

Review

## How FEBS supports Young Scientists' Careers

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**Summary.** The Federation of European Biochemical Societies (FEBS) brings together molecular life scientists in Europe and neighbouring regions. There are many activities of FEBS targeted to young scientists with the aim of promoting their careers. This article provides a brief overview of such FEBS initiatives.

**Key words:** Advanced Courses, Early-Career Scientists, FEBS, Fellowships, YSF.

The Federation of European Biochemical Societies (FEBS) is a charitable organization supporting research and education in molecular life sciences through its journals, fellowships, courses, Congress and other activities – and as an umbrella organization, it brings together members of national biochemistry and molecular biology societies in Europe and neighbouring regions. The foundation of FEBS in 1964, with the aim of promoting cooperation among European biochemists, was an event of great significance to world biochemistry (Slater 1974; Whelan 1974). FEBS currently has 39 'Constituent Societies'. Scientists who have joined a FEBS 'Constituent Society' are automatically members of FEBS. This makes FEBS one of the largest European organizations in the molecular life sciences (which includes biochemistry, molecular biology, cell biology, molecular biophysics and related research areas), with over 35,000 members. FEBS is a scientist-led organization, with governance based on an Executive Committee, itself composed of the Chairs of various committees. Committee members are scientists working pro bono, elected by the FEBS Council composed of delegates from each Constituent Society.

From its early years, among its various programmes, FEBS has placed a strong emphasis on promoting the training and development of young scientists during their PhD studies and post-doctoral period. Scientists at an early career stage who are members of a FEBS 'Constituent Society' are eligible to apply for a range of research fellowships that support both short- and long-term research work in a lab in another country, as well as grants to support participation in courses and scientific meetings. Most of these programmes are aimed at scientists working within the FEBS area. Funding for all programmes offered by FEBS is possible due to the income generated by its four journals: *The FEBS Journal*, *FEBS Letters*, *Molecular Oncology* and *FEBS Open Bio*.

### FEBS YOUNG SCIENTISTS' FORUM

The FEBS Young Scientists' Forum (YSF) is a meeting that takes place prior to the FEBS Congress, one of the most visible activities that is held annually in countries with a FEBS 'Constituent Society', moving to a different location each year. Usually about 100 young scientists are selected

to take part in the event, where they can get to know others at a similar career stage before attending the much larger Congress. The participants can benefit from the different experiences offered by the YSF as a youthful and fresh event with an informal atmosphere and the ensuing large Congress attended by hundreds of delegates with parallel symposia and plenary lectures presented by outstanding scientists, including Nobel Laureates.

The 1<sup>st</sup> YSF was organized by Júlia Costa in 2001 in Oeiras, Portugal as a satellite meeting of the 27<sup>th</sup> FEBS Congress. It established a framework for the event arranged 'by young scientists for young scientists' under the auspices of FEBS. Since then the YSF has developed into a very successful platform enjoyed by everybody, both on the scientific and social level. The YSF programme currently offers a well-balanced combination of keynote lectures delivered by distinguished speakers, career skill sessions, social events, poster sessions and symposia with talks from participants (Fig. 1). The YSF is organized by a local Organizing Committee comprising young scientists from the host country. The organization of the YSF is overseen and guidance is provided, building on a proven format created by the FEBS 'Working Group on the Careers of Young Scientists'.

FEBS provides a grant for organization of the YSF event, as well as financial support for selected scientists to participate in the YSF and ensuing Congress via YSF grants. Grants cover registration, accommodation and most travel costs. The applicants must submit an abstract for the event as a

first author and meet eligibility criteria defined on the YSF event's application page. The applicant should be a member of a FEBS 'Constituent Society' registered as a PhD student at an institute of higher learning in a country where there is a FEBS 'Constituent Society'; the applicant can also be a postdoctoral scientist within five years of having completed a PhD thesis, working in a country where there is a FEBS 'Constituent Society'. The applicant should also be up to 35 years of age, except if studies were started later, or were delayed by maternity leave (18 months per child), prolonged illness or other personal reasons.

The 20<sup>th</sup> YSF in 2020 (Fig. 2) is now being prepared by an organizing committee chaired by Maja Katalinić, in conjunction with the 45<sup>th</sup> FEBS Congress in Ljubljana, Slovenia. The 20<sup>th</sup> YSF will be held in a country neighbouring the Congress – in Lovran, Croatia, from **1<sup>st</sup> to 4<sup>th</sup> July 2020**. The application deadline is December 15<sup>th</sup> 2019.

## FEBS BURSARIES

In addition to the prestigious competitive YSF grant competition, which is limited to the top 100 applicants who apply to attend both the YSF and Congress, FEBS offers a large number of bursaries to enable early-stage researchers to participate in the FEBS Congress itself. FEBS Congress bursaries currently cover early-bird registration fees for the FEBS Congress, and contribute toward travel/accommodation costs. Eligibility criteria are similar to those for the YSF



**Fig. 1.** The 19<sup>th</sup> FEBS Young Scientists' Forum was held in Krakow (Poland) from 3<sup>rd</sup> to 6<sup>th</sup> July, 2019.



**Fig. 2.** The 20<sup>th</sup> FEBS Young Scientists' Forum will be held in Lovran (Croatia) from 1<sup>st</sup> to 4<sup>th</sup> July, 2020.

application and the application deadline is always after announcement of the YSF grant winners, so unsuccessful YSF applicants also have a chance to apply for the FEBS bursaries along with other interested early-stage researchers. Alongside research-focused plenary lectures and scientific symposia, FEBS committees and working groups organize special sessions and workshops during the Congress: providing talks, discussion and practical exercises on a range of research and career skills, gender issues in science and education, which may be of particular interest for early-stage researchers.

## FEBS FELLOWSHIPS

FEBS fellowships and scholarships are intended to allow early-career members of a FEBS 'Constituent Society' to work in a laboratory in an academic institution in a different FEBS country from that in which they are normally working. The Fellowships programme started in 1979, and since then it has become one of the flagship activities of FEBS. As a result of the rigorous selection process required for new fellows, it has become a highly competitive and prestigious programme. FEBS offers Short-Term Fellowships (for advanced PhD Students and PhD graduates), post-doctoral Long-Term Fellowships, Summer Fellowships (for PhD or Master students) and Collaborative Developmental Scholarships (for PhD students studying in certain disadvantaged FEBS countries). Short-Term Fellowships allow for visits of

up to two months, enabling researchers to conduct experiments requiring special techniques or to undergo advanced training. Long-Term Fellowships are initially awarded for one year, with a possibility of applications for renewal for a second or third year.

Every other year, a Fellows Meeting comprising former and current Long-Term Fellowships holders, is organized in parallel to the YSF. Opening and Keynotes Lectures, coffee breaks, lunches and dinners are planned, similar to the YSF, thus offering an interesting mix of science and socialization to encourage fruitful exchanges.

## FEBS ADVANCED COURSES

FEBS funds a range of scientific and educational events on advanced topics in the sciences of biochemistry, molecular biology and related disciplines. The lecture courses, practical courses, workshops, and special meetings in the FEBS Advanced Courses Programme aim to provide the latest updates on research, as well as a strong educational element that makes them especially valuable to PhD students and postdocs. Lecture courses address subjects of general importance and allow participating young scientists to interact with invited scientific leaders in the field, with a focus on teaching and training. Practical courses teach advanced experimental and computational methods in the molecular life sciences. Emphasis is on hands-on experiments so that young scientists can apply these methods in their home laboratories. Workshops bring together experts and interested young scientists to discuss the most recent developments in specific fields. Special meetings have a programme featuring a large number of leading scientists in the field, as well as oral presentations and poster sessions.

Individuals or groups with proven scientific experience in the course topic can submit proposals for consideration for funding from FEBS for such events. Young scientists can apply to Course Organizers for financial support for attendance through FEBS Youth Travel Fund (YTF) grants. The YTF grants cover registration (including accommodation and meals), and may also support travel.

## THE FEBS NETWORK PLATFORM

The FEBS Network is one of the newest activities of FEBS. It aims to provide a valuable online international forum for scientists working in the molecular and cellular life sciences, enabling them to share advice, news and insights, and connect and collaborate – with the ultimate goal of helping to advance progress in these research areas.

An important strand of content on the FEBS Network is a 'channel' directed at Early-Career Scientists, which provides career advice, skills tips and news designed to be of

particular interest for postdocs and students. The FEBS Network platform has also hosted YSF rooms – private online spaces for participants attending a YSF, where they can present their profile, and access content to support and extend the YSF experience, particularly during the build up to the event.

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