



# FEBS News

FEDERATION OF EUROPEAN BIOCHEMICAL SOCIETIES

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**THE 44<sup>th</sup>  
FEBS  
CONGRESS**  
6-11 JULY 2019  
Krakow, Poland

**FROM MOLECULES  
TO LIVING SYSTEMS**

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## Inside this issue:

FEBS Letters  
50th anniversary

Page 4

FEBS 2018 Congress  
round-up

Page 6

FEBS Education

Page 15

44th FEBS Congress

Page 27

FEBS Advanced  
Courses 2019

Page 30

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**Contents:**

<b>Preface</b>	<b>3</b>
<b>FEBS Letters 50th anniversary</b>	<b>4</b>
Article collections, a special meeting and a cover contest as <i>FEBS Letters</i> turns 50	
<b>The 2018 FEBS Congress Round-Up</b>	<b>6</b>
Enjoy a look back at this summer's big gathering in Prague, including award recipients	
<b>FEBS Science and Society</b>	<b>14</b>
From topics for debate to policies to consider	
<b>FEBS Education</b>	<b>15</b>
A round up of events on teaching and learning in the molecular life sciences	
<b>FEBS Network</b>	<b>18</b>
Have you joined yet? Here's an update on FEBS' newest initiative	
<b>FEBS Fellowships</b>	<b>19</b>
A brief overview of FEBS Fellowship opportunities	
<b>FEBS Community</b>	<b>20</b>
Constituent Society FEBS3+ meetings, FEBS National Lectures, and FEBS Council elections	
<b>FEBS Congress 2019</b>	<b>27</b>
Registration and abstract submission are open – find out what's in store!	
<b>FEBS Advanced Courses 2019</b>	<b>30</b>
Browse the list of next year's focused-topic courses and meetings across Europe	



**Cover:** Krakow awaits! Find out about the 2019 FEBS Congress and FEBS Young Scientists' Forum on pages 27–30.



**About FEBS News:** This issue as well as all former issues of *FEBS News* are available online at [www.febs.org](http://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](mailto: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):**  
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Dear colleagues,

Another busy year for FEBS is nearly behind us, and many of our activities are highlighted in this issue of *FEBS News*.

We celebrated 50 years of *FEBS Letters* (pages 4–5). This was especially significant for me: the first issue of *FEBS Letters* was out at the 5th FEBS Meeting in Prague in 1968, my first international conference as a PhD student, and in fact my first paper was published in the issue. The journal has provided not only a timely and effective channel for research publications during the rapid developments in biochemistry and molecular biology over the past 50 years, but also income for FEBS that has been vital for its Fellowships, scientific meetings and other work for the research community.

Support for scientific meetings continues to be a major part of FEBS activities, as you can see from the range of events featured in this issue. The 43rd FEBS Congress in Prague (pages 6–13) attracted the highest number of Congress participants of recent years to its broad programme, and its pre-Congress Young Scientists' Forum (YSF) received much praise. In addition, the FEBS Advanced Courses this year have provided many smaller focused events with an educational emphasis on fundamental biochemistry topics as well as more applied fields. Participation of early-career

researchers in all these events has been supported by a large number of FEBS travel awards. I would like also to briefly highlight the FEBS3+ Meetings programme (pages 20–22), which supports joint meetings of three or more FEBS Constituent Societies. Here we are seeing some interesting new groupings and collaborative support emerge. We thank the organizers of all these events in receipt of FEBS funds for their enthusiasm and efforts to deliver meetings that provide excellent opportunities for attendees and contribute to advancement of the molecular life sciences.

FEBS is a scientist-led organization with many senior scientists devoting considerable time pro bono on committees and via active roles in projects to further its activities. At the turn of the year we say thanks and goodbye to several committee members who have reached the end of their terms, and welcome new scientists elected at the FEBS Council meeting in Prague (pages 27–29). I would like to say a special thank you to Gül Güner Akdoğan, who leaves the FEBS Education Committee Chair position after many years. Under her leadership and with the efforts of committee members (and with a modest budget), FEBS' work in the area of teaching and learning in the molecular life sciences (e.g. see pages 15–17) has been creative and productive, looking on the one hand at the latest

ideas in educational approaches and the other at supporting scientists in some of the newer FEBS member countries.

As we turn towards 2019, beyond FEBS' usual striving to deliver valuable services to the scientific community, there are extra areas to watch and challenges ahead, not least with recent developments in the scientific publishing landscape and Brexit. However, there is much to look forward to as well. The 2019 FEBS Congress in the beautiful historical and university city of Krakow (pages 27–30) will provide one of the rarer opportunities these days to experience and celebrate the excitement of work across the full spectrum of molecular and cellular life science research, and I hope you will join us there. The full 2019 FEBS Advanced Courses programme is also just announced and provides a rich range of scientific meetings (pages 30–31). In addition, the FEBS Network (pages 18–19), launched just over a year ago, is developing into a useful tool for all of us, and I encourage you to join it if you have not already done so.

*Václav Pačes, FEBS Secretary General*



## Key FEBS deadlines in 2019

### For individuals

#### 2019 FEBS Congress

19th FEBS Young Scientists' Forum:  
20 January 2019

44th FEBS Congress abstracts:  
7 March 2019

44th FEBS Congress bursaries:  
7 March 2019

#### 2019 FEBS Advanced Courses

December 2018 – July 2019  
(see pages 30–31)

#### 2020 Advanced Courses proposals

1 March and 1 August 2019

#### FEBS Fellowships

Summer Fellowships:  
1 April 2019

Long-Term Fellowships:  
1 October 2019

Short-Term Fellowships and Collaborative Developmental Scholarships:  
Can be sent throughout 2019

### For FEBS Constituent Societies

#### 2019 FEBS National Lecturers

Can be sent now and throughout 2019

#### 2020 FEBS3+ meeting proposals

1 June 2019

#### 2020 FEBS Committee nominations

March 2019\*

#### 2022 FEBS Congress host Society bid

March 2019\*

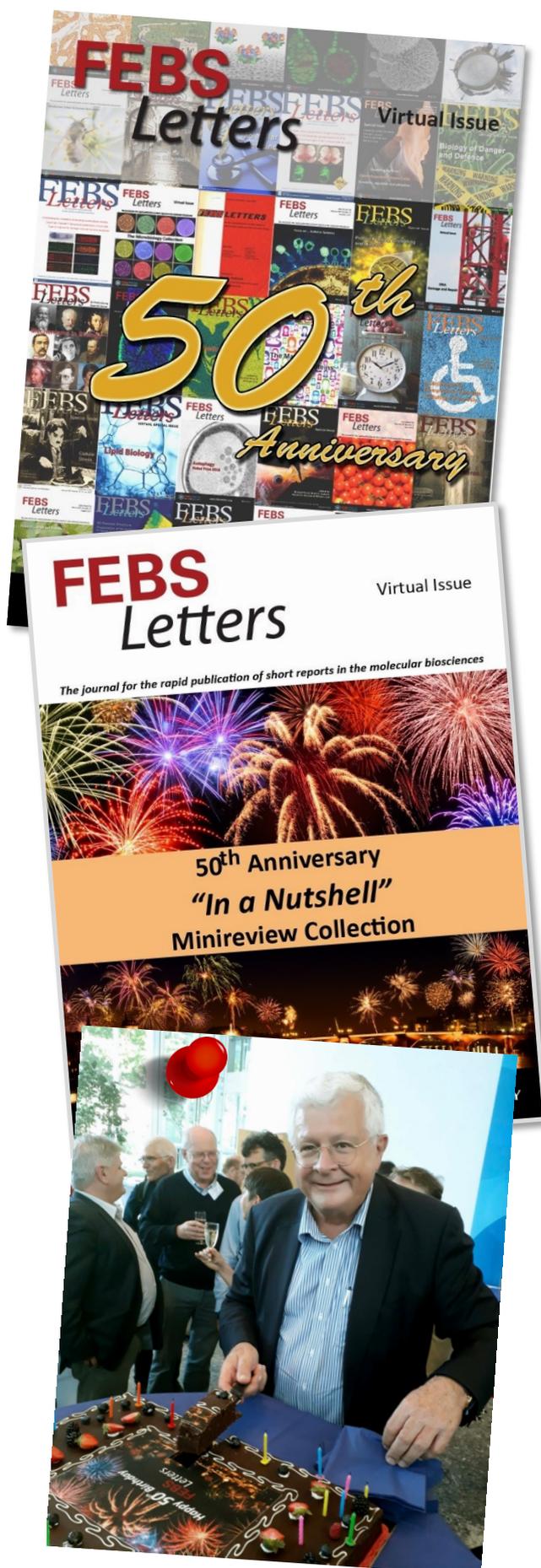
\*Following calls from FEBS in January 2019.

## Celebrating 50 years of science publishing with *FEBS Letters*

As 2018 nears its end, at *FEBS Letters* we are getting ready to draw the curtains on a great year of celebrations for our journal's 50th anniversary. Fifty years have historical significance in a field as young as the molecular biosciences. Since its inception, *FEBS Letters* has collected 50 years' worth of sound science and new ideas, while fostering successive advances in publishing. This is what we chose to celebrate this year, and we did it with style!

We organized an exciting two-day symposium, entitled *50 Years of Molecular Life Sciences with FEBS Letters*, which took place from 24th to 25th May in beautiful Heidelberg, hometown to the journal, looking glorious in the warm spring sunshine. The event featured 26 invited speakers, chosen among the authors of groundbreaking articles published in *FEBS Letters* (find the gems in the historical [Virtual Issue](#) put together for the occasion) and other prominent scientists who contributed to the growth and development of the journal. Over 250 delegates, among whom were FEBS Publications Committee members, *FEBS Letters* Editorial Board members and a large number of students from all over Europe, gathered at the event. The symposium was offered by the journal without registration fees with the intention to bring together students and top scientists in an informal setting, with the generous sponsorship of FEBS, Wiley, the German Cancer Research Center (DKFZ) and the University of Heidelberg.

The scope of the symposium was intentionally broad to reflect the scope of the journal. Every talk equalled the quality of plenary lectures at large conferences. We will just mention a few highlights here. After a warm welcome from the Chair of the FEBS Publications Committee, László Fésüs, and a brief history of *FEBS Letters* presented by the Managing Editor, Felix Wieland, the meeting opened with a fascinating talk on autophagy by Noboru Mizushima, who made a special mention of Yoshinori Ohsumi's groundbreaking work published in *FEBS Letters* in 1993, which, together with other landmark papers, earned him the 2016 Nobel Prize for Physiology or Medicine. Mizushima



Pictured to the right: *FEBS Letters* historical Virtual Issue of highly cited articles; *FEBS Letters* 'In a Nutshell' mini-reviews from symposium speakers; *FEBS Letters* Managing Editor Felix Wieland at the end of symposium party.



then discussed his own latest important findings in the field. Joan Massagué captured the audience with his talk about the intricate signaling of TGF $\beta$  in development, immunity and tumor suppression, while Rob Knight discussed his striking findings on microbial diversity in the gut, and how microbial composition directly affects our health. On the second day, Catherine Robin took us into the depths of hematopoietic stem cell specification, and Gregory Petsko raised our hopes towards a new gene therapy against amyotrophic lateral sclerosis. The closing lecture was given by Nobel Laureate James Rothman, who enthralled the audience with his groundbreaking hypothesis of buttressed rings for neurotransmitter release.

A special mention needs to be made of the Women in Science session held by Laura Norton, from the Babraham Institute, who reported on the barriers and discriminations that have impeded women's progress in science and who provided helpful practical examples on how gender equality can be achieved in academic science. You can find an [article](#) by Laura Norton on this topic in our Scientists' Forum.

While space restriction prevents us from mentioning all of the impressive talks held at the

symposium, we are happy to share the inspiring content of these lectures with all those who are interested. You can find videos of many of the symposium talks on a dedicated [channel](#) of the FEBS Network. Make sure you register for free to gain access to them.

For those of you who prefer to read rather than watch a video, we have collected a number of "[In a Nutshell](#)" Reviews by some of our symposium speakers, which we feel are an excellent introduction to the various fields addressed by the speakers, and may be valuable as teaching material.

The celebrations will be officially closed in December, when the *FEBS Letters* Editorial Office will select the three best [cover contest](#) covers published in *FEBS Letters* over this year and will award a prize to their designers.

Through these activities we have tried to open up the journal to the wider scientific community, to interact with our readers and authors and to share our enthusiasm with everyone. We hope you have enjoyed or will enjoy these opportunities.

Happy 50th anniversary *FEBS Letters*!

Daniela Ruffell  
Editorial Manager, *FEBS Letters*



A few of the speakers and others at the *FEBS Letters* 50th Anniversary Symposium, May 2018: (back row, from left) Felix Wieland (Managing Editor, *FEBS Letters*), Catherine Robin, Roland Beckmann, James Rothman, László Fesus (FEBS Publications Committee Chair) and Zrinka Kovarik (FEBS Advanced Courses representative); (front row, from left) Renee Tsolis, Noboru Mizushima and his spouse, Manajit Hayer-Hartl, Hans Westerhoff, László Nagy and Frances Edwards.

## The 43rd FEBS Congress Prague, 2018

The 43rd FEBS Congress was held from 7th to 12th July 2018 in the newly refurbished Prague Congress Centre, Prague. It was organized under the auspices of the Czech Society for Biochemistry and Molecular Biology, with the local organizing committee consisting of 17 scientists from various cities in the Czech Republic, headed by Tomáš Zima from Charles University, Prague.

The central symbol of the Congress was the mathematical sign for infinity and the motto 'Biochemistry forever'. The Congress offered participants a rich programme of plenary lectures, symposia sessions, workshops, poster presentations and speed talks, as well as social and cultural evening activities. The event attracted over 1900 delegates from 67 countries, bringing together top experts from around the world, as well as many students. The top ten countries for attendance were Russia, Czech Republic, Turkey, South Korea, Poland, United Kingdom, Germany, Spain, France and USA.

The scientific programme was arranged over full days to cover all current topics in the field of biochemistry and related areas, and showing modern trends and developments. The 14 plenary lectures of the event were a highlight for many. After the opening ceremony, Prof. James E. Rothman (USA) opened the Congress with an introductory lecture. The other plenary lectures were given by Profs Albert J.R. Heck, Agnieszka Chacinska, Jan Konvalinka, Frauke Melchior, Eva Kondorosi, Martin Jinek, Alicia Kowaltowski, Susan Gasser, Robert Haselkorn, Miroslav Bárta, Pavel Tomancak, David Stuart and Stefan Oehlers.





A selection of plenary lecturers in action at the 43rd FEBS Congress. (top row, from left) James Rothman ('Recent studies of the mechanism of neurotransmitter release'), Albert J.R. Heck ('Higher-order organization of the proteome explored by mass spectrometry'), Agnieszka Chacinska ('Management of mitochondrial proteins: sort or destroy'); (middle row, from left) Jan Konvalinka ('Enzyme inhibitors as tools for molecular recognition, imaging and specific drug delivery'), Eva Kondorosi ('From symbiosis to novel antibiotics'), Martin Jinek ('CRISPR-Cas genome editors: structures, mechanisms and applications'); (bottom row, from left) Alicia Kowaltowski ('Diet, mitochondria and energy metabolism'), Susan Gasser ('Chromatin dynamics and repair efficiency: DNA repair in space and time') and Pavel Tomancak ('Patterns of gene expression in animal development').



In the symposia sessions on focused research areas, 235 invited speakers presented their work in 44 sessions covering topics from host–pathogen interactions to genome dynamics and stability. Moreover, 48 short talks, 39 speed talks and 1346 posters were also part of the scientific programme, as well as 6 FEBS Special Sessions or Workshops on Education, Gender Issues, Research and Career Skills, and Science and Society. Posters in each Congress topic were displayed throughout the Congress programme. The Congress Exhibition and Catering area, which became the natural heart of the event, attracted 12 companies presenting their state-of-the-art products and services.

The Congress delegates had a chance to enjoy not only a rich scientific programme, but also social events. The welcome reception was hosted in the Congress exhibition area and the guests had an opportunity to taste both local and international cuisine and drinks, including the famous Pilsner Urquell beer. The Congress Dinner took place in the beautiful premises of Plzenska restaurant, located in the underground floor of the Municipal House. With traditional Czech cuisine and excellent Pilsner beer, it was an ideal venue for an evening gathering. The charms of Prague were also easily accessible to delegates in their free time: the Congress venue was located just meters from the historical site of Vyšehrad (UNESCO World

Heritage Site), and delegates received a free travel pass to assist exploration of the city centre.

Prior to the Congress, the FEBS Young Scientists' Forum was held in the Park Inn Hotel Prague, close to the embankment of Vltava river. This meeting presented a wonderful opportunity for over 100 young scientists from 28 countries to meet, share and discuss (see the report on pages 11–12).

We can say without hesitancy that the 43rd FEBS Congress was a great success, reflected by the excellent scientific programme, high Congress attendance and strong appreciation in the FEBS Congress feedback survey. The imaginary FEBS Congress baton has been handed over to Krakow, which will host the event in 2019. We are confident that this Congress will be at least as successful as the one in Prague.

*Tomáš Zima*  
*Chair, 43rd FEBS Congress Organizing Committee*  
*Daniel Svarc, C-IN*

### FEBS Congress Survey

Thanks very much to all delegates who completed the 2018 FEBS Congress feedback survey, which is very helpful for future event plans. From the prize draw for those who completed the survey, the free registration to the 44th FEBS Congress in Krakow goes to Karolina Mitusińska, Gliwice, Poland.

## FEBS Medal Winners (Prague, 2018)

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 were honoured at the FEBS Congress 2018 in Prague, where they each delivered a plenary lecture.



### Sir Hans Krebs medal: Albert J.R. Heck

**Albert J.R. Heck** is professor at the Science Faculty of Utrecht University, The Netherlands. Heck's group focuses on the development and applications of advanced mass spectrometry based technologies and instruments for proteomics and structural biology. His contributions to proteomics technologies include the efficient enrichment of phosphopeptides, novel proteases for digestions and novel fragmentation methods for protein and peptide sequencing. Heck's proteomics research focuses for a large part on cancer, stem cells and immunology. Complementary to the proteomics efforts, the group of Albert Heck is also known for its specific expertise in the mass spectrometric analysis of intact proteins and protein complexes. He has therefore developed dedicated instruments, with most recently a new modified Orbitrap with

extended mass range that can be used for native mass spectrometry and top-down (glyco)proteomics. His research in mass spectrometry based structural biology focuses on virus assembly, therapeutic antibodies, transcription complexes, circadian rhythms and CRISPR-related protein assemblies. Heck has been the recipient of numerous awards, including the Descartes Huygens Award, HUPO Proteomics Discovery Award, EuPA Pioneer in Proteomics Award, the Franklin and Field Award of the American Chemical Society, and the Spinoza Award of the Netherlands Organization for Scientific Research.

Congress plenary lecture: *Higher-order organization of the proteome explored by mass spectrometry*

Photo: Presentation of the medal to Albert Heck (right) by Frank Michelangeli (FEBS Treasurer)



### Theodor Bücher medal: Agnieszka Chacinska

**Agnieszka Chacinska** graduated in Biology, University of Warsaw, and in 2000 received a doctoral degree in biochemistry at the Institute of Biochemistry and Biophysics of the Polish Academy of Sciences. From 2001 to 2009 she worked at the University of Freiburg, as a postdoc and head of a research group. Since 2009 she has been based at the International Institute of Molecular and Cell Biology in Warsaw, Poland, where she was the group leader of the Laboratory of Mitochondrial Biogenesis. In 2014 she was awarded the title of full professor by the President of Republic of Poland. In 2017 Agnieszka Chacinska and her group moved to the Centre of New Technologies, University of Warsaw, where she is a Director. Agnieszka Chacinska is the recipient of multiple awards and prestigious grants, including the Welcome Grant of the Foundation for Polish Science. She is a member

of EMBO and the Polish Academy of Sciences. Agnieszka Chacinska is interested in biogenesis, transport and degradation of mitochondrial proteins and their failure resulting in pathologies. Her research explores links between transport of mitochondrial proteins and cellular protein homeostasis that involve crosstalk between various cellular compartments and processes such as mitochondrial import, cellular protein degradation and protein synthesis.

Congress plenary lecture: *Management of mitochondrial proteins: sort or destroy*

Photo: Presentation of the medal to Agnieszka Chacinska (left) by László Fésüs (FEBS Publications Committee Chair)



### Datta medal: Jan Konvalinka

**Jan Konvalinka** is associated professor at the Department of Biochemistry of the Faculty of Natural Sciences of the Charles University in Prague. He also leads a research group at the Institute of Organic Chemistry and Biochemistry of the Academy of Science of the Czech Republic. In his research he studies proteolytic enzymes as key regulators of physiological processes. These enzymes play a crucial role not only in food digestion but also in tightly controlled processes like apoptosis and the cell cycle. Konvalinka's group analyses the role of proteases in viral replication and in cancer development. Together with his co-workers he developed some of the first substrates and inhibitors of HIV protease, contributed to the understanding of the substrate specificity of retroviral proteases, and provided structural and biochemical characterization of

proteolytic enzymes implicated in neurotoxicity and prostate cancer development. Recently, his group introduced a set of interesting chemical biology tools for imaging, isolation and quantification of biomolecules. Konvalinka has been a recipient of a number of international scholarships and grants including Howard Hughes Medical Institutes International Research Scholar and enjoys extensive support from industry.

Congress plenary lecture: *Enzyme inhibitors as tools for molecular recognition, imaging and specific drug delivery*  
Photo: Presentation of the medal to Jan Konvalinka (right) by Václav Pačes (FEBS Secretary General)

## FEBS | EMBO Women in Science Award 2018

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 2018 award was presented at the FEBS Congress 2018 in Prague to Frauke Melchior (Heidelberg University, Germany).

**Frauke Melchior** was awarded the 2018 FEBS | EMBO Women in Science Award in recognition of her scientific discoveries in the small ubiquitin-like modifier (SUMO) field and wider contributions to the research community. Frauke Melchior earned her PhD in chemistry from the University of Marburg, Germany. Following postdoctoral work at the Max Planck Institute for Biophysical Chemistry in Göttingen, Germany, Melchior moved to the Scripps Research Institute in La Jolla, USA, for a second postdoctoral fellowship. It was there that she discovered the protein SUMO, which has informed her research ever since. On her return to Germany, Melchior spent six years as research group leader at the Max Planck Institute for Biochemistry in Martinsried, and then became Professor of Biochemistry in Göttingen in 2004. In 2008 she accepted a professorship for Molecular Biology at ZMBH at Heidelberg University. In 2005 she received the Binder Award of the German Society for Cell Biology. She was elected an EMBO Member in 2007 and a member of the German National Academy of Sciences, Leopoldina, in 2014. Melchior's current research continues to look at post-translational modification of proteins with small ubiquitin-related proteins of the SUMO family. Specifically, her lab investigates the enzymatic machinery and basic principles required for SUMOylation, the links between SUMO and transport of proteins into and out of the nucleus, connections with other ubiquitin-conjugating pathways, and the regulation of SUMOylation through redox signalling.



Congress plenary lecture: *The ins and outs of SUMOylation*

## FEBS Anniversary Prize (Prague, 2018)

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. The recipient from the FEBS Congress 2018 was Kathrin Lang (Munich, Germany).

**Kathrin Lang** is a Rudolf Mössbauer Tenure Track Professor at the Faculty for Chemistry at the Technical University Munich and the Institute for Advanced Study TU Munich, Germany. Her lab for 'Synthetic Biochemistry' conducts research in the interdisciplinary area between chemistry and biology and combines organic chemical, biochemical, biophysical and cell biological techniques to develop new tools for studying and controlling biological systems. Her lab is especially active in enabling and advancing approaches to expand the genetic code and in developing new in vivo chemistries – a combination that is ideally suited to address unmet challenges in studying and manipulating biological processes with a new level of spatial, temporal and molecular precision.



Congress talk: *Expanding the genetic code – chemistry in living systems*

## FEBS Press Award Lectures (Prague, 2018)

The FEBS Press awards recognize outstanding recent papers published in *FEBS Letters* and *The FEBS Journal*, with the recipients delivering a plenary lecture at the FEBS Congress. The *FEBS Letters* Award 2018 was awarded to David Stuart (Oxford, UK) and *The FEBS Journal* Richard Perham Prize 2018 to Stefan Oehlers (Sydney, Australia). For more details, see the FEBS Press Congress activities on pages 12–13.



## The 18th FEBS Young Scientists' Forum

The FEBS Young Scientists' Forum (YSF) is a meeting aiming to promote networking among PhD students and young postdoctoral researchers, and it takes place just before the annual FEBS Congress. The 18th FEBS YSF was held in Prague from July 4th to 7th, 2018. The venue was the Park Inn Hotel, located in the broader city centre of Prague within walking distance of the Prague Congress Centre, where the 43rd FEBS Congress followed.

The 18th YSF local organizing committee of young scientists consisted of Vlastimil Kulda (Chair), Jana Balounova, Jiri Cerny, Lenka Malinovska, Katarina Psenakova and Zuzana Kadlecikova. The organization was overseen by Irene Díaz-Moreno, Chair of the FEBS Working Group on the Careers of Young Scientists. All the team members worked hard for more than a year to make this event happen successfully.

The 18th YSF gathered together ca. 100 young scientists representing 28 countries of Europe and neighbouring regions. The participants were chosen from 280 applications. FEBS provided financial support for the organization of the YSF and for the attendance costs of participants at the YSF and 43rd FEBS Congress. Additionally, two participants were directly sponsored by the UK Biochemical Society.

The event began with welcome addresses from Václav Pačes, the FEBS Secretary General, and Libor Grubhoffer, the Chair of the Czech Society for Biochemistry and Molecular Biology. In the

opening lecture, entitled 'Translation control: the third genetic code', Eric Westhof (Strasbourg, FR) showed the important role of modifications in tRNAs as an additional layer of the genetic code.

The scientific programme also included four keynote lectures where outstanding speakers inspired us with their research: Pavlína Řezáčová (Prague, CZ) talked about structure-assisted design of enzyme inhibitors; Neta Regev-Rudzki (Rehovot, IL) shed light on malaria parasite networking; Arkaitz Carracedo (Bilbao, ES) pointed out the role of metabolism in cancer; and Hana Cahová (Prague, CZ) described strategies for discovering new chemical modifications of RNA. During the closing lecture, C.S. Raman (Baltimore, USA) addressed membrane-integral respiratory metalloprotein complexes with insights into evolutionary mechanisms.

Participants at the 18th YSF also presented their own research. There were three symposia each comprising four talks from selected participants, and a challenging session of 1-min poster talks in which all YSF participants advertised the main content of their work. Posters were displayed throughout the time of the conference, and we were impressed by their quality.

An important part of the FEBS YSF programme was the 'Career Skills Roundtable Session'. This time, contributions were from Israel Pecht (FEBS activities), Irene Díaz-Moreno (YSF), Andreas Hartig



(left) 1-min poster talks; (right) registration desk.

(FEBS Network and Fellowships), Angelica Valente (Marie Skłodowska-Curie actions), Mary Purton (Scientific manuscript writing), C.S. Raman (Responsible conduct of research) and Keith Elliott (CV production and applying for postdoctoral positions).

The scientific programme was accompanied by social events to promote interactions and experience Prague. Due to unexpected bad weather, the planned picnic at Vysehrad area was rearranged into an enjoyable ‘indoor picnic’ with a social bingo game. The following evening we had a short Prague guided walking tour along the Vltava river, at the end crossing the Charles Bridge to reach Prague’s Lesser Quarter and having a dinner there. Lastly, in the time between the official end of YSF and the beginning of the FEBS Congress there was a boat trip on the Vltava river.

It was a pleasure to witness the enthusiasm and networking of so many young people during the event. The great success of the 18th YSF was reflected from the answers to the on-line survey: 95% of participants answered that the overall impression was excellent, and many expressed their gratitude for this opportunity focused on young scientists.

Last but not least it is worth mentioning that as a new experience for the YSF, a closed ‘room’ on the FEBS Network was created to include important and useful information to be shared among YSF participants. Let us conclude that it is a powerful platform to support such events.

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

*Vlastimil Kulda  
Chair, 18th YSF Organizing Committee*

## FEBS Press journals at the 43rd FEBS Congress

This year’s FEBS Congress in Prague was a special one for the FEBS Press journals, as *FEBS Letters*, celebrating its 50th anniversary, was launched at the 5th FEBS Meeting in the same city. The staff and editors of the FEBS Press journals were involved in two scheduled Congress sessions and also awarded poster prizes.

The Plenary FEBS Press Award Lectures took place on the first full day of the Congress. The *FEBS Letters* Award for 2018 was presented by Felix Wieland, Managing Editor of *FEBS Letters*, to David Stuart of the University of Oxford, UK for his paper [Structure of glycosylated NPC1 luminal domain C reveals insights into NPC2 and Ebola virus interactions](#). David Stuart’s lecture focused on his work on the structure of Ebola virus receptor,

Ebola virus glycoprotein and potential therapies. The paper published in *FEBS Letters* appeared at the height of the West African outbreak of Ebola virus and its fast publication contributed to efforts to develop potential therapies for this deadly infection. Seamus Martin, Editor-in-Chief, presented *The FEBS Journal* Richard Perham Prize 2018 to Stefan Oehlers, for his outstanding paper [A whole animal chemical screen approach to identify modifiers of intestinal neutrophilic inflammation](#). This work was performed while he was a PhD student at The University of Auckland, New Zealand. Stefan Oehlers then talked about his work using zebrafish in vivo models to screen for novel therapeutic small molecules that might lead to new potential therapeutic strategies to treat inflammatory bowel disease.



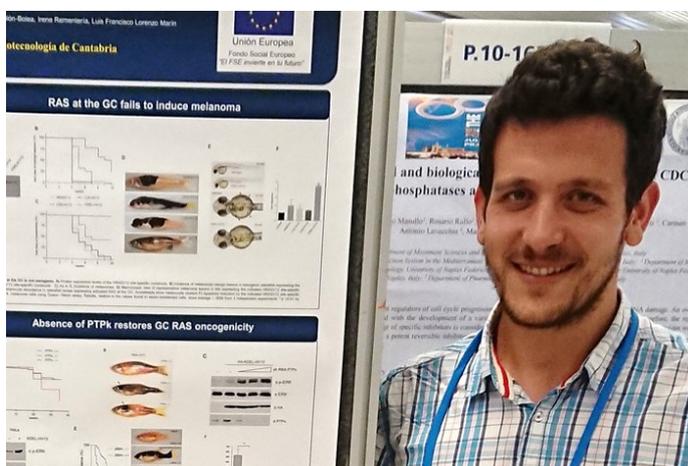
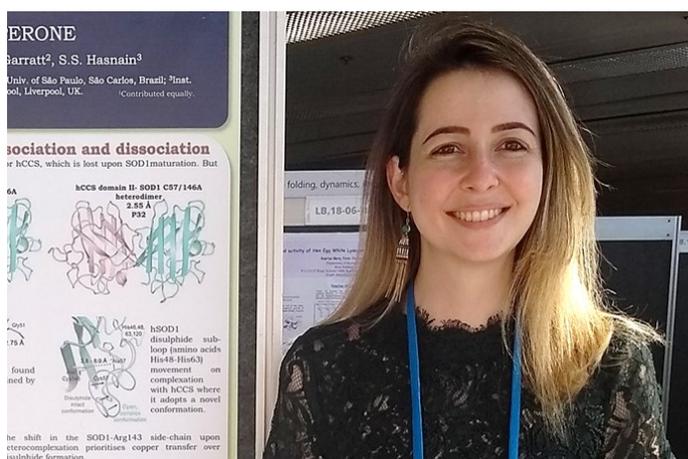
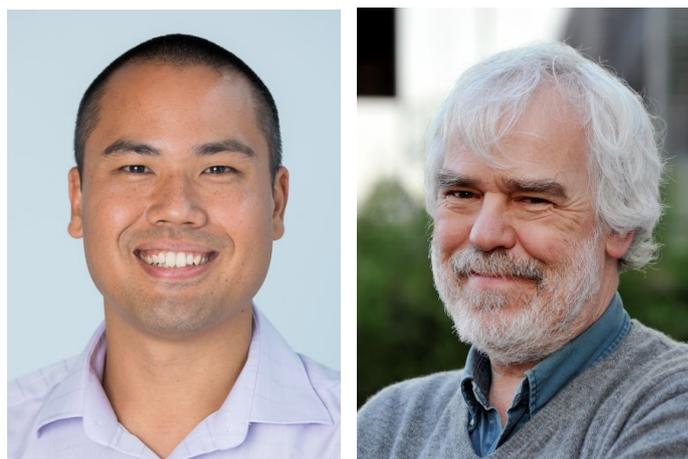
The FEBS Special Session on Research and Career Skills focused on how to improve the value and impact of your scientific papers. Seamus Martin spoke about how to choose a strong research question that will produce an excellent paper, giving plenty of tips about how to organize your research to ensure you have a good paper to publish at the end of the project. With open access publishing gaining ground, László Fésüs, Chair of the FEBS Publications Committee, gave a talk about trends and ethical issues and the need to check the credentials of the journal to which you submit your work. Finally, Violeta Ribarska, from the publisher Wiley, gave some useful tips on how to increase the reach and impact of your published paper, making use of social media and networks.

The poster sessions were also a major focus for the FEBS Press journals. All poster abstracts that had been accepted to the Congress were screened by journal staff, who drew up a shortlist of posters for each day of the Congress. A jury of journal editors then viewed the shortlisted posters and any others that attracted their attention on the day. Posters were scored for scientific content, design and content, and the skill of the presenter in explaining their work. Daily poster prizes were announced in the afternoon coffee break and, from these, four final journal poster prizes were selected, each receiving an award of €200 presented at the closing session of the Congress.

Cyril Dyan (France) was awarded *The FEBS Journal* poster prize for his poster 'Cracking the code of N-myristoylation at structural and genome scales'. The *FEBS Letters* prize went to Szabolcs Takats (Hungary) for his poster 'Rab3GAP-Rab18 module: a novel regulator of autolysosome maturation'. Vincenzo Cappitelli (Spain) was the recipient of the *Molecular Oncology* prize for his poster 'RAS activation at the Golgi Complex prevents tumourigenesis by inducing apoptosis via PTPK-mediated inhibition of ERK activation'. The *FEBS Open Bio* prize went to Fernanda Sala (Brazil) for her poster 'Structural studies of human superoxide dismutase (SOD1) with its metallochaperone'. Congratulations to all the winners.

To bring some fun to the poster sessions and encourage more delegates to view the posters, the journals also ran a 'poster bingo' competition. Bingo cards were available at the FEBS stand, and completed cards were entered into a draw each day for several small prizes.

Mary Purton  
Executive Editor, *FEBS Open Bio*



(top row) FEBS Press Award lecturers Stefan Oehlers and David Stuart; (others) FEBS Press poster prizewinners Fernanda Sala, Cyril Dyan and Vincenzo Cappitelli.

## FEBS Science and Society

The FEBS Science and Society Committee has a wide-ranging remit including engagement with molecular life science topics with wider societal, ethical or legal implications, as well as contributions to shaping European science policy. Here, we look at these goals in turn through recent past and current activities.

### Debate, discussion, dissemination...

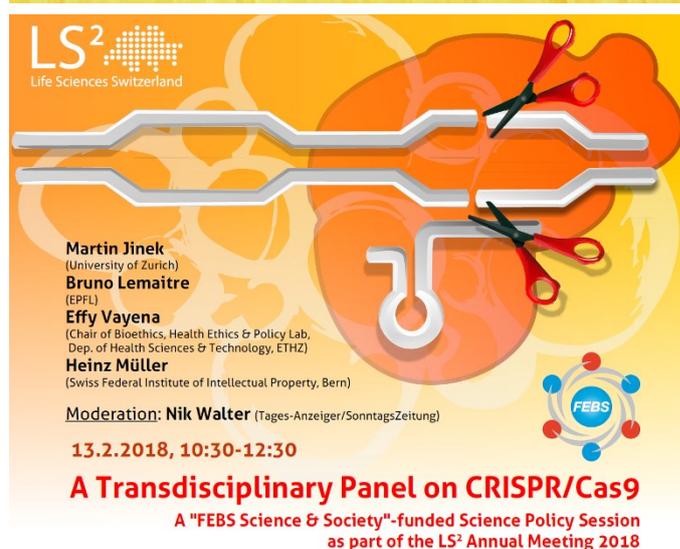
With the aim of increasing understanding across Europe of molecular life science research areas where there has been rapid recent progress and wider interest or debate from society, the Committee has long organized a Special Session at the annual FEBS Congress on a topical issue. Over the past year it has also begun a new approach: to financially support selected FEBS Constituent Society events or activities that extend the reach and discussion on the science and society Congress topic. The start of this new 'outreach' saw FEBS support two events explaining and discussing CRISPR/Cas9 research, hopes and fears (following on from the choice of this topic as the focus at the FEBS Science and Society Special Session at the 2017 FEBS Congress).

First, through a collaboration with the Spanish Society for Biochemistry and Molecular Biology (SEBBM), FEBS supported a debate on 'The role of CRISPR in Personalized Medicine: Legal and Ethical Problems' in Malaga, Spain on 12th December 2017 as part of the [Encounters with Science](#) program. The event included as speakers the researchers Francisco Mojica and Lluís Montoliu, as well as Antonio Diéguez Lucena and Iñigo de Miguel Beriain, who hold professorships in 'Philosophy of Science' and in 'Law and Human Genome', respectively. It gathered almost 400 attendees and also received significant attention from local media and radio. A longer account can be found on the FEBS Network [here](#).

Second, FEBS supported a panel discussion on CRISPR/Cas9 on 13th February 2018 in Lausanne, Switzerland at the Life Sciences Switzerland (LS<sup>2</sup>) Annual Meeting – its first science policy panel touching on basic research, innovation, politics and ethics. The panellists included researchers as well as ethics and legal experts (Martin Jinek, Bruno Lemaitre, Effy Vayena and Heinz Müller – see flyer opposite). The points raised were very well received and triggered a lively discussion with the approximately 120 participants.

A third activity on CRISPR is in progress at the Biochemical Society (UK) with FEBS financial support.

For the 43rd FEBS Congress in Prague in July 2018, it was time for the committee to select a new topic for the FEBS Science and Society Special Session – and the choice was the microbiome. Under the title 'Healthy microbiome, healthy host?' an interesting session took place on 10th July 2018 exploring the surprising links between the microbiome and the host. It also considered the wider societal impact of diet, probiotics and antibiotics on the microbiome and thus the host, leading to the question of whether factors that



LS<sup>2</sup>  
Life Sciences Switzerland

**Martin Jinek**  
(University of Zurich)

**Bruno Lemaitre**  
(EPFL)

**Effy Vayena**  
(Chair of Bioethics, Health Ethics & Policy Lab,  
Dep. of Health Sciences & Technology, ETHZ)

**Heinz Müller**  
(Swiss Federal Institute of Intellectual Property, Bern)

Moderation: **Nik Walter** (Tages-Anzeiger/SonntagsZeitung)

13.2.2018, 10:30-12:30

**A Transdisciplinary Panel on CRISPR/Cas9**  
A "FEBS Science & Society"-funded Science Policy Session  
as part of the LS<sup>2</sup> Annual Meeting 2018

(from top) Speakers and moderator at the FEBS-supported CRISPR debate in Malaga, Spain (from left: Diéguez Lucena, Enrique Viguera, Lluís Montoliu, Francisco Mojica and Iñigo de Miguel Beriain); part of the flyer for the FEBS-supported CRISPR/Cas9 panel at the Annual Meeting of Life Sciences Switzerland in Lausanne (flyer design: Dagmar Bocakova).



change the microbiome should be regulated as drugs. Following talks from Mike Curtis (London, UK; ‘The oral microbiome: stability, variation and benefits’), Domingo Barber Hernández (Madrid, Spain; ‘Microbiome and Allergy, one aspect of a complex network’) and Koen Venema (Venlo, The Netherlands; ‘Modulation of the gut microbiota by probiotics and prebiotics’), there was an interesting discussion with the session’s participants.

Proposals for microbiome-themed activities and events that build on this have recently been invited from FEBS Constituent Societies.

### European science policy for life sciences

The Science and Society Committee has been working to identify and present key priorities from FEBS for influence on the next EU Framework program (FP9). These include increase of the ERC budget, creation and support of ‘mid-sized grants’ for smaller projects, and reorganization of the evaluation process. Such targets are of particular importance for young members of the FEBS Constituent Societies – for example, for claiming research program scholarships. Work continues, and the Committee has recently invited the FEBS

Constituent Societies to comment on their priorities. These FEBS efforts have been coordinated with other scientific societies through the work of the Biomed Alliance to influence FP9 development into a program that promotes scientific excellence but also the exploitation of scientific results for the benefit of European economic development and the life of European citizens. The first draft of ‘[Recommendations of the Alliance for Biomedical Research in Europe \(Biomed Alliance\) for the EU’s ninth Framework program for Research and Innovation \(FP9\)](#)’ is in the right direction.

Lastly, it is worth mentioning that science policy and ethics are two topics covered in the new [FEBS Network](#) Viewpoints channel, which thus provides a useful additional platform for the FEBS Science and Society Committee to raise awareness and understanding of these issues, through commissioning and other contributions. For example, readers interested in science policy and the work of other European scientific organizations can find contributions there so far from [COST](#), [ESF](#) and the [BioMed Alliance](#).

*Emmanouil Fragkoulis*  
Chair, FEBS Science and Society Committee

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## FEBS Education

The FEBS Education Committee promotes education of the highest quality in biochemistry and molecular biology in Europe at undergraduate and postgraduate levels. A range of events organized in 2018 have enabled trends, challenges and ideas to be discussed among educators across the FEBS area, as well as research and career skills sessions to be offered to young scientists, as summarized below.

### The 3rd FEBS Education Ambassadors Meeting | 6–7 April 2018; Zagreb, Croatia

The Education Ambassadors Meeting provides a platform to share experiences in bioscience teaching across Europe and to establish educational strategies at the European level. Delegates from 24 FEBS Constituent Societies as well as members of the FEBS Education Committee gathered at the Zagreb meeting, kindly hosted by Jerka Dumić [Chair, FEBS Working Group on Integration (WGI)] at the Rector’s Hall of the University. The meeting began with sharing of ‘best practices’ through short talks on education experiences and activities in several

countries (Xavier Coumoul, France; Vida Mildaziene, Lithuania; Gül Güner Akdoğan, Turkey; Diana Petkova, Bulgaria; Tatiana Borisova, Ukraine; Winnie Eskild, Norway). In addition, Gus Cameron (UK) was invited as an expert to share his experience on ‘E-Biolabs’, while Luciane Viero de Mello (UK) gave an enthralling talk on ‘International students’ and Angel Herráez (Spain) spoke on ‘FEBS Networking’.

An important mission of the meeting was to continue face-to-face discussions of four working groups established at prior Education Ambassadors Meetings and addressing the following areas:

- ‘Key Knowledge and Skills Expected from a Molecular Life Sciences Undergraduate’ (Coordinators: J. Perret, F. Michelangeli, K. Elliott). This group is working on a minimum set of key knowledge and skills necessary for a core curriculum in molecular life sciences (subject matter, content, depth, stratification over the undergraduate course, ‘mandatory’ technical, transferable and soft skills).
- ‘Good Practices on Education’ (Coordinators: J-L. Souciet, W. Eskild). With awareness of the need for new educational strategies, this group is looking at

how to place the student at the focus of changes, encourage interactive education methods and improve interconnection between teaching and research.

- ‘Make Molecular Life Sciences Education in Europe Strong!’ (Coordinators: L. Dux, G. Güner Akdoğan). Recognizing that excellent science teachers are necessary to support training of excellent young researchers, this group is working on a campaign for decisions, systems and funding at the EU level to help make the region a leader in innovative science education.
- ‘Learning Resources’ (Coordinators: A. Herráez, F. Sagin). This group is aiming to share a collection, maybe a repository, of resources to be used by any instructor and also students. The FEBS Network Educator channel is a good start.

### Zagreb FEBS Education Workshop

4–5 April 2018; Zagreb, Croatia

This workshop, hosted by HDMB (the Croatian Society of Biochemistry and Molecular Biology) and coordinated by Jerka Dumić, gathered about 80 participants at the School of Pharmacy, Zagreb University. Several FEBS Education and other FEBS Committee members acted as lecturers and/or moderators of group discussions: Jean-Luc Souciet, France; Ferhan Sağın, Turkey; Jason Perret, Belgium; Keith Elliott, UK; Angel Herráez, Spain; Luciane Veirol de Mello, UK; Frank Michelangeli, UK; Beáta Vértessy (Chair, FEBS Advanced Courses Committee; Hungary); and Jerka Dumić (Chair, FEBS WGI; Croatia). In addition, Michael Mulvany (Denmark) and Gus Cameron (UK) were invited as experts.

The workshop was highly interactive, with lively discussions between faculty and young scientists, and included the following main themes: ‘Successful PhD training’, ‘Tips for success for PhD students and post-docs’, ‘Innovative learning methods’ (team-based learning, problem-based learning), and ‘PhD supervision’. Additional topics were practical work in the biomedical sciences, use of some educational technologies, and [Proteopedia](#).

### A Biochemical Society and FEBS Training Event: Evolving Molecular Bioscience Education | 13–14 April 2018; Chester, UK

Over 70 bioscientists convened at the University of Chester to take part in a mixture of talks, posters and small-group sessions covering current practice

and developments in bioscience education, organized by the Biochemical Society (UK) in collaboration with FEBS. It began with the presentation of the Biochemical Society teaching award to Dee Scadden (Cambridge, UK) and her interesting award lecture. The program was then themed around four areas: Sharing best practice through research and across Europe; Teaching large cohorts; Undergraduate research projects; and Teaching postgraduate and international students.

Among the trends, tips and issues arising from the talks were the use of apps and ‘super groups’ to engage students alongside video in large cohorts, solutions for personalised feedback in large cohorts, challenges of engaging ‘commuter’ students, how best to support international students, and possibilities of providing meaningful research projects through industry and community collaborations. An international outlook at the event included consideration of how the teaching of postgraduate students is supported across Europe, and how to share educational research and best practice through opportunities provided by FEBS. Lastly, poster sessions provided valuable networking time and a chance to look at a wide range of approaches to delivering and supporting learning, from card games through spreadsheets to virtual labs. *[Thanks to Mark Roberts, UK for a [longer report](#) on which this summary is based.]*

### FEBS Congress Special Session on Education – Bioethics education in molecular life sciences | 9 July 2018; Prague, Czech Republic

This education session during the 43rd FEBS Congress addressed the significance of ‘bioethical education’ in molecular life sciences, principles of bioethics, guidelines on conducting biomedical research, and bioethics teaching experiences and implementation. The talks were from Chris Willmott, UK (‘Why teaching of bioethics matters’), Rolf Heinemann, Germany (‘Introduction of bioethics into molecular life science education: a timely requirement or just a personal opinion?’), and Hakan Ozer, Turkey (‘Institutional policy to implement bioethics principles in graduate education’). Faculty, postdocs and PhD students from all areas of molecular life sciences were among the 100 participants and joined in the discussion after the talks. An ensuing workshop coordinated by Chris Willmott and John Bryant, UK offered advice and training on developing bioethics case studies for use with molecular life science students.



### Izmir FEBS Education Workshop

5–6 September 2018; Izmir, Turkey

### Izmir IUBMB Research and Career Skills Workshop for Young Scientists

7 September 2018; Izmir, Turkey

These workshops, hosted by the Turkish Society of Biochemistry at the Izmir University of Economics, School of Medicine, were coordinated there by Ali Burak Ozkaya and co-chaired by Gül Güner Akdoğan (Chair of FEBS Education Committee, rotating out at the end of 2018) and Ferhan Sağın (newly elected Chair from the start of 2019). The special programs at the events were possible through lectures and support by most FEBS Education Committee members, as well as current and past members of the FEBS Executive Committee.

The Education Workshop (pictured above) attracted strong interest, with around 140 participants from all over Turkey. The program comprised presentations of topics from experts followed by break-out group discussions. The outstanding sessions were ‘Novel educational strategies and methods’ (including flipped classroom, team-based learning and interactive teaching in large classes) and ‘Using electronic technologies in education’ (including examples of E-med activities). In addition, the sessions on ‘Graduate education’ (including MSc studies, PhD training, transferable skills and effective supervision) and ‘Excellence in education, Excellence in research’ attracted great interest. There were 25 posters on education, from which four were selected for oral presentations. Four poster prizes were also given.

About 100 participants took part in a following Research and Career Skills Workshop supported by IUBMB, including MSc and PhD students as well as post-docs and junior/senior faculty working in the field of life sciences and medicine with a focus on biochemistry and molecular biology – the workshop aimed to help early-career scientists directly as well as providing faculty with a model program on training. The event focused on post-graduate academic skills (Beáta Vértessy, Hungary), industrial skills (Jerka Dumić, Croatia), transferable skills including CV preparation (Keith Elliott, UK), writing research proposals (Miguel De la Rosa, Spain) and scientific articles (Felix Goñi, Spain), and use of electronic tools to support career development (Ali Burak Ozkaya, Turkey). The event program was structured so that each speaker had the chance to interact in a smaller group of interested young scientists to discuss issues of importance to them.

### Patras FEBS Workshop on Molecular Life Sciences Education

3 October 2018; Patras, Greece

This workshop, organized by Nikos Karamanos (President, Hellenic Society of Biochemistry and Molecular Biology, and FEBS Education Ambassador from Greece), with support as part of the FEBS Education Ambassadors funding scheme, was dedicated to PhD and early-career research training and attracted round 100 participants. From FEBS, Gül Güner Akdoğan and Daniela Ruffell (*FEBS Letters*) gave lectures and led small-group discussions.

*Gül Güner Akdoğan*  
Chair, FEBS Education Committee

## The FEBS Network

The [FEBS Network](#) – an international online forum for scientists working in the molecular and cellular life sciences – is now just over one year old! The platform is for sharing advice, news and insight and for collaborating and connecting – and it complements FEBS' existing work with events, its Societies, journals, education and other projects. It's been an exciting first year watching the number of users grow and the platform software develop, and working out how to get the best from the possibilities it offers.

### Advice, news and insight

What is most visible on the FEBS Network [homepage](#) on a first visit is the themed curated 'channels' ('Early-Career Scientist', 'Educator', 'Viewpoints' and so on), which present posts from selected contributors, as well as from FEBS, its journals and more recently some of the FEBS Constituent Societies. We thank our contributors over the past year or so for engaging content, which has ranged from straightforward tips and resources, to emotive encouragement, thought-provoking comment and even a little entertainment. If you have not yet had a chance to explore the site, enjoy browsing some of the highlighted posts opposite. The FEBS Network platform also hosts videos, and there is currently the opportunity to watch some great talks recorded at the *FEBS Letters* 50th Anniversary Symposium. You'll find these in the 'Spotlight' channel – just register on the FEBS Network platform or sign in first to view them.

### A community: profiles and tools for interaction

However, from the start there has been more to the FEBS Network than the collections of content: the platform also presents and facilitates connections between an online community of molecular life scientists. When you register on the site you create your own profile page, and then can use tools to 'like' and make comments on other content, post your own content to your profile page, and 'follow' and connect with others. The profile pages have just had a design overhaul, so now is a good time to check yours is up to date or perhaps make one for the first time. Also, look out later this month for a new section on profile pages for listing publications.

### Closed spaces for special groups and interests

Another feature of the FEBS Network is its hosting of 'rooms', which currently are mostly private online



### A '1st birthday' selection of FEBS Network posts

[How many abbreviations does a paper need?](#)

By Athel Cornish-Bowden

[An intuitive approximation to the concept of stereoisomerism in amino acids](#)

By Angel Herrez

[International mobility: scientific communities emerge in their host countries](#)

By Mara Jimenez-Sanchez

[Seeing triple \(a short guide to experiment reproducibility\)](#)

By Brooke Morriswood

[Gender equality in academic science – why and how?](#)

By Laura Norton

[Rare diseases: a healthcare issue and rich scientific hunting ground](#)

By Francesc Palau

[On becoming a group leader](#)

By Evangelia Petsalaki

[Surviving and Thriving in Academia – The "Ten Commandments" to Staying Sane During a PhD](#)

By Maya Schuldiner

[FP9 needs to improve on its predecessors!](#)

By Loredana Simulescu

[ESF Reloaded](#)

By Jean-Claude Worms

["We work on so many projects at the moment that I do not know what exactly 'my field' is anymore."](#)

Interview with Jan Konvalinka

By FEBS Communications

[Visions: Josef Penninger, Scientific Director of the IMBA, Austria](#)

By FEBS Communications

### General FEBS Network information

[Welcome to the FEBS Network](#)

[A new way to stay up to date with the FEBS Network](#)

[Posts from the community: what we're looking for from you](#)



spaces for FEBS community groups such as the FEBS Education Ambassadors or for delegates attending certain FEBS events. For example, in the build up to the FEBS Young Scientists' Forum (YSF) in Prague in July 2018, a room just for the YSF participants offered the chance to interact ahead of the event, learn from the speakers and about Prague, and take part in their own pre-event communication challenge. We hope rooms have a lot of further potential, for example to facilitate online communities around specific research areas, and are looking forward to see how they might develop over the next year.

### Get in touch

The FEBS Network is still at an early stage of development, and we welcome your comments to help create a resource that adds real value for the community and meets our ultimate goal of advancing the molecular life sciences. We would also like to hear from scientists interested in sharing expertise and experience as channel contributors, or researchers keen to develop an online community

in their research area via a FEBS Network room. You can find relevant email addresses on the [Contacts](#) page.

### 'Networking' – a FEBS Congress workshop

An online platform such as the FEBS Network is a newer way to connect, but scientists have long been reaching out to others to share ideas, chew over challenges, set up collaborations and look for their next jobs – despite this not coming easily to all personalities. At this year's FEBS Congress in Prague, the FEBS Network Working Group and other FEBS scientists and staff left their FEBS Network avatars behind to run a popular face-to-face workshop that looked at what 'networking' means or could mean for scientists. Participants joined in small-group discussions around particular settings or goals (e.g. networking at conferences, or networking to find a collaborator) aimed at generating tips to share, and the workshop ended with a lively (and very loud!) 'speed networking' session.

*The FEBS Network Working Group*

## FEBS Fellowships news

### FEBS Long-Term Fellowships

Competition for FEBS Long-Term Fellowships (stipends for early postdoctoral support) remains very strong. Applications from the latest call are currently being carefully assessed by members of the FEBS Fellowships Committee prior to an upcoming selection meeting, and the results are expected to be communicated in December 2018. The next applications deadline for FEBS Long-Term Fellowships will be 1st October 2019.

Since the last *FEBS News* issue, we are pleased to announce that a FEBS Distinguished Young Investigator Award and a FEBS Follow-up Research Fund were awarded to Avraham Ashkenazi (Tel Aviv University, Israel). The awards reflect his excellent research work in the area of neurodegeneration conducted during the tenure of his Long-Term Fellowship in the lab of David Rubinsztein, University of Cambridge, UK. Avraham Ashkenazi is featured in a post on the FEBS Network [here](#).

For 2019, we are looking forward to the 4th FEBS Fellows Meeting, in Krakow, Poland, just ahead of the 44th FEBS Congress and in parallel with the 19th FEBS Young Scientists' Forum. Current and recent former FEBS Long-Term

Fellows have been invited to take part to hear keynote speakers, present their research and share career experiences – and enjoy getting to know each other.

### Other FEBS Fellowships

Full details of the current FEBS Fellowships schemes can be found in the [Fellowships section](#) of the FEBS website. All applications are now made through an online application system.

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 2019 will have a deadline of 1st April 2019.

Good luck for your applications!

*FEBS Fellowships Office*

## FEBS3+ Meetings

The FEBS3+ Meetings programme was established by FEBS to support scientific meetings equivalent to an annual national scientific meeting of a Constituent Society but organized through collaboration of at least three FEBS Constituent 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.

Over the past year or so, FEBS3+ Meetings have been held in Siófok, Hungary (Hungarian, Slovenian Croatian and Serbian Societies), Barcelona, Spain (Spanish, French and Portuguese Societies) and Kyiv, Ukraine (Ukrainian, Polish and Israeli Societies – XI Parnas Conference). Below, the organizers of two of these meetings give a flavour of their events through their answers to our quick questions.

In 2019, a FEBS3+ Meeting of the Latvian, Lithuanian and Estonian Biochemical Societies will take place in Riga, Latvia (17–21 June). Further applications for funding for a 2019 FEBS3+ Meeting can be sent until 31st December 2018. The deadline for applications for FEBS3+ Meetings in 2020 is 1st June 2019: guidelines on the FEBS website are [here](#).

### A Hungarian–Slovenian–Croatian–Serbian FEBS3+ Meeting: Siófok, Hungary

#### What, when, where

FEBS3+ Meeting ‘From Molecules to Living Systems’, Siófok, Hungary, 2–5 September 2018. Organized by the Hungarian, Slovenian, Croatian and Serbian FEBS Constituent Societies.

#### The meeting in numbers

4 days, 64 talks, 144 posters, 260 participants, 3 poster awards, 100 mm of rain.

#### Why FEBS3+?

Following in the footsteps of earlier analogous FEBS3+ conferences held in Croatia and Slovenia, we aimed to showcase the best of biochemical research in the participating countries, and provide a platform for initiating new regional collaborative projects.

#### Examples of how to collaborate for synergy

The organization proceeded through several stages of lively committee discussions. Topics for 12 thematic sessions were chosen based on the strengths and wishes of individual Societies, for example DNA repair as a Hungarian favourite, but each session



ended up international, modelling potential future regional mini-conferences in the given subject area.

#### A couple of speaker program highlights

We heard a fantastic set of inspiring plenary talks, including from the FEBS National Lecturer of the Slovenian Biochemical Society, Jernej Ule (London, UK), presenting his work on different aspects of mRNA splicing. It was also good to hear such unexpected stories as the temperature dependence of CRISPR activity in *E. coli* or the development of mass cytometry methods for the simultaneous separation of over 100 immunophenotypes.

#### What everyone seemed to be talking about

Taking the conference title to its logical conclusion, approaches directly

targeting human disease formed a central common theme to the meeting. The attempts to cure serious medical problems by influencing specific cellular functions included the reprogramming of pancreatic alpha cells into beta cells and the improvement of podocyte function in kidney disease. We also learnt of important sexual differences in liver function and liver disease.

#### Especially for the next generation

The plenary speakers used their time skilfully to present the long-term development of their studies, which was very welcome by young scientists perhaps overwhelmed by the multitude of result-dominated finished stories. The fact that almost everyone presented a poster in the well-attended poster session brought a sense of inclusiveness to the meeting.



### Beyond the science

Although the well-timed three-day rain promoted intense concentration on the scientific aspects and visits to the site's wellness facilities, the sturdier participants did brave the elements to stay on the top deck of the boat during a sightseeing cruise on scenic lake Balaton.

### Favourite conference moment

A certain competitive spirit between

the participating nations was only revealed during the singing of folk songs by the lakeside after the gala dinner.

### New trends

The conference was fully supported by an online app, which made following the program easy. Using the app, the organizers could also make immediate updates of late program changes, and send notifications to the participants.

### Thanks

We thank the previous organizers for sharing their experiences, and also thank the local events company which helped with the organization. We hope that this successful conference series will continue in a similar spirit well into the future.

*Dávid Szűts  
Hungarian Academy of  
Sciences, Budapest, Hungary  
Chair, Organizing Committee*

## A French–Portuguese– Spanish FEBS3+ meeting: Barcelona, Spain

### What, when, where

The 1st FEBS3+ Joint Meeting of the French–Portuguese–Spanish Biochemical and Molecular Biology Societies (also XL Congress of the SEBBM and Annual Congress of SFBBM), 23–26 October 2017, Congress Palace of the Fira de Barcelona, Spain.

### The meeting in numbers

10 plenary talks, 9 symposia of 27 talks, 17 Working Group sessions, 8 prize awards, 500 poster communications, 750 participants.

### Why FEBS3+?

Dissemination and exchange of knowledge and scientific advances, as usual – but we hoped also to encourage an increase in scientific collaboration among the communities represented by the three Societies, resulting, in turn, in the empowerment of their members.

### Examples of how to collaborate for synergy

We ran a competitive call for symposia among the three Societies, which resulted in symposia of great interest and in which outstanding scientists took part; in addition, we 'merged' working group topics from each Society to give themed workshop sessions representing all.



### A couple of speaker program highlights

Hard to pick out, but here we could mention the Inaugural Lecture, sponsored by the 'Ramón Areces Foundation', by the Nobel Prize winner Jules Hoffmann (Université de Strasbourg, France) on innate immunity, and the Closing Lecture (Alberto Sols-BBVA Foundation) on single molecule biophysics from Carlos Bustamante (University of California at Berkeley, USA). The talk on the connection between exercise and insulin sensitivity (L'Oréal-UNESCO for Women in Science Plenary Lecture) by Juleen Zierath (Karolinska Institute, Sweden) received enthusiastic opinions.

### What everyone seemed to be talking about

The Congress was held a few days after knowing that the 2017 Nobel

Prize in Chemistry was awarded to Jacques Dubochet, Joachim Frank and Richard Henderson for developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution. It is not surprising that this was one of the most heard topics in the hallways of the Congress as well as in the three Symposia related to structure and biomolecular function. Discussion on different aspects of mitophagy and of mitochondrial function as processes responsible for disease development were also very popular during the Congress.

### Especially for the next generation

In addition to awards for young speakers from SEBBM, SFBBM and SPB Societies, an Emerging Researchers Workshop was attended by brilliant young researchers who are beginning their stage as principal

investigators. This Workshop had a remarkable participation, demonstrating the strength of what will be the next generation.

#### Off piste activities?

Lots. A session for coordinators of biochemistry/biotechnology degrees, outreach to students ('Introduction to Research in Biochemistry and Molecular Biology'), and outreach to the public through 'Biochemistry in the City' with roundtables on antibiotics, CRISPR and healthy eating.

#### Favourite conference moment

The words in the opening ceremony of Prof. Mayor Zaragoza (the President of the Culture of Peace Foundation and Honorary Member of the SEBBM, and

former General Director of UNESCO) were especially important and I consider that as my special moment. He encouraged continued effort to generate knowledge especially by the younger scientists, and to keep dreaming of a better world.

#### Beyond the science

Social activities included a Welcome reception at the Museu Nacional d'Art de Catalunya (MNAC), a visit to the "WARHOL, the mechanical art" exhibition at the CaixaForum Barcelona, and a Congress dinner.

#### New trends

Strong impact of the event on social media and news media, including 2200 reactions and comments on Facebook.

#### What I learned as a conference organizer

I think it is important to increase travel grants to allow the attendance of young researchers, even if they are researchers from the country where the event is held.

#### Thanks

I thank all the sponsors of the event, which made the celebration of the Congress possible, and enabled us to have speakers of a very high scientific quality. Likewise, we thank the volunteers (Master or PhD students) who helped in many different aspects of the Congress operation, and contributed to its efficient development.

*Antonio Zorzano  
IRB Barcelona, Spain  
Congress Organizer*

## 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 for fundamental contributions to 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. The latest FEBS National Lectures are summarized below. Applications are welcome for FEBS National Lectures at 2019 Constituent Society events; guidelines on the FEBS website are [here](#).



Prof. Dr Andrea Ballabio, Director of the Telethon Institute of Genetics and Medicine in Pozzuoli,

Italy, gave a FEBS National Lecture at the LS<sup>2</sup> Annual Meeting 2018 (12–13 February 2018) in Lausanne, Switzerland. Andrea Ballabio discovered transcription factor EB (TFEB) as the master transcription factor of lysosomal biogenesis and therefore changed our understanding of catabolic regulation in cells.

His lecture, entitled 'A cross-talk between lysosome and nucleus controls cell metabolism', provided an exciting overview of the history of lysosomal degradation and seminal discoveries in its regulation, demonstrating that the cytosolic surface of lysosomes with associated kinase complexes and ion channels is a major site of metabolic regulation in the cell. The lecture received many questions and Andrea Ballabio was afterwards in high demand for



Andrea Ballabio (left) receiving the FEBS National Lecture award from Christian Münz.  
(Photo by Matthias Gstaiger, ETH Zurich.)

additional discussions in the hallways and during the poster sessions.

*Christian Münz, University of Zurich  
Meeting Chair*



Prof. Martin Bachmann (University of Bern, Switzerland and University of Oxford, UK) gave a FEBS National Lecture at the XVth International Conference of the Lithuanian

Biochemical Society, held in the city of Dubingiai, Lithuania (26–29 June 2018). Martin Bachman's lecture on 'Vaccination against chronic diseases using virus-like particles' was well received and well attended.

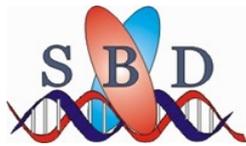
This year, under the initiative of Jerka Dumić (Chair, FEBS Working Group on Integration), the conference was organized together with representatives of the Latvian and Estonian Biochemical Societies. It was attended by approximately 190 participants from 11 countries; about half of them were students, mostly from



Martin Bachman (left) receiving the FEBS National Lecture award from Daumantas Matulis.

Lithuania. There were eight company presentations and exhibitions.

*Daumantas Matulis, Vilnius University  
Chairman, Lithuanian Biochemical Society*



Prof. Jernej Ule was a FEBS National Lecturer proposed by the Slovenian Biochemical Society (SBD) at the FEBS3+

meeting in Siofok, Hungary (2–5 September 2018), where he spoke on 'The fluid world of protein–RNA complexes: assembly, function & evolution'. Jernej Ule is at the UCL Institute of Neurology and the Francis Crick Institute in London, UK. The main research goal of his group is to reveal how protein–RNA complexes regulate gene expression during brain development or disease. He has developed techniques that integrate biochemistry and computational biology to obtain a comprehensive map of interactions between a specific protein and its RNA partners. In genetic studies he identified mutations in RNA-binding



proteins, which often cause neurologic diseases, particularly amyotrophic lateral sclerosis (ALS).

*Janko Kos, University of Ljubljana  
President, Slovenian Biochemical Society*



The Netherlands Society for Biochemistry and Molecular Biology (NVBMB) proudly hosted the FEBS National Lecture of Prof. Naama

Barkai (Weizmann Institute for Science, Israel) during its fall Symposium 'Deciphering the genome: from single molecules to systems' on 12th September 2018. In a lucid and entertaining lecture, Naama Barkai detailed how cells exploit histone modifications to buffer the gene dosage increase during replication. The model presented sparked a lively discussion from students and PIs alike. The National Lecture completed a relaxed but



Naama Barkai receiving the FEBS National Lecture award from Hugo van Ingen.

stimulating day of talks that shed light on the composition, assembly, remodelling and organization of chromatin, as well as on the origin of our cells, and the metabolic influence on gene regulation. Apart from the FEBS-sponsored lecture,

a key event was the award of the NVBMB prize 2018 to Tineke Lenstra for her original work on transcriptional regulation at the single cell level.

*Hugo van Ingen, Utrecht University  
Secretary, NVBMB*



A successful Plenary Symposium on 'Regulatory Network Dynamics: from Interaction to Function', supported by FEBS and the Italian Society of Biochemistry (SIB, Computational and Systems

Biology group), was held at the FISV 2018 Congress, University "La Sapienza" of Rome, Italy on 21st September 2018. The Symposium highlighted innovative computational and experimental strategies for the analysis and modelling of complex molecular networks, and as a FEBS National Lecturer at the Symposium, Prof. Luis Serrano, Director of the Centre for Genomic Regulation (CRG) in Barcelona, Spain and EMBO member, spoke on 'Comprehensive systems analysis of the transcriptome and its regulation of a genome reduced bacterium'. The FEBS National Lecture award recognizes his seminal work on the systems



Mauro Magnani (SIB President; left) presents the FEBS National Lecture award to Luis Serrano.

analysis and regulation of the bacterium *Mycoplasma pneumoniae*, an understanding that allows for the future development of treatments of human diseases.

*Matteo Barberis, University of Amsterdam  
Symposium Chair*

## FEBS governance and thanks

FEBS is ultimately governed by the FEBS Council, made up of one delegate from each of the Member Societies of FEBS (currently 35) as well as the members of the FEBS Executive Committee. The FEBS Council meets annually to elect members of the FEBS Executive Committee (FEBS Officers), as well as other FEBS Committee and Working Group members, for fixed terms as set out in the Articles of Association. The results of elections at the FEBS Council Meeting 2018 in Prague for FEBS Officers and Committee members are given on the next page. Appointments will begin 1st January 2019.

Sincere thanks go to FEBS Executive and other Committee members whose posts finish at the end of 2018 for their various pro bono contributions to the work of FEBS: Gül Güner Akdoğan (Chair, Education Committee); Irene Díaz-Moreno, Zrinka Kovarik and Cláudio Manuel Soares (Advanced Courses Committee); Kristina Gruden, Margarida Oliveira and George Panayotou (Fellowships Committee); Seppo Meri and Aristidis Moustakas (Publications Committee); Marija Jankulovic-Gavrovic and Vida Mildažiene (Working Group on

Integration); and Nazmi Özer (Chair of FEBS Executive Committee 2018).



During the Opening Ceremony of the 43rd FEBS Congress in Prague in July 2018, FEBS Secretary General Václav Pačes (right) and FEBS Chair 2018 Nazmi Özer (left) presented the FEBS Diplôme d'honneur – which honours biochemists and molecular biologists who have given outstanding service to FEBS – to Gül Güner Akdoğan (Turkey), who has been the Chair of the FEBS Education Committee from 2009 to 2018.



## FEBS Council election outcomes (Prague, 2018)

### FEBS Executive Committee elections

Chair, Education Committee

Ferhan Sağın (Turkey); first term

### Other new Executive Committee appointments\*

Chair of FEBS Executive Committee 2019

Joel Sussman (Israel)

Vice Chair of FEBS Executive Committee 2019

Tomáš Zima (Czech Republic)

\*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

Antonio Díaz-Quintana (Spain)

João Laranjinha (Portugal)

Damjana Rozman (Slovenia)

Education Committee

Néstor Torres (Spain)

Luciane Vieira de Mello (UK)

Fellowships Committee

Rita Casadio (Italy)

Dimitris Kletsas (Greece)

Cedric Notredame (Spain)

Graça Soveral (Portugal)

Publications Committee

Consuelo Guerri (Spain)

George Mosialos (Greece)

Working Group on Integration

Aleš Berlec (Slovenia)

Tatiana Borisova (Ukraine)

Working Group on the FEBS Network

Andrea Bellelli (Italy)

### New FEBS Constituent Society Membership

Associate Member: The Tunisian Association of Biological Sciences

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Posts and memberships begin 1st January 2019. The next FEBS Council meeting will take place 11–12th July 2019 in Krakow, following the 44th FEBS Congress. FEBS Constituent Societies will receive details in early 2019 of available FEBS committee positions and an invitation for nominations.

## Introducing new FEBS officers 2018/2019



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

Irene Díaz-Moreno is a Professor of Biochemistry and Molecular Biology at the University of Seville (Spain), working at the

Institute of Chemical Research in the Scientific Research Centre Isla de la Cartuja (icCartuja), where she leads the *Biointeractomics* group ([www.iicq.us-csic.es/en/biointeractomics](http://www.iicq.us-csic.es/en/biointeractomics)). Her research focuses on the post-transcriptional and post-translational regulation of cellular responses to DNA damage, by characterizing the recognition mode between mitochondrial cytochrome *c* and several histone chaperones. In addition, a recent new avenue of research looks at interactions of an RNA-binding protein of the apicoplast, an organelle of cyanobacterial origin essential in the life of the malaria parasite and a possible therapeutic target.

From 2012 to 2015 Irene Díaz-Moreno served on the Executive Committee of the Spanish Society for Biochemistry and Molecular Biology (SEBBM). She has since had an active role at FEBS, with election first to the FEBS Advanced Courses Committee (2015–2018) and then to Chair of the Working Group on the Careers of Young Scientists, a post she began at the start of 2018.

### Aims at FEBS

“As a FEBS Trustee and Chair of the Working Group on the Careers of Young Scientists, my interest is in further developing FEBS activities for young scientists, to enhance not only their scientific and technical abilities but also their career skills, ranging from communication and outreach to management and leadership. The main responsibility of this Working Group is currently the FEBS Young Scientists’ Forum – a satellite meeting before the FEBS Congress. I aim to nurture and develop the event further as one of the best forums for synergies and networking among early-career molecular life scientists in Europe.”



**Prof. Joel L. Sussman**  
**Chair 2019, FEBS**  
**Executive Committee**

Joel Sussman earned his PhD in biophysics from MIT (USA) and was a postdoc at the Hebrew University of Jerusalem (Israel) and Duke University (USA) before joining the Weizmann Institute, Israel in 1976. He was head of the PDB (Protein Data Bank) at the Brookhaven National Laboratory, USA (1994–1999), and established and was appointed Director of the Israel Structural Proteomics Center at the Weizmann (2003). He investigates the 3D structure–function relationship of biomacromolecules via X-ray diffraction. He and his colleagues were the first to determine the atomic structure of acetylcholinesterase (AChE), a brain enzyme that terminates the transmission of nerve impulses at synapses. They also determined the 3D structures of a series of compounds in complex with AChE that are potential therapies for

Alzheimer’s disease. Recently he and his colleagues developed *Proteopedia*, a free, collaborative 3D encyclopedia of proteins and other molecules (<http://proteopedia.org>).

Joel Sussman is the recipient of the 2014 Ilanit-Katzir Prize (with Israel Silman), the Teva Founders Prize for Breakthroughs in Molecular Medicine (2006) and the Elkeles Prize for Outstanding Scientist in Medicine in Israel (2005). He is a member of EMBO, received an Honorary Doctorate, University of Oulu, Finland (2017), and holds the title of Honorary Professor from the Shanghai Institute of Materia Medica of the Chinese Academy of Sciences (2000) and the Amity Institute of Biotechnology in India (2016).

**Aims at FEBS**

“As a Trustee and Chair of the FEBS Executive Committee, I aim for FEBS to continue to have its vast impact on life sciences throughout Europe and the world. I feel it is crucial that our journals, support for young scientists, our meetings, and all our efforts to strengthen the ties between ‘east’ and ‘west’ continue at their highest levels.”



**Prof. Ferhan G. Sağın**  
**Chair, FEBS**  
**Education Committee**

Ferhan G. Sağın is a full Professor at the Dept of Medical Biochemistry at Ege University Medical Faculty, Izmir, Turkey. She obtained both her MD degree and PhD degree in Biochemistry there, and

has a deep involvement in education and educational research with a specific focus on educational technologies, team-based learning (TBL), student assessment and mentoring.

Ferhan Sağın has served as an Executive Board Member of the International Association of Medical Science Educators (IAMSE) (2009–2012), Vice President of the Turkish Biochemical Society (TBS) (2015–) and coordinator of TBS educational activities (2005–). She has been a member of the FEBS Education Committee since 2016.

**Aims at FEBS**

“I am honoured to be elected as Chair of this strong Committee in FEBS. In the coming years, the FEBS Education Committee will continue to strive for the best practices of teaching biochemistry, and sharing the results for the development of all educators. We need to raise awareness and recognize good education policies. Thus, I will serve as a strong advocate for educational issues at all FEBS platforms and other related bodies. I believe that education, hand in hand with research, must continue to be the basis for the development of biochemistry and related life sciences and that ‘Fruitful Education Benefits Science’.”

was a visiting researcher at Aarhus University, Denmark (under the supervision of Prof. Dr J. Celis) in 1997 and at the Rambam School of Medicine, Haifa, Israel (under the supervision of Prof. Dr Aviram) in 1999.

Ferhan Sağın’s main scientific interests are in inflammation and oxidant stress (especially LDL oxidation) in disease (atherosclerosis, obesity, cancers). Her group’s latest research showed for the first time the pathophysiological and diagnostic role of Lp-PLA<sub>2</sub> in early atherogenic events in hypercholesterolemic dislipidemic children. She also



Plans for the 44th FEBS Congress, to be hosted by Polish Biochemical Society, are well under way. Here, the Congress Chair, Prof. Andrzej Legocki, tells us what's special about the location and programme. Check out the [event website](#) for further details: registration and abstract submission have just opened!

### Why Krakow for the 2019 FEBS Congress?

The 44th FEBS Congress will be the third edition of this event to be held in Poland, but the first one organized in the southern part of the country – the previous two Congresses, in 1966 and 2004, took place in Warsaw. Krakow, situated just 100 km north of the Tatra Mountains, is Poland's second largest city, which is also conveniently connected with all European cities through its airport, railway network and highway system.

Krakow is a special place for Poland – a magnificent, vibrant city and a part of the great European heritage. It was founded in the 7th century by the mythical ruler Krakus and is situated on the Vistula river. Between the 11th and the 17th century, Krakow was the capital of the Kingdom of Poland. Hence, the famous royal castle erected at the Wawel hill became the place of coronation and a burial site for Polish kings. It was here that one of Europe's oldest universities – today's Jagiellonian University – was established in 1364. For centuries, Krakow has been a centre of progressive ideas and cultural movements, and home to many outstanding humanists, writers and architects. It is worth mentioning that several buildings and monuments

found in the city are UNESCO World Heritage Sites.

### Which historical attractions in Krakow and in its vicinity are most recommended for visitors?

Fortunately, Krakow was spared during WWII, which is why many impressive historic sites can still be admired across the city. Let's just mention a few of them: the Wawel Castle and Cathedral – the crown jewel among Krakow's treasures with great monuments and beautiful architecture encompassing the royal residence and necropolis; the vast medieval Market Square (Rynek Glowny), featuring the magnificent 14th century St Mary's Basilica (with wooden altarpiece carved by Veit Stoss), the Cloth Hall (Sukiennice) and the Town Hall Tower; the National Museum with Leonardo da Vinci's masterpiece *Lady with an Ermine*; historic Kanonicza street, with the Erazm Ciolek Palace housing a unique collection of gothic sculptures; and Kazimierz – the medieval Jewish quarter with a plethora of traditional restaurants and local attractions. To encourage Congress participants to explore our wonderful city and thus enrich their overall experience, we are planning to offer guided city tours as well as trips to the most important sites surrounding Krakow (see box on next page), which can be booked in advance. In addition, in view of the special role of Krakow as the cultural capital of Poland – 'Mecca' of Polish and international scientists and artists alike – the Congress will offer a unique 'Art & Science' session in the early evenings.



Andrzej B. Legocki represents the Institute of Bioorganic Chemistry, Polish Academy of Sciences in Poznan, Poland. His scientific interest is plant molecular biology. He is a member of EMBO and Academia Europae, and in 2003–2006 he was elected the President of the Polish Academy of Sciences.



### Krakow at a glance

- The former capital of Poland (11th to 17th century)
- Home to the oldest university in Poland (established in the 14th century)
- Krakow's Market Square is the largest medieval commercial square in Europe
- Wawel Castle is one of Europe's finest examples of Renaissance architecture
- In 1978, UNESCO placed Krakow's Old Town on the first list of World Heritage Sites
- Krakow is the city with the largest number of students in Poland (more than 200,000 students)

### Krakow environs

- Wieliczka Salt Mine (15 km outside the city) founded in the 13th century
- Auschwitz State Museum of Nazi Concentration Camp (60 km)
- Ojcow National Park – home to Jurassic limestone from 150 million years ago (15 km)
- Tatra National Park – one of the most spectacular examples of an Alpine mountain range, with high peaks, glacial lakes and many more regional attractions (100 km)

### Let's now talk about the Congress. How will the programme reflect current trends in life sciences?

The programme of the 44th FEBS Congress has been developed in collaboration with the International Scientific Committee and all topics and speaker choices have been carefully selected. The general topic of the Congress – ‘From molecules to living systems’ – has been formulated broadly. This gave us a chance to review the state-of-the-art and the current trends in biochemistry and related fields. The programme has been arranged in such a way that all the dynamic fields like systems biology, synthetic biology or regenerative biomedicine are aptly represented. Five parallel sections will encompass 40 sessions (see the programme webpage [here](#)). Posters are also invited for presentation under the same themes. In addition, a concurrent exhibition of specialized companies is planned.

### It is often said that the list of plenary speakers is the best recommendation for every scientific event. Would you agree?

Yes, I fully agree. This is why the list of plenary speakers for the Congress in Krakow is very impressive indeed. There are nine plenary lectures lined up by truly eminent scientists (see box on next page). Many of them have been or will be awarded annual medals or prizes of FEBS and other relevant scientific organizations; indeed, two additional lecturers are expected to join this list following selection of prizewinners in early 2019. Furthermore, two Nobel Prize Laureates have confirmed their participation in the Congress: the opening and closing lectures will be delivered by Andrew Z. Fire from Stanford University, USA, and Venkatraman Ramakrishnan from Cambridge, UK, respectively.

### What is your view on large versus small scientific meetings?

Present-day science definitely needs both kinds of scientific events: big meetings reviewing important topics, often deriving from different fields of knowledge, as well as smaller-scale, specialized conferences. Nowadays, holistic concepts strongly affect present trends in life sciences, requiring scientists to monitor analogous or similar metabolic pathways that occur in various biological models. Only then can one postulate more general or universal conclusions. FEBS Congresses provide a large number of researchers with unique



opportunities to make these kinds of stimulating comparisons, well-grounded in the first-class science. If well organized, scientific congresses can provide participants with fruitful interactions and memorable experiences broadening their scientific horizons.

### What kind of advantages may participation in the FEBS Congress offer early-career researchers?

Participation in a FEBS Congresses offers several benefits for young scientists. It provides a rare opportunity to be inspired by talks from leading researchers from a range of research areas and to meet them in person, as well as representatives of other important attending scientific organizations such as the ERC. The Congress is also a special chance for young researchers to present the results of their work as a poster or even as an oral presentation during one of the symposia to a wide international audience. Moreover, during the Congress there are additional special sessions organized by FEBS committees, including on research and career skills or teaching, which early-career researchers usually find interesting and valuable.

To help the participation of young researchers in the event, there is a low registration fee set for under 35s. In addition, a number of FEBS bursaries will be available to early-career scientists travelling from outside the host country and presenting their work at the event. Furthermore, participants selected for the 19th FEBS Young Scientists' Forum (YSF) taking place just before the Congress (see next page) will also receive financial support to attend the Congress.

### How will you facilitate interactions at the event?

We are giving this important aspect special consideration in our plans for the 44th FEBS Congress. The Welcome Reception, and the Gala Dinner held at the Old Tram Depot, offer opportunities to catch up with old friends or enjoy making new ones, while the afternoon poster sessions with coffee provide the chance to interact and network with each other over particular scientific interests. In addition, we are planning to help participants meet and discuss with the speakers they are interested in by organizing Speaker Corners, and also to support the social interaction of young scientists with small-group evening outings to interesting places in the city.

### FEBS 2019 Plenary Lectures



Opportunistic RNAs and acquisitive genomes  
**Andrew Z. Fire**, USA (Nobel Laureate)  
(Opening Lecture)



The Human Protein Atlas – implications for human biology, drug development and precision medicine  
**Mathias Uhlen**, Sweden  
(FEBS Sir Hans Krebs Lecture)



Regulation of gene expression by RNA-binding proteins and non-coding RNAs  
**Günter Meister**, Germany  
(FEBS Theodor Bücher Lecture)



Human pluripotent stem cell models of cardiac and vascular disease  
**Christine Mummery**, The Netherlands  
(FEBS Datta Lecture)



Novel insights into the inner workings of the spliceosome by combined biochemical and Cryo-EM studies  
**Reinhard Lührmann**, Germany



Hydrogen sulfide: an endogenous gasotransmitter with diverse biological roles ranging from cardiovascular disease to cancer  
**Csaba Szabo**, USA  
(IUBMB Lecture)



Imaging phagocytosis: receptors, integrins and the cytoskeleton  
**Sergio Grinstein**, Canada  
(PABMB Lecture)



Molecular mechanisms underlying brain wiring and social behaviour  
**Claudia Bagni**, Switzerland  
(EMBO Lecture)



Termination of translation in bacteria and eukaryotes  
**Venkatraman Ramakrishnan**, UK (Nobel Laureate)  
(Closing Lecture)

Two additional plenary lectures are expected to be announced in early 2019, following selection of the winners of the 2019 FEBS|EMBO Women in Science Award and *The FEBS Journal* Richard Perham Prize.

### Key Upcoming Congress deadlines

**FEBS YSF applications:** January 20, 2019

**FEBS Bursary applications:** March 7, 2019

**Abstract submission deadline:** March 7, 2019

[www.febscongress.org](http://www.febscongress.org)

## The 19th FEBS Young Scientists' Forum



The 19th FEBS Young Scientists' Forum (YSF) will be held from July 3rd to 6th, 2019 in Krakow, in conjunction with the 4th FEBS Fellows Meeting and 44th FEBS Congress.

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 discuss and exchange ideas. The 2019 FEBS YSF, which will be held in the Jagiellonian University Campus near the centre of Krakow, will include inspiring keynote lectures (from Agnieszka Chacina, Isabel Fariñas, Jonathan Heddle, Mickaël Ryckelynck and Eric Westhof), talks and posters from YSF participants, roundtable sessions supporting scientific career development, and a social programme. All

YSF participants will also attend the 44th FEBS Congress in Krakow, from July 6th to 11th, 2019.

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 44th FEBS Congress website's [YSF section](#).

The 19th FEBS YSF will provide a wonderful forum for you to refresh your knowledge in biochemical sciences and to meet and interact with leading researchers as well as scientists at similar early-career stages. We hope you will join us to make new fruitful friendships and scientific cooperations and enjoy Krakow!

*Anna Jagusiak, Chair, 19th YSF Organizing Committee*  
*Irene Díaz-Moreno, Chair, FEBS Working Group on the Careers of Young Scientists*

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## FEBS Advanced Courses 2019

The FEBS Advanced Courses programme funds a range of events 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 to apply for FEBS [Youth Travel Fund](#) grants to support participation.

Each year the FEBS Advanced Courses Committee selects the best courses to fund from many excellent applications following calls for proposals. The 2019 programme offers a diverse list of lecture courses, practical courses, workshops and a 'special meeting', on research topics from biomembranes, proteomics and mitochondria to immunology, microbiology and stem cells – as set out opposite and on the next page. Course summaries and links to the events' websites will gradually be added on the FEBS website at [bit.ly/FEBSAC2019](http://bit.ly/FEBSAC2019).

Proposals for organization of FEBS-supported courses in 2020 will be welcome ahead of the deadlines of 1st March and 1st August 2019. More details about the application process can be found via the [Course Organizers](#) page of the FEBS website.

*Beáta G. Vértessy*  
*Chair, FEBS Advanced Courses Committee*

### FEBS ADVANCED LECTURE COURSES

#### Current advances in pathogen research →

Yerevan, Armenia  
March 25–30, 2019  
Organizer: Hovakim Zakaryan  
Deadline: December 1, 2018

#### Matrix pathobiology, signaling and molecular targets →

Porto Heli, Greece  
May 2–7, 2019  
Organizer: Nikos Karamanos  
Deadline: February 2, 2019

#### HFP2019: Molecular mechanisms of host–pathogen interactions and virulence in human fungal pathogens →

La Colle sur Loup, France  
May 18–24, 2019  
Organizer: Patrick Van Dijck  
Deadline: February 1, 2019

#### Europhosphatase 2019: from molecular mechanisms to system-wide responses

Debrecen, Hungary  
June 11–16, 2019  
Organizer: Beáta Lontay  
Deadline: April 1, 2019

#### Molecular organization, function and dynamics of biomembranes

Cargèse, France  
June 11–19, 2019  
Organizer: Eefjan Breukink  
Deadline: April 1, 2019



### Biological surfaces and interfaces: the mechanistic view

Sant Feliu de Guixols, Spain  
June 30 – July 5, 2019  
Organizer: Marta Bally  
Deadline: April 1, 2019

### Advanced proteomics

Varna, Italy  
July 28 – August 3, 2019  
Organizer: Bernhard Kuster  
Deadline: May 15, 2019

### Molecular mechanisms in signal transduction and cancer

Spetses Island, Greece  
August 16–24, 2019  
Organizer: Boudewijn Burgering  
Deadline: April 1, 2019

### Epigenomics, nuclear receptors and disease

Spetses Island, Greece  
August 25–30, 2019  
Organizer: Eckardt Treuter  
Deadline: May 6, 2019

### Biochemistry of membrane proteins – structure, trafficking, regulation

Budapest, Hungary  
August 25–30, 2019  
Organizer: Balázs Sarkadi,  
Deadline: April 1, 2019

### Oncometabolism: from conceptual knowledge to clinical applications

Luso, Portugal  
September 1–6, 2019  
Organizer: Paulo Oliveira  
Deadline: July 1, 2019

### 20th International summer school on immunology Immune system: genes, receptors and regulation

Hvar, Croatia  
September 21–28, 2019  
Organizer: Hans-Reimer Rodewald  
Deadline: June 30, 2019

### Biosystem design: computational and experimental approaches

Spetses Island, Greece  
September 29 – October 7, 2019  
Organizer: John McCarthy  
Deadline for applications: May 15, 2019

## FEBS SPECIAL MEETING

### Sphingolipid biology: sphingolipids in physiology and pathology [➤](#)

Cascais, Portugal  
May 6–10, 2019  
Organizer: Liana Silva  
Deadline: March 15, 2019

## FEBS WORKSHOPS

### Ageing and regeneration

Innsbruck, Austria  
September 9–12, 2019  
Organizer: Pidder Jansen-Dürr  
Deadline: May 1, 2019

### Chromatin proteomics

Heraklion, Crete, Greece  
September 22–27, 2019  
Organizer: John Strouboulis  
Deadline: August 10, 2019

## FEBS PRACTICAL COURSES

### Functional imaging of nuclear organisation and signaling

Amsterdam, The Netherlands  
June 9–15, 2019  
Organizer: Mark Hink  
Deadline: February 1, 2019

### Biomolecules in action II [➤](#)

Hamburg, Germany  
June 23–28, 2019  
Organizers: Jeroen Mesters and Christian Betzel  
Deadline: March 30, 2019

## JOINT FEBS/EMBO LECTURE COURSES

### Molecular mechanisms of tissue injury, repair and fibrosis [➤](#)

Spetses Island, Greece  
May 23–31, 2019  
Organizer: Stefan Rose-John  
Deadline: March 1, 2019

### Venice summer school 2019: mechanisms in development and evolution

Venice, Italy  
August 26–30, 2019  
Organizer: Johannes Jäger  
Deadline: April 30, 2019

### The new microbiology

Spetses Island, Greece  
September 4–12, 2019  
Organizer: Pascale Cossart  
Deadline: March 15, 2019

### The Hydra XIV European summer school on stem cell biology and regenerative medicine

Hydra, Greece  
September 15–22, 2019  
Organizer: Austin Smith  
Deadline: April 30, 2019

### Mitochondria in life, death and disease

Herceg Novi, Montenegro  
September 24–28, 2019  
Organizer: Aleksandra Trifunovic  
Deadline: June 1, 2019

## Explore the most-viewed articles published in the FEBS Press journals this year\*

\*1 Jan – 30 Sep 2018



**The role of Nrf2 signaling in counteracting neurodegenerative diseases**  
*Albena T. Dinkova-Kostova, Rumen V. Kostov, Aleksey G. Kazantsev* →

**The inflammation – cancer connection** *Alberto Mantovani* →

**Functions of autophagy in the tumor microenvironment and cancer metastasis**  
*Erin E. Mowers, Marina N. Sharifi, Kay F. Macleod* →

**How to design an outstanding poster** *Rita Gemayel* →

**Canonical signaling and nuclear activity of mTOR—a teamwork effort to regulate metabolism and cell growth** *Vincent Giguère* →

[Latest issue](#)



**Transforming plant biology and breeding with CRISPR/Cas9, Cas12 and Cas13**  
*Patrick Schindele, Felix Wolter, Holger Puchta* →

**Role of mitochondrial ROS in the brain: from physiology to neurodegeneration**  
*Plamena R. Angelova, Andrey Y. Abramov* →

**Identification of a novel botulinum neurotoxin gene cluster in *Enterococcus***  
*Jason Brunt, Andrew T. Carter, Sandra C. Stringer, Michael W. Peck* →

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[Latest issue](#)



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[Latest issue](#)



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