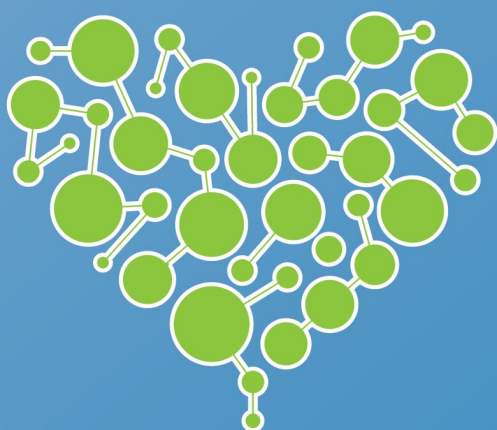




FEBS News

FEDERATION OF EUROPEAN BIOCHEMICAL SOCIETIES

NOVEMBER 2019



FEBS 2020

THE 45TH FEBS CONGRESS

4-9 JULY 2020

LJUBLJANA SLOVENIA

Molecules of Life: Towards New Horizons



Inside this issue:

Society Spotlights

Page 4

FEBS 2019 Congress
round-up

Page 14

FEBS Press

Page 23

FEBS Advanced
Courses

Page 26

45th FEBS Congress

Page 30

www.febs.org

Contents:

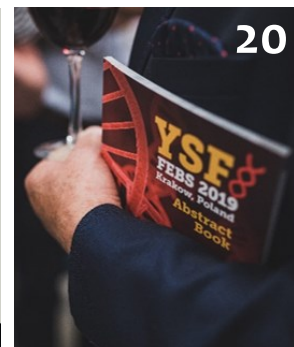
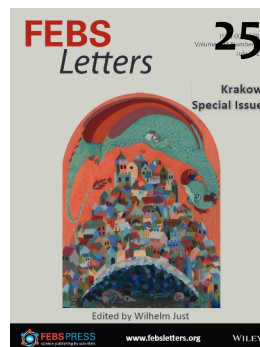
Preface and Council elections	3
FEBS Society Spotlights Four FEBS Constituent Societies share successes and new initiatives	4
FEBS-supported Constituent Society activities A tour across the FEBS area for a look at recent Education activities, Science and Society events, FEBS National Lectures, and a FEBS3+ Meeting	8
The 44th FEBS Congress round-up Relive this year's FEBS Congress, YSF and Fellows Meeting in Krakow	14
FEBS Press News on transformative deals and more	23
FEBS Fellowships A short overview of FEBS Fellowship opportunities	25
FEBS Network Aims, updates and recent content in brief	25
FEBS Advanced Courses Highlights of three 2019 events, and – just out – the full list of 2020 events	26
FEBS Congress 2020 and YSF 2020 Registration and abstract submission are open – find out what's in store!	30



Cover: Save the dates for the 45th FEBS Congress and 20th FEBS Young Scientists' Forum! Enjoy introductions to the events on pages 30–33.



9



20



14



30

About FEBS News: This issue as well as all former issues of *FEBS News* are available online at www.febs.org. To receive an email when a new *FEBS News* issue is out, simply sign up to the e-newsletter in the [News section](#) of the FEBS website. Questions and suggestions about *FEBS News* should be sent to the *FEBS News* Editor, Carolyn Elliss (elliss@febs.org).

FEBS website postings: FEBS offers free advertising of academic positions (PhD students, postdocs, etc.) in the [Career Opportunities](#) section of the website, and scientific events can be listed in our [Conference Calendar](#). Selected postings may also be included in *FEBS News*, according to space available. In addition, Constituent Societies of FEBS are able to post news on the [FEBS Network](#) platform.

Federation of European Biochemical Societies (FEBS):
www.febs.org

A charitable organization advancing research in the molecular life sciences across Europe and beyond

A Company Limited by Guarantee (Number 08239097);
A Registered Charity (Number 1149638);
Registered in England and Wales;

Registered office: Suite B1, Third Floor, St Andrew's House,
59 St Andrew's Street, Cambridge CB2 3BZ, UK.



Dear colleagues,

FEBS as an organization has many visible strands to its activities, from early-career support to journal publishing to scientific meetings. But at the heart of FEBS is its special nature as a federation of learned societies across Europe and neighbouring regions. It was 17 such societies in the field of biochemistry in Europe that founded FEBS in 1964, with an initial aim of intra-European scientific exchange through an annual conference, and now the 39 FEBS Constituent Societies covering biochemistry, molecular biology and related areas interact and collaborate with FEBS and each other in various activities in support of the molecular life sciences, as well as contribute to the governance of FEBS.

This issue of *FEBS News* puts special emphasis on the Societies that make up FEBS. First, we feature some of the forward-thinking activities of our member Societies, to inspire other Society leaders and to interest all, with contributions on different themes from the Spanish Society for Biochemistry and Molecular Biology, the Croatian Society of Biochemistry and Molecular Biology, Life Sciences Switzerland and The Biochemical Society in the UK.

The next section of *FEBS News* presents a selection of recent FEBS-supported Society activities, grouped into first those aimed at assisting single Societies within their own countries (pages 8–11), and second those aimed at inter-Society collaboration (pages 12–13).

This segues into reports from our FEBS Congress in July 2019 in Krakow (pages 14–22) – hosted magnificently by the Polish Biochemical Society, and bringing together scientists not only from other FEBS Societies (especially via FEBS YSF grants and bursaries aimed at young members of the FEBS Societies) but also from many universities and institutes in Europe and beyond for a great international opportunity for learning and updating across biosciences research.

Later in this *FEBS News* issue we start our look forward to activities next year. The FEBS Advanced Courses are featured on pages 26–29, and this includes the just-released full list of events in this programme in 2020. From page 30 of the issue you will also find an interesting introduction to the 2020 FEBS Congress – a special one as it is being hosted by two host societies this time (the Slovenian Biochemical Society and the Croatian Society of Biochemistry

and Molecular Biology), with the Congress in Ljubljana, Slovenia, and the preceding YSF in Lovran, Croatia! Harking back to the original intentions of the FEBS founders, the Congress remains an excellent opportunity for molecular life scientists across the FEBS area and beyond to come together for a unique broad view of the molecular life sciences, and I look forward to seeing many of you there.

I mentioned near the start of this Preface the role of the Societies of FEBS in its governance. The FEBS Council comprises representatives of the (full) Member Societies of FEBS and elections are held annually for fixed-term committee positions. The results of elections at the FEBS Council Meeting 2019 in Krakow are given below. I also take this opportunity to thank FEBS Committee members whose posts finish at the end of 2019 for their various pro bono input to the work of FEBS: Paola Bruni and Stefana Petrescu (Advanced Courses Committee); László Dux, Winnie Eskild and Jean-Luc Souciet (Education Committee); Laurence Drouard, Lluis Montoliu and Rostyslav Stoika (Fellowships Committee); and Adam Szewczyk (Finance Committee).

Václav Pačes
FEBS Secretary General

FEBS Council election outcomes (Krakow, 2019)

FEBS Executive Committee re-elections

Secretary General: Václav Pačes (Czech Republic); second term
Chair, Fellowships Committee: Alain Krol (France); second term
Chair, Science and Society Committee: Emmanouil Fragkoulis (Greece); second term
Chair, Women in Science Working Group: Cecilia Arraiano (Portugal); third and final term
Chair, Working Group on Integration: Jerka Dumić (Croatia); second term

Other Executive Committee appointments*

Chair of FEBS Executive Committee 2020: Tomáš Zima (Czech Republic); *Vice Chair*: Piotr Laidler (Poland)

*Chair and Vice Chair are one-year appointments for FEBS Constituent Societies that have organized a FEBS Congress in the previous two years.

New Members of other FEBS Committees

Advanced Courses Committee: Mauro Maccarone (Italy); Kristiina Mäkinen (Finland)
Education Committee: Xavier Coumoul (France); Erkki Raulo (Finland)
Fellowships Committee: Marie-Theres Hauser (Austria); Jolanta Jura (Poland); Maciej Lalowski (Finland); Marek Mraz (Czech Republic); Vicente Rubio (Spain)
Finance Committee: Joel Sussman (Israel)

Posts start on 1 January 2020. Full FEBS Committee lists are available in the FEBS website's [About us](#) section.

The next FEBS Council meeting will take place 9–10 July 2020 in Ljubljana, Slovenia, following the 45th FEBS Congress. Nomination invitations will be sent to Constituent Societies in early 2020.

FEBS Society Spotlights

The Constituent Societies of FEBS vary in dates of establishment, size and resources, but share many objectives, values and challenges. Here, we showcase the efforts of four of our member Societies across different issues and aims, with a view to sharing ideas and best practice among other FEBS Societies and for general interest. The Spanish Society for Biochemistry

and Molecular Biology write on their imaginative public outreach efforts, the Croatian Society of Biochemistry and Molecular Biology reflect on regional collaborations, Life Sciences Switzerland illustrate effective structural reorganization, and The Biochemical Society in the UK show how 'equality, diversity and inclusion' are informing their programs.

SEBBM: celebrating ten years of science activities for society

#1
Public
outreach

SEBBM

Founded in 1963, the Spanish Society for Biochemistry and Molecular Biology (SEBBM) contributed to the creation of FEBS and represents Spain in both FEBS and the International Union of Biochemistry and Molecular Biology (IUBMB). It currently has more than 3100 members and coordinates numerous scientific activities related to the biosciences.

Ten years ago, in 2009, SEBBM started the outreach program 'Science for All' with the main aims of increasing 'scientific culture', giving social visibility to science by encouraging contact between researchers and citizens, and promoting scientific vocations in young people. Our motto was a sentence by the neuroscientist Santiago Ramon y Cajal: 'The car of culture in Spain lacks the wheel of science'.

The annual SEBBM congress became an opportunity to organize dissemination activities for citizens under the slogan 'Biochemistry in the City', as well as a course to introduce research to undergraduate students. In addition, the meeting is now an occasion to showcase pictures of our scientific photography contest, biographies of women in science, other exhibitions we have organized such as 'Molecules of life' and 'The molecules we eat', and also historical perspectives such as on the FEBS Meeting in Madrid 1969.

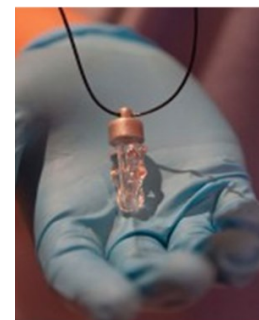
SEBBM participates in other activities for the public such as the 'Science Week' organized annually in the autumn in all Spanish cities, and the 'Researchers' Night' within a European Union project that is renewed annually and combines multiple activities organized by researchers of the community of Madrid.

A fundamental objective has been to offer quality information on scientific issues hitting the media, from the Zika virus to bird flu to gene editing, for the citizen who is seeking information but also, specifically, aimed at teachers and high school students. This is achieved through monthly articles in the 'Science Teacher's Corner' on the [SEBBM website](#). Also there, especially dedicated to the youngest students, we have the 'Tell your parents' outreach video contests,

and you will find resources and educational games for science teachers, news of scientific events, a gallery of scientific images, and much more.

We want to offer role models to young people. The biographies of women in science partially fulfil this objective, but we also have monthly articles dedicated to the work of a researcher along with a short biography and an interview in which his/her motivations to become a researcher are explained, as well as the qualities that a scientist must have. Not surprisingly, the quality that is most frequently mentioned as the driver of a scientific career is curiosity.

When we started 'Science for All', we wondered what the response would be from our fellow researchers, science teachers and the general public.





We were pioneers in Spain among scientific societies and we were not sure whether there was a real social demand for this sort of activity. The reality has exceeded all our expectations: in these ten years our

colleagues have contributed more than 240 articles, our texts are used in schools and in the nationwide Biology Olympics, and from the 2476 monthly visits of September 2009 to the SEBBM website we

have reached more than 60,000 in July 2019! Thank you all for helping us put the wheel in place.

*Isabel Varela-Nieto,
SEBBM President Elect
Félix Goñi, SEBBM President*

HDBMB: a player in fostering regional scientific exchange

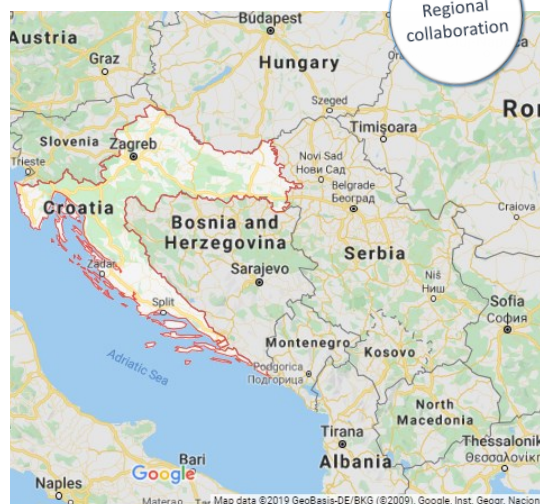
#2
Regional
collaboration

HDBMB The first association of Croatian biochemists was established in 1957 as the Section of Biochemistry within the Croatian Chemical Society. In 1976, the Section became the Croatian Biochemical Society, and in 2003 it changed its name to the Croatian Society of Biochemistry and Molecular Biology (HDBMB). As a part of the Union of Chemical (and later Biochemical) Societies of Yugoslavia (UBSY), the Society became a FEBS member in 1965, and an independent Society in 1992.

In the time of Yugoslavia, Croatian biochemists together with Slovenian colleagues significantly contributed to the development of biochemistry in other Yugoslav republics – founding the Union, initiating research projects between institutions from different republics, mentoring students from other republics, teaching biochemistry at the Yugoslav universities and taking part in organization of the Union's congresses. There was also an international outlook from Croatian biochemists who were, for example, active in organizing (and participating in) the Alps-Adria regional meetings of Austrian, Bavarian, Croatian, Hungarian, Italian and Slovenian biochemists (two were held in Croatia: Zagreb, 1981; Opatija, 1990), as well as the 'Balkan Biochemical and Biophysical Days' that gathered scientists from Albania, Bulgaria, Greece, Romania, Turkey and Yugoslavia (e.g. Dubrovnik, 1988).

Due to the Homeland War (Croatian War of Independence, 1991–1995) and the difficult economic situation in ensuing years, the international activities of the Societies in the region were rather suppressed. However, Croatian biochemists and molecular biologists maintained personal contacts and collaboration with colleagues from all around Europe, who actively supported molecular life sciences in Croatia particularly through participation in its congresses and symposia. At this time, because of the politically and economically challenging times for colleagues in Bosnia and Herzegovina, HDBMB offered them free membership of the Society.

Collaboration with scientists in the region started to revive in the late 2000s, and is an example of science trying to transcend regional tensions and differences. In 2011, HDBMB organized an IUBMB-supported Workshop on Biochemical Education for Medical Students in Split, which was attended by participants from Bosnia and Herzegovina, Croatia, Northern Macedonia, Montenegro and Serbia. In addition, renewed contacts with Slovenian and Hungarian colleagues resulted in organization of a FEBS3+ Meeting (a FEBS-sponsored meeting involving at least three FEBS Constituent Societies) by HDBMB in Opatija in 2012. The event gathered more than 300



participants, from not only the organizing Societies but also many other European countries, and it was a good basis for further development of the regional collaboration. Indeed, a second FEBS3+ Meeting was organized in Portorož, Slovenia in 2015, by the Slovenian Biochemical Society in collaboration with the FEBS Societies in Croatia, Hungary and Serbia; a third in Siofok, Hungary, by the Hungarian Biochemical Society; and a fourth is expected in Belgrade, organized by the Serbian Biochemical Society. To further promote contacts among scientists from the region, all four Societies arrange a special FEBS3+ session in their national congresses that includes lecturers from the other three Societies.

What are some of the benefits of regional collaboration? Although HDBMB is not among the smallest FEBS societies (it has 250–300 active members), the Croatian scientific community is relatively small. For individual scientists, discussing work with other groups studying similar areas, applying

multidisciplinary approaches, considering multicentric studies and accessing particular equipment are all drivers for cross-border collaboration and mobility – and for ease of travel and contact it makes sense to consider opportunities in easily accessible neighbouring regions (in a 400 km radius from Zagreb, there are numerous well-known institutes). The HDBMB congresses have a long tradition and are well attended not only by Croatian molecular life scientists but also by guests from abroad. However, the experience

of a multinational and multicultural environment is always inspiring, on a personal as well as a scientific level – and particularly so for graduate students where such joint meetings are often the first opportunity to spend some time in an international environment – so the positive experiences of FEBS3+ Meetings will be for sure continued in the future.

The very fruitful collaboration between the Slovenian and Croatian Societies has also led to joint organization of the next FEBS Congress. The FEBS2020

Congress will be held in Ljubljana, Slovenia, July 4–9, 2020, whereas the accompanying FEBS Young Scientists' Forum will be held in Lovran, Croatia, July 1–4, 2020 (see pages 30–33). We hope it will serve as a demonstration of the benefits of close collaboration, intensive interactions and friendship among FEBS Societies. We kindly invite you to participate, thus contributing to the promotion of the molecular life sciences all around Europe and beyond!

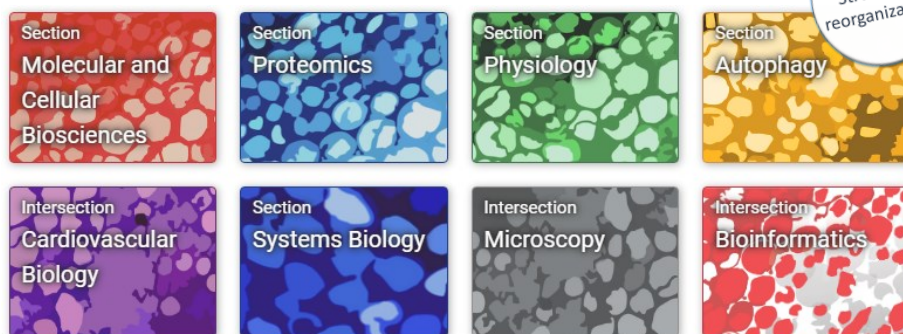
Jerka Dumić
HDBMB President

LS²: developing a versatile multidisciplinary organization



Life Sciences Switzerland (LS²) arose in 2016 from the Union of Swiss Societies for Experimental Biology (USGEB), an umbrella organization for various societies including the Swiss Society for Biochemistry (established in 1954 and a member of FEBS from 1964). In 2013, the Swiss Society for Biochemistry changed its name to the Swiss Society for Molecular and Cellular Biosciences and integrated all members of the Swiss Society for Cell Biology, Molecular Biology and Genetics; then in 2016, the Swiss Society for Molecular and Cellular Biosciences merged with its umbrella organization LS².

Previously, USGEB/LS² was structured very much like FEBS – essentially a 'society of societies'. As a consequence, decisions had to be made via a series of interactions within and between the different societies, a process which was slow and not easily managed. Now, LS² is a democratic grassroots organization with individual affiliation and direct participation of its members, sections representing different disciplines,



a central office and a scientific officer. It is not-for-profit, has no political agenda, and can independently advise politics and the public. It provides a forum for education and communication of science between its members and also for the public.

A key activity of LS² is a self-organized two-day annual conference at an academic institution in Switzerland. Satellite meetings and special sessions at the event offer additional opportunities; for example, in the dedicated session '[PIs of Tomorrow: The Future of Swiss Research](#)' scientific feedback as well as career advice is offered by established scientists in both academic and non-academic institutions. The LS² structure is open and flexible, and can easily accept new sections, or loosely

connect to organizations in- and outside of the life sciences but without formal ties to LS² to allow them to present their science at the LS² annual meeting. Different sections of LS² now compete for slots at the annual meeting. In return, the sections can organize their own independent meetings with the help of the LS² managing office. This model promotes diversity, interdisciplinary education and safe resources, generates visibility for the sections, and gives the members the benefit of a comprehensive and vibrant annual meeting.

This versatile structure of LS² is also now allowing for the first time in the 50 years of LS²/USGEB history an expansion of its annual meeting through involvement of scientific organizations from outside Switzerland. The [LS²](#)



[Annual Meeting 2020](#) engages in a FEBS3+ Meeting with two FEBS Constituent Societies: the German Society for Biochemistry and Molecular Biology (GBM) and the Austrian Association of Molecular Life Sciences and Biotechnology (ÖGMBT). The meeting will be preceded by two satellite meetings. The [first satellite meeting](#) is organized by young scientists with a keynote lecture from an

established researcher, and selected flash talks by postdocs and doctoral students. The [second satellite](#) is a panel discussion in the evening. It will be open to the general public and feature international scientists who emphasize the value of vaccination at large.

LS² is further promoting discussions of the benefit of animal research to humankind, and engages its members and the

scientific community to discuss genetic engineering, the value and risks of big data aggregation and mining, or the benefits of personalized medicine for society and the individual. With these activities, LS² is taking specific actions to communicate that science exists not just for scientists but also for the public.

Urs F. Greber, LS² President
Jean Gruenberg, Former LS² President

The Biochemical Society: broadening participation in molecular biosciences

#4
EDI
initiatives



The Biochemical Society was established in 1911 and is the largest UK single-discipline

learned society in the biosciences. Its mission is to support the dissemination and advancement of science, delivering opportunities to share knowledge and expertise, critically discuss ideas and provide forums in which to gather together and collaborate.

The Society is in a new phase of its [strategy](#) for the period 2019–2021. Key strands include supporting early-career bioscientists, extending international links, and providing professional development and lifelong learning opportunities through a range of training and career events, publishing activities and educational resources.

A particular area of focus within the strategy is ensuring equality, diversity and inclusion (EDI) of these opportunities, with the intention of supporting and broadening participation in the molecular biosciences. The Society believes that a lack of diversity and inclusivity across the scientific community represents a loss of potential talent to the UK and beyond. As well as being an active member of the Equality, Diversity and Inclusion in Science and Health (EDIS) group, the Society

is also a signatory of The Science Council's Declaration on Diversity, Equality and Inclusion.

Every year the Society recognizes excellence and achievement in the molecular biosciences via its [Awards programme](#), which is continuously reviewed to ensure it includes an award for each career stage and for a diversity of career paths. These Awards are presented for specific and general fields of science both nationally and internationally. Nominations can be submitted by and for members and non-members. The deadline for the 2021 Awards is 31 January 2020.

The Society also offers grants supporting research, attendance at scientific conferences and the sponsorship of events. Its [Diversity in Science](#) grants scheme provides funding of up to £500 to individuals, groups, charities or not-for-profit organizations to support and address issues relating to diversity in science. In the last five years, 34 diversity projects have been

supported including a podcast [Querdy](#) and an exhibition to highlight the work of BAME ('Black, Asian and minority ethnic') scientists which has previously been neglected.

One of the more recent changes facing Societies with journals is the opportunity to transition to open access publishing. The Society, along with its publisher [Portland Press](#), have taken a positive and proactive approach to open access, seeing this as a stepping stone towards open scholarship. This transition provides a basis to work



Colin Bingle, Chair of the Biochemical Society's Awards Committee, presents Wai-Hong Tham of the Walter & Eliza Hall Institute of Medical Research (Australia) with the Biochemical Society's International Award 2020.

even more closely with researchers, institutions, funders and other societies to develop new models and better serve the research and higher education communities. In line with this, the Society, through Portland Press, looks forward to the uptake of new ‘transformative’ pilot deals offered to hundreds of subscribers for 2020. Uptake of these new offerings will convert all published articles from

corresponding authors at participating institutions to open access without the need for individual article publishing charges (APCs).

Collaboration and community remain central to the Biochemical Society. In 2020, the Society will be organizing a joint FEBS3+ Meeting with the Netherlands Society for Biochemistry and Molecular Biology (NVBMB) and the Spanish

Society for Biochemistry and Molecular Biology (SEBBM) to explore ‘Machines on Genes’. The Society welcomes opportunities to work more closely with other like-minded FEBS member societies.

For more information, visit biochemistry.org

*Katie Crabb, Head of Marketing & Communications,
The Biochemical Society*

FEBS support for individual FEBS Constituent Society activities: recent highlights

FEBS Constituent Societies are able to apply for support for their own events, normally in their own countries, through the FEBS National Lecture scheme, FEBS Science and Society grants and FEBS Education Ambassador grants. In addition, a key activity of the FEBS Education Committee is to run education workshops in collaboration with particular FEBS Constituent Societies. Pages 8–11 of this *FEBS News* issue highlight in brief some of these FEBS-supported activities of individual Societies over the past year.

Education

Education workshops held in collaboration with FEBS Constituent Societies provide a forum to discuss best teaching practice and may also include sessions on skills development for early-career scientists. Organizers of the event are able to select sessions that best suit their audience and the FEBS Education Committee then crafts a program to meet these needs. Two such events were held in 2019: first with the Association of Georgian

Biochemists, and second with the Ukrainian Biochemical Society.

The Tbilisi Workshop on Molecular Life Sciences Education (pictured below) took place at Ilia State University, Tbilisi, Georgia, 8–9 April 2019, just after the FEBS Education Committee Ambassadors Meeting (see page 12), with Revaz Solomonias (FEBS Georgian Education Ambassador) as Co-Chair. The ~60 participants were mostly faculty and postdocs, and the speakers were FEBS Education Committee members (Ferhan Sağın, Frank Michelangeli, Jerka Dumić, Laszlo Dux, Luciane V. Mello, Nestor Torres Darias) and FEBS Education Ambassadors (Erkki Raulo, Aziz Hmyene).

There were sessions on Key Knowledge and Skills for Molecular Life Sciences, Innovative Strategies in Education, and Graduate Education (MSc and PhD Training), in which talks were followed by Q&A sessions and small-group discussions. Challenges (large classes, research obligations overshadowing education, limited funding for educational technologies, etc.) and





opportunities (educational support from FEBS and similar associations, open online sources, etc.) were discussed with great enthusiasm.

The FEBS Ternopil Education Workshop on Molecular Life Sciences Education took place at I. Horbachevsky Ternopil National Medical University, Ternopil, Ukraine, 3–4 October 2019. The workshop was hosted and realized with support from Mykhailo Mykhailovych Korda (Rector of the university), Serhiy Komisarenko (President of the National Academy of Sciences and Director of the Palladin Institute of Biochemistry), and Tatiana Borisova (FEBS Ukrainian Education Ambassador). The ~130 participants included a large proportion of PhD students, undergraduates and even high school students. Trainers from the FEBS Education Committee (Keith Elliott, Angel Herráez, Jerka Dumić, Beáta Vértessy, Ferhan Sağın) presented sessions on Key Knowledge and Skills for Molecular Life Sciences, Innovative Strategies in Education, Designing Practicals, and Career Skills for Young Scientists, comprising short talks, Q&As, and small-group discussions (pictured on page 2), and there were also five short talks for Ukrainian colleagues on related topics. There were many issues raised in the Q&A sessions (lack of resources, large classes, lack of motivation of students, etc.) which were discussed in depth.

In addition to the established FEBS education workshop format above, a recent initiative is to provide grants for FEBS Education Ambassadors to organize education workshops in their own countries. In the past year, these included: ‘Implementing more participative and engaging ways of teaching and learning’, 17–18 January 2019, hosted by Nestor Vicente Torres and Angel Herráez in Alcalá de Henares, Spain; ‘Excellence in learning

and teaching biochemistry’, 16–17 September 2019, hosted by Maria Luisa Genova and Francesco Malatesta in Rome, Italy; and ‘Better skills for better jobs: education and training for successful research careers’, 25 and 28 September 2019, hosted by Jerka Dumić and Igor Stuparević in Lovran, Croatia.

Ferhan Sağın, Chair, FEBS Education Committee

Science and Society

The FEBS Science and Society Committee chooses a topical subject with societal implications for a session of lectures and discussion at the annual FEBS Congress, and for the past couple of years FEBS Constituent Societies have then been invited to apply for grants for activities that extend the reach and discussion of that topic in the ensuing year.

This approach saw three interesting local events organized on the topic of the microbiome in 2019, in Spain, Cyprus and Italy, as illustrated below and reported on the FEBS Network (see [Madrid](#), [Nicosia](#) and [Ancona](#) reports there). The committee looks forward to 2020 events on its next topic of ‘personalized medicine’, and will invite applications for 2021 support on a new subject in autumn 2020.

Special Symposium support

FEBS sponsored a symposium on ‘DNA Replication, Repair and Genomic Instability’ at the recent congress of the Spanish Society for Biochemistry and Molecular Biology (SEBBM) in Madrid (16–19 July 2019), which celebrated the 50th anniversary of a significant FEBS 6th Meeting in the same city in 1969. An interesting video on the 1969 event, reflecting on politics and science of the time, can be viewed [here](#).



(left) Publicity or program literature for FEBS-supported Science and Society activities on the microbiome; (right) SEBBM’s Special Issue commemorating 50 years since the 6th FEBS Meeting.

FEBS National Lectures

FEBS supports plenary lectures to enhance the scientific meetings of its Constituent Societies, through FEBS National Lecture awards. These enable a distinguished scientist with a significant international reputation in the fields of biochemistry and molecular biology who is working in a different

FEBS country to the one hosting the event to present a lecture at the meeting. An engraved glass award is presented to the lecturers, as a memento of the speaker's selection and significant contribution to the meeting. FEBS National Lectures over the past year are summarized below, with photos of the lecturers at the events.



Prof. **Reinhard Lührmann** (Max Planck Institute for Biophysical Chemistry, Göttingen, Germany) gave a FEBS National Lecture at the 11th SifrARN meeting, organized on behalf of the French Society for Biochemistry and Molecular Biology (SFBBM) by the IMoPA lab in Nancy, France (6–8 November 2018). The

meeting was attended by 175 European scientists working on a range of topics in the RNA field.

Reinhard Lührmann has pioneered the purification, and the biochemical and functional characterization of human and yeast spliceosomes arrested at defined stages of assembly/function. In an outstanding lecture entitled 'Novel mechanism insights into the inner workings of the human spliceosome by

combined biochemical and cryo-EM studies' he explained how electron cryomicroscopy, used to investigate the structures of human pre-catalytic and catalytically active spliceosomes at high resolution, has provided a wealth of atomic structural information, and deep insights into the inner workings of the spliceosome and the dramatic RNP remodeling events that occur during its



catalytic activation and catalytic cycle.

*Séverine Massenet
Meeting Organizer*

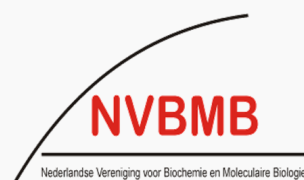


Prof. **Primo Schär** (Dean at the Faculty of Medicine, University of Basel, Switzerland) gave a FEBS National Lecture at the 55th Annual Meeting of the Norwegian Biochemical Society (NBS) at Røros, Norway (24–27 January 2019).

Primo Schär has made seminal contributions revealing the impact of DNA base repair in regulation and maintenance of DNA methylation and active demethylation. His lecture entitled 'DNA methylation, chromatin plasticity and cancer' provided an exciting overview of pathways that control and modulate DNA methylation patterning in mammalian

cells and their importance in establishing and maintaining cell type-specific gene expression. The lecture was followed by many questions from the audience and he was in high demand for additional questions and discussions at poster sessions and minisymposia during the meeting.

*Magnar Bjørås
Meeting Chair*



The Netherlands Society for Biochemistry and Molecular Biology (NVBMB) proudly hosted the FEBS National Lecture of Prof. **Karim Lebib** (University of Dundee, UK) during its Fall Symposium 'Mechanism and regulation of cell division' (2 October 2019,

Utrecht, the Netherlands). In a magnificent lecture, Karim Lebib presented the work of his team on the termination of replication. Through an impressive series of experiments the molecular mechanism of replication termination was revealed step-by-step, sparking a lively discussion. The lecture completed a relaxed but stimulating day of talks illuminating various aspects of DNA replication

including its biophysical basis, the impact and role of DNA repair, and the regulation of chromosome segregation. Apart from the FEBS-sponsored lecture, a key event was the award of the NVBMB prize 2019 to Francesca Mattioli for her outstanding work on the molecular mechanisms involved in chromatin regulation.

*Hugo van Ingen
Secretary, NVBMB*





Eesti Biokeemia Selts
Estonian Biochemical Society

The Estonian Biochemical Society (EBS) hosted a FEBS National Lecturer at the FEBS3+ Meeting held in Riga, Latvia, 17–19 June 2019 (see page 13). All members of the EBS were

involved in the selection process for the FEBS National Lecturer and Prof. **Roslyn Bill** from Aston University (Birmingham, UK) was invited after voting on eight candidates. The FEBS National Lecture award was presented to her during the opening plenary session of the meeting by Tiit Lukk, the

President of EBS. Roslyn Bill then gave an awe-inspiring talk on new routes to therapies for traumatic injury of the brain and spinal cord, which focused on the regulation of aquaporin by subcellular relocalization.

Tiit Lukk
EBS President



Prof. **Petra Schwille** (Max Planck Institute of Biochemistry, Martinsried, Germany) was invited as a FEBS National Lecturer at the 13th Meeting of the Slovenian Biochemical Society (SBD) with International Participation,

24–27 September 2019, in Dobrna, Slovenia. Her opening lecture on ‘Bottom-up design of protein self-organization’ gave insights into challenging experimental characterization of pattern-forming protein networks in cell-free systems and was followed by interesting discussion.

This biennial event, with over 200 participants this

year, presented an important opportunity for Slovenian biochemists and invited international collaborators to present and discuss many topical subjects, from synthetic biology to functional genomics, and for younger researchers to meet and interact with established colleagues.

Martina Mohorčič
Meeting Organizing Committee



The Croatian Society of Biochemistry and Molecular Biology (HDBMB) was pleased to host the FEBS National Lecture of Prof. **Sven Gould** (Heinrich Heine University, Düsseldorf, Germany) during the Society Congress ‘HDBMB2019 Crossroads in Life Sciences’

(Lovran, Croatia, 25–28 September 2019). The Congress, which gathered more than 150 participants, was an exciting and beneficial event for Croatian molecular life scientists, especially for young ones.

In his inspiring lecture, entitled ‘Major changes in plastid biology and their conquer of land’, Sven Gould talked about how a

single streptophyte (green) algal lineage colonized land and thus how all macroscopic biomass of the terrestrial habitat is the result of their evolutionary adaptations. Nothing similar in the evolution of life affected Earth’s appearance more than this event occurring some 480 million years ago.

Damjan Franjevič
Chair, Organizing Committee



It was with great pleasure that the Turkish Biochemical Society’s 30th National Biochemistry Congress (TBS 2019), jointly organized with the 27th Balkan Clinical Laboratory Federation Meeting (BCLF 2019), hosted a FEBS National Lecture by Prof. **Jerka Dumić** (Faculty of Pharmacy and Biochemistry,

University of Zagreb, Croatia). Her interesting plenary talk on ‘Galectin-3: from molecule to biomarker and back’ started with a reminder of the structure and function of galectin and continued with the results of her group’s interesting work on scuba divers. Her and many others’ work in the field of galectins brings hope to understand more of the role of these molecules in normal physiology and diseases.

The lecture received many questions and there was a lively discussion afterwards. The congress was held in Antalya, Turkey, 27–31 October 2019, and hosted over 700 participants, with several plenary lectures, as well as mini symposia, short talks, a large exhibition of products and services in the life sciences field, and an exciting social program.

Ferhan Sağın
Vice-President, TBS



FEBS support for inter-Society activities: recent highlights

FEBS Education Ambassadors Meeting

The 4th FEBS Education Ambassadors Meeting took place in Tbilisi, Georgia, 5–6 April 2019. This year 31 Ambassadors from FEBS Constituent Societies (the highest number to date) as well as members of the FEBS Education Committee attended the meeting, which was hosted by Ilia State University. The President of the Association of Georgian Biochemists and FEBS Georgian Education Ambassador, Revaz Solomonias, kindly arranged all logistics and organized an outstanding social program.

The meeting provided a forum to learn about recent teaching and learning initiatives at universities throughout the FEBS area, through presentations from some Education Ambassadors, as well as to continue discussion groups ('Working Groups') initiated at previous meetings. It was also a chance to update participants on other relevant FEBS activities, such as funding for events organized by Education Ambassadors in their own countries.

This year's short presentations were an informative and varied selection: 'An innovative forum where faculty can exchange research...on teaching!' (Xavier Coumoul, France), 'Science Made Simple: the Cyprus example' (Myrtani Pieri, Cyprus), 'Implementing more participative and engaging ways of teaching and learning' (Néstor Torres Darias, Spain), 'Undergraduate students' understanding of epigenetics in the course of their 3 years studies towards a BSc degree in Agricultural Sciences' (Anat Yarden, Israel), 'Teaching Molecular Sciences in universities from Romania: a SWOT approach'

(Carmen Socaciu, Romania), 'Research Integrity and Experimental Design: Course for doctoral students in life sciences' (Erkki Raulo, Finland), 'Reflections from the FEBS Izmir Education Workshop: Training Tomorrow's Scientists' (Aylin Sepici Dinçel, Turkey) and 'Educational strategies to guide & motivate MSc students to become an entrepreneur while doing scientific studies' (Aziz Hmyene, Morocco).

The four Education Ambassador Working Groups (Key Knowledge and Skills Expected from a Molecular Life Sciences Graduate, Good Practices on Education, Promotion of Ambassadors' Educational Activities and Communication with the Ministries, and Learning Resources) met for two 2-hr sessions during the meeting and generated a lot of lively discussions within their sessions and among other meeting participants when reports of each group were shared.

The social program consisted of a city tour starting from the Old Part of Tbilisi and a visit to the fascinating Georgian National Museum (both events kindly sponsored by Ilia State University). The Education Ambassadors also enjoyed dinners together where many new friendships and fruitful collaborations and networking possibilities emerged.

Next year's FEBS Education Ambassadors Meeting will take place at Vilnius, Lithuania, 8–9 May 2020, under the patronage of Vida Mildaziene, FEBS Lithuanian Education Ambassador.

Ferhan Sağın
Chair, FEBS Education Committee





FEBS3+ Meetings

The FEBS3+ programme was established by FEBS to support scientific meetings equivalent to an annual national scientific meeting of a FEBS Constituent Society but organized through collaboration of at least three such Societies. The programme aims to increase international collaboration between molecular life scientists in a subset of countries within the FEBS area, such as those in a particular region or linked in other ways, while also encouraging sharing of Society expertise and efforts.

FEBS provides a grant of €10,000 towards event organization and a further €10,000 for travel awards for early-career scientists from the collaborating Societies travelling from outside the host country.

The most recent FEBS3+ Meeting was held in Riga, Latvia (Latvian, Lithuanian and Estonian Societies), reported in brief Q&A style below.

For 2020 FEBS3+ Meetings, see page 33. The deadline for applications for FEBS3+ Meetings in 2021 is 1st June 2020: guidelines on the FEBS website are [here](#).

Latvian–Lithuanian–Estonian FEBS3+ Meeting: Riga, Latvia

What, when, where

FEBS3+ conference of Latvian, Lithuanian and Estonian Biochemical Societies, 17–19 June 2019, Nature House of University of Latvia, Riga, Latvia.

The meeting in numbers

4 plenary talks, 24 talks by young researchers, 22 regular talks, 69 posters, 143 participants, 1 award for the best poster. And about 500 meals and 2000 cups of coffee consumed!

Why FEBS3+?

The Biochemical Societies of Latvia, Estonia and Lithuania are rather small, so it makes sense to hold a single yearly conference jointly instead of having three separate ones. Already in 2018, the Latvian and Estonian Societies participated in the XV conference of the Lithuanian Biochemical Society in Dubinigiai near Vilnius, but without financial support from FEBS. The FEBS3+ opportunity matches perfectly with the need of the three Baltic countries, which is why we applied for support.

Examples of how to collaborate for synergy

The very idea of organizing the FEBS3+ event came from Lithuanian side, as they suggested to obtain financial FEBS support in 2018. The Estonian side organized a FEBS National lecture (see page 11).



Speaker program highlights?

One of the best talks was given by Pavel Plevka from CEITEC (Brno, Czech Republic) about structure and function of a bacterial gene transfer agent.

Hot topics?

Structural biology was one of the most widely covered subjects – including state-of-the-art solid-state NMR, crystallography, cryo-EM and neutron scattering advances, applied in studies of enzymes, viruses, spider silk and other macromolecules.

Especially for the next generation

The first half of the first day was devoted to young researchers – in total 24 talks.

Beyond the science?

A welcome dinner (pictured above) was held in the first evening.

Off piste activities?

A separate meeting for conference evaluation and future plans concluded

that in general the conference was a success and similar events should be organized each year in Tallinn, Riga and Vilnius.

Favourite meeting moment

A presentation from a young Estonian researcher about a simple-to-use electrophoresis device to quickly test drugs of abuse in oral fluids intended to be used by police seemed to cause some worry in the audience...

What I learned as an event organizer

Perhaps the first day was a bit too squeezed with talks. Also, next time I would like to include some social event.

Thanks

To FEBS, University of Latvia, Latvian Biomedical Research and Study Center, and ten commercial sponsors: Bioavots, Biosan, Genera, Quantum, AnimaLab, Adrona, Interlux, LaboChema, Diamedica and HNK Analuusitehnika.

*Kaspars Tars
President, Latvian Biochemical Society*

The 44th FEBS Congress Krakow, 2019

The 44th FEBS Congress was held in beautiful Krakow, Poland, from 6th to 11th July 2019. The event was hosted in the ICE Krakow Congress Centre – a flagship cultural venue of Krakow located almost in the heart of the city on the bank of the Vistula River, opposite the Wawel Castle. This excellent location allowed all the participants to enjoy the stunning views of the city even during the Congress coffee breaks. The Krakow old city with its famous St Mary's Church and the Cloth Hall was within walking distance from the ICE Centre. The Congress was organized by the Polish Biochemical Society (PTBioch) in cooperation with FEBS, and chaired by Andrzej Legocki, the PTBioch President. Other members of the Local Organizing Committee (LOC) were Adam Szewczyk, Piotr Laidler and Małgorzata Iciek. The organizational side of this event was handled by the PCO Targi w Krakowie in collaboration with the LOC.

Under the 44th FEBS Congress title 'From molecules to living systems', the scientific programme of the event was arranged to cover all current topics in the field of biochemistry and related areas. During the opening ceremony on Saturday July 6th, the plenary lecture was delivered by Andrew Fire (Stanford, USA), a Nobel Laureate,





(top row, from left) Christine Mummery receiving the FEBS Datta Medal from Tomáš Zima, FEBS Vice Chair; Gunter Meister (right) receiving the FEBS Theodor Bücher Medal from Miguel A. De la Rosa, FEBS Congress Counsellor. (middle row, from left) Mathias Uhlen delivering the FEBS Sir Hans Krebs Lecture on 'The Human Protein Atlas – implications for human biology, drug development and precision medicine'; Sara Linse holding aloft her FEBS|EMBO Women in Science Award 2019 statuette (with Cecilia Arraiano, FEBS Chair of the Working Group on Women in Science); Closing Lecturer Venki Ramakrishnan (left), with young Congress delegates. (bottom row, from left) Václav Pačes, FEBS Secretary General, Miguel A. De la Rosa, and Andrzej Legocki, 44th FEBS Congress Chair, planting a Swedish whitebeam near the ICE Krakow Congress Centre to commemorate the event; Joanna Hoffmann-Dietrich delivering an Art & Science lecture.

who spoke on ‘Opportunistic RNAs and acquisitive genomes’. Another Nobel Prize winner, Venki Ramakrishnan (Cambridge, UK), gave a very interesting lecture on ‘Termination of translation in bacteria and eukaryotes’ on Thursday July 11th, during the closing ceremony. Other plenary lectures were given by leading experts in fields of world-class research: Csaba Szabo (Fribourg, Switzerland) – IUBMB Lecture; David Klinke (West Virginia University, USA) – FEBS Journal Prize Lecture; Sara Linse (Lund University, Sweden) – FEBS|EMBO Women in Science Award Lecture; Christine Mummery (Leiden, the Netherlands) – FEBS Datta Lecture; Mathias Uhlen (Stockholm, Sweden) – FEBS Sir Hans Krebs Lecture; Gunter Meister (Regensburg, Germany) – FEBS Theodor Bücher Lecture; Reinhard Lührman (Göttingen, Germany) – FEBS 2019 Plenary Lecture; Sergio Grinstein (Toronto, Canada) – PABMB Lecture; and Claudia Bagni (Lausanne, Switzerland) – EMBO Lecture.

In addition to the unique plenary lectures, the 44th FEBS Congress offered participants a rich scientific programme covered by 40 symposia topics and including 118 symposia lectures delivered by the invited speakers, and 78 short talks chosen by the session Chairs from among the submitted abstracts. Moreover, the Congress programme offered a variety of Special Sessions, including those from FEBS on Gender Issues in Science, Science and Society, Research and Career Skills, and Education (see page 17), and from EU-OPENSREEN, the European Research Council, EMBL and EMBO on their initiatives and funding opportunities. This year, the organizers also decided to enrich the programme with two special Art & Science lectures: insight into Krakow from Polish art historian Jacek Purchla, and a look at science through an artist’s eyes, from the artist and Professor of Fine Arts Joanna Hoffmann-Dietrich.

Over 1300 posters, including these submitted as late-breaking, were presented during the afternoon poster sessions from Sunday through Wednesday. The poster sessions were an excellent opportunity, especially for young researchers, to present and discuss their findings in a welcoming and relaxed setting with a cup of coffee.

The 44th FEBS Congress in Krakow attracted over 1800 delegates from 54 countries, with most coming from Poland, Russia, South Korea, Turkey, UK, Spain, Italy, Czech Republic, Germany and

USA. It is noteworthy that young scientists made up nearly 60% of all participants.

The Congress was preceded by the 19th Young Scientists’ Forum held concurrently with the 4th FEBS Fellows Meeting (see pages 20–22).

The Congress Exhibition, where 30 companies presented and offered their new products and services to the participants, became an important part of the Congress. The exhibition and catering areas were located in the spacious foyer of the ICE Centre, which encouraged interactions between participants and exhibitors.

Beyond the scientific programme, participants of the 44th FEBS Congress also had a chance to enjoy various social events. During the opening ceremony, they could listen to the excellent concert of the Krakow Young Chamber Orchestra under the direction of young, multi-talented Joanna Ślusarczyk. The Congress Dinner was held at the Old Tram Depot in the medieval Jewish quarter of Krakow. The warm atmosphere during this dinner encouraged networking, socializing and dancing.

The 44th FEBS Congress was a successful meeting characterized by world-class research presented by both leading experts in the field of life science and many young enthusiastic scientists. It will long remain in the memories of both the participants and the organizers of the event, who commemorated the Congress with the event’s own tree – a Swedish whitebeam planted during the Congress by representatives of FEBS, the LOC and the PCO in a special avenue close to the ICE Centre. We hope it will be the living reminder of the Congress. The organizers’ efforts have been rewarded by very positive feedback collected via a survey.

During the closing ceremony, the FEBS flag was passed to the organizers of the 45th FEBS Congress, to be held in Ljubljana, Slovenia. We wish them good luck in the preparation of the event, and hope to meet everyone again in Ljubljana in 2020.

Andrzej Legocki, 44th FEBS Congress Chair

Małgorzata Iciek, 44th FEBS Congress Secretary

FEBS Congress Survey

Thanks very much to all delegates who completed the 2019 FEBS Congress feedback survey, which helps to inform future events. From the prize draw for those who completed the survey, the free registration to the 45th FEBS Congress in Ljubljana goes to Irina Voronkina, St Petersburg, Russia.



FEBS Special Sessions at the 44th FEBS Congress

As a complement to the main research-focused talks of the 44th FEBS Congress, FEBS Committees and Working Groups organized ‘Special Sessions’ of wide general interest to Congress delegates.

Two such **Education** sessions (co-organized by FEBS and IUBMB Education Committees) aimed to update and inspire university lecturers and tutors. In the first session, ‘Creative teaching: Effective learning in life sciences education’, Peter de Jong (Netherlands), Michal Nowakowski (Poland) and Bill Heslop (UK) gave thought-provoking talks on open online courses in classroom teaching, student-activated teaching, and information technology in undergraduate teaching labs, respectively. The second session, ‘Future education now!’, was honoured with motivational lectures from internationally recognized educational innovators Eric Mazur (USA) and Joan J. Guinovart (Spain). Over 200 people attended the sessions, and there were many contributions and questions from the audience. An education-themed poster session also stimulated discussion, and a prize was awarded to Julian Pakay (Melbourne, Australia) for his poster ‘Improving quantitative literacy in incoming biomedical science students’.

The **Research and Careers Skills** session this year comprised short talks on a range of skills beyond the lab bench and then a choice of small-group discussion on these topics, according to interests. Daniela Ruffell (Spain) and Seamus Martin (Ireland) from the FEBS Press journals offered advice on abstract and review writing, respectively, while Miguel A. De la Rosa (Spain) discussed cogent grant applications and Frank Michelangeli (UK) shared ideas for creating engaging lectures. In addition, a separate Networking workshop provided a forum to discuss tips for different networking objectives, such as finding a collaborator – and it also included some fun ‘speed networking’.

The hot topic chosen for the **Science and Society** session was ‘Personalised medicine: a future vision’. It brought together perspectives on taste perception from Paolo Gasparini (Italy), bioethics from Andrzej Kochanski (Poland) and rare diseases from Francesc Palau (Spain), and stimulated several questions.

Finally, the **Gender Issues in Science** session strove to further raise awareness of and offer solutions to barriers to progression of women in scientific careers, with speakers Isabelle Vernos (Spain), Maren Jochimsen (Germany) and Charise Johnson (UK) sharing their experiences and work of their organizations supporting gender equality.



(top four images, left to right) Education Sessions: speaker Eric Mazur, audience questions (Winnie Eskild), speaker Joan Guinovart, poster prizewinner Julian Pakay with FEBS Education Committee Chair Ferhan Sağın; (other) Networking workshop: small-group discussions and speed networking.

FEBS Medal Winners (Krakow, 2019)

The **Sir Hans Krebs Medal**, the **Theodor Bücher Medal** and the **Datta Medal** are awarded annually by FEBS for outstanding achievements in biochemistry, molecular biology or related areas. This year's awardees – Mathias Uhlen (Stockholm, Sweden), Gunter Meister (Regensburg, Germany) and Christine Mummery (Leiden, the Netherlands) – were honoured at the FEBS Congress 2019 in Krakow, where they each delivered a plenary lecture.



Sir Hans Krebs medal: Mathias Uhlen

Mathias Uhlen is professor at the Royal Institute of Technology (KTH), Stockholm, Sweden. His research is focused on protein science, antibody engineering and precision medicine and ranges from basic research in human and microbial biology to more applied research, including clinical applications in cancer, infectious diseases, cardiovascular diseases, autoimmune diseases and neurobiology. He leads an international effort to systematically map the human proteome to create a Human Protein Atlas (www.proteinatlas.org) using antibodies and various omics technologies. This effort has so far resulted in the Tissue Atlas (2015) showing the distribution of proteins across human tissues and organs, the Cell Atlas (2016) showing the subcellular location of human proteins in single cells, and the Pathology Atlas (2017) showing how cancer patient survival is tied to RNA and protein levels. He is the President of the European Federation of Biotechnology, and from 2010 to 2015 he was the founding Director of the Science for Life Laboratory (SciLifeLab), which is a Swedish national center for molecular bioscience.

Congress plenary lecture: *The Human Protein Atlas – implications for human biology, drug development and precision medicine*



Theodor Bücher medal: Gunter Meister

Gunter Meister is professor and chair for Biochemistry at the University of Regensburg, Germany. He graduated in Biology at the University of Bayreuth, Germany. During his PhD, he worked on the role of splicing regulation and obtained his PhD in 2002 from the Max-Planck-Institute of Biochemistry and the Ludwig Maximilians University, Munich, Germany. From 2003 to 2005, he joined the lab of Tom Tuschl at the Rockefeller University in New York, USA as a postdoc and started to work on mechanistic aspects of small RNA-guided gene regulation. In 2005, he started his independent lab at the Max-Planck-Institute of Biochemistry. His lab contributed to our current understanding of the mechanism of microRNA regulation. In 2009, he was appointed full professor and chair for Biochemistry at the University of Regensburg, Germany. His research focus is the biochemical analysis of small-RNA-guided gene silencing pathways, long non-coding RNAs, RNA-binding proteins and RNA modifications in mammals. His lab combines molecular biology and biochemistry with biophysical and structural approaches. Gunter Meister has received the Research Award of the Peter and Traudl Engelhorn foundation, the Schering Young Investigator Award as well as starting and consolidator grants of the European Research Council (ERC).

Congress plenary lecture: *Regulation of gene expression by RNA-binding proteins and non-coding RNAs*



Datta medal: Christine Mummery

Christine Mummery studied physics at the University of Nottingham, UK and has a PhD in Biophysics from the University of London. After positions as postdoc and tenured group leader at the Hubrecht Institute, she became professor at the University Medical Centre Utrecht in 2002. After a sabbatical at the Harvard Stem Cell Institute in 2007, she introduced human iPS cells to the Netherlands. In 2008, she became Professor of Developmental Biology at Leiden University Medical Centre in the Netherlands and head of the Department of Anatomy and Embryology. Her research concerns heart development and the differentiation of pluripotent human stem cells into the cardiac and vascular

lineages and using these cells as disease models, for safety pharmacology and drug discovery. Immediate interests are on developing biophysical techniques for characterization and functional analysis of cardiovascular cells from hPSCs. In 2015 she became guest professor at the Technical University of Twente to develop organ-on-chip models. She was recently awarded a multimillion grant for this purpose and is an awardee of a prestigious European Research Council Advanced Grant. She is a member of the Royal Netherlands Academy of Science (KNAW), a board member and the incoming president of the International Society of Stem Cell research (ISSCR), and a former board member of the KNAW and Netherlands Medical Research Council (ZonMW). She was recently awarded the Hugo van de Poelgeest Prize for Animal Alternatives in research.



She co-authored a popular book on stem cells 'Stem Cells: scientific facts and fiction' and is editor of the ISSCR journal Stem Cell Reports. She is also on the editorial boards of Cell Stem Cell, Cardiovascular Research and Stem Cells.

Congress plenary lecture: *Human pluripotent stem cell models of cardiac and vascular disease*

FEBS | EMBO Women in Science Award 2019

The FEBS | EMBO Women in Science Award, a joint initiative of FEBS and EMBO, recognizes the exceptional achievements of a female researcher in the life sciences. The 2019 award was presented at the FEBS Congress 2019 in Krakow to Sara Linse (Lund University, Sweden).

Sara Linse was awarded the 2019 FEBS | EMBO Women in Science Award for her contribution to the understanding of the molecular mechanisms of protein self-assembly in Alzheimer's disease and related neurodegenerative disorders; in addition, the award recognizes her varied activities in support of science and society. Sara Linse studied at Lund University, Sweden, and Stanford University, USA, before completing her PhD on the topic of cooperativity of calcium binding in calmodulin and calbindin D9k at Lund University in 1993. She has remained at the university, where she now holds the position of Professor in Physical Chemistry and Molecular Protein Science. Her current research interests include calcium signalling networks, non-covalent interactions in proteins, the stabilization of proteins for therapeutic purposes, and biological risks of nanoparticles. Furthermore, she continues to work on protein amyloid formation, including the aggregation process, the influence of intrinsic and extrinsic factors, and coaggregation between lipids and amyloid proteins. Sara Linse has received numerous awards for her work, including the Cozzarelli Prize awarded by the National Academy of Sciences, USA (2007), the IUPAC Distinguished Woman in Chemistry prize (2011), and Sweden's KTH Royal Institute of Technology's Great Prize (2014). She is also a member, and has previously served as Chair, of the Nobel Committee for Chemistry.



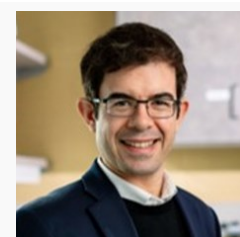
Congress plenary lecture: *On the mechanism of amyloid β aggregation and the role of inhibitors*

FEBS Anniversary Prizes (Krakow, 2019)

Awardees of the FEBS Anniversary Prizes of the Gesellschaft für Biochemie und Molekularbiologie (GBM) are selected for their outstanding achievements in biochemistry, molecular biology or related areas from among researchers under the age of 40 who are invited to give a lecture at a FEBS Congress. This year's recipients were João Passos (Rochester, USA) and Ana Casañal (Cambridge, UK).

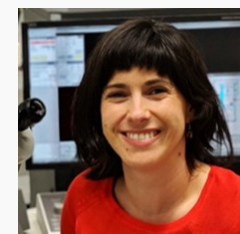
João Passos is an Associate Professor of Physiology at Mayo Clinic, Rochester, USA. He directs the 'Cell and Molecular Aging Laboratory', which investigates the role of senescent cells in aging and age-related disease, with a particular focus on the role of mitochondria and telomeres in the process. His research has revealed that mitochondria play a pivotal role in cellular aging, contributing to different phenomena such as telomere dysfunction and chronic inflammation.

Congress talk: *Mitochondria and telomeres: guardians of cell senescence*



Ana Casañal is a post-doctoral researcher in the group of Lori Passmore at the MRC Laboratory of Molecular Biology, Cambridge, UK. She is using cryo-EM to elucidate the molecular mechanisms of gene expression regulation, with a particular focus on how the multi-protein complex 'cleavage and polyadenylation factor' (CPF) recognizes, cleaves and adds a poly(A) tail of defined length to nascent mRNA. As part of a team, her work has resulted in the first cryo-EM structure of the CPF protein complex.

Congress talk: *Towards a molecular understanding of the eukaryotic 3'-end machinery*



FEBS Press Award Lecture (Krakow, 2019)

The FEBS Journal Richard Perham Prize 2019 was awarded for an outstanding paper published in the journal in 2018 (<https://doi.org/10.1111/febs.14396>). The joint first authors – Cassidy L. Bland and Christina N. Byrne-Hoffman – shared the monetary award, and senior author David J. Klinke II (West Virginia University, USA) was congratulated on the prize and presented a plenary lecture about this work at the 44th FEBS Congress. For more information on the prize, see the [announcement](#) on the FEBS website.



The 19th FEBS Young Scientists' Forum

The 19th FEBS Young Scientists' Forum (YSF) took place in Krakow, Poland from 3rd to 6th July 2019 alongside the 4th FEBS Fellows Meeting (see page 22) and directly before the 44th FEBS Congress. The venue was the Faculty of Chemistry, located at Krakow's Jagiellonian University Campus, with participants accommodated at the Apart Hotel Vanilla near the campus.

As usual, the YSF was organized by a local committee of young researchers*, overseen by the Chair of the FEBS Working Group on the Careers of Young Scientists. With the aim of providing a supportive European forum for early-stage

researchers across a range of fields in the molecular biosciences to meet each other, present their work, and learn from experts, the event brought together 102 postdocs and PhD students (selected from 255 candidates) from 24 countries in the FEBS area, as well as experienced scientists and specialists. YSF participants received financial support from FEBS to attend the YSF and also the ensuing FEBS Congress, and two were directly sponsored by the UK Biochemical Society.

The scientific programme included lectures, symposia and poster sessions, as well as career and soft skill sessions. In addition, an extensive social side of the event enabled participants to get to know each other, establish closer contacts and experience Krakow.

*19th YSF Organizing Committee: Anna Jagusiak (Chair), Kinga Kłodawska, Katarzyna Kolczyńska, Anna Mleczko, Sonia Trojan and Tomasz Tronina.



During the scientific part, participants listened to wonderful keynote lectures: the opening lecture given by Eric Westhof (Strasbourg, FR) introducing the subject of ribosomal decoding and control over translation; the closing lecture by Isabel Fariñas (Valencia, ES) on remote signalling in stem cell biology; and lectures from Jonathan Heddle (Krakow, PL) addressing synthetic structural biology, from Michaël Ryckelynck (Strasbourg, FR) on RNA analysis by droplet microfluidics, and from Agnieszka Chacińska (Warsaw, PL) on cellular stress and mitochondria. Fifteen participants were chosen to deliver symposia talks, and all participants prepared posters showing the results of their work, which were previously presented in the form of a 1-min-1-slide presentation. Prizes were awarded for oral presentations (1st, Ivan Corbeski, NL; 2nd, Miriam Linsenmeier, CH; 3rd, Marco Cavaco, PT) and for poster presentations (1st, Andrew Hammond, UK; 2nd, Laura Casarrubios Molino, ES; 3rd, Almudena Ponce-Salvatierra, PL).

The sessions on career development and soft skills first presented scholarship/fellowship opportunities (David del Álamo, DE – EMBO Fellowships; Gaetano Castaldo, BE – MSCA: Marie Skłodowska-Curie Actions; Alain Krol, FR – FEBS Fellowships), and then participants learned from experts in CV writing (Keith Elliott, UK), writing scientific publications (Mary Purton, UK) and creating scientific presentations (Miguel A. De la Rosa, ES), who gave short lectures stimulating subsequent discussions in groups (chosen according to participants' interests). This section also included talks on important contemporary topics: the role of women in science (María Luz Cárdenas, FR), and engaging the public in your science (Mark Roberts, UK). Lastly, former FEBS Secretary General Israel Pecht, IL, and Claudina Rodrigues-Pousada, PT, former Chair of the FEBS Working Group on the Careers of Young Scientists, gave historical perspectives of the work of FEBS for early-stage researchers.

The social programme of the 19th YSF included the opening ceremony in the Krzysztofory Palace tenement house in the centre of Krakow, a dinner in the historic Lubicz Brewery, a visit to Solaris – Polish National Synchrotron, a get-together party in Wieliczka Salt Mine combined with sightseeing and dancing 100 m underground and, finally, an exploration of Krakow's Old Town during a guided walk to the ICE Krakow Congress Centre. Friendships and connections were also supported



(from top) 19th FEBS YSF bag; opening ceremony in the Krzysztofory Palace; fun in the Wieliczka Salt Mine; YSF bridge event at the 44th FEBS Congress with 2018, 2019 and 2020 YSF Committee Chairs Vlastimil Kulda, Anna Jagusiak and Maja Katalinić, respectively.

by a closed ‘room’ on the FEBS Network platform, where all 19th YSF participants are registered, together with the lecturers and participants of the 4th FEBS Fellows Meeting. Ahead of the event, room members could see who was attending and read posts introducing aspects of Krakow and Poland from the Organizing Committee, as well as actively develop the room by participating in a Communication Challenge, where the best posts were recognized with prizes (1st, Victoria Barygina, IT; 2nd, Antonio Zandona, HR; 3rd, Iva Uzelac, RS).

In addition to providing a forum to directly support young scientists, the YSF also allows experienced scientists and FEBS to listen to opinions and assess the needs of their younger colleagues, to inform future plans for support for young scientists in the early stages of their scientific career. Related to this, this year the FEBS Working Group on the Careers of Young Scientists has had

the excellent input of Vlastimil Kulda (Chair of 18th YSF) and Anna Jagusiak (Chair of 19th YSF) for future ideas, one example of which was a new informal ‘bridge’ event held during the FEBS Congress to bring early-stage scientists together, explain FEBS support for young scientists and introduce the next YSF, which will be held 1–4 July 2020 in Lovran, Croatia (see page 33).

Irene Díaz-Moreno, Chair, FEBS Working Group on the Careers of Young Scientists

*Anna Jagusiak
Chair, 19th YSF Organizing Committee*

For a perspective on the value of the 19th YSF from one of the participants, enjoy an account on the FEBS Network platform by Nicola Edwards: [‘A Cracking Time in Krakow’](#) – thoughts from the 19th YSF and 44th FEBS Congress’.

The 4th FEBS Fellows Meeting

Held simultaneously to the 19th FEBS YSF at the Faculty of Chemistry in Krakow’s Jagiellonian University Campus, the 4th FEBS Fellows Meeting brought together 17 former or current holders of FEBS Long-Term Fellowships. Keynote lectures, meals and social activities were organized together with the YSF so that the young and less young generation could discuss and share experiences.

Put together with the meeting Vice-Chair and former Chair of the Fellowships Committee Andreas Hartig, the programme comprised seven sessions covering 17 talks. Given the diversity of research fields investigated by the Fellows, from plants to molecular tools, it was not an easy task to assemble sessions containing homogenous talks. The consensus was Protein homeostasis, Details on protein folding and interaction, Bacterial pathogens, Differentiation and Development, Tools for future, Signaling, and Metabolic changes. In addition to presenting their – sometimes unpublished – data, Fellows were asked by the Chairs to discuss and share experience about the future of the scientific career during two additional sessions, which were an opportunity for lively and productive discussions.

As pointed out by one of the Fellows [in a post on the FEBS Network](#), “The unfamiliar group soon turned out to be individual friendly faces with a genuine interest in sharing scientific knowledge.” This statement summarizes very well the friendly



atmosphere that prevailed during the three days. The Fellows decided to continue exchanging information through the FEBS Network and social media.

In conclusion, a very fruitful 4th Fellows Meeting that calls for a 5th one!

*Alain Krol
Chair, FEBS Fellowships Committee*



FEBS Press journal news

Making it easier to publish open access

The pace of transition to open access publishing has accelerated with the launch of Plan S in September 2018 by the European Union and European Research Council, together with a group of national research funding organizations. FEBS is supportive of open access publishing, although it has expressed reservations about some of the details of Plan S [here](#). Two of the FEBS journals, *Molecular Oncology* and *FEBS Open Bio*, are fully open access, while *The FEBS Journal* and *FEBS Letters* are ‘hybrid’ subscription journals in which authors can opt to publish open access on payment of an article processing charge.

FEBS is pleased to announce that scientists in some of its member countries can now choose to publish open access articles in all of our journals, at no direct cost. Our publishing partner, Wiley, has negotiated agreements in Germany, Hungary and Norway enabling authors at participating institutes to both read our journals and publish articles open access in them. The open access article processing charge will be paid centrally.

In Germany, Wiley was the first publisher to sign a countrywide agreement with [Projekt DEAL](#), a consortium of nearly 700 German libraries and research institutions that provides participating German institutions access to read Wiley’s portfolio of academic journals, which includes the four FEBS journals, and enables researchers at those institutions to publish articles open access in any of Wiley’s journals.

In Hungary, Wiley has signed a deal with the [Hungarian Electronic Information Service National Programme \(EISZ\)](#) enabling researchers in 13 Hungarian institutions to read journals published by Wiley and to publish open access in both full open access and ‘hybrid’ journals with no charges direct to authors.

In Norway, a similar [Read and Publish deal](#) between Wiley and institutions participating in the Norwegian Directorate for ICT and Joint Services in Higher Education and Research (Unit) allows corresponding authors to publish primary research and review articles open access in any of Wiley’s journals. Again, there will be no charge for the

authors, with the invoice sent directly to the participating institute.

Authors at participating institutions, when submitting articles to either *Molecular Oncology* or *FEBS Open Bio*, will be directed to [this page](#) where they can obtain a code that indicates their eligibility. If their article is accepted for publication, the invoice will be paid on their behalf. Authors of articles accepted for publication in either *FEBS Letters* or *The FEBS Journal* should select the OnlineOpen option when prompted (see [here](#) for more details) to make their article open access with no direct charge.

FEBS is delighted to be able to offer this service to scientists in some of its member countries. And of course, all FEBS members and others will benefit from being able to read these articles free of charge immediately on publication.

Such ‘transformative’ arrangements move the FEBS Press journals closer to a more open research landscape, fostering a rapid pace of discovery and scientific advancement. At the same time, the long-term future of the journals, and the funds that they provide for FEBS’ other activities, is secured.

We hope that all authors at participating institutes will consider submitting their work to one of the four FEBS journals.

Journal poster prizes

The FEBS Press journals present poster prizes at the annual FEBS Congress, where posters form a large part of the event. At the 44th FEBS Congress in Krakow in July 2019 (see pages 14–16), there were over 1300 posters displayed during the event. The four FEBS Press journals, and also this year the *Biochemical Journal* of The Biochemical Society, awarded daily mini-prizes and, from these, announced overall winners at the Closing Ceremony.

From a shortlist of posters chosen by journal editors on the basis of abstracts submitted to the Congress, a panel of jurors viewed the displayed posters and talked to the presenters. They looked for high-quality and exciting research presented in a clear and appealing manner. The overall winners selected by the journals at the FEBS Congress in Krakow are listed on the next page.

Mary Purton, FEBS Press Publisher

Journal poster prizes (overall winners) at the 44th FEBS Congress, Krakow

FEBS Letters: Gαq activation induces mitochondrial arrest by interacting with Alex3, Miro1 and Trak1/2 proteins. PRESENTER: Ismael Izquierdo Villalba (Spain)

The FEBS Journal: Structural basis for DNA recognition by FoxH1 pioneer transcription factor. PRESENTER: Radoslaw Pluta (Spain)

FEBS Open Bio: Single-molecule Slimfield microscopy for real-time dissection of protein–protein interactions, stoichiometry and mobility directly in live eukaryotic cells. PRESENTER: Sviatlana Shashkova (UK)

Molecular Oncology: CDK6 is an essential signaling node in JAK2V617F-mutant MPN. PRESENTER: Barbara Maurer (Austria)

Biochemical Journal: Pop2 phosphorylation at S39 is important for Pop2 to repress the expression of stress response genes, HSP12 and HSP26, upon glucose availability. PRESENTER: Thi Minh Viet Nguyen (Japan)



Recent thematic content from FEBS Press journals

The FEBS Journal

The Special Issue [ER Stress in Disease](#) contains 11 reviews that illustrate the role of ER stress in different human diseases, including myopathies and lung diseases, while the 13 reviews in the [Extracellular matrix in health and disease](#) Special Issue highlight the role of extracellular matrix (ECM) in maintaining tissue homeostasis. In addition, a focus issue on [Single-cell analyses](#) features 6 reviews highlighting recent technological advances, insights into biomedicine gained and potential future applications of single-cell biology.

FEBS Letters

The [Krakow](#) Special Issue contains 17 Reviews and 2 research articles based on presentations by invited speakers given at the 44th FEBS Congress in July 2019 on topics as diverse as plant biology, evolutionary biology, chromatin, translation, the cytoskeleton, mitochondria and translational research. [The Golgi](#) Special issue features 15 reviews examining the diverse roles of the Golgi in cargo transport, sorting and processing; in lipid metabolism; and as a relay or generator of signaling cascades.

Molecular Oncology

The [Noncoding RNAs: Dark matter of the genome and cancer](#) Special Issue contains 7 reviews that focus on specific issues of these molecules, discovered just 30 years ago, that have practical significance. The Special Issue [Boosting the social impact of innovative cancer research – towards a mission-oriented approach to cancer](#) highlights the essential components needed for a mission-oriented approach to cancer, and how they should be connected to develop a coherent cancer research continuum stimulating science-driven and social innovations that impact society at large across Europe and beyond.

FEBS Open Bio

The [Education Section](#) contains some of this journal's most downloaded articles, including the highly accessed article by David Smith and colleagues [Who goes where? The importance of peer groups on attainment and the student use of the lecture theatre teaching space](#)



FEBS Fellowships

Full details on FEBS Fellowships – stipends for early-career researchers for a stint of research in a host lab in a different country in the FEBS area – can be found in the FEBS website's [Fellowships section](#). Here is a brief update and overview.

FEBS Long-Term Fellowships: Applications from the latest call are now being carefully assessed by members of the FEBS Fellowships Committee before an upcoming selection meeting, and the results are expected to be communicated in December 2019.

Shorter Fellowships: Our popular **Short-Term Fellowships** provide financial support for up to 3 months for research visits to another country in the FEBS area for collaboration, advanced training or

use of techniques not available in the normal place of work. They are aimed at researchers who have obtained their PhD degree within the last 6 years or have at least one published paper as main author. FEBS also offers **Collaborative Developmental Scholarships** of 2 or 3 months for PhD students in certain FEBS countries with HINARI status, and **Summer Fellowships** for promising Master or PhD students.

Applications for Summer Fellowships in 2020 must be submitted by **1st April 2020**. For perspectives on the experience of a FEBS Summer Fellowship from a couple of recent awardees, see the post on the FEBS Network [here](#).

Good luck for your applications!

FEBS Fellowships Office

The FEBS Network

The [FEBS Network](#) platform, launched just two years ago, offers an international online forum for molecular life scientists to share advice, news and insight and for collaborating and connecting – complementing FEBS' existing work with events, its Societies, journals, education and other projects.

The FEBS Network hosts thematic 'channels' providing a range of interesting and useful blog-style content (see examples right), but it is also a community platform for users to present their profiles, interact with content, and connect. If you are new to this initiative, see the site's [Welcome](#) page – and to join the FEBS Network, simply register [here](#)! For new as well as existing users, it is worth mentioning a handy feature added to the site this year: you can now set up alerts to new activity from chosen areas of the site at a frequency that suits, as explained in [this post](#).

In addition to presenting attractive written posts, the FEBS Network site is ideal for video content, and this possibility was exploited in a trial for the 2019 FEBS Congress: a FEBS Network channel hosted 1-minute videos made by poster presenters to introduce their posters, with the videos linked from the Congress app. This new idea was taken up by several adventurous and creative presenters, and three prizes were awarded by the FEBS Network Working Group, as reported [here](#).

We welcome suggestions for interesting content and further development of the FEBS Network: just contact info@febs.org

The FEBS Network Working Group

Explore the FEBS Network channels: a selection of 2019 posts

Early-Career Scientist

[Check the technique \(a short guide to critical reading of scientific papers\)](#)

Brooke Morriswood

[Scientific talks: top tips](#)

The FEBS Journal

Educator

[Integration between university teaching and academic research: Why are we "experimental scientists" in our labs but not so much in our classrooms?](#)

Cristina Murga

[Breaking boundaries between subjects: horizontal and vertical integration](#)

Iván Rodríguez-Martín

Viewpoints

[Horizon Europe and its role in supporting health research](#)

Marieke Meijer

[Women in Science profiles: María A Serrano](#)

María A Serrano

Research

[Gunter Meister: "We are currently experiencing a really exciting period of RNA biology"](#)

FEBS Communications

[Christine Mummery: "That's the best bit – brainstorming about the results of experiments, figuring out what they might mean and planning the next steps."](#)

FEBS Communications

FEBS Advanced Courses

The FEBS Advanced Courses programme funds a range of events across Europe on focused research fields in biochemistry, molecular biology and related disciplines, providing opportunities for learning and training, updates on recent progress, and the chance to develop contacts and discuss work with peers and experts in the same research area. The events are particularly valuable for early-career researchers, who may be eligible for FEBS [Youth Travel Fund](#) grants.

A recent development for FEBS Advanced Courses is the launch of a partnership with *FEBS Letters*, whereby selected Advanced Courses will be highlighted through Special Issues or Virtual Issues in *FEBS Letters*.

The next couple of pages present short reports from three FEBS Advanced Courses in 2019 – to

provide a flavour of these events and illustrate the great efforts of course organizers to create engaging meetings that maximize learning, discussion and networking.

Selection of events by the FEBS Advanced Courses Committee for funding in 2020 is now complete, and you can find the new exciting list on pages 28–29. Course summaries and links to the events' websites will gradually be added on the FEBS website at bit.ly/FEBSAC2020.

Proposals for organization of FEBS-supported courses in 2021 are invited ahead of the deadlines of 1st March and 1st August 2020. Find more details via the [Course Organizers](#) page of the FEBS website.

Beáta G. Vértessy
Chair, FEBS Advanced Courses Committee



FEBS Advanced Lecture Course: Epigenomics, Nuclear Receptors and Disease

Spetses, Greece; 25–30 August 2019

Aims

Our course aimed to provide a unique meeting and training opportunity for young scientists in the broader fields of epigenomics and nuclear receptor signaling, and in particular to cross-fertilize the fields in order to better understand diseases. Epigenomics can be described as the integrated study of components and mechanisms that

regulate chromatin states and gene expression. A particular emphasis was on pathways involving nuclear receptors – today's best-studied signal-responsive transcription factors and significant drug targets – considering environmental and nutritional inputs that trigger epigenome alterations towards disease.

Program features

Our program was designed to actively encourage multiple student activities and interactions with lecturers and peers every day,

thereby stimulating the scientific dialogue and creating a unique friendly and inspiring atmosphere. All attendees stayed in the Spetses Hotel, offering excellent meeting facilities and idyllic surroundings of the picturesque Island of Spetses.

The event started off with an 'elevator-pitch' where all attendees had 60 seconds to introduce themselves! Then all students presented their work at poster sessions, guided in small groups of seven students with two lecturers as moderators. The 18 best abstracts also were selected for



short talks. Prizes were awarded to the best posters and short talks, and a novelty this year was a prize also for the most engaged and attentive student, based on questions asked and on interactions with peers. We had two types of tutorials during the course: 'lecturer tables' where interested students could talk with a specific lecturer over lunch; and pre-assembled groups of a lecturer and six students for a highly appreciated tutorial dinner at different beach restaurants. Workshops were organized in two sessions for science and career advice. Finally, some great round-table sessions discussed how to use social media in science, how to publish in (top) journals and how to find the (best) postdoc lab.

Some research highlights

An impressive IUBMB Keynote Lecture was given by Kathryn J. Moore, a Professor of Cardiology at New York University's Langone Medical Centre, on the role of long non-coding RNAs in regulating cholesterol metabolism and their therapeutic significance for cardiovascular diseases.

Renowned lecturers, including several junior PIs who were once students in our previous Spetses courses, introduced current concepts and methodologies in epigenomics along with key components such as transcription factors, nuclear receptors, coregulators, chromatin modifications, enhancers and non-coding RNAs. This was

followed by in-depth discussions of mechanisms underlying developmental, metabolic and inflammatory diseases, cancer and aging.

A special moment

The grand finale was without doubt the last morning's session with all short talks given by students. To witness how enthusiastically and professionally everyone had prepared and performed, and to see the anxious and then entirely happy faces during the final prize announcements, was a very special and rewarding moment for the organizers, and likely for everyone.

*Eckardt Treuter and Karen Knudsen
Course Organizers*

FEBS Practical Course: Biomolecules in Action II

Hamburg, Germany; 23–28 June 2019

The event in brief

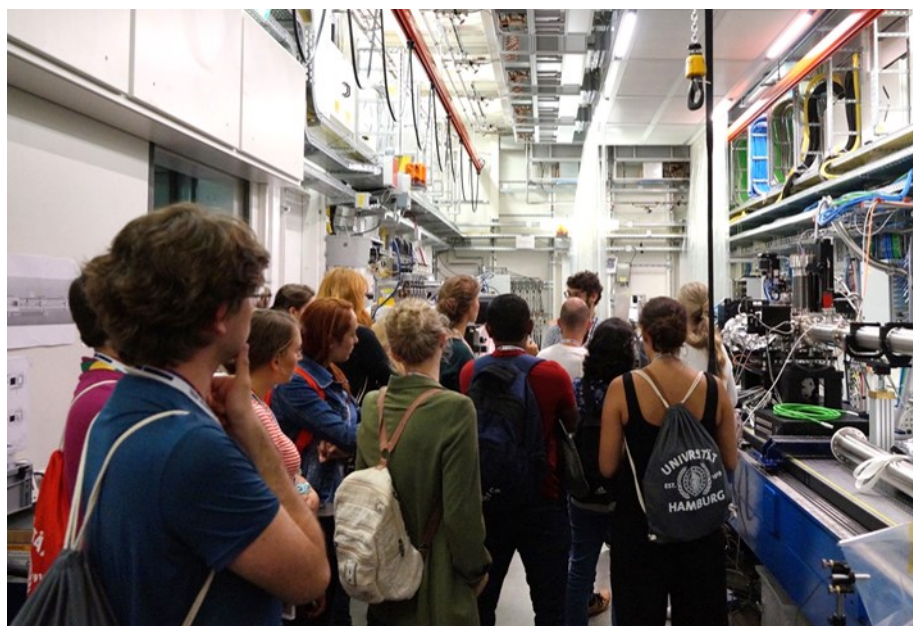
The course brought together 41 students and 38 tutors/lecturers on the DESY Campus in Hamburg for a blend of lectures and practical exercises. It was organized by the Universities of Hamburg and Lübeck with support of DESY, EMBL and EuXFEL, in addition to that of FEBS.

Aims

The aim of the course was to introduce and discuss the latest, most applicable and emerging bioanalytical methods applied in life sciences to characterize and analyse the structure and function of biomolecules, utilizing in particular novel high-intensity and pulsed radiation sources.

Program features

The tight but rich one-week program included four plenaries and 19 state-of-the-art talks in morning sessions, all presented by



world-renowned experts. In addition, there were eight hands-on afternoon practical exercises and 21 poster contributions. It was, according to the students and young scientists, challenging yet rewarding! The SAXS lecture was elected 'tough topic presented most clearly', while lectures covering coherent imaging and time-revolved serial crystallography elicited lots of consultations. We are looking forward to planning Biomolecules in Action III for 2021.

Special moments

Special moments of the event were the outstanding poster session with intense discussions, and the unique possibility to visit an experimental station at the European X-ray Free Electron Laser facility (EuXFEL; see photograph), one of the most brilliant X-ray sources in the world. Lastly, valuable prizes were assigned to honour the many high-quality poster contributions!

*Christian Betzel and Jeroen Mesters
Course Organizers*



FEBS Advanced Lecture Course: Biochemistry of membrane proteins – structure, trafficking, regulation

Budapest, Hungary; 25–30 August 2019

Aims

The course aimed to increase understanding of key areas of membrane biochemistry, with a special emphasis on supporting the active participation of young investigators and students.

Program features

Sixteen lecturers with a high international reputation and from several countries lectured on membrane topics from structural analysis to pharmacology to trafficking. Participants were able to present their work through posters and poster bullet sessions, and 24 were also selected for short talks. Interaction between junior and senior attendees was encouraged by

mixed tables and speakers' corners at meal times, and also by accommodating lecturers and students at the same hotel, near to the Research Centre for Natural Sciences (RCNS, the main venue). Efforts were rewarded with prizes for posters and short talks.

Some research highlights

The opening lecture by Susan G. Amara, head of the NIMH, NIH, Bethesda, USA was a fascinating presentation about the cooperation between G-protein-coupled and neurotransmitter receptors, prompting heated discussion. Another intriguing talk was from Bert Poolman (University of Groningen, The Netherlands) on how to generate 'life' in vitro, by putting together artificial systems solving the complex cellular regulation of metabolism and transport. Satoshi Murakami (Tokyo Institute of Technology, Japan) gave

a special, IUBMB-supported talk on high-resolution structural studies of membrane transporters.

Special moments

Participants enjoyed a river cruise on the Danube in the beautifully illuminated city of Budapest in great weather, as well as dinner in a 'ruin pub', a feature of current Budapest evening life.

It is always a great honour and responsibility to put together an international conference and we felt it especially true as this was the last event under the umbrella of the Hungarian Academy of Sciences in RCNS before reorganization as a direct governmental research centre.

According to the reflections of both the student and the lecturer participants, this was an interesting and pleasant meeting with lots of fruitful discussions and personal interactions.

Balázs Sarkadi, Course Organizer

FEBS ADVANCED COURSES PROGRAMME 2020

FEBS ADVANCED LECTURE COURSES

Molecular targets for anti-aging interventions

Spetses Island, Greece; May 25–30, 2020

Organizer: Aleksandra Mladenovic Djordjevic

Deadline: January 31, 2020

Structural Drug Design 2020: biology, chemistry and computers →

Erice, Italy; May 29 – June 6, 2020

Organizers: Giovanna Scapin, Charlotte Dean, Frank von Delft

Deadline: November 30, 2019

Cellular stress and ADP-ribosylation

Naples, Italy; July 12– 18, 2020

Organizers: Daniela Corda, Michael O. Hottiger

Deadline: April 17, 2020

Protein folding, aggregation and compartmentalization

Spetses Island, Greece; August 21– 28, 2020

Organizers: Bernd Helms, Sheena Radford, Stefan Rüdiger

Deadline: May 1, 2020

Continued on next page



FEBS ADVANCED LECTURE COURSES

(continued)

Redox alterations and cellular responses: from signalling to interventions

Spetses Island, Greece; September 21–27, 2020
Organizers: Aphrodite Vasilaki, Niki Chondrogianni
Deadline: May 15, 2020

4th Danube conference on epigenetics

Budapest, Hungary; October 6–9, 2020
Organizer: Tamás Arányi
Deadline: September 6, 2020

FEBS PRACTICAL COURSES

Hydrodynamic and thermodynamic analysis of biological macromolecules and their interactions: multi-method approaches and global data analyses →

Grenoble, France; January 26–31, 2020
Organizer: Christine Ebel
Deadline: October 30, 2019

State-of-the-art alternative infection models to study molecular mechanisms of human fungal infections →

Jena, Germany; February 16–23, 2020
Organizers: Ilse Jacobsen, Bernhard Hube, Mark Gresnigt
Deadline: October 31, 2019

Advanced methods in macromolecular crystallization IX

Nove Hradý, Czech Republic; May 16–22, 2020
Organizer: Ivana Kuta Smatanova
Deadline: March 20, 2020

Macromolecule MD simulations for interdisciplinary beginners

Nove Hradý, Czech Republic; September 6–12, 2020
Organizers: Babak Minofar, David van der Spoel, Victor Guallar, Sarah Harris
Deadline: July 1, 2020

Microspectroscopy: functional imaging of biological systems →

Wageningen, Netherlands; September 8–17, 2020
Organizer: Jan Willem Borst
Deadline: June 1, 2020

FEBS PRACTICAL AND LECTURE COURSES

Exploring the human proteome with antibodies, transcriptomics and mass spectrometry

Stockholm, Sweden; June 21–26, 2020
Organizers: Cecilia Lindskog, Kalle von Feilitzen, Mathias Uhlen
Deadline: March 1, 2020

Computational approaches to understanding and engineering enzyme catalysis

Oulu, Finland; October 13–16, 2020
Organizers: Rikkert Wierenga, Aleksandra Maršavelski
Deadline: June 30, 2020

FEBS WORKSHOPS

The new biology of polyphosphate in health and disease

Cadiz, Spain; April 21–23, 2020
Organizers: Adolfo Saiardi, Felix Ruiz, Roberto Docampo
Deadline: February 28, 2020

IUBMB Focused Meeting / FEBS Workshop on Crosstalk between nucleus and mitochondria in human disease →

Seville, Spain; May 19–22, 2020
Organizer: Irene Díaz-Moreno
Deadline: February 29, 2020

Nucleotide excision repair and crosslink repair – molecules to mankind

Smolenice, Slovak Republic; May 31 – June 4, 2020
Organizers: Peter McHugh, Miroslav Chovanec, Caroline Kisker, Bennett Van Houten
Deadline for abstract submission: March 1, 2020

Lost in integration – probing biomolecules with electrons, photons, neutrons and magnetic spins

Spetses Island, Greece; September 14–20, 2020
Organizer: Poul Nissen
Deadline: April 29, 2020

FEBS SPECIAL MEETING

ATP-binding cassette (ABC) proteins: from multidrug resistance to genetic disease – ABC2020 →

Innsbruck, Austria; March 1–7, 2020
Organizer: Karl Kuchler
Deadline: December 15, 2019

JOINT FEBS/EMBO LECTURE COURSES

Ion channels and transporters: from molecule to man

Erice, Italy; May 17–23, 2020
Organizer: Stephan Pless, Alessio Accardi, Paolo Tammaro
Deadline: March 1, 2020

Molecular mechanisms of ageing and regeneration: from hydra to humans

Spetses Island, Greece; September 5–13, 2020
Organizers: Christoph Englert, Frank Madeo, Julia von Maltzahn
Deadline: May 1, 2020

Cancer systems biology: promises of artificial intelligence

Paris, France; September 28 – October 3, 2020
Organizer: Inna Kuperstein
Deadline: July 1, 2020

Susan Lindquist school on proteostasis

Rehovot, Israel; December 7–12, 2020
Organizers: Ruth Scherz-Shouval, Christian Münch, Matthias Feige, Rebecca Taylor
Deadline: June 1, 2020



FEBS 2020
THE 45TH FEBS CONGRESS
4-9 JULY 2020
LJUBLJANA SLOVENIA

Molecules of Life: Towards New Horizons

SBD FEBS HDBMB

This 45th FEBS Congress, hosted by the Slovenian Biochemical Society and the Croatian Society of Biochemistry and Molecular Biology, is now open for registration and abstract submission! Here, the Congress Chair, Prof. Janko Kos, introduces the Congress location and programme plans, and offers some tips for first-timers. Check out all the event details on the [Congress website](#)

Why Ljubljana as a Congress host city?

Ljubljana is a vibrant central European city with an indelible touch of the Mediterranean, a city whose name means ‘the beloved’. Ljubljana is also a strong academic centre with the oldest Slovenian university and many research institutions, the Slovenian Academy of Sciences and Arts, and a number of companies developing advanced technologies. As the capital of Slovenia it can be easily accessed from all parts of Europe and is an ideal destination for hosting eminent scientific events, offering appropriate meeting infrastructure and accommodation facilities.

On the other hand, Ljubljana prides itself on being a relaxed, friendly and cosmopolitan city. Due to the city’s compact size, meeting venues, hotels and places of interest are conveniently within walking distance. Ljubljana also offers many historical sites, dating back to Roman and medieval times, a beautiful old town and a picturesque landscape. Apart from green being the official colour of

Ljubljana (and of the Congress), Ljubljana strives hard to implement green environmental policies and was therefore selected European green capital in 2016. Ljubljana is also an ideal starting point for excursions to other parts of Slovenia, such as coastal, alpine or pannonian regions, as well as to neighbouring countries.

The 45th FEBS Congress will in fact be the second time the FEBS Congress has been organized in Ljubljana – the first occasion was in 1987. Several things have changed since this time; however, the hospitality and friendliness of Ljubljana and Slovenia have remained the same.

What led to two FEBS Constituent Societies organizing this Congress?

The 45th FEBS Congress is organized jointly by two FEBS Constituent Societies in neighbouring countries: the Slovenian Biochemical Society (SBD) and the Croatian Society of Biochemistry and Molecular Biology (HDBMB). Our previous collaboration on the organization of three very successful FEBS3+ Meetings (meetings supported with FEBS funding and involving three or more FEBS Constituent Societies) held in Opatija, Croatia (2012), Portorož, Slovenia (2015) and Siofok, Hungary (2018), as well as other jointly organized conferences and events, show strongly the profound cooperation between our two societies. We firmly believe that, building on these



Janko Kos is a professor of Biochemistry at the Faculty of Pharmacy, University of Ljubljana, and served as a Head of the Dept of Biotechnology at the Jozef Stefan Institute from 2005 to 2019. He is President of the Slovenian Biochemical Society and a member of the European Academy of Sciences and Arts. His research group is studying the role of the proteolytic system in development, progression and treatment of cancer and neurodegeneration.

experiences and with our combined efforts, hosting the FEBS Congress together in Ljubljana will be of great impact in promoting molecular life sciences not only for our two countries but throughout Europe and beyond.

Due to our well-established partnership we decided to offer the new idea of organizing the pre-Congress FEBS Young Scientists' Forum (YSF) and the FEBS Congress in different countries: the 20th FEBS YSF will take place in the lovely Mediterranean town of Lovran in Croatia (see page 33), only 135 km from Ljubljana, before participants transfer together to the 45th FEBS Congress in Slovenia.

How has the speaker programme been planned?

The development of the Congress programme and the list of invited plenary and symposia speakers started immediately after the approval of our Congress bid by the FEBS Council two years ago. The International Scientific Committee, consisting of 78 eminent scientists from 22 countries, prepared a proposal for the speakers and sessions, finally confirmed by the Congress Program Board. Under the general slogan for the Congress of 'Molecules of Life: Towards New Horizons' the programme has been prepared on one side to represent the state of the art in 'classical' topics in biochemistry and molecular biology, such as protein turnover, structural biology, molecular genetics, and biotechnology and, on the other, to provide current trends and perspectives in dynamic and emerging fields, such as molecular and precision medicine, systems biology, and regenerative medicine. Additionally, we address some of the crucial problems of modern society, such as environmental pollution, food production, aging and age-related diseases, including cancer and neurodegeneration.

Altogether, 135 invited plenary and symposia lecturers will present their outstanding research findings in 12 plenary and 40 scientific sessions. Several plenary lecturers will be awarded annual medals and prizes. The opening and closing plenary lectures will be delivered by Nobel Prize Laureate Sir Richard Roberts (New England Biolabs, Ipswich, USA) and Emmanuelle Charpentier (Max Planck Institute, Berlin, Germany), respectively.

The speaker programme will be further enriched by FEBS Special Sessions (organized by FEBS committees), Early-Bird Sessions, and many concise talks as a result of selection of work by the



Ljubljana at a glance

- The capital of Slovenia, with 300,000 inhabitants
- A modern and compact city with a rich heritage, combining facilities and efficiency of a metropolis with the relaxed ambience of smaller towns
- A university city with a young and dynamic pulse, fuelled by 50,000 university students
- A harmonious blend of Baroque, Art Nouveau and newer architectural styles
- A city crowned by a medieval castle, protected by a mighty dragon and crossed by the river of seven names
- A city that loves and respects greenery – parks and forest areas spread right into the urban centre

Beyond Ljubljana

- Lake Bled (45 km), a world-renowned paradise and a symbol of Slovenia's beauty
- Postojna cave (50 km) and Škocjanske cave - Unesco heritage (70 km) – magical underground worlds
- Triglav National Park (70 km), with spectacular Alpine mountain ranges and high peaks, beautiful glacial lakes and rivers, and other attractions
- Piran (120 km), the most beautiful place on the Slovenian coast

International Scientific Committee from submitted abstracts – as mentioned further below.

How is the Congress supporting early-career scientists?

Participation in FEBS Congresses offers several benefits to young scientists. It provides an opportunity to be inspired by talks from top scientists from a range of research areas, to meet them in person and ask questions. To stimulate discussions, a ‘Speakers’ corner’ will be organized to get speakers and delegates together during coffee breaks and lunch. Additionally, the Congress gives the chance to meet representatives of important scientific organizations like the European Research Council, publishers and scientific companies, and to attend FEBS Special Sessions on topics such as research and career skills and on education.

The FEBS 2020 Congress offers the opportunity for all participants to present their recent results as poster presentations in different poster sessions, this year with slightly changed guidelines. All posters will be displayed for at least two days giving a lot of time either for presenting your own poster or for visiting others. Furthermore, this time we are offering greater talk opportunities for abstract submitters: as well as selecting abstracts for Short Talk slots in the Symposia, we plan six Speed Talk Sessions that will enable 5 min presentations of work (also presented as posters) to a broader audience. Furthermore, we will also be featuring work from invited early-career scientists from the host countries in Early-Bird Sessions at 08:00. In the evening, two events named ‘Science on the street’ will be organized in the old city with the aim to popularize science and to present something of the FEBS Congress to local society.

To help young scientists attend the Congress, a low registration fee is set for under 35s. Also, many FEBS bursaries will be available to support participation of early-career scientists coming from outside the host countries to the event, and the host societies SBD and HDBMB will also offer bursaries to their young members. Details of support schemes are on the [Congress website](#).

Any tips for FEBS 2020 for those coming to a FEBS Congress for the first time?

First, the speaker programme... Take the opportunity to not only listen to but also meet and talk to famous scientists from all over the world. Also, the Congress will provide a number of sessions

FEBS 2020 Abstract Submission

Main abstract deadline: 5 March 2020

for consideration for oral presentations, FEBS bursaries, and inclusion in the *FEBS Open Bio* Congress supplement

NB: Earlier deadlines apply to YSF applications (15 December 2019) and host society (SBD and HDBMB) bursaries (25 January 2020)

Abstract submission guidelines:

Find all the details on the [Call for Abstracts](#) webpage

Abstract themes:

Molecular Genetics • Protein Turnover • Signals and Membranes • Structural Biology and Imaging • Synthetic Biology and Molecular Biotechnology • From Systems to Precision Medicine • Organisms – Molecules – Interactions • Molecular Medicine • Glycans and Lipids • Molecular Bioscience Education

For the full list of 40 subject areas within these themes, see the [Abstract Topics](#) webpage

from outside your own research area – use those to get new ideas, to broaden your view on life science and enhance your perspectives for your further work and career.

Second, the presentation opportunities... Do not be intimidated by the size of the Congress – take the opportunity to present your work to a broad international audience. Poster sessions are a good place for debate on your results and may give you a range of ideas from different people.

Third, it’s not only about the latest research findings... The Congress will include sessions on improving your career skills – put them in your agenda. In addition, visit the exhibition booths and tell the exhibitors your demands on equipment, reagents and protocols, or enquire about possibilities to obtain scholarships or to publish your results in high-impact journals.

Fourth, expand your network of contacts... Do not miss the social events, organized to facilitate interactions between delegates. Besides coffee and lunch breaks, the Welcome Reception and Congress Excursion & Dinner at Lake Bled will be a good time for new acquaintances and contacts.

And finally... Take some time to explore the city and enjoy a drink at the banks of the Ljubljanica river in the city centre!



Photo credit: Hotel Excelsior, Lovran

The 20th FEBS Young Scientists' Forum



Apply by December 15, 2019

The 20th FEBS Young Scientists' Forum (YSF) will be held from 1st to 4th July 2020 in Lovran, Opatija Riviera, Croatia, in conjunction with the 45th FEBS Congress

(FEBS 2020). The event venue is the Remisens Hotel Excelsior, situated right on the Adriatic Sea.

The FEBS YSF provides an opportunity for about 100 PhD students and young postdocs selected from the FEBS Constituent Societies to meet up in a friendly, informal and international atmosphere to present their work, and discuss and exchange ideas around their research and early-career development. The 20th FEBS YSF will include inspiring lectures from keynote speakers (including Sanja Sever, Cecilia Arraiano and Nina Vardjan), short talks and posters from YSF participants, presentations and practical exercises supporting scientific career development, and a social

programme. All YSF participants will also attend the 45th FEBS Congress in Ljubljana, Slovenia, from July 4th to 9th 2020, transferring there together by bus.

Participation in the FEBS YSF and Congress is supported by a YSF grant from FEBS to the selected YSF participants that covers Congress registration, accommodation for both the YSF and FEBS Congress and most travel expenses. More information, including how to apply, can be found in the 45th FEBS Congress website's [YSF section](#). Note the deadline for applications is **December 15, 2019**.

The scientific programme and the social events at the 20th FEBS YSF will provide you with an excellent opportunity for a rewarding scientific and personal experience, including exchanging ideas with colleagues and establishing new acquaintances. We hope to see you in Lovran!

Maja Katalinić, Chair, YSF 2020 Organizing Committee
Irene Díaz-Moreno, Chair, FEBS Working Group on the Careers of Young Scientists

FEBS3+ Meetings 2020

The [LS² Annual Meeting 2020 'Cells, Molecules & Organisms'](#), in Zurich, Switzerland, 13–14 February 2020, is a collaboration of Life Sciences Switzerland (LS²) with the German Society for Biochemistry and Molecular Biology (GBM) and the Austrian Association of Molecular Life Sciences and Biotechnology (ÖGMBT). Explore program details, including plenary speakers, symposia topics, and a special session 'Pls of Tomorrow', on the meeting website. The event is preceded by a [satellite meeting for young scientists](#) on 12 February 2020. Abstract deadline: **8 December 2019**. Registration deadline: **12 January 2020**.

The Harden Conference '**Machines on Genes**' in Alicante, Spain, 3–7 May 2020, is organized by The Biochemical Society in the UK in collaboration with the Netherlands Society for Biochemistry and Molecular Biology (NVBMB) and the Spanish Society for Biochemistry and Molecular Biology (SEBBM). For preliminary information, click [here](#).

