as more time for discussion and posters, and providing a summary of the small-group discussions to the whole group.

The FEBS education platform has been uploaded with slides from the presentations as well as the relevant book chapters from Wiley-Blackwell (the latter for a period of six weeks after the workshop).

In conclusion, this workshop was successful in many ways: in providing an excellent platform for the sharing of innovations in molecular bioscience education, in presenting 'tips' for the careers of young scientists, in helping young interested academics to promote their educational skills, and in bringing together those interested in molecular bioscience education not only from all over the UK but from the entire FEBS area.

I thank everyone who made this workshop a memorable one, and particularly Francesco Michelangeli, Sheila Dargan and Frances van Klaveren from the Biochemical Society.

*Gül Güner Akdoğan Chair, FEBS Education Committee*

(FEBS News January 2013)

#### 8.4.2.8.3 FEBS Education Workshops in 2013

**Education Workshop at St Petersburg Congress (July 8, 2013)** At the 38th FEBS Congress, the FEBS Education Committee organised a workshop entitled 'Molecular Life Sciences Education for the Needs of Industry' as well as a poster session on education in molecular life sciences. The workshop looked at scientific and generic skill requirements, such as communication and commercial awareness, for career success not only within but also outside of academia. Following a brief introduction by Keith Elliott (FEBS Education Committee), the talks of the workshop (see box) presented three perspectives on this topic: industry's needs (what does an industrial company look for in its recruits?); how academic research could be developed into applied science and commercialisation; and the university perspective (how can students be prepared for the needs of industry?). At the end, there was an opportunity for open discussion between the speakers and the audience to share experiences – for example, how different countries tackle the problems and how industry and academia can work together.

Prof. Ruth Arnon's inspiring illustration from the Weizmann Institute of Sciences set an excellent example of how academic research could impact on industry. Prof. Detlev Riesner pointed out that the percentage of PhD holders being recruited in universities was relatively low: though figures differ between countries, in Germany, for example, only 4% of PhD graduates were finally recruited as professors, and 2.5% as permanent staff. The rest (93.5%) pursued careers outside universities. These overwhelming figures stressed very well the need for collaboration between universities and industry. It was also agreed that universities should plan ways of preparing students for industry, for which Prof. Tomas Zima from Charles University First Faculty of Medicine described an excellent working model.

This workshop was very well attended, with around 100 participants at all career stages and with representatives from both industry and academia. We hope it not only inspired university academic staff to work more on the issue of industrial

collaboration, but also motivated young scientists to think more effectively about the translational potential of their research. Wiley-Blackwell (the publishing partner for *FEBS Journal*) offered book chapters on subjects related to the workshop through a website linked to the FEBS education platform and the workshop participants were able to download these chapters.

The poster session involved all posters related to education in molecular life sciences and provided an interactive platform for discussion. Some of the interesting posters presented were: 'European funding for talented life scientists from anywhere in the world' (European Research Council, Brussels, Belgium), 'Careers and Research Performance of PhD Program Graduates of Health Sciences in Turkey' (Dokuz Eylül University, Izmir), 'Why Iranian students prefer doctoral education in Turkey' (Hacettepe University Ankara, Turkey), and 'Promoting deep learning in biochemistry by diversifying assessment strategies – experience at the university of Hong Kong' (University of Hong Kong, Pokfulam). We look forward to receiving more and more posters on education in future FEBS Congresses.

Finally, in the traditional collaborative activity between the FEBS Education Committee and the Young Scientists' Forum (YSF), Keith Elliott provided CV advice to 35 YSF participants, which we hope will help the young scientists in their bright future careers.

We thank all those who contributed to the success of these FEBS education events in St Petersburg and look forward to meeting with you in future FEBS Education workshops.

*Gül Güner Akdoğan*

*Chair, FEBS Education Committee*

(FEBS News September 2013)

*Lectures at the FEBS Education Congress Workshop*

*Detlev Riesner* (Heinrich Heine University of Düsseldorf; and Qiagen, Germany) 'What the industry expects from molecular life sciences graduates'

*Ruth Arnon* (Weizmann Institute of Science, Rehovot, Israel) 'From basic research to applied science'

*Tomas Zima* (Prague University 1st Faculty of Medicine, Czech Republic) 'How medical schools prepare students for the industry'

**Teaching Molecular Evolution Workshop in Gdańsk, Poland; July 2013** For several years now, FEBS has been organizing Biochemistry and Molecular Biology Education Workshops throughout the FEBS area, in collaboration with Constituent Societies of FEBS. The latest workshop was agreed between the FEBS Education Committee and the Intercollegiate Faculty of Biotechnology, Gdańsk (a joint centre of the University of Gdańsk and Medical University of Gdańsk), with support from the Polish Biochemical Society. It was run on the first day of an extended four-day event of scientific and training activities (13–16 July 2013).

The target audience consisted of PhD students, young scientists and academics involved in biochemistry and related biosciences, with an interest in understanding and teaching molecular evolution. Fifty people attended the event, mostly from Poland, 52% of them being graduate or masters students and 38% PhD students.

Speakers/facilitators at this workshop were Angel Herráez (Alcalá University, Spain; and FEBS Education Committee), Jarosław Marszałek (Gdansk University, Poland), Juli Peretó (Valencia University, Spain) and Dan Tawfik (Weizmann Institute of Science, Israel). The lectures covered topics such as 'Evolution: from modern to functional synthesis', 'Laboratory molecular evolution', 'Discussing the origin of life as an educational tool in biochemistry' and 'Teaching metabolism with an evolutionary flavour'. There was also a practical activity on 'Molecular evolution illustrated using protein structure' which was run *in silico* in a computer lab.

As is usual with FEBS Education Workshops, supporting documents, reading material and a discussion forum were made available to the participants via the online FEBS Education Platform, both during and after the event.

Feedback was collected from the attendants using a short questionnaire, which denoted a high degree of satisfaction with the workshop (average level of overall satisfaction rated 4.4 out of 5).

A more detailed report can be accessed from the Education section of the FEBS website, and the full program of the four-day event is available at <http://www.bss.ug.edu.pl/?tpl=schedule&lang=en>.

*Angel Herráez*

*FEBS Education Committee Member*

(FEBS News September 2013)

**Molecular Life Sciences Education: Tbilisi, Georgia; 8–9 October 2013** Topics include post-graduate education, problem-based learning, designing laboratory practicals, and skills for young scientists. The workshop will be preceded by a celebration of the reconstitution of the Georgian Society of Biochemistry.

**Molecular Life Sciences Education: Sofia, Bulgaria; 22 November 2013** Topics include post-graduate education and scientific skills for young scientists (how to read and write a scientific article, how to write a research project proposal, how to write a CV). This is an opportunity to assess progress since an earlier FEBS education event with the Bulgarian Society of Biochemistry, in 2008.

## 8.5

### FEBS Working Group for Exploring Ways to Assist Central and Eastern European Countries" (WOGCEE)

#### 8.5.1

##### Initiatives and Reports

*By Guy Dirheimer,*

*Chair of the FEBS Working Group on Central and Eastern Europe*

The principal initiatives and objectives of WOGCEE at its inauguration have been outlined in **Chapter 3, Section 3.3.5**.

Up to the year 2008 WOGCEE continued its visits – that had begun in Kyiv (see Section 8.5.2.1) – to Central and Eastern European Countries: to Yerevan (Armenia) on April 24–29, 2004 (see Section 8.5.2.2), Zagreb and Osijek (Croatia) on May 11–13, 2006 (see Section 8.5.2.4) and Sofia (Bulgaria) on October 20–24, 2007 (see Section 8.2.5.). Each time the visits were perfectly organised by the host Biochemical Societies and the National Academies of Sciences and of Medicine, and the Committee was received in the friendliest fashion. They met very motivated scientists and visited many Institutes. The authorities also made themselves available: for example the Prime Minister of Armenia and the Ministers of Education and Science in Croatia and Bulgaria. The Committee's message was of the need to develop basic research and to invest in scientific infrastructure in order to prevent brain drain.

At all these meetings the Committee could speak freely, as FEBS is a non-governmental organisation. Each time the Committee emphasised that good higher education is not possible without good research. These visits permitted us to find out the most urgent problems. Some of them could be solved by FEBS afterwards (Satellite connection to Romania, books for Ukraine, Croatia and Bulgaria, equipment and heating the Institute for Armenia). During the formal and informal meetings and discussions with scientists the members of the WG noticed the high determination among most of the biochemists they met, to perform high quality research. The research topics of several groups, which were visited, contain exciting and new scientific ideas, which would deserve financial support. Researchers were open to suggestions and criticism related to the possibility to improve their scientific achievements.

Reports on these visits have been given to the FEBS Councils and published in the book "*Forty Years of FEBS, 1964–2003, A Memoir*", and in the FEBS Newsletters of September 2004 and November 2007.

The reports were also sent to the receiving authorities and institutes, as they gave conclusions and recommendations for recruiting the youth to science, making science globally competitive, blocking/reversing brain drain etc. (FEBS News 2008)

*Ex officio* Members: FEBS Secretary General, FEBS Treasurer, Chairman FEBS Advanced Courses Committee, Coordinator of FEBS SARS/SARP; from 2005 on: Chairman of FEBS Education Committee.

## 8.5.2

### Reports on WOGCEE Committee Activities

#### 8.5.2.1 Visit to Kyiv (Ukraine) of the FEBS Working Group to Explore Ways to Improve Assistance to Central and Eastern European Countries

The FEBS Working Group met in Kyiv from April 15 to April 17, 2002. The participants were J. Baranska, A. El'skaya, P. Campbell, J. Celis, G. Dirheimer, I. Mowbray, S. Szedlacsek, K. Wirtz and T. Zima. The visit was perfectly organized by Professor S. Komisarenko, President of the Ukrainian Biochemical Society, and Professor El'skaya, President of the Ukrainian Society of Molecular Biology. The Working

**Table 8.5.1** Members of the WOGA - WOGCEE Committee, 2000 to 2008.

Member	Country	Elected	Start	End
<b>2000–2006</b>				
Guy Dirheimer, Chairman	France	Nice (1999)	01 01 2000	31 12 2002
		Istanbul (2002)	01 01 2003	31 12 2005
		Budapest (2005)	01 01 2006	31 12 2008
Jolanta Baranska	Poland	Nice (1999)	01 01 2000	31 12 2006
A.V. El'skaya	Ukraine	Nice (1999)	01 01 2000	31 12 2006
Stefan Szedlacsek	Romania	Nice (1999)	01 01 2000	31 12 2006
Ivo Safaric	Czech Rep.	Nice (1999)	01 01 2000	31 12 2006
<b>2007–2008</b>				
Guy Dirheimer, Chairman	France	Budapest (2005)	01 01 2006	31 12 2008
Olga P. Matysheva	Ukraine	Istanbul (2006)	01 01 2007	31 12 2009
Andrzej Dzugaj	Poland	Istanbul (2006)	01 01 2007	31 12 2009
Gabriela Negroiu	Romania	Istanbul (2006)	01 01 2007	31 12 2009
Karel Berouska	Czech Rep.	Istanbul (2006)	01 01 2007	31 12 2009

Group was received in the friendliest fashion and much appreciated the outstanding Ukrainian hospitality. We met excellent scientists and officials. During our stay in Kiev we visited the Palladin Institute of Biochemistry and the Institute of Molecular Biology and Genetics, both belonging to the National Academy of Sciences of Ukraine, the National Agrarian University and the Department of Biochemistry of Kyiv University.

In the first two Institutes broad areas of research are covered and the majority of the research projects outlined there deal with important subjects of the actual biochemistry and molecular biology. The research level of both Institutes is high. This is in part due to a close cooperation of scientists of these Institutes with their Ukrainian colleagues working abroad in laboratories of West Europe and the USA. These Institutes represent potential 'Centres of Excellence'. It should be also mentioned the significant human resources which Ukraine have invested in as this two Institutes have altogether almost 1000 employees, the researchers representing less than one third of the total number of them. However, 40% of their researchers have left in recent times in order to make their research in Western Europe or USA. This represents an important brain drain. On the other hand, the Department of Biochemistry of Kiev University represents a much lower research level. In contrast, the Agrarian University is very successful, both in research and teaching. However, they are in different position. The students pay for their study and they have additional money from different sources, e.g. from the Ministry of Agriculture.

The working group also met different officials: Professor Vassily Kremen, Minister of Education and Science, Professor Volodymyr Seminozhenko Vice-prime Minister responsible for humanitarian matters (including science and technology) and the Presidium of the National Academy of Sciences. Each time G. Dirheimer

presented the activities of FEBS and J. Celis the reasons for our visit to Ukraine. Informal discussions followed showing the determination of everybody that good science is to be done in Ukraine. All officials stated that basic research, problems of natural sciences, and modern biological technologies represent priorities in the development of science and technology in Ukraine.

There are, however, weak points that were seen. For instance there are two societies, one dealing with biochemistry and the other with molecular biology. This represents the kind of division of resources and potential which they cannot afford. The Working Group encouraged them firmly to find a way to form a unique society, with for example two or more specialized sections, as this is the case in many other European societies. *L'union fait la force*.

Another weak point is a critical shortage of modern equipment; except for several laboratories where collaboration with industry or agriculture brought important extra funds. The equipment is outdated and non-performing. Definitely, most of these laboratories deserve much better equipment than what they have at present.

The subscriptions of the libraries are also quite scarce; besides several important journals, their libraries have rather insignificant journals, which cannot provide the researchers an appropriate literature search for their topics. In addition, there could be much more papers published by the Ukrainian biochemists in prestigious peer-reviewed journals than they do at present. Perhaps, if more important journals would be available to them, they would publish more in these journals. The Working Group thinks that East-European biochemists, in particular those of Ukraine, should be encouraged to publish more in the FEBS journals. This would be beneficial both for these scientists and the FEBS journals as well.

The cooperation between different research institutes and between research institutes and university could also been improved. For instance, more joint projects, collaborative research work or mutual information between the institutes as concerning the journals available in their libraries should considerably contribute to the progress of research in Ukraine. There are difficulties in sending books to Ukraine. For example the load P. Campbell sent (126 good books worth about 7000 euros) was refused and returned to Vilnius. FEBS was even asked to pay the cost of return to London from Vilnius! Apparently all goods have to get authority from the recipient in Ukraine and this was not given. P. Campbell complained about this stupid situation as we met the ministry of education. The university teachers were complaining about the lack of modern textbooks. Apparently one reason for this fact is that most of the former textbooks were written in Russian while nowadays the official language in universities is the Ukrainian language.

After oral discussion in Ukraine the members of the working group sent to G. Dirheimer written proposals concerning the help FEBS could give to Ukraine. *These recommendations are the following:*

- 1) This year the Institute of Molecular Biology and Genetics has organized its first *Practical FEBS Advanced Course*. We should encourage them to continue



organizing this course, if not annually, then at least biannually. We provide the Institute with funds to buy dedicated equipment; they will invite experts from abroad.

- 2) *Poor access to literature.* Given the trend towards making most of the main journals free online from 1 month to 1 year after initial publication, the priority should be to promote internet access. The problems may not be the same everywhere but it seemed that the problem in Kyiv was inadequate server capacity. We could offer grants to purchase these. We have also discussed providing online (in place of paper) access to FEBS Letters and EJB for a limited period (subject to review) with Elsevier and Blackwell and they are generally supportive. FEBS should provide one Institute of Kyiv and the biochemical Institutes of Kharkiv and Lvov with free subscriptions to FEBS Letters and EJB.
- 3) *Out of day teaching:* We should ask the Working Group on Education to propose how best to modernise university teaching of biochemistry and molecular biology in Ukraine: internet resources/education sessions at Society meetings/travel grants to attend FEBS Education sessions? FEBS should buy and send to the department of Biochemistry of Kyiv University a few modern textbooks in English (two copies of each) concerning molecular biology and biochemistry (for a staff of students). However, the problem of custom procedures for books should be solved beforehand. We have some sympathy with the views of the Ukrainians that initial teaching of molecular cell biology/biochemistry would be better done in the students' native language. We would expect any author(s) to forego royalties in these cases and we think we should explore this further e.g. seek the views of the Romanians, Bulgarians, Poles, Czechs and Hungarians (the latter may already do this for themselves?). A meeting with all delegates to the FEBS Council coming from central and eastern European countries will be organized in Istanbul by G. Dirheimer.
- 4) *Establishing centres of research excellence.* We should try to recruit an international advisory panel of experts who could review research programmes in Ukraine and provide funding to allow members to visit proposed Centres if appropriate. This might be done as an extension of a 6th Framework network if FEBS is approved to have a role in this.
- 5) *The brain drain.* This is essentially a problem of political will for the government: if they want to have prosperous and innovative science then they will have to provide the funds from government resources. The scientists, particularly the young ones, must be encouraged financially to stay and work in Ukraine, by providing them higher salaries than they have at present, but also give consistent financial support to those who intend to continue their research in Ukraine or to come back after a post-doc. The working group draws their attention to the Swedish solution (post-doc grants tenable abroad with an obligatory final phase back home).
- 6) The young Ukrainian doctoral students should be better informed about the FEBS *Collaborative Experimental Fellowships* and encouraged to apply.

- 7) *Equipment.* The SARS programme for Ukraine should be encouraged. Up to now Ukraine got 20 £ 284 (INTAS paid £595) representing 13.7% of the total loads (see Section 8.2.2).

#### 8.5.2.2 FEBS Visits Armenia in 2004 – Margarian Meets FEBS Delegation

##### 8.5.2.2.1 Visiting the Armenian Constituency 2004

*By Guy Dirheimer, Chairman of FEBS Working Group on Central and Eastern Europe*

The FEBS Working Group on Central and Eastern Europe, invited by the Armenian Association of Biochemists (which is Associated member of FEBS since 2002), met in Yerevan from April 24 to April 29. The participants were A. El'skaya, P. Campbell, G. Dirheimer, I. Mowbray, S. Szedlaczek, K. Wirtz and I. Safarik. The visit was perfectly organised by Professor A. Galoyan, President of the Armenian Association of Biochemists with the help of Dr V. Knaryan, Secretary of the Armenian Association of Biochemists and Mrs K. G. Gevorgyan, Secretary of the Council on International Cooperation. The Working Group was received in the friendliest fashion and much appreciated the outstanding Armenian hospitality. During their stay in Yerevan the members of WOGCEE had several meetings with Armenian scientists and officials: Professor F. Sargsian, president of the National Academy of Sciences, and the members of the Armenian Association of Biochemists, Prof. L. Mkrtychyan, President of the Academy of Medicine and the Deputy-Minister of Health in the presence of the members of the Academy (at this occasion Prof. P. Campbell was accepted as a new member of the Academy) and finally Mr A. Margarian, the Prime Minister of the Republic of Armenia. At these occasions the activities of FEBS and of the WG were explained and fruitful discussions took place. It was particularly emphasised that good higher education is not possible without good research. Several Research Institutes and Faculties were also visited: the H. Buniatan Institute of Biochemistry headed by Prof. A. Galoyan and the Institute of Molecular Biology headed by Prof. K.G. Karageuzyan, which both belong to Academy of Sciences, the Heratsi Yerevan State Medical University, President Prof. V. Hakobian and Prof. M. Aghajyanov, Head of the Biochemistry Department, the Yerevan State University, Faculty of Biology (Dean Prof. E.S. Gevorgyan, Dean, Prof. A. Ch. Agadjanyan, Head of the Department of Biochemistry and Prof. R. M. Aroutiounian, Head of the Department of Genetics). The research activities going on in the different Institutes are the following. The H. Butanian Institute of Biochemistry essentially focuses on Neurochemistry with an emphasis on a new brain neuroendocrine immune system. The protective effects of new hypothalamic neurosecretory cytokines against neurodegenerative disorders are studied. It is interesting to underline that several groups in Yerevan are working on the same system, establishing a critical mass. In addition, these groups work in collaboration with the Department of Biochemistry of the Yerevan State Medical Institute. The Butanian Institute has about 90 researchers. Much international collaboration is going on. Some laboratories were visited and their projects were discussed with the researchers. Concerning the equipment, several pieces of apparatus, even those provided by

FEBS via SARS, are no longer working, due to parts failures (pump of HPLC Gilson 305, cells for the spectronic 20 etc.). In addition there is no good internet connection. Thanks to FEBS the library has many books and journals which are available to all scientists. At the Institute of Molecular Biology we were told that many different research projects were going on. This is a large building with laboratories available for biochemical research. However, the WG was unable to meet the researchers (about 100) because the Institute was closed for 6 months (November 15 to May 15) as they have no money to heat the institute during the winter! The researchers stay at home and are paid 20 euros a month! Under these conditions it is not surprising that many of them prefer to emigrate. The situation is much better in the Heratsi Yerevan State Medical University where there is no heating problem. In the laboratory of Prof. Aghajyanov the protection against neurodegeneration, and particularly Alzheimer's disease, by the new hypothalamic neuropeptide of Prof. Galoyan is studied. The laboratory lacks particularly chemicals and reagents. At the Faculty of Biology of the Yerevan State University the molecular and cellular mechanisms of hormone action, particularly estradiol, hydrocortisone and insulin, are studied in the laboratory of Prof. Gevorgyan. In the laboratory of Prof. Trchounian the research concerns the biophysics and energetics of ion transport and their role in bacterial cell physiology. Finally, in the laboratory of Prof. Aroutiounian interesting studies of genotoxicology are performed. The Institute of Biotechnology focuses its activities on the synthesis of purified amino acids for medicine and food industry. The Branch of China Xinjian-Armenia Bioengineering and Development Centre was founded in 2001 at this Institute and an important contract has been signed. Much international cooperation is going on. During the formal and informal meetings and discussions with the Armenian scientists the members of the WG noticed the high determination among most of the biochemists they met, to perform high quality research. The research topics of several groups contain exciting and new scientific ideas which would deserve financial support. Researchers were open to suggestions and criticism related to the possibility to improve their scientific achievements. Many researchers and laboratories still have strong connections/collaborations with important Russian biochemical research centres, but the WG stressed the necessity to publish the scientific results in English in high quality peer reviewed international journals. However, the number of people able to understand and speak English is relatively low; even in the research and academic groups we met, the presence of an interpreter was essential for our communicating with them. Concerning the equipment, much of it was outdated. The same was true for the techniques used; for instance, very few of the research groups which were met (some 2–3) are currently using the methods of recombinant DNA – which represent probably among the most popular and useful techniques in modern biochemical research. At the meeting with the Prime-Minister, the WG presented the following conclusion: FEBS could help to train the new generation in modern biological sciences. The danger is that these people will permanently leave Armenia unless the government invests in infrastructure. The WG would recommend that the government seriously

considers devising a strategy to maximise the resources available. For example, it was concerned to learn that some institutes were closed half a year due to lack of heating. No viable and competitive research is possible under these conditions. Finally, it recommended that a competitive peer-reviewed state grant system be established, given the successful expansion of the Armenian economy. This will help to attract matching funds from abroad.

The Minister promised to do everything that is possible. At their final round table the members of the WG recommended:

- That Armenian biochemists try to organise an Advanced course in Armenia (K. Wirtz who stayed longer in Armenia investigated this).
- That FEBS favourably considers requests to pay for improved internet connections (satellite dishes/servers/slave computers).
- That a subscription to EJB should be sought from the Publications Committee Chairman who can also provide information on free internet Journal access under the Hinari scheme.
- That a list of equipment required by Armenia and similar countries be compiled and published in FEBS NewsLetter and in 'Regard sur la Biochimie' to seek more widely for donations to SARS.
- That FEBS offers to provide via SARS spare parts for pieces of donated equipment where these are still available.
- That the Association of Armenian Biochemists be encouraged to recruit a substantial number of scientists since this is a prerequisite for their access to FEBS aid.
- That the Armenian researchers should consider the establishment of central facilities for sharing expensive equipment in the short term, a strategy which was already used by the Medical University.
- That researchers, particularly those at the beginning of a scientific career, be encouraged to become more proficient in English; in this way, they will be able to establish much better scientific communication with foreign researchers working in their specific field of activity.
- That meritorious young researchers be appointed as group leaders where possible in an effort to mitigate the brain drain from Armenia. (FEBS NewsLetter, 2004/5, p. 9–11)

#### 8.5.2.2.2 ArmenPress

"Armenian Prime Minister Andranik Margarian received today a delegation of the Federation of European Biochemistry Societies (FEBS), led by Professor Guy Dirheimer. Welcoming members of the delegation, Margarian said he was pleased to see prominent scientists representing different countries to have come to Armenia to explore ways for assisting its biochemistry's development. Margarian thanked FEBS for its assistance to several Armenian research institutes and helping the Armenian Association of Biochemists to become FEBS member. Margarian was also quoted by government's press office as saying that he expects FEBS's to identify most perspective achievements of Armenian



**Figure 8.5.1** Yerevan, April 29, 2004, Andranik Margarian and Guy Dirheimer.

biochemists and outline ways for attracting European funds to support new studies. ARMENPRESS (FEBS News May 2004)

#### 8.5.2.3 Roundtable Discussions 2002–2008

G. Dirheimer proposed that, at the FEBS Congress in Istanbul, a round table discussion with all delegates coming from Eastern and Central European countries should be organised, like the one he organised in Basel in 1994 when he was president of EUROTOX. This was organized on October 22, 2002. The delegates of Azerbaijan, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovenia, Turkey and Ukraine and, in addition, several members of the Executive Committee attended.

This meeting showed clearly the great differences in working conditions between the different countries. Access to the Internet and the literature is not a particular problem for some of them, whereas it is an urgent need for others. The need for more courses on basic biology and molecular biology and for more key lecturers from the West was a general demand. Several delegates also asked for guidance in applying for FP6 funds. J.E. Celis suggested a Working Group on FP6 and evaluation panels be set up. Several countries have problems with articles in English. The Working Group will seek a group of volunteers from the West to help in this matter. Finally the FEBS Council in Istanbul accepted to increase the budget from 100,000 € to 200,000 € for the Advanced Course Committee in order to organize more workshops and courses in Central and Eastern European Countries.

Three other round tables were organised by WOGCEE in Warsaw (2004), Istanbul (2006), and in Athens (2008). Each time the delegates were asked about the major problems the biochemists encounter in their countries. The 3 last round tables were preceded by a questionnaire, sent to the different delegates prior to the meeting, about their problems in research and education. The answers to this questionnaire were summarized by G. Dirheimer and presented to the Executive Committee. The problem of consulting the most important biochemical journals by internet is also crucial as stated by the delegates. Therefore W. Stalmans, former

chairman of the publication Committee, published a paper entitled “How FEBS can help you to Access the scientific literature online” which should be very helpful (Newsletter 2004/4, pp. 6–8). The role of WOGCEE is not to replace the different FEBS Committees (Advanced Courses, Fellowships, Education and Publication), but to insist that they do not forget the biochemists of EEC countries. This policy met with success, particularly concerning the fellowships. Following a suggestion of G. Dirheimer the FEBS Fellowship Committee set up in 2000 a new fellowship called the *Collaborative Experimental Scholarship* which permits PhD students from CEE countries to go from time to time to Western European laboratories to perform experiments not feasible in their home countries. It will also foster collaborations between Eastern and Western biochemists.

#### 8.5.2.4 FEBS Visit to Croatia 2006

The WOGCEE was invited by the Croatian Society of Biochemistry and Molecular Biology to Zagreb and Osijek from May 11 to May 13, 2006. The participants were O.P. Matyshevska, G. Negroiu, G. Dirheimer, A. Džugaj, K. Kuchler, I. Mowbray, I. Pecht and K. Wirtz. The visit was perfectly organised by Professor K. Barisic, with the help of Professor J. Dumic Belamaric and Professor J. Varljen President of the Croatian Society of Biochemistry and Molecular Biology. The Working Group was received in the friendliest fashion and much appreciated the outstanding Croatian hospitality.

The WOGCEE met authorities and visited University and laboratories in Zagreb, but also in Osijekin, province of Slavonia. The following visits were made:

- 1) Visit to the Minister of Science, Education and Sports
- 2) Visit to the Croatian Academy of Sciences and Arts
- 3) Visit to the University of Zagreb
- 4) Visit to the PLIVA-Research Institute, Ltd
- 5) Visit of the Institute Ruder Boskovic (IRB)
- 6) Visit to the Department of Biochemistry, Faculty of Natural Sciences, University of Zagreb
- 7) Visit to the University of Osijek
- 8) Visit to the biochemical laboratories of Faculty of Pharmacy and Biochemistry of Zagreb

#### 8.5.2.5 WOGCEE Visit to Bulgaria 2007

*By Guy Dirheimer*

The FEBS Working Group on Assistance to Central and Eastern Europe (WOGCEE) was invited to visit the Bulgarian Society of Biochemists, Biophysics and Molecular Biologists, which was one of the founding members of FEBS in 1964. The Working Group met in Sofia from October 21 to October 24, 2007. The visit was perfectly organized by Professor Diana Petkova and Professor Genovaeva Nacheva respectively President and Secretary of the Society. The Working Group was very well received both by scientists and the authorities and much

appreciated the outstanding Bulgarian hospitality. The first visit in Sofia was to the Deputy Minister of Education and Science. Guy Dirheimer, the chairman of WOGCEE, presented the goals of the visit of the Group and the Minister, in response, presented the situation of Research in Bulgaria. She was very optimistic concerning the future and announced that although in 2007 only 0.4% of the GDP was devoted to research (in addition, private research contributes about 0.1%) this will go up to 1.2% of GDP next year (from 18 million to 60 million leva – about € 30 million). There is also an Innovation fund of 7 million leva from the Ministry of Economy, which will grow to 10 million leva next year. The second visit was to the Bulgarian Academy of Sciences. Professor Georgy Markow, Scientific Secretary of the Biological Sciences Division, explained that 3000 researchers in Bulgaria depend on the Academy, whose budget of 63 million leva is spent largely on paying salaries and energy. Only a small percentage of this budget is for bench money and for apparatus. This is a serious problem. The role of the Academicians is important as they are responsible for recruiting researchers. The second day, WOGCEE visited the Medical University where Professor Ganka Kossekova from the Department of Chemistry and Biochemistry gave a very detailed and well-illustrated report. The people at the Medical University seem to be doing quite well and are using innovative and up-to-date teaching techniques. However, there are only 120 Bulgarian medical students a year in Sofia (Bulgaria has about 8 million inhabitants). In addition, 400 students are foreigners, mainly from Balkan countries. The Medical University has been involved in the Socrates/Erasmus program since the year 2000, so now in 2007, 25 inter-University Bilateral Agreements are running. 135 students from the Medical University Sofia spent a period abroad as Erasmus students mainly in Belgium, Germany, France and G.B. The salaries of the teaching staff are very low: 700 leva a month (about €350!) for a Professor and 300 leva for an Assistant Professor. Concerning research in the Biochemistry section, 87 papers were published in international journals and 34 in Bulgarian journals between 2002 and 2005. The department of Biochemistry would need help from FEBS SARP (Scientific Apparatus Recycling Programme) for books and equipment for 4 student laboratories (each for 10–15 students). At present they are in crisis: all old apparatus was scrapped recently. Yet there is no money for new equipment.

The next visit was to the Bulgarian Genetic laboratories. Its young and dynamic director Radka Kaneva explained that in 2002 the Bulgarian Ministry of Health accepted Molecular Medicine as a priority of the Health-care system. In 2002, the Bulgarian Ministry of Education and Science funded the National Scientific Programme “GENOMICS”. In the 6th Framework Programme, the EC accepted their project “Life Sciences, Genomics and Biotechnology for health” and supported it with about €1 million in order to transform the laboratory of Molecular Pathology into a collaborative multidisciplinary Molecular Medicine Centre. This laboratory is well equipped and properly staffed and housed. It shows what can be done in Bulgaria, but this needs external funding and relevant missions. It does not need help from FEBS. The visit to the Agrobiointitute (ABI) was also encouraging. Its director, Professor Atanas Atanassov, presented the activities of this scientific



**Figure 8.5.2** Members of WOGCEE enjoying a well deserved break!

research institute that is also involved in applied, service and related activities in the field of agriculture. ABI is a Centre of Excellence in Plant Biotechnology and has a PhD programme. It is subsidised from the state budget and has contracts from the EU, UNESCO, NATO, FAO, IAEA etc. as well as private companies. Thus it is well equipped and does not need FEBS help. The next visit was for the Faculty of Biology, Department of Biology. Professor Z Latchev, head of the department and Prof M. Odjakova presented first a profile of the Faculty of Biology, which has 25,000 students of which 1,300 are foreigners. It has 14 departments and 200 professors. There are 7 Faculties: Molecular Biology, Biotechnology, Biology and Chemistry and 4 Faculties for High school teachers in Biology. In Molecular Biology there are 80 students per year and 15 PhD students. The last visit was to the Institute of Molecular Biology and the Institute of Biophysics of the Bulgarian Academy of Sciences. These laboratories, headed by Professor Ilia Pashev and Professor Andon Kosev carry out good research and have fruitful collaborations with Western Europe laboratories. However, their budgets are damagingly low. FEBS has begun to help by giving some apparatus via its SARP, but more apparatus for recycling to these and other such economies is urgently needed from Western laboratories (for donations and information please contact the SARP Coordinator, Professor Karel Wirtz: [K.W.A.Wirtz@uu.nl](mailto:K.W.A.Wirtz@uu.nl)). Finally, the WOGCEE is in the process of drawing up its Conclusions and Recommendations. These will be published in the next issue of FEBS News. (FEBS News November 2007)



**8.6****FEBS Working Group on Integration (WGI) – and Its Activities**

## 8.6.1

**Renaming WOGCEE and Goals of WGI***Mathias Sprinzl**Chairman of the Working Group on Integration (since 2009)*

Formerly known as the Working Group on Assistance to Central and Eastern Europe, (WOGCEE), this working group is now named the Working Group on Integration (WGI). The terms of reference of WGI are given in the FEBS Statutes and Guidelines.

Mathias Sprinzl

Since its constitution, WGI has visited several national biochemical societies, laboratories and institutes in CEE countries, where WGI members have met scientists, students, and high-level politicians responsible for science and education. The message of WGI conveyed at these visits is that it is vital to develop basic research and to invest in scientific infrastructure in order to prevent brain drain. Moreover, WGI has emphasized that good higher education is not possible without good research. These visits have enabled us to find out the most urgent problems, and some of these have been addressed by FEBS afterwards (e.g. access to electronic literature, special travel and workshop funds, laboratory equipment). Details of the visits and activities of WGI are regularly published in *FEBS News*.

Besides official visits of the national biochemical societies in CEE countries, WGI is engaged in cooperation with other Working Groups and Committees of FEBS, and promotes European networking during FEBS courses/workshops and Congresses. (Text from FEBS WEBSITE)

## 8.6.2

**FEBS WGI – Initiatives and Visits***Mathias Sprinzl Chairman of the Working Group on Integration*

The FEBS Working Group on Integration (WGI) explores ways of assisting researchers in the molecular life sciences who are working in Eastern countries of the FEBS area where research and education can be significantly affected by limited financial support. In autumn 2011, Lithuania and Armenia were visited by a FEBS delegation consisting of: WGI members Tatiana Borisova, Jolanta Baranska, Jerka Dumić Belamarić (Armenia only) and Mathias Sprinzl; the FEBS Education Committee Chair Gül Güner-Akdoğan; the FEBS Advanced Courses Committee Chair Jaak Järv; and either the FEBS Secretary General Israel Pecht (Lithuania) or the FEBS Treasurer John Mowbray (Armenia).

**Table 8.6.2** Members of the Working Group for Integration (WGI).

Year and Name	Country	Elected	Start	End
<b>2009</b>				
Mathias Sprinzl, Chairperson	Germany	Athens (2008)	01 01 09	31 12 11
Olga P. Matyshevska	Ukraine	Bupadest (2005)	01 01 06	31 12 09
Andrzej Dżugaj	Poland	Bupadest (2005)	01 01 06	31 12 09
Gabriela Negroiu	Romania	Bupadest (2005)	01 01 06	31 12 09
Karel Bezouska	Czech Rep.	Bupadest (2005)	01 01 06	31 12 09
<b>2010</b>				
Mathias Sprinzl, Chairperson	Germany	Athens (2008)	01 01 09	31 12 11
Jolanta Baranska	Poland	Prague (2009)	01 01 10	31 12 13
Tatiana Borisova	Ukraine	Prague (2009)	01 01 10	31 12 13
Jerka Dumic Belamaric	Croatia	Prague (2009)	01 01 10	31 12 13
V. Knaryan	Armenian Rep.	Prague (2009)	01 01 10	31 12 13
<b>2011</b>				
Mathias Sprinzl, Chairperson	Germany	Athens (2008)	01 01 09	31 12 11
Jolanta Baranska	Poland	Prague (2009)	01 01 10	31 12 13
Tatiana Borisova	Ukraine	Prague (2009)	01 01 10	31 12 13
Jerka Dumic Belamaric	Croatia	Prague (2009)	01 01 10	31 12 13
V. Knaryan	Armenian Rep.	Prague (2009)	01 01 10	31 12 13
<b>2012</b>				
Mathias Sprinzl, Chairperson	Germany	Turin (2011)	01 01 12	31 12 14
Jolanta Baranska	Poland	Prague (2009)	01 01 10	31 12 13
Tatiana Borisova	Ukraine	Prague (2009)	01 01 10	31 12 13
Jerka Dumic Belamaric	Croatia	Prague (2009)	01 01 10	31 12 13
V. Knaryan	Armenian Rep.	Prague (2009)	01 01 10	31 12 13
<b>2013</b>				
Mathias Sprinzl, Chairperson	Germany	Turin (2011)	01 01 12	31 12 14
Jolanta Baranska	Poland	Prague (2009)	01 01 10	31 12 13
Tatiana Borisova	Ukraine	Prague (2009)	01 01 10	31 12 13
Jerka Dumic Belamaric	Croatia	Prague (2009)	01 01 10	31 12 13
V. Knaryan	Armenian Rep.	Prague (2009)	01 01 10	31 12 13

**8.6.2.1 Report on a Visit to Vilnius, Lithuania, 2011**

The visit of the FEBS WGI to Vilnius, Lithuania, from 15th to 16th September 2011, was very well prepared and organized by Rimantas Daugelavicius, President of the Lithuanian Society for Biochemistry (LSB), and Vida Mildaziene, Secretary of the LSB. The aim of the visit was to discuss and evaluate molecular life sciences in Lithuania, and in particular the problems of tertiary education in this discipline. The trip focused on visits to two institutes of two universities devoted to bachelor, master and postgraduate degree education, and one large biotech company. There were also opportunities to meet representatives of other academic institutions, as well as politicians.

*The Institute of Biotechnology, Vilnius University.* Detailed information about the history and present structure of the institute was provided by Director Prof. K.



**Figure 8.6.1** Rimantas Daugelavicius and Vida Mildaziene of the Lithuanian Society for Biochemistry.

Sasnauskas, as well as leaders of the Laboratories of Protein Nucleic Acid Interaction, DNA Modification, Genetic Engineering, and Biothermodynamics, and this was followed by a round table discussion with MSc and PhD students. A presentation about FEBS activities was given by M. Sprinzl, and a lively discussion with teachers, students and scientists ensued. The Institute of Biotechnology has its roots in the All Union Research Institute of Applied Enzymology. It was restructured and renamed in 1992 to become the Institute of Biotechnology (IBT). From originally about 700 employees it now has 145 staff members, with 82 research staff members and 48 researchers. In 2010 the institute was fully integrated into Vilnius University. IBT, with its focus to enzyme technologies, possesses excellent modern equipment, including X-ray crystallography and modern computational facilities. Running costs were covered in 2009 by foreign grants (€1.75 million), state subsidy (€1.35 million), the Lithuanian Science Foundation (€0.9 million) and other sources (€0.2 million) (data are from IBT Report 2008–2010). Looking back over a longer period, 70% of resources have come from foreign sources and 30% from state budgets. Members of IBT publish in international journals ( $\sim 25$ – $30$  papers/year), and collaborate with a number of research groups in and outside Europe. There are currently 20 students involved in PhD studies at the institute, with a graduation rate of about three to five theses defended each year. IBT provides positions for 20 master degree students and gives laboratory courses for 30–40 students. Most of the research staff are involved in teaching.

*IBT spin-off: ThermoFisher.* IBT has successfully promoted the development of spin-off companies, with four successful companies established as a direct result of IBT research. The largest company, with several hundred employees, developed from the Lithuanian company Fermentas, which is today merged with the US company ThermoFisher Scientific. This is a true success story! The FEBS WGI met the Director of Research and Development, Dr Arvydas Lubys, and senior colleagues, who described the activities of the Vilnius site of the company. Besides the production, research and commercial activities, there is lively communication with the LSB and IBT. Thermo Fisher in Vilnius exemplifies the optimal route in conversion of a Soviet-type Academy Research Institute into an efficient, modern biotech company.

*Vilnius University and Lithuanian Academy of Sciences.* The Rector of Vilnius University, Prof. Benediktas Juodka, who is a bioorganic chemist, provided expert information about the Lithuanian higher education system and the Bologna reform, as well as insight into the history and facilities of the university. The reception from the Rector was followed by a conference of the FEBS WGI delegation with the President of the Lithuanian Academy of Sciences, Prof. V. Razumas, and Dr Albertas Zaly, Director of the Department of Higher Education, Science and Technology from the Lithuanian Ministry of Education and Science. The FEBS Secretary General Israel Pecht described the organization and mission of FEBS. Further issues discussed were the successful transfer of the Academy of Sciences and its research institutes to an advisory institution of scholars representing Lithuanian science; efficient distribution of limited financial resources to reach groups with excellent research programmes; and institutional recognition, financial support and social integration for returning scientists and their families.

*Lithuanian University of Health Sciences, Kaunas.* The FEBS WGI also met students, postdoctoral researchers, professors and other scientists at the Lithuanian University of Health Sciences for a general discussion of FEBS' mission and activities. A visit to the Laboratories of Cell Culture in the Institute of Cardiology, led by Dr V.A. Skeberdis, was followed by a reception by the Vice-Rector for Research Prof. V. Lesauskaitė (Head of the Laboratory of Molecular Cardiology). The Lithuanian visit concluded with a reception by the Rector of Vytautas Magnus University, Prof. Kestutis Sidlauskas, an informal lunch with representatives of the LSB, and an interview of the FEBS Secretary General by the local press.

#### 8.6.2.2 Report on a Visit to Yerevan, Armenia, 2011

The FEBS WGI visited Yerevan, Armenia, from 6th to 8th October 2011. The aim of the visit was to gain insight into the organization, activities and structure of the Armenian Association of Biochemists (AAB). The visit provided an opportunity to meet young scientists and students, learn about their current concerns, and disseminate information about FEBS. The WGI also met office holders responsible for higher education and science, for general discussions. The FEBS delegation was accompanied by Prof. Guevork A. Kevorkian, Director of the H. Buniatian Institute of Biochemistry, National Academy of Sciences of the Republic of Armenia (NAS RA), and Vice-President of AAB. At the H. Buniatian Institute of Biochemistry, the FEBS WGI met Prof. Armen A. Galoyan, President of AAB, who provided information about the 50-year history of the institute and its main scientific achievements.

The central topic of the institute has been the biochemistry and metabolism of brain tissue, which has culminated in current research focused on neuropeptides, their regulatory and metabolic role, pharmaceutical importance and medical application. Later, the WGI met with members of AAB, and also with Arsen Gasparyan, President of the Young Biologists Association NGO, and others who had successfully organized the FEBS Advanced Lecture Course 'Trends in Genetics: Genomic Instability and Pathways of Response'. The meeting with members



**Figure 8.6.2** FEBS WGI delegates with Armenian colleagues at the H. Buniathan Institute of Biochemistry, NASRA.

of the Young Biologists Association was arranged at the request of FEBS and provided a good opportunity to discuss current and future directions of the AAB. At Yerevan State University (YSU), the FEBS WGI visited the Departments of Biochemistry, Biophysics and Human Genetics and Cytology and met professors and students. FEBS also had the opportunity to meet the President of the National Academy of Sciences of the Republic of Armenia, Academician Radik M. Martirosyan, who provided general information about the present situation in Armenian science. Up to 1990, the financial support of science in Armenia was 2.3% of GDP. Today it is only 0.2%, and most republics of the Caucasus region are experiencing a similar situation. The Academy of Sciences, as the main contributor to national science research, should, according to Academician Martirosyan, cooperate but not merge with universities. The meeting with the President of the Academy was followed by a scientific conference to celebrate the 50th anniversary of the H. Buniatian Institute of Biochemistry. The invited lecture was presented by Prof. Tatiana Borisova (member of FEBS WGI), who spoke on 'Changes in glutamate transport in cholesterol-deficient brain nerve terminals.' This lecture was followed by presentations of current research work of several young scientists and PhD students from the institute, which provided a useful picture of current research topics in Armenian life sciences.

*Assistance to biochemists residing in HINARI B countries.* In order to stimulate participation of (mainly young) biochemists from HINARI B countries in International scientific activities, the FEBS Executive Committee decided at its meeting held on 26<sup>th</sup> November 2011 to provide additional financial support to facilitate access to scientific literature, and to improve networking and communication by enabling participation in the FEBS Congress and other FEBS activities. According to the latest figures of the World Bank, support can be provided to members of following FEBS Constituent Societies: Association of Armenian Biochemists, Association of Georgian Biochemists, Azerbaijan Society of Biochemistry and Molecular Biology, Macedonian Biochemical Society, and Ukrainian Biochemical

Society. At the recent FEBS Executive Committee meeting, it was also agreed that the FEBS Scientific Apparatus Recycling Programme (SARP) in its present form will be terminated. However, donations of scientific instrumentation as part of an ongoing collaborative project will be supported by FEBS by covering the costs for transportation. Applications should be directed to the FEBS WGI.

*Mathias Sprinzl Chair, FEBS Working Group on Integration (WGI)*

(FEBS News, 2012/1, p. 12–15).

#### 8.6.2.3 Report on a visit to Georgia, 2012

On a recent visit to Tbilisi, Georgia (10–12 October 2012), FEBS met with the Association of Georgian Biochemists (AGB) to see how this FEBS Constituent Society was operating; with young scientists and students to learn about their current concerns; and with office holders responsible for higher education and science for general discussions. The WGI also disseminated information about FEBS.

The FEBS delegation consisted of WGI members Mathias Sprinzl, Tatiana Borisova, Jolanta Baranska and Jerka Dumić, as well as the FEBS Education Committee Chair Gül Güner Akdoğan. From the Georgian side, the FEBS visiting group was accompanied by Prof. Dr Revaz Solomonias, Acting Secretary of the AGB, who was kindly responsible for the local organization. During the trip, FEBS visited four institutions carrying out life sciences research and teaching.

- (1) The **Department of Physiology of the Center of Experimental Biomedicine**, formerly belonging to the Georgian Academy of Sciences, is today under the Ministry of Education and Sciences of Georgia. In the laboratories of Drs Revaz Solomonias and David Mikeladze, FEBS WGI met co-workers and PhD students. With some exceptions the lab equipment does not meet the requirements of modern research, and the building and technical facilities need general maintenance work and improvements. Despite this, the scientific performance and quality of publications, as judged from the journals in which the groups communicate their recent papers, reflect a high scientific standard.
- (2) The **Georgian Agrarian University, Institute of Biochemistry and Biotechnology** is a private university focusing on education in applied sciences at bachelor degree level. Here, modern teaching facilities and student laboratories meet the needs of undergraduate teaching. Research laboratories are focused on applied research, mainly covering analytical applications in agriculture for commercial purposes. Besides student tuition fees, these activities account for an essential part of the university budget. Analytical laboratories are equipped with modern instruments such as LC-MS, real-time PCR and facilities for molecular biology. Many leading scientists from the former Academy of Sciences now work here.
- (3) At a short stop at **Tbilisi State Medical University** and meeting with the Rector, Prof. Zurab Vadachkoria, and colleagues (see photo), FEBS learned about the biochemistry and life sciences undergraduate and postgraduate



**Figure 8.6.3** Discussions of FEBS WGI with Tbilisi State Medical University representatives [who included the Rector, Prof. Zurab Vadachkoria; Deputy Rector, Prof. Rima Beriashvili (Pathology); Chancellor, Prof. Zurab Orjonikidze; Head of the International Affairs Department, Dr Irina Kapetivadze; and Head of Biochemistry Department, Prof. Paata Tushurashvili].

curricula. Postgraduate studies in these areas are limited, and the impression was that research activities are not focused on molecular life sciences, although the leaders of the university stressed the intention to focus scientific resources in that direction.

- (4) A visit to the **Departments of Physiology and Chemical Biology of the Ilia State University** was guided by Dr Elena Zyравleva. The FEBS delegation spoke with several researchers of the department and visited labs, which are in a functional condition and are partly equipped with new instruments. Besides ecological sciences (an original focus of the department), research in neurochemistry, neuroimmunology and behavioral studies is successfully conducted. The Rector, Prof. Gigi Tevzadze, provided information on history, new developments and prospects of the institution, which was originally focused on languages, arts and education of teachers. Life sciences teaching was established only several years ago, but now includes several graduate and postgraduate programs in molecular life sciences (biochemistry, biotechnology, biopharmacy) designed according to the demands of the employment market. The university profits from the presence of new professors, formerly working at the Academy, who have good conditions for their research.

Perhaps the most informative, open and interesting information about the ongoing transformation of science in Georgia was provided by A. Kvitashvili, Georgia's former Minister of Health and presently Rector of the largest university in Georgia, the Tbilisi State University. This knowledgeable politician informed the FEBS delegation about present policy and directions in science and education.

The two-day program of visits also provided several formal and informal opportunities to inform professors, researchers and students about FEBS' activities and missions, which generated much interest and discussion.

The information the FEBS WGI gained about Georgian life sciences, education in biochemistry and molecular biology and perspectives of scientific networking will inform FEBS' discussions and actions in the coming years. One immediate outcome is the organization of an education workshop in Tbilisi by the FEBS Education Committee in October 2013.

*Mathias Sprinzl Chair; FEBS Working Group on Integration*

(FEBS News May 2013)

## 8.7

### FEBS Working Group on the Career of Young Scientists (YSF)

#### 8.7.1

##### Initiatives

The Working Group on the Career of Young Scientists was established in 2001. FEBS in 2001 set up a Forum dedicated to young scientists that was attached to the annual Congress, inspired by the initiative performed for many years by the French Society of Biochemistry and Molecular Biology. The organisation of the annual Young Scientists Forum (YSF) is the key activity of this Working Group.

The basic idea of the FEBS YSF is to promote interactions between young scientists in the pre-doctoral and early post-doctoral stages, and also to give them the opportunity to be responsible for the organisation of the event. Each year the local organisation is run by students in the Congress host country. Usually 100 young scientists are selected to participate in the Forum, which takes place immediately before the annual Congress in a relaxing and informal atmosphere, where these students can make friends, interact and exchange ideas. These students are also granted financial support to attend the annual FEBS Congress, and therefore can enjoy the different experiences that the YSF and Congress offer.

As well as supervising the YSF, the Working Group moderates the YSF round-table discussions that deal with career issues. Over the years, the Working Group has invited people from several organisations, such as EMBO and ELSO, who have launched programmes aimed to promote and support the young scientists' careers. Representatives of companies are also invited to give advice on career prospects. During the discussions the students have raised several questions, particularly related to scientific publishing, management, and career pathways in academia, as well as science politics.

##### 8.7.1.1 First Activities of the Working Group on the Career of Young Scientists

At the FEBS Council Meeting in Lisbon M. Makarow presented her ideas concerning the new Working Group to which Council had agreed. She reported that



the Lisbon Meeting was preceded by a 2.5 day conference called The Young Scientist Forum which had been arranged by J. Costa and was very successful. M. Makarow proposed that the Young Scientist Forum be established as a regular satellite meeting – taking place annually in conjunction with the FEBS Meeting. A sum of 100,000 Euros was allocated specifically for its organisation. With that money 3 or so plenary speakers can be funded and the rest is to provide travel grants for the young scientists. This will make the Forum independent of the main Meeting. A panel discussion will be organized at each Forum focused at the post-doctoral level. A recruitment activity in conjunction with the Forum should also be organized. G. Dirheimer encouraged this initiative citing the example that at the Nice Meeting a “Forum emploi Jeunes Chercheurs Industrie” had been organized with a whole day devoted to themes related to the employment market in science: how to find opportunities and how to apply to cross the bridges between private and public jobs. Several speakers from the pharmaceutical industry and biotechnology had participated in this Forum. M. Makarow pointed out that the aim of the working group is to identify young scientists’ problems and obstacles to their careers and the Forum would offer a very good tool to listen to the young scientists, to survey their career developments, to create visions for future actions, and to think of solutions to their problems. The Working Group should then be able to produce materials for recommendations to put forward to the EU and to address the members of the European Parliament.

At the Executive Committee Meeting in Amsterdam, April 2002, M. Makarow gave the composition of the Working Group: I. Braakman (The Netherlands), F. Chakrani (France). At the first meeting the Working Group recognized that the formal post-graduate level in biotechnology is missing in most FEBS member states. This led to a proposal elaborated in the second Working Group Meeting, to create a European School for Biotechnology and Industrial Pharmacy (ESBIP), a virtual graduate school using biocenters and universities in Europe to provide tailor-made practical and lecture courses annually for 200 Ph.D. students embarked on their national PhD programs. Thirteen biocentres in ten European countries and several industries expressed their keen interest to participate, and thus an Expression of Interest was submitted to the European Commission. The FEBS Executive Committee decided at its Istanbul meeting to participate in ESBIP via the current instruments of FEBS, funding of practical and lecture courses based on competitive applications, and supporting mobility of students via the Youth Travel Funds.

From 2006 onwards, each FEBS Forum for Young Scientists was organised by a small team of young scientists from the country hosting the FEBS Congress (please see the Reports of these Satellite Meetings).

**Table 8.7.1** Members of FEBS Working Group on Young Scientists.

Member	Country	Elected	Start	End
<b>2002–2004</b>				
Marja Makarow, Chairperson	Finland	Lisbon 2001	01 01 02	31 12 04
Ineke Braakman	Netherlands		01 01 02	31 12 04
Fatima Chakrani	France		01 01 02	31 12 04
<b>2005</b>				
Claudina Rodrigues-Pousada, Chairperson	Portugal	Warsaw (2004)	01 01 05	31 12 07
Ineke Braakman	Netherlands			
Fatima Chakrani	France			
<b>2006–2007</b>				
Claudina Rodrigues-Pousada, Chairperson	Portugal	Warsaw (2004)	01 01 05	31 12 07
<b>2008–2010</b>				
Daniela Corda, Chairperson	Italy	Vienna (2007)	01 01 08	31 12 10
<b>2011–2013</b>				
Claudina Rodrigues-Pousada, Chairperson	Portugal	Gothenburg (2010)	01 01 11	31 12 13

## 8.7.2

**Reports on FEBS Forum for Young Scientists as Satellite Meetings of FEBS Congresses****8.7.2.1 First Young Scientists Forum in Portugal and Subsequent Forums**

The first Forum was organised in 2001 in Oeiras, Portugal as a satellite meeting of the 27th FEBS Congress. After this debut, several workshops were then organised under the supervision of Prof. Marja Makarow who was appointed by FEBS as the first Chair of the Working Group. Due to the success of this meeting, the YSF has been held every year since. Prof. Claudina Rodrigues-Pousada was elected by the FEBS Council in Warsaw, 2004 as Chair of the Working Group and subsequently supervised the YSFs in Visegrád, 2005 (30th FEBS Congress), Istanbul, 2006 (31st FEBS Congress) and Vienna, 2007 (32nd FEBS Congress). Prof. Rodrigues-Pousada stepped down as chair at the end of 2007. Prof. Daniela Corda from the Institute of Protein Biochemistry, National Research Council, Napoli, Italy became her successor, and supervised the YSFs in Athens, 2008 (33rd FEBS Congress), Prague, 2009 (34th FEBS Congress) and Gothenburg, 2010 (35th FEBS Congress). Prof. Claudina Rodrigues-Pousada was re-elected by the FEBS Council in Gothenburg 2010 and supervised the YSF in Torino, 2011 (36th FEBS Congress).

**8.7.2.2 FFYS, 18–20 October 2002, Istanbul, Turkey**

Organizers: Marja Makarow (Helsinki, Finland), Tomris Özben (Antalya, Turkey) and Nina Saris (Helsinki).

**Outline of the program** The sessions were composed of about twenty presentations chosen from submitted abstracts, and 3 didactic plenary talks by authorities in the fields of molecular machines for folding, degradation and membrane translocation of proteins.

*Friday, October 18:* Opening of the meeting and 1st session

*Saturday, October 19:* Sessions and 1st poster session; Panel discussion addressing young scientists' issues. *Short presentations:* Building up a scientific career, Riccardo Cortese, Italy; Funding instruments for young scientists, Gerlind Wallon, EMBO, Case 1 – (How) Did I plan my career? Ineke Braakman, The Netherlands; The novel Ph.D.'s career, research in academia or industry? Fatima Chakrani, France; Case 2 – From basic researcher to founder of Start-up Company, Manuel Vega, France. – Banquet, with belly dancing, on a boat on the Bosphorus.

*Sunday, October 20:* Last sessions and 2nd poster session.

(FEBS NewsLetter 2002/2, p. 8–10)

#### 8.7.2.3 FFYS, June 24 – 26, 2004, Warsaw

Organizers: Rafał Czajkowski (Warsaw), Edyta Brzóska (Warsaw), Eeva Sievi (Helsinki) and Marja Makarow (Helsinki).

##### **Outline of the FFYS program:**

*Thursday, June 24:* Registration and mounting of posters; Opening of the meeting; Rafał Czajkowski; Key note talk: Professor Ada Yonath, Israel; Session 1; Get-together party

*Friday, June 25:* Session 2; Lunch; Poster session 1; Panel discussion addressing young scientists issues, such as shaping a scientific career, funding instruments for young scientists, mobility, workplaces in industry and bio-business (Chair: Marja Makarow ); Banquet

*Saturday, June 26:* Poster session 2; Session 3; Closing of the meeting.

(FEBS NewsLetter 2004/1, p. 6)

#### 8.7.2.4 FEBS Forum for Young Scientists, June 30 to July 2, 2005, Budapest

Organised by Elza Friedländer, it was held at Visegrád (Hungary), located at the Danube Bend, one of the most picturesque places of Hungary. Accommodation was provided at the Danubius Spa and Conference Hotel Visegrád.

#### 8.7.2.5 FEBS Forum for Young Scientists, June 24–26, 2006, Istanbul

The 6th Forum for Young Scientists accompanying the 31st FEBS Congress in Istanbul was organized by Dr. Gunnur Dikmen. The convention took place at the Doga Club, 50 km outside Istanbul on the Asian side.

#### 8.7.2.6 FEBS YSF Careers Session Vienna 2007

##### *Programme*

“Your career: a chain of opportunities and decisions”. Monday, June 28 – Chair: Daniela Corda (Napoli); The FEBS Programme – Opportunities for Training & Education of Young Scientists in Molecular Biosciences, Karl Kuchler Medical University Vienna, Max F. Perutz Laboratories, Vienna Biocenter; Career in Drug

Research – Opportunities and Challenges – Eeva Moilanen University of Tampere Medical School, Finland (The Federation of European Pharmacological Societies, EPHAR); “People” Programme; Marie Curie actions, Alan Craig “European Commission, DG Education and Culture (EAC)”

The session was followed by a general discussion moderated by Daniela Corda. (FEBS News 2007)

#### 8.7.2.7 FEBS Forum for Young Scientists 2008

In connection with the annual FEBS Congress, FEBS each year brings more than a hundred young scientists together for a two-day Satellite meeting. The latter offers an exclusive opportunity to network and knowledge exchange, and is fully sponsored by FEBS, meaning that all successful applicants receive a FEBS Fellowship covering local expenses at the Forum (fees, transportation, meals, accommodation in a double room). Furthermore, they will be given free registration, accommodation, and partial travel support related to the actual FEBS Congress that follows the Forum. (FEBS News 2008)

#### 8.7.2.8 Overview of FEBS Forum for Young Scientists 2002–2013

Please note that more details on FEBS Forum for Young Scientists and reports for Forums between 2002 and 2013 have been presented in Chapter 5 (Section 5.2), since these were organised as Satellite Meetings to the annual FEBS Congresses.

## 8.8

### Working Group on Women in Science (WISE)

#### 8.8.1

##### Initiatives and Goals

The Working Group on Women in Science (WISE) was established in 2001. Its main objective is to facilitate awareness, to encourage people to participate actively in promoting gender equality in science, and to support the 43 Constituent Societies and academic institutions in these countries on the issue of Women in Science.

The Working Group has worked to create awareness on the issue of Women in Science, and has organised workshops on the issue at several FEBS Congresses in recent years.

Sissel Rogne, member of FEBS Executive Committee, was chairing the FEBS Working Group on Women in Science (WISE), which started its 3-year period in January 2003. The objective was to develop a plan for FEBS’ engagement in the topic ‘Women in Science’. In order to increase the possibility for women to make a career in science, the working group will ‘work on’ – try to change – people’s attitudes throughout the whole educational system as well as in all strategic processes in science or science politics. It will collaborate with FEBS Science and

Society Committee, as well as with the Working Group “Career of Young Scientists”. Furthermore, the Working Group on Women in Science will create forums for debating this issue, and participate in venues where the issue is debated.

## 8.8.2

### Activities and Reports of the WISE Committees

#### 8.8.2.1 WISE Workshops at the FEBS Congress in Brussels, Belgium, 2003

The FEBS Working Group on Women in Science (WISE) was responsible for two workshops, which took place in connection with the Special FEBS Meeting in Brussels. The workshops focused on the problems and questions related to attracting and retaining competent research scientists, in particular of female origin. The workshops were open for all interested.

*Outline of the WISE workshop programme:*

Friday, July 4:

Theme: “Mobility and flexibility in planning a scientific career”.

1. “Scientific careers in academia: an international perspective” (Mary Osborn, Max Planck Institute for biophysical Chemistry, Göttingen, Germany, Chair, ETAN Expert Working Group on Women and Science, and President elect, International Union of Biochemistry and Molecular Biology (IUBMB)).
2. “Scientific careers in industry: Career planning in a lifetime perspective” (Ragnhild Sohlberg, Vice President, Norsk Hydro ASA, Co-chair of STRATA report on Women in Industrial Research, and Scientific Secretary, The European Research Advisory Board).
3. “Scientific careers: Flexibility and mobility in and between academia and industry” (Raffaelli Liberali, Director, Directorate D-The human factor, mobility and Marie Curie activities, Directorate-General for Research, European Commission, Brussels).

Panel discussion.

Saturday, July 5:

1. “Leader potential” (Anna Paula Laissy, DG Admin., the European Commission).
2. “Dual Careers – Combining professional and private life” (Prof. Sue Lewis, Prof. at University of Manchester).
3. “Different genders, different expectations?” Panel discussion. (FEBS News May 2003)

#### 8.8.2.2 WISE Workshops at the FEBS Congress in Warsaw, Poland, 27th and 28th of June 2004

*Workshop 1:*

A career in Science? (Chair: Dr. Gerlind Wallon, EMBO); Speakers: Prof. E. Steines (President and CEO of Zealand Pharmaceuticals, Denmark); Prof. Stepana Petrescu (Director of the Institute for Molecular and Cell Biology,

**Table 8.8.1** Members of the Working Group on Women in Science (WISE).

Member	Country	Elected	Start	End
<b>2002</b>				
Sissel Rogne, Chairperson	Norway	Lisbon (2001)	01 01 02	31 12 04
Mickal Neeman	Israel	Lisbon (2001)	01 01 02	31 12 05
Stefana Petrescu	Romania	Lisbon (2001)	01 01 02	31 12 05
Susan Greenfield	UK	Lisbon (2001)	01 01 02	31 12 05
Alexandre Quintanilha	Portugal	Lisbon (2001)	01 01 02	31 12 05
Gerlind Wallon	EMBO; D	Lisbon (2001)	01 01 02	31 12 05
<b>2003</b>				
Sissel Rogne, Chairperson	Norway	Istanbul 2002	01 01 02	31 12 04
Mickal Neeman	Israel	Lisbon (2001)	01 01 02	31 12 05
Stefana Petrescu	Romania	Lisbon (2001)	01 01 02	31 12 05
Susan Greenfield	UK	Lisbon (2001)	01 01 02	31 12 05
Alexandre Quintanilha	Portugal	Lisbon (2001)	01 01 02	31 12 05
Gerlind Wallon	EMBO; D	Lisbon (2001)	01 01 02	31 12 05
<b>2004</b>				
Sissel Rogne, Chairperson	Norway	Lisbon (2001)	01 01 02	31 12 04
Mickal Neeman	Israel	Lisbon (2001)	01 01 02	31 12 05
Stefana Petrescu	Romania	Lisbon (2001)	01 01 02	31 12 05
Susan Greenfield	UK	Lisbon (2001)	01 01 02	31 12 05
Alexandre Quintanilha	Portugal	Lisbon (2001)	01 01 02	31 12 05
Gerlind Wallon	EMBO; D	Lisbon (2001)	01 01 02	31 12 05
<b>2005</b>				
Saskia Van der Vies	Holland	Warsaw (2004)	01 01 05	31 12 07
Mickal Neeman	Israel	Lisbon (2001)	01 01 02	31 12 05
Stefana Petrescu	Romania	Lisbon (2001)	01 01 02	31 12 05
Susan Greenfield	UK	Lisbon (2001)	01 01 02	31 12 05
Alexandre Quintanilha	Portugal	Lisbon (2001)	01 01 02	31 12 05
Gerlind Wallon	EMBO; D	Lisbon (2001)	01 01 02	31 12 05
<b>2006</b>				
Saskia Van der Vies	Holland	Warsaw (2004)	01 01 05	31 12 07
Gerlind Wallon	EMBO; D			
Stefana Petrescu	Romania			
Sidsel Rogne	Norway			
Alexandre Quintanilha	Portugal			
<b>2007</b>				
Saskia Van der Vies	Holland	Warsaw (2004)	01 01 05	31 12 07
Timothy Martin Palmer	UK			
Reko Lethilä	Finland			
Gerlind Wallon	EMBO; D			
Sidsel Rogne	Norway			
Alexandre Quintanilha	Portugal			

Table 8.8.1 (Continued)

Member	Country	Elected	Start	End
<b>2008</b>				
Ruth Hracky Paulssen, Chairperson	Norway	Vienna (2007)	01 01 08	31 12 10
Gerlind Wallon	EMBO; D			
Zafroula Georgussi	Greece			
Reko Lehtilä	Finland			
Alexandre Quintanilha	Portugal			
Timothy Martin Palmer	UK			
<b>2009</b>				
Ruth Hracky Paulssen, Chairperson	Norway	Vienna (2007)	01 01 08	31 12 10
Gerlind Wallon	EMBO; D			
Zafroula Georgussi	Greece			
Alexandre Quintanilha	Portugal			
Reko Lehtilä	Finland			
Timothy Martin Palmer	UK			
<b>2010</b>				
Ruth Hracky Paulssen, Chairperson	Norway	Vienna (2007)	01 01 08	31 12 10
Gerlind Wallon	EMBO;D			
Zafroula Georgussi	Greece			
Alexandre Quintanilha	Portugal			
Reko Lehtilä	Finland			
Thimothy Martin Palmer	UK			
<b>2011</b>				
Lea Sistonen, Chairperson	Finland	Gothenburg (2010)	01 01 11	31 12 13
Ruth Hracky Paulssen	Norway			
Erik Boye	Norway			
<b>2012</b>				
Lea Sistonen, Chairperson (resigned 2012)	Finland	Gothenburg (2010)	01 01 11	31 12 13
Cecilia Arraiano Chairperson (in 2012)	Portugal	Until elections at the FEBS Council meeting in July 2013.		
Oscar Marin	Estonia			
Erik Boye	Norway			
<b>2013</b>				
Cecilia Arraiano Chairperson	Portugal	St Petersburg (2013)	01 01 13	31 12 15
Oscar Marin	Estonia			
Erich Nigg	Switzerland			
Anna Tramontano	Italy			
Ingrid Grummt	Germany			

Bucharest, Romania); Prof. Alexandre Quintanilha (Director of the Institute for Biochemistry and Molecular Cell Biology, Porto, Portugal).

The session was chaired by G. Wallon, who introduced the subject by pointing out the difficulties that women encounter when wanting to make a career in science. Prof. Steines reported about her experience in Denmark and how she handled the “all men world” around her over the years. She told the audience that she

had been very much “alone” as a woman, during her long and successful career. The next speaker, Prof. Quintanilha gave a short overview of his career. Born and educated in Mozambique, he spent the majority of his scientific career in California (USA) and is now working in Porto, Portugal. He told the audience that in his Institute the majority of the group leader positions are occupied by women and that most of these women have been hired from “outside” the institute rather than having made their way up through the institute’s organisation. He mentioned that Portugal (and the institute) might not represent a “typical” place when it comes to Women in Science, as there are relatively many women in senior positions. Directors of Institutes, however, are usually men.

His talk was followed by Prof. Petrescu, who described a totally different situation in Romania, where one finds many women in science and also in senior positions. She herself is the head of the Institute. It seems that the social structure in Romania is helping women to make a career in science since it is common that when both partners work the grandparents take care of the (grand) children. Such structures do not exist in many of the other European countries and hence women (and men) are faced with a lack of social support, which has a more dramatic effect on the career development of women than of men.

The presentations were followed by a lively discussion with the speakers and the audience of which the majority (~80%) were women, mainly young scientists.

The following topics were subject of discussion: Applying for a high-ranking position in science.

- Women seem to be more hesitant to apply for a high-ranking position. A Polish (male) professor and head of a department told the audience that he had the experience that when out of the 40 applications, 3 were from women, one could almost hire these women immediately since they were all excellent. His interpretation was that women seem more hesitant to apply, while men more often think that they can do the job, which does not always turn out to be the case.

The importance of a supporting partner:

- The point was made that behind every successful man you will find a supportive woman (partner). This point was further discussed and the conclusion was clear that it doesn’t matter whether you are a man or a woman or whether you are in science or not. A supportive partner seemed to be crucial for making a career that will lead one to the “highest ranking positions”.

The importance of the social environment:

- It also seemed that different countries have different social structures, which are either inhibitory or supportive for women to develop a career (in science). When you plan to endeavour a career in science it is important to be aware of the support that one can expect from the social context.

Social status:

- When jobs (positions) are ranked as more prestigious one tends to find more men in these positions.

The workshop was attended by about 80 participants

*Workshop 2:*



A career in Science: “What made the difference”?! (Chair: Prof. Saskia van der Vies, Head of the Department of Biochemistry & Molecular Biology, Free University, Amsterdam, The Netherlands).

Three female speakers talked about important factors that had influenced their careers. Dr. E. Arimondo, an Italian National, recipient of a Marie Curie Excellence Award and group leader in France gave an account of how she managed to obtain a permanent position in France.

Prof. Saskia van der Vies (Dutch National) told the audience how she became a professor in Biochemistry, having started as a research assistant. Both speakers gave their views and “advice” on what they thought were important factors that had an effect on their careers. Prof. Van der Vies discussed also who made the difference, as in order to reach her goals support for her ideas from senior scientists had been crucial. Mrs. Steiner, a Danish National and President and CEO of Zealand Pharmaceuticals, Denmark, had moved from a scientist position to being the head of her own company. She is now at the end of her career and told the audience that four telephone calls had made the difference for her. Interestingly, it turned out that the three stories had a number of things in common:

Mrs. Arimondo and Mrs. van der Vies both had studied and worked in different countries. They both had had “unusual ideas” about the things they wanted to achieve. It meant that they set a precedent in a number of cases e.g. Mrs. Arimondo was the first to get accepted by the French system with an Italian training background. The same happened to Prof. van der Vies who had been trained in the Dutch system and had to be accepted at a British university. Both of them obtained their PhD outside their home country.

It seemed that all three speakers had had an open eye for opportunities that occurred in their surroundings, were clear about what they wanted to achieve and had encountered hurdles on the way. All three speakers had “moved about” and did not make their career in one institution or company only.

The presentations were well received and a lively discussion followed.

Points and conclusions that came out of the discussion:

- It is better to have no partner than a partner who does not support you.
- A favourable social structure and support of senior scientists helps (women) to achieve a career in science.
- When moving abroad one should be prepared to deal with “obstacles” that have nothing to do with science, like housing/accommodation, (health) insurance, finance, bureaucracy.
- It is a good idea to have some financial support when you want to achieve goals that are not “standard/common”.
- Moving abroad does not only enhance your scientific experience but also enriches your personal life.
- The quotation: “If you don’t know what you want, know what you don’t want” was recognised by many participants. It was acknowledged that knowing what you “don’t want” helps you to give direction to your career, as often it is hard to identify exactly what you do want.

- It is “easier” to make a career in science when you are prepared to change employers. Scientists who remain with the same organisation tend not to move fast up the career ladder.

The workshop was attended by about 100 participants.

#### 8.8.2.3 Workshop on “Women in Science”, FEBS Congress in Budapest, Hungary 6 July 2005

“Creating awareness: Lessons learned from the MIT study”. The Workshop was in two parts and organised in collaboration with EMBO.

*Part 1 Lecture* “Women Faculty in Science and Engineering at MIT”. Prof. Nancy Hopkins gave a personal account of her experience at Massachusetts Institute of Technology (MIT) in the USA. She shared her experience of how she became aware that women are treated differently than men at MIT and her subsequent efforts to collect evidence to support these observations. She shared her experience with creating awareness at MIT, her activities to change MIT policy and to bring the “gender” issue on the agenda of policy makers. It was both an inspiring and informative seminar. Women in the audience recognized many of the issues Nancy Hopkins had to deal with and several women from different countries reported on their personal experiences during the discussion.

*Part 2 Panel discussion* “Policy and views from Heads of Institutions”. The session was chaired by Prof. Mary Osborn (Max Planck Institute for Biophysical Chemistry in Goettingen, Chair of the ETAN report, the first report that gave an overview of the situation of women in science in Europe). Members of the panel were Prof. Giulio Superti-Furga (Scientific Director of the CEMM in Vienna, Austria and former director of Cellzome), Dr. Dora Groo (Managing director of the Hungarian Science and Technology Foundation) and members of the Enwise Expert Group and Prof. Joan Guinovart (Head of IRBB-Parc Científic de Barcelona, Spain). Prof. Giulio Superti-Furga and Prof. Joan Guinovart each gave a report of the situation regarding women in science in their host institution, commented on the institution’s policy on gender issues and gave personal views. Prof. Dora Groo reported on the final report of the ENWISE group, which provides an analysis of the role of women in science in Central and Eastern European countries and the Baltic States.

The recommendations on how to improve the role and place of women in the European scientific research (European Research Area’s objective) and how to increase the number of female participants from the targeted countries in the 6th Community Research Framework Programme (2002–2006) were presented. In addition Prof. Nancy Hopkins (MIT), Dr. Gerlind Wallon (EMBO-WISE) and Prof. Saskia van der Vies (FEBS-WISE) participated. It became clear that the gender issue is on the agenda of policy makers of some of the institutions, but that often this is the result of the personal awareness and interest of the head of the Institute.

The session was attended by approximately 100 participants. (FEBS News 2005 Special, p.6)

### 8.8.2.3.1 Science Needs Women & Women Need Visibility

By Saskia Van der Vies

When I opened the national French newspaper *Le Monde* on March 3 2006, my eyes spotted an interesting statement printed in big letters: “*La science a besoin des femmes*”! It made me think. “*Science needs Women*”? “*Die Wissenschaft braucht Frauen*” .....? “*La Ciencia necesita las Mujeres*”... .....? it didn't really matter in what language I thought of it, I couldn't help wondering whether it is actually true. Does science need women? Isn't it just all right the way it is? The answer to this question is NO; it is not allright the way it is and YES science needs women. That's what I would say, but maybe **you** would disagree. Let me give you some food for thought. Let's start with some of the facts. That is always good practice in science. Multiple studies have revealed that in the majority of the European countries women make up half the number of students in science, but when it comes to higher positions, women are chronically under represented. And I can hear you say, so there are less women than men, so what. That's no reason to want to increase the number of women. There are all sorts of professions where you find more women than men. Then I say to you: Read the facts. The under representation of women in science means that on average only 15% of senior academic positions are held by women. At present 25% of all researchers in the European Union are women. Is this not a *major* imbalance? So, doesn't “*Science needs women*”!? I give you a second fact: The European Commission has stated in the Lisbon declaration that Europe should become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. In terms of human resources, this translates into an extra half a million researchers (or 1.2 million research-related personnel), which will be needed to meet this goal. “*Science needs women*”! It is a straightforward calculation. Europe simply cannot reach the level of science and technology resources that are needed for its development without finding ways to increase the number of women in science. You are still not convinced? Then I want you to think about the following: Shouldn't all human beings be free to develop their personal abilities and make choices without limitations that are set by strict gender roles? By gender I mean the social differences, which are learned, changeable over time and have wide variations both within and between cultures. Should we not strive to reach a state of gender equality in which the different behaviour, aspirations and needs of women and men are equally valued and favoured? Numerous studies have revealed that science is gender biased, and women in particular suffer from a lack of gender equality. Have I convinced you that something should be done! I hope so. So what can we do, you ask me? If it's a social issue it will be very difficult to change. And I say to you, you are right. It will be hard and it will take time to achieve change. But remember; if the need and realisation for change increases, it will become easier to make that change. It's a question of mass action. Everybody can help to make the change. Also you. Let me tell you about the FEBS Working Group on Women in Science in the hope that it will inspire you to develop activities in your own surroundings. In July 2001 the FEBS council approved a proposal of the Executive Committee to establish a new Working Group on Women in Science

(WISE). FEBS itself was founded in 1964 and today has more than 42 000 members in 43 member societies. FEBS is one of the largest organisations in European life sciences. It is a charity organisation that is run by scientists for scientists and utilises large and unique European networks to promote biochemistry, molecular biology and biophysics. WISE started in January 2002 and has initiated a number of activities on “Women in Science”. WISE develops activities to create awareness and encourages people to participate actively in promoting gender equality in science. In collaboration with EMBO, WISE organises workshops at annual FEBS congresses and undertakes initiatives with the aim to expand the probability for women to pursue a career in science. WISE advises the different FEBS Committees on measures to improve the situation for women in science by for example promoting the participation of women scientists in the various committees. WISE also promotes gender equality in the scientific community by improving the visibility of women that have made major contributions to science. And I can hear you say, visibility, how will that help? I tell you that visibility is probably the key word for all of the activities mentioned above. And the nice thing about it is, it is relatively simple. It is much easier to make women more visible than to change e.g. university policy makers to generate gender equality. But do realise, that the former may eventually lead to the latter. So you ask me, how can we make women more visible? I give you a few ideas. One can increase the number of female invited speakers at international scientific meetings. But you may say, but where can I find these women. Then I tell you that there are databases of women experts in (life) science and technology. But you should also become alert yourself and spot female scientists. You know that most scientists just “know” about other scientists because they have seen them, read about them or heard about them. And so, visibility is extremely important. “*Science needs women*”, as I told you earlier, “*La science a besoin des femmes*” was the statement I read in *Le Monde*. It was part of the full-page advertisement with the announcement of the 5 laureates of the L’Oréal-Unesco prize 2006. The L’Oréal-Unesco award honours female scientists for their exceptional quality and at the same time provides role models for young scientists. The advertisement looked impressive, with large photographs of all the five laureates. To honour the achievements of women in science is of course a great way to promote visibility. I hope you have become inspired, and that you will undertake actions that will help to promote a healthier gender equilibrium because “*La science a besoin des Femmes*”, “*Die Wissenschaft braucht Frauen*”, “*La Ciencia necesita las Mujeres*” .....YES: “*Science needs Women*”!

(FEBS News March 2006)

#### 8.8.2.4 Workshops on “Women in Science”, FEBS Congress in Istanbul, Turkey, 25th and 26th of June 2006

Two workshops were organised at the Istanbul meeting. One workshop, a lunch box seminar, was focussed on WISE – related issues and the situation in Turkey and the second workshop had a focus on a large-scale WISE project that is currently running in the United Kingdom. The workshops were organised in collaboration with EMBO.

*Workshop 1, June 25, 2006* “Women in Science and Engineering in Turkey: lessons to be learned”.

Prof. Canan Özgen (Director of the Graduate School of Natural and Applied Sciences, METU, Ankara) talked about the situation of women in science in Turkey. In Turkey more than in any other European country the number of women that are participating in scientific research and teaching is high. Data on the participation of women in science was presented as well as information about the social aspects of the Turkey’s society.

It became clear that the social structures in the Turkish society are favourable for women and less favourable for men to undertake a career in science. The social status of a university professor is quite different from someone who runs his/her own small business. It turned out that, like in most European countries, the higher the social status of the profession the more men one tends to find in that profession. The seminar was both inspiring and informative. The audience recognized many of the issues raised and many of the participants were keen to share their personal experiences.

The session was attended by about 120 participants (25% men and 75% women)

*Workshop 2, June 26, 2006.* “The UK Athena project: the way forward”.

Prof. Nancy J. Lane, a senior scientist in Cell Biology at Cambridge University, chair of the Athena Project and director of the Cambridge WiSETI initiative talked about the UK Athena Project. The project was established in 1999 with the aim to promote the improvement of the careers of women in science, engineering and technology (SET) in higher education and research to achieve a significant increase in the number of women recruited to top posts. The Athena project has worked with a number of universities in order to promote the establishment and implementation of good practice.

In 2005 the Athena project published the results of a survey that has been performed among more than 6500 UK scientists (ASSET). The survey contained question about career pathways, the role of scientists beyond teaching and research, expectations and ambitions. The findings suggest that heads of departments and senior scientists need to do more to encourage and support women in their departments so that they can reach their full potential. In 2006, the Athena project launched a recognition scheme that is aimed at assisting the recruitment, retention and progression of women in SET. The presentation was well received and was followed by a discussion.

The session was attended by about 50 participants. (FEBS News)

#### **8.8.2.5 Events on the issue of “Women in Science”, FEBS Congress in Vienna, Austria 9th and 11th of July 2007**

A workshop and a lunch session was organised at the Vienna meeting. The workshop was organised in collaboration with EMBO.

*Workshop, July 9, 2007* “Strategies & Programmes to Facilitate Careers for Women”.

Maaïke Romijn, manager of the Mosaic and Aspasia programs of the Netherlands Organisation for Scientific Research (NWO) presented the two programs

that are aimed at increasing the participation of women scientists and researchers from ethnic minorities in science. Initially the Aspasia program was a program that only supported women imbedded in the VENI, VIDI, VICI program, which supports individual scientists at early postdoc, young group leader and senior group leader positions respectively. The Mosaic program is very successful and is aimed at supporting young scientists (PhD positions) from ethnic minorities. Each year 15 positions are awarded for the whole of The Netherlands including all the scientific disciplines. The main conclusion was that these special programs do help towards improving the gender balance. Dr. Gerlind Wallon, manager for the EMBO Young Investigator Programme and the Women in Science actions reported on the EMBO investigation on gender dimension and the effect of gender blinding on the selection process. Data was taken from the application documents of the EMBO Long term Fellowship programme (between 1999 and 2006) and from the Young Investigator programme (2002–2004). The main conclusion of the study was that traditional gender roles hold female scientists back. All the results and the analysis can be found at [www.embo.org/gender](http://www.embo.org/gender).

The audience asked both EMBO and FEBS (representative) for the organization to do more for Women in Science and suggested a mentoring scheme to be set up and possibly some financial support for Women in Science-related activities at a national level.

The workshop was attended by about 80 people.

*WISE-Career-Lunch, July 11, 2007*

A woman's career lunch was organized where, in a leisurely setting, small groups, each consisting of two female senior scientists and 8–10 participants, discussed personal career related issues. Participants had to register to attend the wise-career-lunch. A total of about 120 people attended. The response was very positive and many of the participants found the session very useful.



**Figure 8.8.1** Prof. Saskia van der Vies (in the green) leading the charge.



Figure 8.8.2 Round table lunch at Schweizerhaus.



Figure 8.8.3 Round table lunch at Schweizerhaus.

#### 8.8.2.6 Events on the issue of “Women in Science” FEBS Congress in Athens, Greece, 30th June and 2nd July, 2008

*FEBS/EMBO Workshop, 30th June, 2008 “The Way Forward – Gender Equality in Science”.*

Prof. Gerd Bjørhovde, Prorector of the University of Tromsø and chairman of the Norwegian Committee for Mainstreaming, presented the program and activities of the Norwegian Committee for Mainstreaming – Women in Science in Norway. This committee has a national mandate to monitor and make recommendations concerning policies and initiatives that may assist and inspire the whole sector to recruit and encourage more women to go for a career in science. The committee has functioned as a national coordinator and promoter for mainstreaming gender equality in higher education and research. It has been shown that a dialogue between the different institutions, the ministry and the Research Council of Norway, and the ministry is important and a necessity to promote the process of mainstreaming gender equality in science and technology.

Prof. Lesley Yellowlees, head of the School of Chemistry, Universities of Edinburgh and St. Andrews, UK and professor of Inorganic Chemistry, focused on

the cooperation between Athena and the Royal Society of Chemistry in UK and the results of this cooperation were presented. The main messages for influencing changes are that increasing the supply of female graduates does not on its own solve the problem of gaining gender equality in Science.

Women are as academically active but do not make it to the top in numbers that reflect their abilities and contribution to science. Heads of departments and senior scientists need to take a greater responsibility for career progression and women scientists need to expect more of themselves and their careers, and of their departments and universities.

The workshop was well received and approximately 50 people attended.

*FEBS-WISE Workshop, 2nd July, 2008 "Time-Management and Negotiation".*

The workshop was organized by the Hellenic Biochemical Society together with FEBS.

Prof. Joyce Taylor-Papadimitrou, a Visiting Professor and Senior Fellow at Kings College Medical School, Guys Hospital, London, focused in her talk on how personal strategies can influence success for women in science. The presentation was followed by a talk from Prof. Christine Färber who is professor at the Life Science Department of the Hamburg University of applied sciences HAW. With a PhD in Political Science her research focuses on the system of science, the health care system and on gender issues. The workshop started with an input on time-management, work-life-balance and contracting science. As women in science we have to be clear about personal goals, have to be able to set priorities, and manage ourselves effectively and efficiently. It became clear that negotiation includes bargaining on conditions in order to achieve personal goals for very good working conditions.

About 50 participants attended, of which 20% represented men.

*FEBS WISE – Career-Lunch, 2nd July 2008*

A women's career lunch was organised in a leisurely setting of small groups, each consisting of one or two female senior scientists and 8–10 participants, to discuss personal career related issues. Participants had to register to attend the wise-career lunch. The lunch session was very well received and 75 people attended. (FEBS News September 2008)

#### 8.8.2.6.1 Gender Equality



*By Ruth Hracky Paulssen*

*Chair of the FEBS Working Group on Women in Science.*

*FEBS/EMBO Workshop*

*The Way Forward - Gender Equality in Science 30th June, 2008*

Prof. Gerd Bjørhovde, Prorector of the University of Tromsø and chairman of the Norwegian Committee for Mainstreaming, presented the programme and activities of the Norwegian Committee for Mainstreaming – Women in Science in Norway. This committee has a national mandate to monitor and make recommendations concerning policies and initiatives that may assist and inspire the whole sector to recruit and encourage more



women to go for a career in science. The committee has functioned as a national coordinator and promoter for mainstreaming gender equality in higher education and research. It has been shown that a dialogue between the different institutions, the ministry and the Research Council of Norway, and the ministry is important and a necessity to promote the process of mainstreaming gender equality in science and technology. Prof. Lesley Yellowlees, of the School of Chemistry, Universities of Edinburgh and St. Andrews, UK and professor of Inorganic Chemistry, focused on the cooperation between Athena and the Royal Society of Chemistry in UK and results of this cooperation were presented. The main messages for influencing changes are that increasing the supply of female graduates does not on its own solve the problem of gaining gender equality in Science. Women are as academically active but do not make it to the top in numbers that reflect their abilities and contribution to science. Heads of departments and senior scientists need to take a greater responsibility for career progression and women scientists



**Figure 8.8.4** Scenes from the Careers Lunch.



**Figure 8.8.5** Scenes from the Careers Lunch.

need to expect more of themselves and their careers, and of their departments and universities. The workshop was well received and approximately 50 people attended.

#### 8.8.2.7 Workshops on the issue of “Women and Science” FEBS Congress in Prague, 2009

FEBS/EMBO Workshop on Women in Science

*Why aren't more women in science?*

Chairmen: Ruth H. Paulssen (N), Gerlind Wallon (DE)

Dr. Susan M. Barnett, Cornell University, Ithaca, NY, USA. Lecture title: “*Women and the science career pipeline: What happens?*”— Dr. Susan Barnett earned her undergraduate degree in Experimental Psychology from Cambridge University and graduate degrees from Harvard (M.B.A.) and Cornell (Ph.D. in Developmental Psychology). She was a Visiting Scholar in the Faculty of Education at Cambridge University, and is now a Visiting Scholar at Cornell. She studies the underrepresentation of women in science, the development and application of reasoning ability (e.g., intelligence, transferable learning, group differences), and policy implications of each. Her research focused on transfer of learning and on women's underrepresentation in science. Women are still scarce at the top of many scientific disciplines and in her lecture she discussed sex differences in representation and performance, as well as both free and constrained choices women make and the sociocultural context in which these choices are made.

Marcela Linková, National Contact Centre, Women in Science, Academy of Sciences, Czech Republic Lecture title: “*Changing academia and its genderings*”— Marcela Linková is a scientist at the Institute of Sociology of the Academy of Sciences of the Czech Republic where she is a member of the Gender and Sociology research group and the coordinator of the National Contact Centre for Women in Science. She has also been a primary investigator of an international grant on knowledge, institutions and gender of the 6th EU Framework program (2006–2008). Her research interests concentrate on the position of women in science, construction of research institutions and knowledge production from a gender perspective. Women in Science Events: Research in higher education landscapes are changing and her lecture focused on the dynamics driving the various changes in R&D and HE that do not square well with some of the demands stemming from the gender equality agenda. This was showcased using the example of work life balance, stress on mobility and flexibility, and research performance assessments. This workshop was well received and approximately 50 participants attended.

(FEBS News July 2009)

*WISE-Career Lunch*

A women's career lunch was organised in a leisurely setting at the Holiday Inn Prague Congress centre, which was in walking distance to the Congress Centre. Small groups, each consisting of one or two female senior scientists and 8–10 participants, discussed personal career related issues. The lunch session was very well received and 50 young scientists attended.



**Figure 8.8.6** Lunch session at Prague Congress.

#### 8.8.2.8 Events on the issue of “Women in Science”, FEBS Congress in Gothenburg, Sweden, 2010

##### *FEBS/EMBO Workshop on Women in Science*

##### *Gender in Science*

*“Reaching consensus on the gender dimension in science”*— Dr. Elizabeth Pollitzer, Director, Portia-Equalitec, London, UK. With her talk Elizabeth Pollitzer shared the experience of using the model of Consensus Conferences to facilitate an agreement of the science community on the role of the gender dimension in science. This task formed part of the genSET project (<http://www.genderinscience.org/>) which is part of the EU 7th Frame Program. The innovative aspect of this approach was that the traditional ‘lay’ panel was made up of European science leaders and the ‘expert’ panel was made up of acknowledged research leaders in the field of gender. The 14 science leaders forming the Consensus Panel have been selected to represent different science sectors (from education to industry), scientific disciplines, and geographical locations. Their task was to discuss, reflect and to probe the gender dimension issues and produce a Consensus Report with priority themes and recommendations for institutional action on gender in science. To assist them in this process, genSET has brought together a large pool of gender experts whose task was to help explain and clarify the issues and to answer any questions that the Panel may have. A Consensus report including thirteen recommendations for action on the gender dimensions in science have been presented for the first time to the public at the FEBS Congress.

##### *WISE – Career Lunch*

A women’s career lunch with 60 participants was organised together with Maria Enge, a member of the local organizing committee, and was held in a leisurely



**Figure 8.8.7** Women's Career Lunch Gothenburg 2010.



**Figure 8.8.8** Women's Career Lunch Gothenburg 2010.

setting at the Restaurant of Gothia Towers, Gothenburg. Small groups of each consisting of two female senior scientists and 8–10 participants discussed personal career related issues. (FEBS News October 2010)

#### 8.8.2.9 Events on the issue of “Women in Science” FEBS Congress in Turin, Italy, 2011

The Women in Science events at the FEBS Congress in Torino were well attended. In addition to the three activities outlined below that already have an established position in the Congress programme, a childcare service was introduced as a new initiative in Torino. Based on the experience obtained this year, we hope to develop this important service to facilitate intensive participation of young parents in future Congresses.

##### *FEBS/EMBO Workshop*

##### *Gender in Science*

After the opening words, Flavia Zucco, President of the Italian Association of Women in Science ‘Donne e Scienza’, who has been active in this area since 1988, presented the many Women in Science activities and goals in Italy. She also outlined past and ongoing European networks and provided a detailed bibliography

of the institutional documents and reports that are available in English. Maria Laura Scarino, Secretary of the Italian Association of Women in Science 'Donne e Scienza', gave an inspiring lecture entitled 'Future in science and science in future: ideas and expectations of women scientists'. She presented recent developments in the role of women scientists in post-academic science and their possible positive future contributions. Her presentation highlighted a wealth of challenges and opportunities that are likely for future female scientists in academia and national and international organizations, as well as in industry and other private enterprises. The talk was well received and prompted a lively and interactive discussion in which the entire audience participated.

#### *Women in Science Career Lunch*

In keeping with past years' well-established model, the women's career lunch was organized in a leisurely setting. Small groups, each consisting of one or two female senior scientists and four to six participants, had an excellent opportunity to discuss personal career-related issues. The participants represented all stages of scientific careers and they came from a great variety of European countries. The discussions around each table were lively, and this informal event received very positive feedback from both the junior and more senior participants.

#### *FEBS/EMBO Women in Science Award 2011*

The FEBS/EMBO Women in Science Award, now in its fourth year, recognizes and rewards the exceptional achievements of a female researcher in the life sciences over the previous five years. The awardee this year was Prof. Carol Robinson from the Department of Chemistry, University of Oxford, UK, who is a pioneer in the development and use of mass spectrometry for structural studies of large multimeric protein assemblies. Her unique scientific career and highly innovative research were presented in an outstanding lecture entitled 'Finding the right balance: from rare gases to rotary motors' that raised multiple comments and questions among the audience. The laudation for Prof. Robinson was given by Prof. Wolfgang Baumeister, Max Planck Institute of Biochemistry, Martinsried, Germany.

#### *Lea Sistonen Chair of FEBS Working Group on Women in Science (WISE)*

(FEBS News, September 2011)

### **8.8.2.10 Events on the issue of "Women in Science" FEBS Congress in Sevilla, Spain, 2012**

Over the past ten years FEBS has developed events at its annual Congress aimed at raising awareness of gender issues in science and providing career support and inspiration to young female scientists. The three Women in Science activities at the IUBMB–FEBS Congress in Sevilla are highlighted here.

#### *Workshop*

#### *"Women in Biochemistry: from Past to Future"*

The well-attended (approximately 100 participants) workshop was opened by Prof. Catalina Lara, who is Professor of Biochemistry and Molecular Biology at the University of Sevilla and Chair of the Working Group of Women in Science of the Spanish Society of Biochemistry and Molecular Biology (SEBBM). The first



**Figure 8.8.9** A table at the Women in Science Career Lunch.

speaker was Dr Robert Freedman, Warwick University, UK, who served as Chair of the Biochemical Society during 1996–1998. For the Society's Centenary in 2011, he initiated a research programme on the role of women in the early years of biochemistry in the UK. In his talk entitled 'Women and the establishment of biochemistry in Great Britain', which was beautifully illustrated with unique photographs, he covered the pioneering research conducted by female biochemists in Cambridge from the very beginning until the 1940s. The second speaker, Prof. Raquel Gonçalves Maia, University of Lisbon, Portugal, gave an inspiring lecture entitled 'From X-ray to biomolecular structure'. She elucidated key discoveries in structural biochemistry by presenting the groundbreaking work of three female Nobel Prize Laureates: Dorothy Crowfoot Hodgkin (1910–1994), Rosalind Elsie Franklin (1920–1958), and Ada E. Yonath (1939–). Interestingly, Prof. Yonath herself had given a plenary lecture already earlier in the Congress. The last presentation was from a female scientist who is still active in academic research. Prof. Jenny Martin, who received her PhD in protein crystallography and structure-based inhibitor design at Oxford University, UK, and is now an ARC Australian Laureate Fellow and honorary NHMRC Fellow at the University of Queensland in Brisbane, Australia, told about her exciting and multifaceted career path from the UK via USA to Australia. Her presentation 'Strategies for coping and succeeding as a female biochemist: a personal perspective', initiated a lively discussion among the audience, and the challenges for female scientists, especially in various cultural backgrounds, were highlighted. The following morning, Dr Martin gave her scientific talk entitled 'Why protein engineering may not always be a good idea.'

#### *Women in Science Career Lunch*

A women's career lunch was organized in a leisurely setting to allow participants and female senior scientists to discuss personal career-related issues in small groups. The participants represented all stages of scientific careers and they came from a great variety of European countries. The discussions around each table were lively, and this informal event received very positive feedback from both the junior and more senior participants.



**Figure 8.8.10** Gerlind Wallon (EMBO), Susan M. Gasser (with the statuette and certificate), Erich Nigg (laudator) and Lea Sistonen (FEBS).

Participants also had concrete suggestions about how to improve information flow among female scientists, in general, and how to arrange the conversations during the lunch, in particular, so that everyone could listen to all the comments and participate in an open discussion.

*Lea Sistonen Ex-Chair, FEBS Working Group on Women in Science.* (FEBS News October 2012)

*FEBS/EMBO Women in Science Award and Plenary Lecture*

The FEBS/EMBO Women in Science Award, now in its fifth year, recognizes and rewards the exceptional achievements of a female researcher in molecular biology over the previous five years. Winners of the award are great role models who inspire future generations of women in science. Dr Gerlind Wallon, Deputy Director of EMBO, provided a short introduction to the selection procedure and historical background to the award, which is jointly sponsored by FEBS and EMBO.

The 2012 awardee is Dr Susan M. Gasser, Director of the Friedrich Miescher Institute of Biomedical Research, Basel, Switzerland, and she gave an outstanding lecture on her recent studies describing how the eukaryotic genome in the cell nuclei is divided into active and silent compartments (euchromatin and heterochromatin, respectively). The spatial organization of the transcriptionally repressed heterochromatin at the nuclear periphery is a well-known feature of the eukaryotic nucleus, but the underlying molecular mechanisms have remained enigmatic. Using embryos of the nematode *Caenorhabditis elegans* as the model system, the Gasser lab has now conducted a systematic screen for factors required for the perinuclear sequestration of heterochromatin and revealed an enzymatic cascade controlling the post-translational modifications of the chromatin-associated proteins in this important biological process that is evolutionary conserved from worms to humans. After finishing the scientific part of her lecture, Susan Gasser devoted the last minutes of her presentation

to encourage young women, well represented in the audience, to continue their scientific careers after completing their PhDs and post-doctoral training. Using her own experience and group members as examples, she convinced the audience that it is fully possible to combine high standard research careers with balanced family lives: of nine of her former female students and postdocs who now lead research labs, seven have two children each and two have three children. A personal and in-depth laudation for Dr Susan Gasser was given by the nominator Prof. Erich Nigg, Director of the Biozentrum, University of Basel, Switzerland.

*Lea Sistonen Ex-Chair, FEBS Working Group on Women in Science*

(FEBS News October 2012)

#### 8.8.2.11 Events on the issue of "Women in Science" FEBS Congress in St Petersburg 2013

FEBS has developed events aimed at raising awareness of gender issues in science. In general these events reinforce the need for equal work opportunities, and provide career support and motivation to young scientists. At the 38th FEBS Congress, there was the FEBS|EMBO Award and Plenary Lecture (on July 9, 2013), the Women in Science Career Lunch, and the Women in Science (WISE) Seminar.

##### **FEBS|EMBO Women in Science Award 2013 and Plenary Lecture**

The FEBS|EMBO Women in Science Award rewards the exceptional achievements of a female researcher in the life sciences. Winners of the award are role models who inspire women in science.

Dr Cecilia M. Arraiano gave a welcome in the name of FEBS and introduced the event, and Dr Gerlind Wallon, Deputy Director of EMBO, provided a short description of the selection procedure and historical background to the award, which is jointly sponsored by FEBS and EMBO. Dr Olga I. Lavrik, Head of the Laboratory of Bioorganic Chemistry of Enzymes at the Institute of Chemical Biology and Fundamental Medicine, Novosibirsk, Russia, gave a few words of motivation focusing on the role of Russian women working in science.

Dr Giacomo Cavalli, Investigator at the Institute of Human Genetics in Montpellier, France, was the nominator of this year's winner, and gave a short laudation preceding the Plenary Lecture. The awardee of the FEBS|EMBO Women in Science Award 2013 was Dr Geneviève Almouzni, Deputy Director of the Institut Curie in Paris, and the title for her talk was 'The multifactes of chromatin assembly, a recipe that mixes new with old partners'. She gave an excellent lecture on her recent studies describing the underlying molecular mechanisms of chromatin.

##### **Women in Science Career Lunch**

A women's career lunch was organized at the Congress site for 50 people (registration for the event took place at the FEBS information desk). The participants came from a great variety of European countries. Career-related issues were discussed in small groups, each consisting of one or two female senior scientists plus younger scientists, and participants even exchanged addresses.

##### **The Women in Science (WISE) Seminar**

Dr Cecilia Arraiano introduced Dr Elizabeth Pollitzer, who gave the Women in Science Seminar at this Congress. She is Director of the genSET programme





**Figure 8.8.11** Cecilia Arraiano and young scientists at the WISE career lunch.

([www.genderinscience.org](http://www.genderinscience.org)), an initiative run by Portia Ltd, which builds on the achievements of the now completed FP7-funded project. Portia Ltd UK is responsible for the European Gender Summit programme development and scientific content. The title of her talk in St Petersburg (of interest to men and women) was: 'We need to talk about sex.' In her talk she used as an example the experience of genSET in trying to challenge scientists' unquestioned adherence to the concept of 'gender neutrality'. The well-attended seminar was followed by a discussion among the audience, and men and women talked about gender issues, especially in various cultural backgrounds. This event received very positive feedback from both the junior and more senior participants.

These FEBS Women in Science events at the Congress contributed to raising awareness of gender differences. The participants were able to reflect on this matter, focusing on the position of women in science and society. Unfortunately, due to the present situation it is expected that these events still have to continue...

*Cecília M. Arraiano*

*Chair, FEBS Working Group on Women in Science*

## 8.9

### FEBS Engagement World-Wide

#### 8.9.1

##### The European Commission Gives EFBIC the Green Light

The European Commission has signed a contract with the European Focus on Biotechnology in China (EFBIC), which gives EFBIC the formal green light to commence planned activities. The contract is effective from April 1st, 2002. EFBIC's purpose is to establish strategic relations in biotechnology between high-level decision makers in Europe and China and facilitate collaborations

in research, training and innovation between European and Chinese scientists in general and in particular under the 6th Framework Programme (FP6) of the European Commission. Apart from having gained acceptance of the contract, a scientific management board has been established in EFBC. The board consists of 10 members, 5 from Europe and 5 from China. The 5 selected members from Europe are Lars Bolund (Denmark), Brian Clark (Denmark), Antoine Danchin (Hong Kong), K. Luyben (The Netherlands) and Lothar Willmitzer (Germany). The board is expected to have its first meeting in the beginning of September. At this meeting the board members hope to establish a High Level Supervisory Committee. The board is supported by the chairman of FEBS Science and Society Committee, Prof. Federico Mayor and by Sir Brian Heap, Foreign Secretary and Vice President, The Royal Society. (FEBS NewsLetter July 2002)

## 8.9.2

### FEBS Activities in China

#### 8.9.2.1 FEBS presentation at the IUBMB and FAOBMB Congress in Shanghai 2009

*By Andreas Hartig*

A small delegation of FEBS attended the IUBMB and FAOBMB Congress in Shanghai in August 2009 to promote FEBS activities worldwide and especially in China. Mission and vision of FEBS as a charity was presented to a selected group of Chinese scientists with special emphasis on activities now open for scientists working outside Europe. Young scientists from all over the world are now admitted to the Young Scientists Forum held usually in conjunction with the annual FEBS Congress, and to Advanced Courses for training their skills. Fellowships were implemented specifically for Chinese scientists in their early independent years to visit a European laboratory for a short period of time (Chinese European Visiting Fellowships). Moreover, the FEBS publications FEBS



**Figure 8.9.1** Andreas Hartig addressing the delegation of eminent local scientists prior to discussions over dinner on future collaboration.



**Figure 8.9.2** The presentation was attended by senior scientists and those just starting their careers.

Journal, FEBS Letters and Molecular Oncology were presented for high quality papers. Our staff at the booth were kept busy all the time answering questions and giving away information material and copies of our Journals.

The most frequently asked questions dealt with the impact factor of the Journals and with application procedures for the participation of courses or the Young Scientist Forum and the new Chinese European Visiting Fellowships. As scientists operating in a larger region and affected by the economic and political environment, we face quite similar challenges as our Chinese colleagues, such as the concern for the quality of research, for the understanding of the public for science and scientific results, for sufficient financial support or for the best possible education of the future scientific generation, just to name a few.

The FEBS delegation used the opportunity of the IUBMB and FAOBMB Congress in Shanghai to invite a small group of eminent Chinese scientists for dinner to talk about common goals and to share ideas and explore possibilities for future collaborations. Most luckily, the young Chinese scientist who was the winner of the FEBS Journal prize 2008 was present as well.

Time will tell whether these first contacts will lead to long-lasting cooperation. Within IUBMB important changes will take place.

#### 8.9.2.2 Links between European and Chinese researchers

*By Hannah Brown, Molecular Oncology Editorial Office*

A delegation from FEBS travelled to China in the first week of June to hold two meetings, one in Beijing and one in Shanghai, with the aim of strengthening links between European and Chinese researchers. Speaking to an audience of Chinese researchers invited specially to the meetings, Julio E. Celis (Professor and Director of the Institute of Cancer Biology, Copenhagen, Denmark), Editor-in-Chief of FEBS' newest journal *Molecular Oncology*, introduced the FEBS delegation and

its purpose by emphasising the increasing need for international collaborations in science. “We live in very exciting times,” he said. “It is coming increasingly clear that there is no single lab institution of even country that is able to solve the complex biological problems that we face today. So it is essential that we collaborate and extend our abilities by pooling resources and abilities that we don’t have.” He added that an essential part of this agenda was to create nurturing environments for the young generation of scientists to develop their careers. The meetings, held in large hotels in Beijing and Shanghai and with an attendance of around 30 Chinese delegates at each, consisted of a programme of short talks introducing FEBS and its publishing activities, followed by two scientific presentations. One final presentation by Iain Mowbray, FEBS Treasurer, introduced the idea of some special FEBS fellowships for Chinese researchers to spend three months working in a European laboratory of their choosing – an offering that aims to stimulate greater international collaboration. Calling the fellowships offered to Chinese scientists “a catalysing action”, Professor Celis said he hoped that FEBS would help to create “an instrument to allow the networking collaboration that we hope to see in the future.” Chair of the FEBS Publications Committee, Felix Goñi (Bilbao University, Spain) gave a presentation introducing the society’s publications: *Molecular Oncology*, the newest addition devoted to translational research in cancer; *FEBS Letters*, the leading journal for rapid publication of short reports in molecular biosciences; and *FEBS Journal*, which publishes full-length papers. With two different publishers, Elsevier and Wiley-Blackwell, dealing with the production of these journals, the Chinese audience was also given some background on the commercial activities of both companies, with particular reference to strategies to help promote science in China. *FEBS Letters*’ managing editor Professor Felix Wieland (Heidelberg University, Germany) made his pitch for Chinese submissions in a talk that emphasised the journal’s desire to increase Chinese representation on its editorial board. Discussing where most submissions to *FEBS Letters* come from, he showed a graph of geographical spread of submissions over time indicating that while Japan currently dominates Asian papers in the journal, China shows a trend of strongly increasing numbers since 2000. “So by next year China will be the champion in the number of submitted papers, so that leads us to be in closer contact with our authors in China,” he concluded. Jan Johansson, Senior Editor of *FEBS Journal*, also stressed how Chinese submissions were increasing in his publication. “Total papers published in the field of biochemistry and molecular biology are increasing almost exponentially in China, whereas those from the UK are largely levelling off,” he explained. There were 143 submissions to *FEBS Journal* from China last year, with a 15% acceptance rate. Those figures represent a large increase since 2004. Taking the stand again to describe *Molecular Oncology*, Professor Celis said that while the journal has only one Chinese member of the editorial board, its content reaches a wide audience in Asia. The journal has 4000 online subscribers and around 300 institutes in China register with Science Direct, Elsevier’s proprietary literature database through which the entire journal’s content is accessed. “The fact that you are in one country is obsolete nowadays because of globalisation,” he said. Two well-received scientific sessions formed the second

half of the meetings. Gianni Cesareni, Professor of Network Biology at Tor Vergata University in Rome, described his work to elucidate ways in which biological relationships can be understood as networks that are dynamic both in space and time, rather than fixed connections in signal transduction pathways. He explained how consideration of the specific binding domains of biological molecules, rather than the whole, can lead to a more accurate understanding of physiological processes and localise the functional consequences of specific mutations. "We know there are thousands of proteins and we want to elucidate how they all fit together. Even though we know about the interactions between proteins in the simplest organisms the map is a terrible mess of overlapping interactions. We like to be able to understand which interactions are responsible for the cell's reaction to a given stimulus but we can't do that yet," he says. A second scientific talk was given by Yosef Yarden, Professor in the Department of Biological Regulation at the Weizmann Institute of Science, Rehovot, Israel. Yarden focused on the complexity of cellular signalling in higher organisms – similar to the network idea Cesareni had focused on – and how this acts as a protection for the cell, enabling it to face a challenge of random mutagenesis. "The network is able to shift pathways and overcome single point mutations or single component inactivations," Yarden explained. However, he said that acknowledging this feature also enables researchers to understand how to effectively bring it down. Referring to a paper published in 2000 studying the conditions causing internet servers to fail, he said there was strong robustness against common perturbations but extreme fragility against uncommon ones. In a biological context, uncommon perturbations would be things like two-hit drugs, where two modules intercept simultaneously, and immunotherapy where treatment with artificial autoantibodies target two different domains. "Efficacious cancer therapies may exploit fragile aspects of oncogenic networks such as non-canonical activation independent receptor endocytosis. Resistance to drugs reflects systems plasticity and may be overcome by drug combinations".

(FEBS News July 2008)

#### 8.9.2.3 Chinese Society of Biochemistry & Molecular Biology Annual Meeting, Nanjing, China August 2010

*From the Secretary General Prof. Israel Pecht*

The ongoing deep interest of FEBS in promoting contacts with the Chinese community of life sciences has led in 2010 to two further events where FEBS has participated, first in a major activity of the Chinese Society of Biochemistry and Molecular Biology (CSBMB). FEBS has been present at the biannual CSBMB meeting that took place in August this year in Nanjing. Courtesy of Chinese colleagues, a FEBS booth was present where Chair of the FEBS Working Group on promoting Women in Science, Prof. Ruth Paulssen, and Louise McSeveny have been present throughout the meeting, providing information about our activities. Also a special FEBS lecture was delivered by Professor Alexander Levitzki from the Hebrew University of Jerusalem, Israel, on *The biochemical basis of targeted therapy* at the above meeting and a dinner for the leadership of the CSBMB was hosted by FEBS.

The Chair of the FEBS Publication Committee, Prof. Felix Goni, the Editor in Chief of FEBS Journal, Prof. Richard Perham and FEBS Secretary General, Prof. Israel Pecht informed the participants about the wide range of FEBS activities and in particular its journals. A special meeting was later organized in Beijing in which major researchers and professors in leading universities and the Chinese Academy in this city were invited. Following a festive dinner, Prof. Levitzki lectured on the above topic which was followed by a rather lively and long discussion. (FEBS News October 2010)

#### 8.9.2.4 FEBS in China 2011

##### *Israel Pecht FEBS Secretary General*

For the past four years, representatives of FEBS have been present at central events of the Chinese community of molecular life sciences. The recent dramatic rise of China as a scientific power has been striking and was one major reason for FEBS to strive to form close contacts with this emerging community. While contacts between the European scientific community and that of China go back for a considerable time and, indeed, many leading Chinese figures received part of their education in Europe, the involvement of the North American scientific community in China is more obvious.

This made it natural for FEBS to take active steps to establish deeper and wider contacts with our Chinese colleagues. A significant element in these efforts is sharing with the Chinese biochemical community our channels of communicating scientific results. A report published by the Royal Society (London) stated that China now publishes the second largest number of scientific papers (after the USA), and by 2020 it could be the world's dominant producer of scientific



**Figure 8.9.3** The FEBS booth at the national meeting of the Chinese Society for Cell Biology, 2011. Right, Ms Judy Bai from the Beijing Elsevier office; left, Ms Hanni Naor, Assistant to the FEBS Secretary General.

research. This is one result of the huge investment of the Chinese government in research, reaching more than US\$200 billion a year. Moreover, the Chinese government is urging its scientists to publish in highly respected English language journals and is offering, as incentives, promotion and additional benefits. In the light of these developments, FEBS is striving to build effective and mutually beneficial contacts with our Chinese partners by raising awareness of our journals and offering these as publishing media for their research results. One approach has been to invite leading Chinese scientists to join the Editorial Boards of our three journals – *FEBS Journal*, *FEBS Letters* and *Molecular Oncology*. In addition, to achieve broader and more effective contacts, Editors of the journals and members of the FEBS Executive Committee have travelled to China in recent years to present the different activities of our Federation at international and national Chinese meetings, as well as smaller social events organized by FEBS. The Congress of the International Union of Biochemistry and Molecular Biology (IUBMB) organized by the Chinese Society of Biochemistry and Molecular Biology in Shanghai two years ago provided an excellent opportunity for presenting FEBS to the thousands of participants, mainly from China but also from neighbouring countries.

A FEBS booth was present throughout this meeting to distribute information. In addition, Prof. Wolfgang Baumeister, from the Max Planck Institute of Biochemistry in Munich, delivered the FEBS lecture at this Congress. This was complemented by two special dinners that brought together leading figures of the local community as well as the emerging younger leadership of Chinese biochemistry. Last year, FEBS participated in a national event, the biannual meeting of the Chinese Society of Biochemistry and Molecular Biology, which took place in Nanjing.

A FEBS booth was again present throughout the meeting, and Prof. Alexander Levitzki from the Hebrew University in Jerusalem delivered a FEBS lecture. Also, FEBS organized a festive dinner and FEBS lecture in Beijing for local scientists.

Earlier this summer, the Chinese Society for Cell Biology meeting brought together more than 2000 participants in the outskirts of Beijing for an intense four-day programme. A FEBS lecture was delivered there by the Editor-in-Chief of *FEBS Letters*, Prof. Felix Wieland from the University of Heidelberg, and this drew thousands of participants to the meeting hall.

A FEBS booth placed in the heart of the meeting's venue attracted many of the attendants, who were able to learn about FEBS and its journals in their native Chinese language, thanks to the presence of a member of the local Beijing Elsevier office at the FEBS booth. In addition, during this summer's visit FEBS organized a special event in Shanghai, which has a very large concentration of research institutions in molecular life sciences; the event consisted of a dinner and Prof. Wieland's lecture, which was followed by intense and long discussions. Clearly these activities are only a beginning of efforts to establish deeper and long-standing contacts that would be accompanied by mutual collaborations, exchange of students and resultant publications of the scientific research.

(FEBS News September 2011)



**Figure 8.9.4** The FEBS event in Shanghai, 2011; listening to Prof. Wieland's lecture.

### 8.9.3

#### **FEBS in Brazil, 2012**

##### *Israel Pecht FEBS Secretary General*

Science in Brazil has undergone dramatic changes in recent years. Brazil currently produces half a million graduates and 10,000 PhDs a year – ten times more than two decades ago. Between 2002 and 2008 its share of the world's scientific papers rose from 1.7% to 2.7%. It is a world leader in research on tropical medicine, bio energy and plant biology. Most significantly, Brazil spends ~ 1% of its fast-growing GDP on research – half that spent by many advanced economies but almost double the average in the rest of Latin America. Its scientists are increasingly collaborating with those abroad: 30% of scientific papers by Brazilians now have a foreign co-author. These impressive developments have led FEBS to begin to establish closer contacts with the Brazilian community of molecular life sciences. As a first step in that direction, FEBS recently participated in the XLI Annual Meeting of the Brazilian Biochemistry and Molecular Biology Society (SBBq), which took place from 19th to 22nd May 2012 in Foz do Iguaçu, in the state of Paraná. Following consultation with the SBBq leadership, a symposium sponsored by FEBS on Protein Structure–Function relations was organized, with lectures by Prof. Sir Alan Fersht (Cambridge, UK) and Prof. Dr Christian Griesinger (Göttingen, Germany), and this attracted a huge audience to a packed lecture hall.

The SBBq meeting was attended by close to 2000 participants from all over Brazil. Dozens of workshops and symposia kept the participants rather busy throughout the four days of the meeting and one of the main highlights was the poster sessions, which brought together crowds of enthusiastic presenters and discussants to lively debates around the boards. This unique gathering was also an opportunity to promote FEBS activities and, more significantly, the journals of FEBS, through a short opening presentation and a booth where information and samples of our journals were provided. We hope that these activities will





**Figure 8.9.5** and **Figure 8.9.6** Speakers at the FEBS-sponsored symposium on Protein Structure–Function: (left) Alan Fersht ('Rescuing oncogenic mutants of p53');

(right) Christian Griesinger ('Fuzziness of globular and aggregating proteins in neurodegeneration: an NMR spectroscopic view').

initiate closer and longstanding contacts between our Brazilian colleagues and the European biochemical communities. (FEBS News June 2012)

## 9 FEBS Awards

### 9.1 FEBS Medals

#### 9.1.1 Sir Hans Krebs Lecture and Medal



Figure 9.1.1 The Krebs Medal.

The Sir Hans Krebs Lecture and Medal was endowed by a generous capital gift from the Lord Rank Centre for Research and is awarded for outstanding achievements in Biochemistry and Molecular Biology or related sciences.

The awardee, who should be active in European research, presents one of the plenary lectures at the FEBS Congress.

The awardee receives a silver medal, and is awarded his/her travel expenses to the Congress.

It is customary for the Lecture to be published in full in *The FEBS Journal*.

#### 9.1.1.1 Hans Krebs' Personality

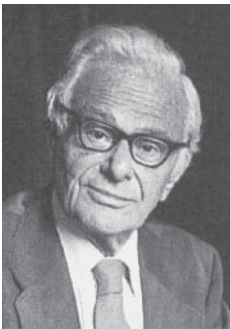


Figure 9.1.2 Sir Hans Krebs.

Krebs, a German biochemist, first postulated the mechanism of cyclic oxidation of substrates in the mitochondrial matrix in 1937, under the name *citric acid cycle*. Proper names are *tricarboxylic acid cycle* or *citric acid cycle*. However, many people refer to the process as the Krebs cycle in recognition of the contribution of Hans Krebs to the discovery.

Krebs discovered the formation of citrate from oxaloacetate and pyruvate, the 'missing link' that allowed the known reactions to form a cyclic sequence. Adding malonate to muscle suspensions caused an accumulation

of succinate in the presence of citrate, isocitrate, cis-aconitate, or alpha-ketoglutarate. In the presence of fumarate, malate, or oxaloacetate, succinate also accumulated, clearly establishing a cyclic sequence leading to succinate. Malonate poisoning also limited the ability of oxaloacetate to stimulate the oxidation of pyruvate – where one molecule of oxaloacetate could stimulate the oxidation of many molecules of pyruvate in the uninhibited system, only one molecule of pyruvate was oxidized per molecule of oxaloacetate in the malonate-poisoned system. Thus, pyruvate clearly entered a cyclic system of oxidation of substrates.

It wasn't established until later that citric acid was indeed the first substrate formed from the reaction of pyruvate and oxaloacetate, so the cycle was called simply the tricarboxylic acid cycle for many years. Now, both names are accepted, as well as the term 'Krebs cycle'.

Krebs' own account of the history of the discovery of the cycle can be found in his article, *The History of the Tricarboxylic Acid Cycle, Perspect. Biol. Med., 14: 154–170 (1970)*.

**Table 9.1.1** Recipients of the KREBS Lecture and Medal.

Year	Meeting	Awardee	Krebs Lecture
1968	Prague	M.F. Perutz	1
1969	Madrid	A.S. Spirin	2
1971	Varna	D.C. Phillips	3
1972	Amsterdam	E. Katchalski	4
1973	Dublin sp.	A.B. Pardee	5
1974	Budapest	C. Weissmann	6
1975	Paris	H.G. Wittmann	7
1977	Copenhagen	F.H.C. Crick	8
1978	Dresden	P. Mitchell	9
1979	Dubrovnik sp.	P. Desnuelle	10
1980	Jerusalem	S. Brenner (no lecture)	
1981	Edinburgh	C. Milstein	11
1982	Athens sp.	F. Jacob	12
1983	Brussels	A. Kornberg	13
1984	Moscow	R. Henderson	14
1985	Algarve sp.	R.J.P. Williams	15
1986	Berlin	G. Schatz	16
1987	Ljubljana	T.L. Blundell	17
1989	Rome	H. Beinert	18
1990	Budapest	P. Chambon	19
1992	Dublin	R. Huber (Martinsried)	20
1993	Stockholm	C. Nüsslein-Volhard (Tübingen)	21
1994	Helsinki sp.	J.-P. Changeux (Paris)	22
1995	Basel	K. Nasmyth (Vienna)	23
1996	Barcelona	J. Schell (Cologne)	24
1997	Amsterdam sp.	D. Baltimore (Cambridge, MA)	25
1998	Copenhagen	B. Samuelson (Stockholm)	26
1999	Nice	S. Prusiner (San Francisco)	27

Table 9.1.1 (Continued)

2000	Birmingham sp.	Thomas Steitz (Yale, USA)	28
2001	Lisbon	Philip Cohen (United Kingdom)	29
2002	Istanbul	Jean Pouysségur (Nice, France)	30
2003	Brussels	Pierre Chambon (Illkirch, France)	31
2004	Warsaw	Ryszard Gryglewski (Poland)	32
2005	Budapest	Thomas Jenuwein (Vienna, Austria)	33
2006	Istanbul	Aaron Ciechanover (Haifa, Israel)	34
2007	Vienna	Tom Rapoport (Boston, USA)	35
2008	Athens	Tim Hunt (London, UK)	36
2009	Prague	David Lane (Singapore ??)	37
2010	Göteborg	Harald Stenmark (Oslo, Norway)	38
2011	Turin	Elena Conti (Martinsried, Germany)	39
2012	Seville	Venki Ramakrishnan (MRC Cambridge, UK)	40
2013	St. Petersburg	Sir Richard Roberts (Ipswich, Ma, USA)	41
2014	Paris	Michael Hall (Basel, Switzerland)	42

## 9.1.2

## The Datta Lectureship and Medal



Figure 9.1.3 The Datta Medal.

The Datta Lectureship award is provided by generous capital gifts from *Elsevier Science Publishers* and is awarded for outstanding achievements in the field of Biochemistry and Molecular Biology or related sciences.

The award will normally be made at each Congress of FEBS to one of the plenary lecturers. The lecturer should normally be from a FEBS country.

The awardee receives a medal, provided by *Elsevier Science Publishers*, and is awarded his/her travel expenses to the Congress.

## 9.1.2.1 In Memoriam Prakash S. Datta

Figure 9.1.4  
Prakash S. Datta.

Prakash Datta 1920–2010

Professor S. Prakash Datta died peacefully at his home in Chiswick on 12th May a few days after he had celebrated his 90th birthday in fine style with a group of family and friends.

The son of a Scottish mother and Indian father, he was born in Calcutta in 1920 and received much of his schooling in Geneva where his father was the Indian High Commissioner to the League of Nations. Prakash read first

chemistry at University College London and then medicine at University College Hospital Medical School in the early 1940s. He subsequently joined the academic staff of the Department of Biochemistry at UCL, becoming Professor of Medical Biochemistry in 1966.

At the founding of FEBS in 1964 Prakash became the first Treasurer, a post he held without a break until 1990. It is largely due to his astute management that FEBS began to prosper financially in its early years. He was able to persuade Springer Verlag and its Managing Editor, Theodor Bücher, that *Biochemische Zeitschrift* could not only be rescued as the European Journal of Biochemistry but that the copyright should belong to FEBS.

Further spotting a gap in the publications market for a “letters” journal, against opposition within FEBS he assembled an impressive editorial board and became the founding Managing Editor of FEBS Letters, a project he nursed to great success in 1968 and his retirement from the post in 1985. The scientific and commercial success of FEBS Letters was recognized by the endowment by Elsevier Science Publishers in 1986 of the Datta Medal and Plenary Lectureship at a FEBS Congress.

Prakash was held in great affection by a very wide spectrum of colleagues across the European area and he is remembered for always being supportive of and generous to younger colleagues. On leaving office as Treasurer he was appointed a Life Member of FEBS Executive Committee by the 29<sup>th</sup> Council in Rome on July 5<sup>th</sup> 1989.

A more extensive obituary will be published in a future issue of FEBS News.

*John Mowbray, May 2010.*

(FEBS News July 2010)

**Table 9.1.2** Recipients of the DATTA Lectureship Award.

Year	Meeting	Awardee
1986	Berlin	F. Melchers (University of Basel, Switzerland)
1987	Ljubljana	N. Sharon (Weizmann Inst. Rehovot, Israel)
1988	No FEBS Meeting	
1989	Rome	B.G. Malmström (Chalmers Univ. Göteborg, Sweden)
1990	Budapest	J.C. Skou (University of Aarhus, Denmark)
1991	No FEBS Meeting	
1992	Dublin	D.E. Koshland Jr. (University of California, Berkeley, USA)
1993	Stockholm	Alan R. Fersht (Cambridge, United Kingdom)
1994	Helsinki	E. Sackmann (TU München, Germany)
1995	Basel	P. de Camilli (Yale University New Haven, USA)
1996	Barcelona	Ch. Weissmann (ETH Zurich, Switzerland)
1997	Amsterdam	P. Cohen (University of Dundee, United Kingdom)
1998	Copenhagen	L. Johnson (Oxford, United Kingdom)
1999	Nice	None
2000	Birmingham	George Poste (Smith Kline Beecham, UK)
2001	Lisbon	Jean-Marc Egly (Illkirch, France)

Table 9.1.2 (Continued)

2002	Istanbul	Wolfgang P. Baumeister (Martinsried, Germany)
2003	Brussels	J.A. Gustfsson (Huddlinge, Swesen)
2004	Warsaw	Kurt Wüthrich (Zurich, Switzerland)
2005	Budapest	Ada E. Yonath (The Weizmann Institute, Rehovot, Israel)
2006	Istanbul	Joan Massagué (Howard Hughes Medical Institute, USA)
2007	Vienna	Venki Ramakrishnan (MRC Cambridge, UK)
2008	Athens	Sidney Altman (Yale University, USA/Canada)
2009	Prague	David Lane (University Dundee, UK)
2010	Göteborg	Juleen Zierath (Karolinska Institutet, Sweden)
2011	Turin	Sirpa Jalkanen (University of Turku, Finland)
2012	Seville	Ada Yonath (The Weizmann Institute, Rehovot, Israel)
2013	St. Petersburg	Roger D. Kornberg (Stanford University Medical School, Stanford, USA)
2014	Paris	Nicole Le Douarin (Paris, France)

## 9.1.3

## The Theodor Bücher Lecture and Medal



Figure 9.1.5 The Bücher Medal.

Congress.

The Theodor Bücher Lecture and Medal was endowed by a generous capital gift from Frau Ingrid Bücher to the Gesellschaft für Biochemie und Molekularbiologie (GBM) and is awarded for outstanding achievements in Biochemistry and Molecular Biology or related sciences.

The awardee, who is expected to be active in European research, presents one of the plenary lectures at the FEBS Congress.

The awardee receives a silver medal, and is awarded his/her travel expenses to the

## 9.1.3.1 Theodor Bücher's Personality



Figure 9.1.6  
Theodor Bücher.

Theodor Bücher studied chemistry in Munich and then in Berlin, the town where he spent his youth. In 1938, he entered Warburg's laboratory to do his doctoral thesis. This laid a basis for Bücher's future career: he congenially assimilated Warburg's ingenious capability of imaginative and precise experimentation to become his own leading principle.

Already at the beginning of his career at Hamburg-Eppendorf, Bücher laid the grounds for a multitude of

practical applications due to his abilities as a physiological chemist, combined with those of a gifted practical engineer.

- Purification of enzymes and the practical application of optical assays.
- Construction of the *Eppendorf* photometer as a route to developing assays in clinical enzymology and clinical chemistry, which finally resulted in the foundation of the Eppendorf Gerätebau Company.
- Invention of the microliter pipette, without which modern biochemistry, bio-analytical and molecular biology would be unthinkable.

Being appointed professor of physiological chemistry in Marburg, Bücher started to turn his curiosity for “Biological Organisation” into practical research.

One of the major topics of Bücher’s research became the measurement of metabolites and enzyme activities in intact tissues. After he was appointed head of the institute of physiological chemistry in Munich, he continued to investigate metabolic pathways in intact organs following their changes in development by imaging their enzyme patterns.

Finally, his interest in the interrelationship between form and function focused on the investigation of the biogenesis of mitochondria. Synthesis and assembly of components of the respiratory chain and the ATP synthase, import of mitochondrial components from the cytosol and the coordination of nuclear and mitochondrial activities became a novel field. Numerous pupils of the Bücher School have carried on this field with conspicuous success.

Bücher devoted a considerable part of his scientific and political influence in re-establishing biochemistry in Germany after the war. As a president of the

**Table 9.1.3** Recipients of the Bücher Lecture and Medal.

Year	Meeting	Awardee
1999	Nice	Mark C. van Montagu (Ghent, Belgium)
2000	Birmingham	No medal awarded
2001	Lisbon	Dorothea Bartels (Germany)
2002	Istanbul	T. Pozzan (Padova, Italy)
2003	Brussels	Ernesto Carafoli (Padova, Italy)
2004*)	Warsaw	Rosario Rizzuto (Italy)
2005	Budapest	Douglas B. Kell (UK)
2006	Istanbul	Ruedi Aebershold (Switzerland)
2007	Vienna	Kim Nasmyth (University of Oxford, UK)
2008	Athens	Axel Ullrich (Germany)
2009	Prague	Walter Sebald (Würzburg, Germany)
2010	Gothenburg	Svante Pääbo (Leipzig, Germany)
2011	Turin	Pier Giuseppe Pelici (Milan, Italy)
2012	Seville	Christian Griesinger (Göttingen, Germany)
2013	St. Petersburg	Kurth Wüthrich (The Scripps Research Institute, La Jolla, USA)
2014	Paris	Elena Conti (Martinsried, Germany)

\*) The Theodor Bücher Lecture (2004): *Mitochondrial calcium signalling in cell death* by S. Leo, K. Bianchi, M. Brini and R. Rizzuto (FEBS Journal, Vol. 272/16).

*Gesellschaft für Biologische Chemie*, he helped transform the old “*Biochemische Zeitschrift*” into the *European Journal of Biochemistry* in 1969.

Furthermore, Bücher was an enthusiastic academic teacher, celebrating the big lecture for medical students. Generations of physicians are grateful to him that he was able to demonstrate to them the necessity of modern biochemistry as a basis for medical art and science.

(Text from laudation by Horst Feldmann in Lisbon 2001)

## 9.2

### FEBS Annual Prizes

#### 9.2.1

#### FEBS Anniversary Prizes of the *Gesellschaft für Biochemie und Molekularbiologie*

These Prizes are provided by generous capital gifts from Boehringer Mannheim GmbH and Eppendorf Gerätebau Netheler & Hinz GmbH and are awarded for outstanding achievements in the field of Biochemistry and Molecular Biology, or related sciences. The Prize administration is managed by both FEBS and the *Gesellschaft für Biochemie und Molekularbiologie (GBM)*.

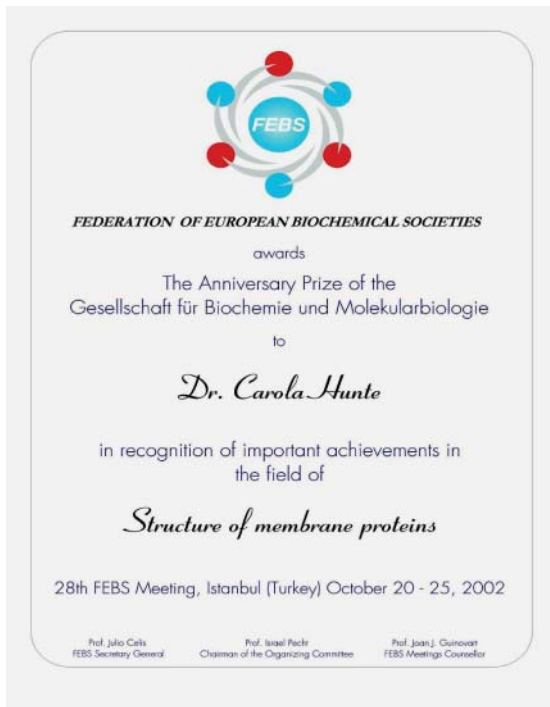


Figure 9.2.1 The Diploma for the FEBS Anniversary Prize.



Two Prizes will normally be awarded each year to persons under the age of 40. In 2006 the award was €2,000.

The Prize-Winners will be selected from among the persons invited to give a lecture at one of the Symposia or workshops held during a FEBS Congress. Each Prize-Winner shall receive a Diploma.

It was on the 10th Anniversary of FEBS that the Gesellschaft für Biologische Chemie (now Gesellschaft für Biochemie und Molekularbiologie, GBM) offered these two prizes to be awarded at each FEBS Meeting for outstanding achievements in the field of Biochemistry and Molecular Biology and related sciences.

**Table 9.2.1** Recipients of the FEBS Anniversary Prize (set up in 1979).

Year	Meeting	Awardee(s)
1980	Jerusalem	Alan Fersht (UK)
1990	Budapest	I.W. Mattaj (FRS); D. Stewart (UK)
1991	(IUB)	Data not available
1992	Dublin	S.A. Benner (ETH Zurich); A.S. Whitehead (TC Dublin)
1993	Stockholm	A. Driessen (Groningen); G.O. Hing (Stockholm)
1994	Helsinki sp.	Marino Zerial (Naples); John Hjort Ipsen (Denmark)
1995	Basel	Josephine Antoinette Killian (Utrecht); Susanna Cotocchia (Lausanne)
1996	Barcelona	Konrad Basker (Zurich); Dusan Turk (Ljubljana)
1997	Amsterdam sp.	T.W.J. Gadella Jr. (Wageningen); U. Klingmüller (Fribourg)
1998	Copenhagen	C. Lopez-Otin (Oviedo, Spain); P. Bork (Heidelberg)
1999	Nice	B. DeStrooper (Leuven); Manuel Serrano (Madrid)
2000	Birmingham	Karen E.K. Duff (Orangeburg NY); Maria A. Blasco (Madrid)
2001	Lisbon	Juergen Knoblich (Vienna); Modesto Orozco (Barcelona)
2002	Istanbul	Carola Hunte (Frankfurt M)
2003	Brussels	
2004	Warsaw	Isabelle Mansuy (Paris)
2005	Budapest	Anne Houdusse; Albert Laszlo Parabasi
2006	Istanbul	Stephanie Dimmeler
2007	Vienna	Olivier Voinnet, (CNRS, Strasbourg); Elena Conti (MPI for Biochemistry, Martinsried, Germany).
2008	Athens	Nikolaus Rajewsky (Delbrück Centre, Berlin-Buch); René F. Ketting (Hubrecht Institute, Utrecht).
2009	Prague	Majlinda Lako (Newcastle University, UK); Volker Manfred Arlt (Institute of Cancer Research, London)
2010	Gothenburg	Ben Lehner (ICREA, Barcelona); Johanna Ivaska, VTT Medical Biotechnology, Turku)
2011	Turin	Geoffrey J. Faulkner (Edinburgh, Scotland, UK); Ira Milosevic (HHMI and Yale University Medical School, CT, USA).
2012	Seville	Claudio Hetz (Santiago, Chile); Alicia Kowaltowski (São Paulo, Brazil).
2013	St. Petersburg	

The names of the awardees of the years 1981 through 1989 are no longer available.

## 9.2.2

**FEBS Ferdinand Springer Lectureship**

The FEBS Ferdinand Springer Lectureship was installed in 1973 and was last awarded for the period 1998/99. Funded by the interest from a capital gift from Springer-Verlag, this award provided an honorarium and travel expenses to allow distinguished biochemists to accept invitations to visit institutes in FEBS countries. The awarding committee consisted of the Secretary General and the Treasurer of FEBS, three Members appointed by Council and a representative of Springer-Verlag.

**Table 9.2.2** FEBS Ferdinand Springer Lectureships, 1973–1999.

Year	Awardee	Title(s)	Places visited
1973	E.K. Bautz (Heidelberg)	Initiation of transcription by RNA polymerase of <i>E. coli</i> and phage T3	Leningrad, Moscow; London, Leeds, Glasgow
1973/74	Y. Ovchinnikov (Moscow)	Membrane active complexones: chemistry and function	Sofia; Vienna; Frankfurt, Göttingen, Heidelberg, München
1974/75	H.L. Kornberg (Leicester)	Regulation of carbohydrate uptake by <i>E. coli</i>	Zürich; Berlin, Jena, Leipzig
1975/76	J.-P. Changeux (Paris)	Functional properties of the physiological receptor of acetylcholine	Copenhagen; Tromsø, Bergen, Oslo
1976/77	L. Philipson (Uppsala)	Adeno virus transcription	Ghent; Strasbourg; Utrecht, Leijden; Köln, Giessen, München; Prague; Rehovot, Jerusalem, Tel Aviv
1977/78	M. Avron (Rehovot)	The mechanism of energy conservation in photosynthesis	Oeiras; Amsterdam; London; Grenoble
1978/79	G. Schatz (Basel)	Molecular organisation and biogenesis of mitochondria	London; Graz, Vienna; Sofia; Oslo; Stockholm
1979/80	L.L.M. van Deenen (Utrecht)	Dynamic aspects of lipid-protein interactions in membranes	Reykjavik; Yugoslavia; Bulgaria; Ankara
1980/81	S. Magnusson (Aarhus)	Aspects of structure, function and evolution of prothrombin, plasminogen, antithrombin-III, alpha-2-macroglobulin and cold-insoluble globulin (fibronectin)	London, Cambridge, Oxford; Leningrad, Moscow, Pushino; Helsinki; Vienna; Athens, Patras; Ankara, Istanbul; Szeged, Budapest; München; Lausanne, Bern; Erfurt

Table 9.2.2 (Continued)

Year	Awardee	Title(s)	Places visited
1981/82	P. Venetianer (Szeged)	The promoters of bacterial rRNA genes	Paris, Strasbourg; Lisbon; Vienna; Helsinki; Copenhagen, Aarhus; Heidelberg, Freiburg, München
1982/83	R. Henderson (Cambridge)	Bacteriorhodopsin and other membrane proteins	Moscow; München, Köln, Regensburg, Tübingen; Madrid, Bilbao; Rome; Grenoble
1983/84	T. Blundell (London)	Structural evidence for gene duplication in the evolution of proteins (i), The conformation of molecular biology of polypeptide hormones and growth factors (ii)	Helsinki, Oulu; Uppsala, Stockholm; Copenhagen, Aarhus; München, Würzburg, Heidelberg, Frankfurt
1984/85	A.A. Hadjiolov (Sofia)	Structure and processing of ribosomal RNA in eukaryotes	London, Liverpool; Berlin, Heidelberg, Freiburg, Würzburg; Toulouse, Strasbourg, Gif-sur-Yvette; Vienna, Graz, Innsbruck; Budapest, Szeged
1985/86	W. Schaffner (Zürich)	Enhancers of eukaryotic gene expression	Sofia; München; Utrecht, Amsterdam; Gembleux
1986/87	D. Stehelin (Lille)	Retroviruses with two oncogenes	Canterbury; Uppsala, Göteborg; Oslo, Bergen; Helsinki, Turku; Brussels
1987/88	M.J. Berridge (Cambridge)	Inositol lipids and cell signalling	Brussels; Bern
1988/89	A. Fersht (London)	Stability and folding pathway of an enzyme using protein engineering	Copenhagen; Zürich
1989/90	W. Neupert (München)	Import of proteins into mitochondria: a multi-step process	Fuglso; Amsterdam; Louvain; Paris
1990/91	P. Cohen (Dundee)	The regulation of protein phosphatases by hormones, toxins and tumour promoters (i); The molecular mechanism by which insulin stimulates biosynthetic processes, recent advances (ii)	Aarhus; Reykyavik; Mons; Montpellier; Helsinki

(continued overleaf)

Table 9.2.2 (Continued)

Year	Awardee	Title(s)	Places visited
1991/92	R.J.P. Williams (Oxford)	Bringing inorganic chemistry to life (i); The evolution of proteins to match metal ion properties (ii); The nature and importance of mineral phases in biology (iii); The coupling of electron transfer to photon movements (iv)	Innsbruck; Brussels; Florence, Rome; Frankfurt, München; Haarlem; Stockholm
1992/93	M. Wikström (Helsinki)	Oxygen activation and the conservation of energy in cell respiration	Namur; Basel; Sheffield
1993/94	S. Moncada, FRS (Beckenham)	Not carried out	
1994/95	H. Feldmann (München)	The yeast genome project - lessons from genome analysis (i); A novel family of ATP-binding proteins in yeast involved in programmed proteolysis (ii)	Bari, Naples, Rome; Brussels; Riga; Geilo
1996	H. Kleinkauf (Berlin)	Peptide antibiotics – biosynthesis and functions (i); Enzymatic formation of bioactive peptides and related compounds (ii)	Strasbourg; Antalya, Oeiras and Porto; Heraklion, Ioannina and Patras; Helsinki and Turku, Bratislava and Prague; Vienna, Salzburg and Innsbruck; Moscow; Liège and Brussels; Naples, Rome and Bari
1996/97	R. Jaenicke (Regensburg)	(i) Folding of Proteins in vitro versus in vivo; (ii) stability and stabilisation of proteins.	Gif-sur-Yvette, Paris, Prague, Budapest, Szeged, Reykjavik, Innsbruck, Ljubljana, Ferrara, Rome, Bari, Leuven, Lillehammer
1997/98	G. Schatz (Basel)	How mitochondria import proteins from the cytoplasm (i); The biogenesis of mitochondria (ii)	Lisbon, Ankara, Tromsö, Eilat, Tel Aviv, Thessaloniki, Ljubljana, Graz, Wien
1997/98	G. Schatz (Basel)	How mitochondria import proteins from the cytoplasm (i); The biogenesis of mitochondria (ii)	Lisbon, Ankara, Tromsö, Eilat, Tel Aviv, Thessaloniki, Ljubljana, Graz, Wien

Table 9.2.2 (Continued)

1998/99	V. Turk (Ljubljana)	Cysteine proteinases and antigen presentation (i); Lysosomal cysteine proteinases and regulation of their activity (ii); and both subjects combined in one lecture	Athens, Prague, Reykjavik, Aarhus, Copenhagen, Geilo, Haifa
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The FEBS Ferdinand Springer Lectureship has not been continued after the year 1999.

### 9.2.3

#### FEBS 'National Society' Lecture Award

FEBS Society Lectures are being established to commemorate the 40th anniversary of the Federation of European Biochemical Societies. These FEBS Society Lectures (a maximum of 5 per year) are intended as Plenary Lectures that significantly enhance the quality of a scientific meeting, symposium or annual national scientific meeting of a Constituent Society.

The Lecturer should be a distinguished scientist with a significant international reputation. A Certificate describing the event, together with its place and date will be provided by FEBS for presentation to the FEBS Society Lecturer after his/her presentation.

The Lecturer should be working in a FEBS country different from the one organizing the meeting.

The support shall consist of travel expenses and accommodation. The host organization will offer free registration. FEBS will not offer an honorarium. Reimbursement will be made by the FEBS Treasurer.

A FEBS Society Lecture shall be awarded only when the host organization is not already in receipt of FEBS funds for support of the event and on the undertaking that no additional application for funds will be made to FEBS in the same year.

An application proposing at least two candidates for the FEBS Society Lecturer, including short Curricula Vitae and with full details of the event, shall be sent to the FEBS Congress Counsellor at least 6 months in advance. The application will be evaluated by the Executive Committee members of FEBS and awarded within 2 months of receipt of the application.

The invited speaker shall be named 'The FEBS Society Lecturer' and designated as such in all announcements and programmes.

The FEBS Lecturer should be introduced by a member of the host organization with a brief acknowledgement of FEBS and the lectureship at the beginning of his/her presentation. June 2006 by [a.szewczyk@nencki.gov.pl](mailto:a.szewczyk@nencki.gov.pl)

**Table 9.2.3** Awardees of National Lecture Prize.

Year and Event	Name	Affiliation
2012, SFBBM-SFB Congress, Grenoble	Prof. Dr Rita Gerardy-Schahn	Institute for Cellular Chemistry, Hannover Medical School, Hannover, Germany
2012, Joint Meeting of PTBioch and GBM, Warsaw	Prof. Dr Volker A. Erdmann	Institute of Chemistry/Biochemistry, Free University of Berlin, Germany
2013, Hungarian Molecular Life Sciences Conference, Siófok, Hungary	Prof. Ian D. Hickson	Department of Cellular and Molecular Medicine and Center for Healthy Aging, University of Copenhagen, Denmark
2013, SEBBM Society Meeting, Madrid	Prof. Fiona Watt	Centre for Stem cells and Regenerative Medicine, King's College London

## 9.2.4

**FEBS Campbell Lectureship**

Initially, a new programme set up in 2005, was called the 'FEBS Ambassador Programme'. After the death of Peter Campbell it was renamed 'Peter Campbell Lectureships'. Campbell was a former chairman of the FEBS Advanced Courses Committee and the founder of the Scientific Apparatus Recycling Programme (SARP) to help refurbish laboratories in Central and Eastern Europe (CEE). After invitation by the Biochemical Society of a CEE country, the Peter Campbell lecturers give one or two lectures and provide information about the various FEBS programmes in CEE countries. FEBS pay travel and accommodation expenses of the lecturers and the receiving Institutes have to cover the meal expenses. This programme ended in 2008.

**Table 9.2.4** Awardees of Campbell Lectureship.

Year	Name	Country	Lecture(s) in
2006	Marja Makarow	Finland	Vilnius
2007	Israel Pecht	Israel	Yerevan
2008	Ed Wood	UK	Vilnius & Kaunas

## 9.3

## FEBS Diplôme d'Honneur

Inaugurated as part of the 10th Anniversary celebrations, the Diplôme is awarded to individuals judged by the Executive Committee as having made an exceptional contribution to FEBS activities. Nominations are solicited from the constituent Societies and recipients of the Diplôme will be selected by FEBS Executive Committee. The Diplômes will be presented at a FEBS Meeting and will be signed by the Chairman and the Secretary-General of FEBS. Recipients of the Diplôme are invited to attend FEBS Meetings without payment of the registration fee.



Figure 9.3.1 Diplôme d'honneur.

In 1996, Marianne Grunberg-Manago was awarded the FEBS Diplome d'Honneur for her outstanding services to FEBS. To the following "In Memoriam", one has to include Marianne's tireless dedication to the founding and maintenance of the famous "Spetses Summer Schools", which were inaugurated by her in 1968, and have been supported by FEBS from 1983 onwards.

**Table 9.3.1** List of Diplôme d'honneur Holders.

Year	Name	Institution
1974	H.R.V. Arnstein	Dept. of Biochemistry, King's College, Strand, London WC2R 2LS, England
1974	Th. Bücher	Deceased
1974	S.P. Datta	9 Dukes Avenue, London W4 2AA, England. Deceased
1974	F.C. Happold	Deceased
1974	O. Hoffmann-Ostenhof	Deceased
1974	C. Liébecq	Université de Liège, Belgium. Deceased
1974	W.J. Whelan	Dept. Biochemistry and Molecular Biology (M823), Univ. of Miami, School of Medicine, PO Box 016129, Miami, FL-33101-6129, USA
1976	F. Lynen	Deceased
1977	J.E. Courtois	Comité National de Biochimie, 4 Avenue de l'Observatoire, 75270 Paris Cedex 06, France (deceased 1989)
1979	L.L.M. van Deenen	Deceased
1979	M. Gruber	Deceased
1979	J.P. Ebel	Deceased
1981	P.N. Campbell	University College London, Gower Street, London WC1E 6BT, England
1981	S. Rapoport	Kuckhoffstraße 45, D-13156 Berlin, Germany
1984	M. Yomtov	Deceased
1984	T.W. Goodwin	Monzar, 9 Woodlands Close, Parkgate, South Wirral L64 6RU, England
1987	G. Bernardi	Stazione Zoologica Anton Dohrn, Villa Comunale, I-80121 Napoli, Italy
1990	G. Dirheimer	Institut de Biologie Moléculaire et Cellulaire du CNRS, 15 rue René Descartes, 67084 Strasbourg Cedex, France
1992	G. Semenza	ETH Zürich, Laboratorium für Biochemie, ETH Zentrum, Universitätsstr. 16, CH-8092 Zürich, Switzerland
1994	C. Gancedo	Instituto de Investigaciones Biomedicas, Arturo Duperier no 4, E-28029 Madrid, Spain
1996	H. Feldmann	Adolf-Butenandt-Institut, Molekularbiologie, Schillerstrasse 44, D-80336 München, Germany
1996	K.F.A. Decker	Institut für Biochemie und Molekularbiologie, Universität Freiburg, Hermann-Herder-Strasse 7, D 79104 Freiburg i.Br., Germany

*(continued overleaf)*



Table 9.3.1 (Continued)

Year	Name	Institution
1996	H. Kleinkauf	TU Berlin, Max-Volmer-Institut für Biophysikalische Chemie und Biochemie, Straße des 19. Juni 135, 10623 Berlin
1996	M. Grunberg-Manago	Institute Pierre et Marie Curie, Paris. Deceased 4 Jan 2013
1998	V. Turk	Department of Biochemistry and Molecular Biology, Josef Stefan Institute, Jamova 39, SL-1000 Ljubljana, Slovenia
1998	U. Littauer	The Weizmann Institut of Science, 76100 Rehovot, Israel. Deceased
1998	A. Evangelopoulos	National Hellenic Research Foundation, 48 Vass. Const. Ave., GR-Athens 116 35, Greece
2001	B.F.C. Clark	Department of Molecular and Structural Biology, University of Aarhus - The Science Park, Gustav Wieds Vej 10–8000 Aarhus C, Denmark
2001	I. Pecht	Department of Chemical Immunology, The Weizmann Institute of Science, 76100 Rehovot, Israel
2001	J. Skoda	Institute of Molecular Genetics, Academy of Sciences, Prague, Czech Republic
2003	J. Mowbray	University College, Gower Street, London
2005	P. Friedrich	Semmelweis University, Budapest. Deceased
2005	A.V. Xavier	Instituto de Tecnologia Quimica e Biologica, Lisbon, Portugal.
2007	J. Guinovart	Institute for Research in Biomedicine, Barcelona
2007	F. Gannon	Director of EMBO (until 2007)
2007	W. Stalmans	University of Leuven, Belgium
2009	C. Rodrigues-Pousada	Instituto de Tecnologia Quimica e Biologica, Lisbon, Portugal
2011	Julio E. Celis	Natl. Cancer Institute, Copenhagen, Denmark
2011	Richard N. Perham	Cambridge, UK
2011	Felix Wieland	Institut für Biochemie, Heidelberg, Germany
2012	Federico Mayor Zaragoza	Director of Culture of Peace Foundation of Spain

### *In Memoriam*

#### *Marianne Grunberg-Manago 1921–2013*

Marianne Grunberg-Manago discovered the enzyme polynucleotide phosphorylase (PNPase), which was essential for deciphering the genetic code at the beginning of the 1960s. She also had a distinguished international career at a time when there were few women working as scientists.

Marianne Grunberg–Manago was born into a family of artists on 6th January 1921 in Petrograd (St Petersburg) in Russia. She immigrated to France with her parents at the age of nine months. Later, she studied both Comparative Literature and Biology at the University of Paris, receiving her PhD in 1947. Marianne

first worked on intermediary metabolism in bacteria at the Institut de Biologie Physico-Chimique (IBPC) in Paris. In 1953, she left for the USA, first to the University of Illinois at Urbana and later to New York University, where she joined the laboratory of Severo Ochoa in 1954. It was there that she discovered PNPase, an enzyme that catalysed the synthesis of polyribonucleotides. In 1959, Ochoa and Arthur Kornberg were awarded the Nobel Prize 'for their discovery of the mechanisms in the biological synthesis of ribonucleic acid and deoxyribonucleic acid'. Later experiments showed that the major role of PNPase *in vivo* was RNA degradation rather than RNA synthesis. However, the capacity of PNPase to produce RNA played a key role in the experiments of Nirenberg and Matthaei in 1961, establishing that polyU (synthesized by PNPase) directed the synthesis of polyphenylalanine. Thus, the early steps in cracking the genetic code depended on the discovery of PNPase.

Marianne returned to the IBPC in 1956, where she studied the biochemical properties of PNPase and those of the various polynucleotides it synthesized. She also used these polynucleotides in cell-free systems to define new codons. The first area of work led her to investigate the biological role of PNPase and RNA degradation in model bacteria, while the second led her to study the mechanism of mRNA translation initiation in collaboration with François Gros, at the IBPC at that time. Later, she studied how translation was regulated, mainly in collaboration with Sylvain Blanquet and later with Jean-Pierre Ebel and Bernard and Chantal Ehresmann in Strasbourg.

Marianne Grunberg-Manago was the first woman to be President of the International Union of Biochemistry and Molecular Biology (1985–1988) and the only female President of the French Academy of Sciences (1995–1996). She was also a member of the American National Academy of Sciences and of numerous other Academies, won many French and international prizes and published more than 300 articles in peer-reviewed journals. Marianne was awarded the FEBS Diplôme d'Honneur in 1996.

In addition to being a prominent scientist, Marianne Grunberg-Manago was a wonderful person, greatly loved by all her collaborators, colleagues and friends. On 18th March 2000, she suffered a terrible brain haemorrhage that kept her in hospital until her death on 4th January 2013, two days before her 92nd birthday. Despite these 13 difficult years, Marianne will always be remembered as a vibrant person with a great sense of humour. After her election to the presidency of the French Academy of Sciences, many journalists came to interview her. One very admiring journalist confessed to her 'I always dreamed of becoming a scientist, but only managed to become a journalist' – to which Marianne replied 'that's funny, because I always wanted to be journalist, but only managed to become a scientist!'

*Mathias Springer and Richard H. Buckingham*  
*Institut de Biologie Physico-Chimique, Paris, France*  
*Sylvain Blanquet*  
*École Polytechnique, Palaiseau, France.*  
(FEBS News January 2013)

## 9.4

### Other FEBS Awards

#### 9.4.1

#### Awards for Young Scientists

##### 9.4.1.1 FEBS Letters Award for Young Scientists

The annual FEBS Letters Award for Young Scientists was established in 2003. Now renamed to ‘The FEBS Letters Young Group Leader Award’, the Prize is given to an independent scientist, aged 40 years or younger, who is the corresponding author of an outstanding research letter published in the previous calendar year. The prize is endowed with €10 000 prize money and is presented on the annual FEBS Congress.

The choice of prize winner will be made by the Editorial Board of the journal, whose decision will be final. The successful author will present a lecture and be awarded the prize at the FEBS at the annual FEBS Congress.



Figure 9.4.1 Announcement for Young Scientists' Prizes.

**Table 9.4.1** FEBS Letters Young Scientists/Group Leaders Award Lecture.

Date and Place	Name	Institution
2003, Brussels	Kung Ping Lu	Harvard Med. School, USA
2004, Athens	Jie-Oh Lee	Daejeon, South Korea
2005, Budapest	Elke Deuerling	ZMBH Heidelberg, Germany
2006, Istanbul	Theresia Stradal	GSF Braunschweig, Germany
2007, Vienna	Noburo Mizushima	Tokyo, Japan
2008, Athens	Kaspar Locher	ETH Zurich, Switzerland
2009, Prague	Frank Sargent	Dundee University, U.K.
2010, Gothenburg	Hideo Iwai	Helsinki University, Finland
2011, Turin	Shiro Suetsugu	Tokyo University, Japan
2012, Seville	Megumi Funakoshi-Tago	Keio University, Japan
2013, St. Petersburg	Susumu Mitsitake	Hokkaido University, Japan

#### 9.4.1.2 FEBS Journal Prize for Young Scientists

The FEBS Journal established the FEBS Journal Prize for Young Scientists in 2005.

This Prize, which is awarded annually at the FEBS Congress, is €10 000. It is awarded to the graduate student or young post-doctoral research worker (no more than 3 years from the time of award of the PhD degree when the paper is submitted) who is the first author of a paper that is judged to be the best in *FEBS Journal* during the calendar year. Regrettably, first authors of reviews, minireviews, hypotheses and meeting reports cannot be considered as candidates for the prize.

Authors are asked to indicate their eligibility for the prize as part of the manuscript submission process.

The choice of prize winner will be made by the Editorial Board of the journal, whose decision will be final. The successful author will present a lecture and be awarded the prize at the FEBS at the annual FEBS Congress.

**Table 9.4.2** FEBS Journal Award.

Year and Place	Name	Institution
2005, Budapest	Christian Klammt	Frankfurt University, Germany
2006, Istanbul	Nicole LaRonde-LeBlanc	National Cancer Inst., Frederick, USA
2007, Vienna	Hakan Dortay	Freie Univ. Berlin, Germany
2008, Athens	Xueyan Zhao	Univ. Alabama, USA
2009, Prague	Simon Gunning	Univ. Sydney, Australia
2010, Gothenburg	Mercedes Nancy Munkonda	Laval Univ., Quebec, Canada
2011, Turin	Karen van Eunen	University Groningen, Netherlands
2012, Seville	Rosemarie Carew	University College Dublin, Ireland
2013, St. Petersburg	Anna-Karin Gustavsson	University of Gothenburg, Sweden

## 9.4.2

**FEBS Distinguished Young Investigator Awards**

FEBS Long-Term Fellowships are awarded to support visits by postdoctoral scientists to a host laboratory in another country within the FEBS area for scientific collaboration or advanced training, for one to three years. The aim of our Distinguished Young Investigator Award is to give recognition to FEBS Long-Term Fellows who have conducted excellent research during the tenure of their FEBS Fellowship.

The Award takes the form of a certificate and the sum of €10,000, which may be used at the discretion of the awardee to buy small pieces of equipment, specific consumable items or to defray conference, publication or similar expenses, but not as a salary.

Applications for the FEBS Distinguished Young Investigator Award may be made throughout the year, including during the tenure of the Long-Term Fellowship, but not longer than 12 months after its completion. Further details are given at <http://www.febs.org/index.php?id=372>.

**Table 9.4.3** Candidates for FEBS Distinguished Young Investigator Awards.

Year	Name of candidate	Institution
2012	Arnaud Gautier	MRC Cambridge UK
2012	Emily Pacary	Natl. Inst. Medical Research, London
2012	Areti Pantazopoulou	CIB-CSIC, Madrid, Spain
2013	Joerg Mansfeld	Biotec Institute, TU Dresden, Germany

## 9.4.3

**FEBS/EMBO Women in Science Award**

**General information** The FEBS/EMBO Women in Science Award is a joint initiative of the Federation of European Biochemical Societies (FEBS) and the European Molecular Biology Organisation (EMBO). Launched in 2007, the aim of the award is to highlight the major contributions made by female scientists to life sciences research. Winners of the award will serve as inspiring role models for future generations of women in science.

Each year an individual woman working in the life sciences will be recognised for her exceptional achievements. The winner will be honoured at the annual FEBS Congress, where she will receive a grant of €10,000 and present a special plenary lecture.

**Nomination** The nominee must be a woman who has made significant contributions to her field of science in the last 5 years. The award is generally not meant to

be for lifetime achievements. The nominee's research must be based in one of the FEBS or EMBO member countries and in a scientific field covered by FEBS and EMBO, i.e. the life sciences, including medical and agricultural research.

Candidates have to be nominated by a third person, self-nominations are not accepted. FEBS welcomes re-nominations. Applications can only be made via the web page. Documents must be uploaded individually in PDF form.

**Selection** An award committee of eight members will evaluate the nominees and make the selection. The official announcement will be made via a press release two months prior to the FEBS congress.

**Award ceremony** The awardee is expected to receive the award in person at the FEBS Congress; exceptions can only be made under special circumstances, such as ill health. The recipient of the award is expected to hold a plenary lecture at the FEBS Congress and write a manuscript for publication in *FEBS Journal*. During the award ceremony she will receive a cheque of €10,000 and a commemorative certificate. The awardee's travel and accommodation will be covered.

**Contact** Additional information concerning the FEBS/EMBO Women In Science Award and/or the nomination process is available from the Chairperson of the FEBS Working Group on Women in Science.

**Table 9.4.4** Recipients of the FEBS/EMBO Women in Science Award.

Year and Place	Name	Institution
2008, Athens	Naama Barkai	Institute of Science in Rehovot, Israel
2009, Prague	Anne Houdusse	CNRS, Institut Curie, Paris, France
2010, Gothenburg	Ingrid Grummt	DKFZ Heidelberg, Germany
2011, Turin	Carol Robinson	Oxford University, UK
2012, Seville	Susan Gasser	Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland
2013, St. Petersburg	Geneviève Almouzni	Institut Curie, Paris, France



## 10

### Epilogue – FEBS Future Developments

History is recordable, as we have tried our best in compiling this document, though history is by no means respected as a guideline for future decisions and developments, nor does 'it sell very well'. Readers will find that there is a good deal of repetition from the era of FEBS' first 40 years in this oeuvre, but we decided to present the full account, not only concentrating on the last ten years, which indeed include a multitude of new FEBS activities, unexpected changes and innovations. Taking into account those achievements occupy more than half the volume of our archiving. We are confident that, in addition, at least some features of our presentation will generate (hopefully exhilarating) reminiscences of FEBS past years.

There will be a second initiative to document the history of FEBS in an illustrated Essay Book, but at the same time herein to present ideas about FEBS future development. Necessarily, we have omitted such latter prospects from our narration.

None the less, we hope that both historical accounting and developing plans for the future will pay out for the benefit and longevity of FEBS.

#### 10.1

##### Documentation of FEBS Life through 50 Years

###### 10.1.1

##### Fifty Years of FEBS – A Memoir 1964 through 2013

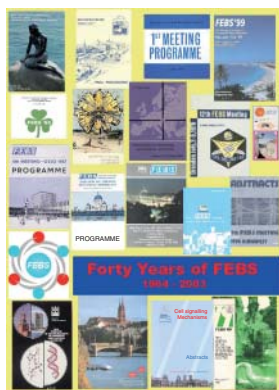


Figure 10.1 Cover Fifty Years of FEBS.

*Fifty Years of FEBS*, First Edition. Guy Dirheimer and Horst Feldmann.

© 2014 The Federation of European Biochemical Societies. Published 2014 by Wiley-VCH Verlag GmbH & Co. KGaA.





**Figure 10.2** Cover Forty Years of FEBS.

We have tried to finalize our documentation '**Fifty Years of FEBS – A Memoir 1964 through 2013**' by the end of the year 2013. It thus will be available in electronic form to everyone interested before the Anniversary FEBS-EMBO Conference in Paris. It will stay online at the FEBS Website, similar to Horst Feldmann's book '**Forty Years of FEBS**' which had been distributed in some 3000 printed copies at the FEBS Meetings in Brussels (2003) and Warsaw (2004).

#### 10.1.2

##### **FEBS 50th Anniversary Book**

FEBS celebrates its 50th Anniversary in 2014. One way FEBS is marking the occasion is by preparing an illustrated 'coffee-table' book covering not just the history of FEBS but also plans for its future development. It is hoped that publication will coincide with the FEBS–EMBO 2014 Conference in Paris (30 August – 4 September).

Richard Perham, Chair of the Editorial Board of *FEBS Journal*, is editing this book in association with Mary Purton, Executive Editor of *FEBS Open Bio*. Chapters are being written by current and past officers of FEBS and others closely associated with its various activities.

## **10.2**

### **FEBS-EMBO 2014 Conference in Paris**

#### 10.2.1

##### **Joint Conference in Paris**

##### Welcome address

The Federation of European Biochemical Societies (FEBS), the European Molecular Biology Organization (EMBO), and the French Society for Biochemistry and



**Figure 10.3** Announcement of FEBS-EMBO Conference 2014.

Molecular Biology (SFBBM) will hold a joint conference for the life sciences in 2014.

**The FEBS–EMBO 2014 Conference** will take place from **Saturday 30 August to Thursday 4 September 2014** at the Palais des Congrès in **Paris, France**.

The year 2014 will be the **50<sup>th</sup> anniversary** of FEBS and EMBO, and the **centennial** of the SFBBM.

The meeting in 2014 replaces the normally separate annual conferences of FEBS and EMBO, and combining our communities, we expect to bring together a wide range of researchers.

Angela Nieto, Susan M. Gasser, Eric Westhof and Michael Reth have agreed to act as the programme committee. They have put together a scientific programme covering the breadth of the life sciences. In addition, there will be sessions on science policy, publishing and careers and education, as well as activities tailored specifically for scientists in the early stages of their careers. A preliminary programme will be posted in September. Abstracts submission will start in December and registration will start in January 2014.

We are all looking forward to welcoming you in Paris in 2014!

**Frédéric Dardel**  
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In a press release earlier in the year, Israel Pecht, Secretary General of FEBS, commented: “It gives me great pleasure to welcome EMBO and the French Society for Biochemistry and Molecular Biology as partners for this life sciences conference that will take place in 2014. I believe the strengths of each organization will contribute to an outstanding event for all life scientists. It will also be an ideal opportunity to celebrate the achievements of all three organizations over the past decades.”

An enriching and topical scientific programme with depth and breadth is currently being built by the conference’s distinguished Programme Committee. In addition to the core scientific lectures, there will be sessions on science policy, publishing, careers and education, as well as activities tailored specifically for scientists in the early stages of their careers. Abstract submission will start in December 2013, and registration will open in January 2014.

To explore all aspects of the conference, do visit its website, [www.febs-embo2014.org](http://www.febs-embo2014.org), which as well as providing general information includes links to speaker videos and conference social media. The next *FEBS News* issue will cover plans for the event in more detail, but we start here by introducing the pre-conference FEBS Young Scientists’ Forum (YSF), whose application deadlines come first. (FEBS News September 2013)

#### 10.2.2

##### Young Scientists Forum – YSF 2014 in Paris

Since 2001, FEBS has held a Forum for pre- and post-doctoral scientists immediately preceding its annual Congress. Usually more than 100 young scientists are selected to take part in the event, where they can present their research work to an international audience, make friends, and exchange ideas in an informal atmosphere. FEBS financially supports the selected participants to take part in not only the YSF but also the ensuing Congress, so they can benefit from the different experiences that the YSF and a large bioscience conference can offer. The YSF also gives young scientists in the host country the opportunity to be responsible for local organisation of the event, which, while building on a proven format, keeps the event youthful and fresh. To read about the most recent FEBS YSF, in St Petersburg, see page 8 of this issue.

Next year, the 14th FEBS YSF will take place from 27th to 30th August 2014 at CISP Maurice Ravel in the beautiful city of Paris. Successful applicants will receive financial support for accommodation and travel for both the YSF and the FEBS – EMBO 2014 Conference. Applicants should be registered as a PhD student

or be within 5 years of having completed a PhD, should submit an abstract to both the YSF and FEBS–EMBO 2014 Conference as first author, and be a member of a FEBS Constituent Society. Please refer to the YSF section of the FEBS–EMBO 2014 Conference website for full eligibility criteria and other details. The application period will open on 8th December 2013 and close on 31st March 2014.

With FEBS celebrating its 50th anniversary in 2014, and with an important focus of FEBS from its early days being the support of the next generation of scientists, this will be a very special YSF for FEBS. I am firmly convinced that the Paris organizing committee led by Alice Verchère will put all their energy, know-how and imagination at the service of their colleagues in what should be a remarkable gathering of young scientists.

*Claudina Rodrigues-Pousada*

*Chair, FEBS Working Group on the Careers of Young Scientists*

(FEBS News September 2013)

### 10.3

#### FEBS-EMBO Conference 2014 - Preliminary Programme

##### 10.3.1

###### Opening Lectures

Saturday 30 August, 17 : 30 - 20 : 00

Catherine Dulac, USA: Olfactory signalling in mammals

Svante Pääbo, Germany: Evolutionary biology – early humans and other ancient populations

##### 10.3.2

###### Plenary Lectures

FEBS Sir Hans Krebs Lecture (31 August 2014): Michael N. Hall, Switzerland

FEBS PABMB Lecture (31 August 2014)

Louis-Jeantet Prize Lectures (1 September 2014)

Special Lecture (1 September 2014)

FEBS/EMBO Women in Science Lecture (2 September 2014)

EMBO Gold Medal Lecture (2 September 2014)

FEBS Prakash Datta Lecture (3 September 2014): Nicole M. Le Douarin, France

FEBS Theodor Bücher Lecture (3 September 2014): Elena Conti, Germany

IUBMB Lecture (4 September 2014)

##### 10.3.3

###### Plenary Sessions

***Epithelial plasticity in health and disease*** (31 August 2014): Elaine Fuchs, USA; Hans Clevers, The Netherlands; Angela Nieto, Spain

**Epigenetics and gene expression** (1 September 2014): David Baulcombe, UK; Wolf Reik, UK; Susan M. Gasser, Switzerland

**Bioinformatics and systems biology** (2 September 2014): Richard Durbin, UK; Ruedi Aebersold, Switzerland; Eric Westhof, France

**Gene diversification and immune recognition** (3 September 2014): Max D. Cooper, USA; Maria Jasin, USA; Michael Reth, Germany

10.3.4

#### Concurrent Session

##### *Concurrent Session I (31 August 2014)*

**Cell cycle & checkpoints:** Erich Nigg, Switzerland; Angelika Amon, USA; Mitsuhiro Yanagida, Japan

**Inflammation & disease:** Fiona Powrie, UK; Ruslan M. Medzhitov, USA; László Nagy, Hungary

**Membrane organization & super-resolution:** Jennifer Lippincott Schwartz, USA; Václav Hořejší, Switzerland; María F. García-Parajo, Spain; Stefan W. Hell, Germany

**Optogenetics & behaviour:** Andreas Lüthi, Switzerland; Karl Deisseroth, USA; Peter Hegemann, Germany

**Stem cell differentiation:** Austin Smith, UK; Mitinori Saitou, Japan

**Ubiquitination and protein turnover:** Ivan Dikić, Germany; Titia K. Sixma, The Netherlands; Frauke Melchior, Germany

##### *Concurrent Session II (1 September 2014)*

**Chromosomal structure, centromeres & telomeres:** Joachim Lingner, Switzerland; Patrick Heun, Germany

**Cilia & disease:** Peter Jackson, USA; Kathryn Anderson, USA; Monica Bettencourt-Dias, Portugal

**Circadian clocks:** Akhilesh B. Reddy, UK; Ueli Schibler, Switzerland; Amita Sehgal, USA

**MicroRNAs in health & disease:** Stefanie Dimmeler, Germany; Petr Svoboda, Czech Republic; Elisa Izaurralde, Germany

**Neural circuits:** Silvia Arber, Switzerland; May Britt Moser, Norway; Guillermina López-Bendito, Spain

**Translation & ribosomes:** Thomas A. Steitz, USA; Gulnara Yusupova, France; Fátima Gebauer, Spain

##### *Concurrent Session III (2 September 2014)*

**Chromatin & epigenetics:** Kristian Helin, Denmark; Geneviève Almouzni, France; Dirk Schübeler, Switzerland

**Development & evolution:** Denis Duboule, Switzerland; Marianne Bronner, USA; Rolf Zeller, Switzerland

**Mitochondria & mitochondrial disorders:** Agnieszka Chacinska, Poland; Roland Lill, Germany; Robert Lightowers, UK

**Neuronal function & imaging:** Rainer W. Friedrich, Switzerland; Andreas Meyer-Lindenberg, Germany

**Non-coding RNAs:** Edith Heard, France; Pascale Romby, France; Olga Dontsova, Russia

**Synthetic biology:** Adam Arkin, USA; Martin Fusenegger, Switzerland; Petra Schwille, Germany

#### *Concurrent Session IV (3 September 2014)*

**Cancer signalling:** Manuela Baccarini, Austria; Chris Marshall, UK; Yosef Yarden, Israel

**Cell dynamics:** Erik Sahai, UK; Thomas Lecuit, France; Carl Philipp Heisenberg, Austria

**Metabolism:** Josef Penninger, Austria; Leslie Leinwand, USA; Vamsi K. Mootha, USA

**Modelling biological processes:** Peter Sorger, USA; Naama Barkai, Israel; Angela DePace, USA

**The new microbiology:** Rotem Sorek, Israel; Peer Bork, Germany; Stephen Giovannoni, USA

**Transcription & RNA processing:** Patrick Cramer, Germany; Richard Štefl, Switzerland; Maria Carmo-Fonseca, Portugal

#### *Concurrent Session V (4 September 2014)*

**Autophagy:** Guido Kroemer, France; Felix Randow, UK; Daniel J. Klionsky, USA

**Chromatin organisation and the nucleus:** Giacomo Cavalli, France; Bas van Steensel, The Netherlands; Gisèle Bonne, France

**DNA Repair:** Helle Ulrich, Germany; Lumír Krejčí, Czech Republic

**Host pathogen interactions/Bacterial pathogenesis:** Philippe Sansonetti, France; Pascale Cossart, France; Cyril Zipfel, UK

**RNA transport, trafficking & processing:** Ulrich Kubitscheck, Germany; Alain Jacquier, France; Cecilia M. Arraiano, Portugal

**The niches: Stem cells & metastasis:** Cédric Blanpain, Belgium; Isabel Fariñas, Spain; Florian R. Greten, Germany;

### 10.3.5

#### Special Sessions

Science and Society Session (31 August 2014)

FEBS Letters Award Session (1 September 2014)

FEBS Journal Award Session (1 September 2014)

EMBO Scientific Publishing Session (1 September 2014)

FEBS/EMBO Women in Science Session (2 September 2014)

FEBS Education Session “What skills and knowledge are required to improve molecular life science education” (2 September 2014)

Science and Society Round Table “New trends in scientific policy in Europe” (3 September 2014)

FEBS Education Session “New technologies available to teach molecular life science”

(3 September 2014)

## Annex 1: Sources for Text and Illustrations, as far as not referenced in the Text

Table of current FEBS Societies was compiled by Horst Feldmann (HF) and Guy Dirheimer (GD), based on correspondence with several chairmen of FEBS Member Societies by GD.

All Tables for Members of the FEBS Committees and Working Groups were compiled by HF and GD, respectively, with the assistance of Israel Pecht/Hanni Naor, several current or past FEBS Officers, and Carolyn Ellis.

Chapter 0: Logo from FEBS, Table of Contents by HF. Cover Memoir 2014 by HF.

Introduction: Text completely revised by GD and HF, three new Figures (1 to 3) generated by HF.

Chapter 1: Figs. 1.1, 1.2, 1.3, 1.5, 1.1.6 kindly provided by Prakash Datta; Fig. 1.4 old FEBS logo. Text photographs kindly provided by Prakash Datta.

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Chapter 5: Figs prepared by HF: Fig. 5.1.1 newly prepared by HF. Figs. 5.1.2 through 5.1.37 photographs by HF of collected covers. Figs. 5.1.38 through 5.1.48 retrieved from FEBS Website. Figs. 5.1.49, 5.1.50, 5.1.51, 5.1.52, 5.1.53, 5.1.54, 5.1.59, 5.1.60, 5.1.63, 5.1.65, 5.1.66, 5.1.67, all 8 items for 5.1.68, 5.1.69, 5.1.70,



5.1.71, 5.1.73, 5.1.74, 5.1.83, 5.1.89, 5.1.90, 5.1.91, 5.1.92, 5.1.93, 5.1.94, 5.1.95, 5.1.96, 5.1.97, 5.1.98, 5.1.100, 5.1.102, 5.1.103, 5.1.105, 5.1.117, 5.1.125, 5.1.126, 5.1.127, 5.1.128, 5.1.129, 5.1.134, 5.1.135, 5.1.136; Brussels\_2003, Brussels Expo, Budapest NEWS, Figs 5.1.115, 5.1.117: own photographs or photographed from FEBS Meeting/Congress Abstracts or similar by HF.

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Kindly provided by K. Wirtz: Figs 7.1.11 (2 items), Figs 7.1.12 (2 items), Text Fig Wirtz2.

Kindly provided by I. Pecht: Figs 7.2.2, 7.2.3, Tables 7.2.3, 7.2.4, 7.2.5.

From FEBS WEBSITE: Figs 7.1.1 (Karl Kuchler, Jaak Järv, Vicente Rubio), Fig 7.2.1 (Israel Pecht, Nalecz), 7.1.21, 7.1.23, 7.3.1, 7.3.2.

Chapter 8: Provided by GD Fig 8.5.1.

All other Figs from FEBS WEBSITE.

Chapter 9: Photographs by HF: 9.1.4, 9.1.6 Bücher, Bücher\_Medal\_2, 9.2.1, 9.4.1, Datta\_Prize; Diplome d'Honneur; Diplome FEBS Prize: Anniversary Diploma

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Chapter 10: FEBS Memoir covers generated by HF. Poster Paris 2014 from FEBS WEBSITE. Preliminary Programme kindly provided by GD.)