



Message from the FEPS President

Dear members and friends of FEPS,
Just a few weeks before the appointment of Granada, I would like to update you about the activities of FEPS over the last few months.

A large part of the activity was devoted to the organization of the most important upcoming scientific meetings co-organized by FEPS. The upcoming SECF/FEPS Physiology in Action Congress will be held at the University of Granada, September 4-6, 2024 with the fundamental contribution of the Spanish Physiological Society. The meeting will be enriched by two plenary lectures, 4 keynote lectures including the Rising Star Prize and Lecture that has been reactivated after a 3-year break, thanks to the support of *Acta Physiologica*, together with 12 symposia (two of which on teaching Physiology), selected oral communications and posters. Have a look to the program (<https://www.feeps2024.org/>) and join us in the sunny Andalusia! Also, thanks to the help of IUPS, FEPS could award an unprecedented number (15) of travel fellowships to Master, PhD students or junior postdocs to help them attending the Granada meeting.

Next year, 2025, will be a very important year for physiology worldwide and for European Physiology in particular. In Frankfurt, September we are organizing the IUPS/Europhysiology meeting with the active participation of FEPS that also co-chairs the International Scientific Program Committee. The program is very exciting with 2 Nobel laureates giving Plenary Lectures and an array of very distinguished physiologists from all over the world contributing with 9 Special Lectures, 24 Keynote Lectures and 24 Symposia. Of note, the opening Special Lecture will be given by our past-president Susan Wray, who is now President of IUPS. We are positive that FEPS Society members will actively participate in this unique meeting by submitting abstracts when the upcoming call will open (January 2025).

Among other initiatives, the European Animal Research Association (EARA) has started to regularly update the societies' members about the need and benefits of the humane use of animals in scientific research by providing accurate and evidence-based information on animal experimentation issues. Moreover, FEPS continues to sponsor the FEPS Travelling Awards initiative to support and develop research of young physiologists across European countries and has also opened a page on the website dedicated to Society-owned journals. Member Societies, if interested to share their journals with the large FEPS community, are invited to communicate the link to the website of their journals. Last, but not least, we invite all Physiological Societies whose boards and members are willing to receive directly FEPS news, to communicate to the FEPS Secretary General the list of mail addresses of their members. I think that direct messaging with greatly tighten the *liasons* between European physiologists and FEPS, promoting a strong sense of belonging to the large European Physiological Community.

The warm summer is coming up, I wish all FEPS members enjoyable and relaxing vacations, and hope to meet you in a few weeks in the beautiful Granada for a great Physiology in Action meeting.

Fabio Benfenati



Executive Board of FEPS

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News & Events

We welcome all news & events from FEPS member societies to be published in the Newsletter and on the website (www.feeps.org). Please send all information to the FEPS secretariat at info@feeps.org

2024 (November 2023-2023)

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Click on the picture for more information

Aug 22nd, 2024: Late registration closes

PREVIEW OF PLENARY AND KEYNOTE LECTURES

PLENARY LECTURES

A unique coding of memories in the human hippocampus

Rodrigo Quian Quiroga, Hospital del Mar Research Institute (Spain), Thursday, Sept. 5th 2024, 12:00-13:30

Unravelling the molecular diversity of human midbrain dopaminergic neurons

Ernest Arenas, Karolinska Institute (Sweden), Friday, Sept. 6th 2024, 17:00-18:30

KEYNOTE LECTURES

1. The cellular stress response as an efficient therapeutic target for treating pancreatic cancer

Juan Iovanna, Marseille Cancer Research Center (France), Thursday, Sept. 5th 2024, 9:00-9:45

2. Transport of negative ions over cell membranes – a positive story

Christian Aalkjær, Aarhus University (Denmark), Thursday, Sept. 5th 2024, 9:00-9:45

3. Vascular function in cardiometabolic disorders

Elena Osto, Medical University of Graz (Austria), Friday, Sept. 6th 2024, 10:45-11:30

ACTA PHYSIOLOGICA RISING STAR AWARD AND LECTURE

The Acta Physiologica Rising Star Award is granted to a young physiologist who has substantially contributed to the advancement of his/her field through ground-breaking research. This year a jury consisting of editors of Acta Physiologica and members of the FEPS Executive Committee awarded the prize to



Borja Martinez Téllez, University of Almeria (Spain)

He will give the **Rising Star award lecture** on Friday, Sept. 6th 2024, 10:45-11:30.

The title of his lecture is

Deciphering the Molecular and Secretory Functions of a Novel and Unique Brown Adipose Tissue Depot in Women



Upcoming Meetings (FEPS member societies) (for more information click on the pictures)

74th SIF National Congress
The Italian Society of Physiology
Rome, Italy · 11-13 September 2024

Navigation: HOME PROGRAMME SYMPOSIA INFORMATION SIGN UP VENUE SUPPORT

mySIF2024

19.-21.09.2024 — Vienna, Austria

Annual Meeting

of the German Physiological Society (103rd), Austrian Physiological Society
and Life Sciences Switzerland (LS²) Physiology

Logos: DPG (Deutsche Physiologische Gesellschaft), LS² (Life Sciences Switzerland), APS (Austrian Physiological Society)

www.dpg-congress.de

3RD INTERNATIONAL MEETING

PORTUGUESE SOCIETY OF PHYSIOLOGY

Sppisiologia
portuguese physiological society

7-8TH NOVEMBER 2024
FACULTY OF MEDICINE
OF THE UNIVERSITY OF PORTO

Upcoming Meetings (IUPS) (for more information click on the pictures)



IUPS Beacon Meeting 2024

Rhythmic activity and its Disorders
in Brain and Muscle

October 25-28th 2024 Tutzing, Germany

A small, timely, focused meeting capturing the excitement of research into rhythmic activity. Immersive, interactive and friendly; aimed at early career researchers. **International expert speakers**

- Bruce Bean
- Dario DiFrancesco
- Veronica Egger
- Russell Foster
- Matteo Mangoni
- Mark Nelson
- Jeanne Nerbonne
- Jochen Roeper
- Bina Santoro
- Gary Sieck
- Karin Sipido





Topics will include:
Circadian rhythms
Pacemaking in cardiac & smooth muscles,
Spontaneous neuronal activity, rhythmicity control in breathing & blood vessels, channels in health and disease.

Are you a curious Physiologist, Biophysicist, Neuroscientist?
Want to network?
Find new ways of looking at your research question?
Then you need to be at The IUPS 2024 Beacon Rhythm meeting.

Registration: 325 euros, includes scientific sessions, meals and coffee.
Venue accommodation share/single – 74/94 euro per night.
Evangelische Academy, 82327 Tutzing, Germany. Munich nearest hub.
Register now – numbers limited and closes on September 15th
Full details and links here
<https://www.iups.org/activities/visual-composer-3797/>
Organizers: Steven Siegelbaum, David Eisner, Bina Santoro & IUPS

40th congress of the international union of physiological sciences

IUPS 2025

a joint meeting with

EUROPHYSIOLOGY

11. – 14. September 2025 | Frankfurt/Main





SLOVAK AND CZECH 99th PHYSIOLOGICAL DAYS

99th Physiological Days under the patronage of the Slovak Physiological Society together with the Czech Physiological Society was a two days event (February 7th – 8th 2024) organized by the Institute of Physiology at Comenius University Faculty of Medicine in Bratislava Slovakia.

A special event was included – a celebration of the centennial of the first Institute of Physiology in Slovakia established in 1924 at Comenius University in Bratislava. Consequent medical physiological institutes founded at the other two medical schools in Slovakia (University of Pavol Jozef Šafarik Faculty of Medicine in Košice and Comenius University Jessenius Faculty of medicine in Martin) were founded later on thanks to the expertise and help of the Professors from Bratislava. Thus the celebration was devoted to the centennial of Slovak medical physiology.

Over 200 participants SLOVAK AND CZECH 99th PHYSIOLOGICAL DAYS

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Over 200 participants mostly from Slovakia and Czech Republic joined the conference in Bratislava. Three plenary lectures, 50 oral lectures and 97 posters were presented within six sessions. During the special symposium “100 years of Medical Physiology in Slovakia” three presentations were devoted to the historical milestones and achievements of the institutes of medical physiology at medical schools in Slovakia and the Slovak Academy of Sciences.

Young researchers had the possibility to compete for a prize. The Czech young physiologists compete for the prize of the best oral presentation while the Slovak young researchers were competing for the prize of the best poster.

At the conference gala dinner the participants enjoyed live music, dancing and networking with colleagues from both countries.

Many thanks go to all who helped to make this event a success.

Prof. Daniela Ostatnikova
Head of the Organizing Committee

Head of the Institute of Physiology
Comenius University, Faculty of Medicine

MEET A NEW MEMBER OF THE FEPS EXECUTIVE COMMITTEE: Professor László Csernoch



New challenges in science are always waiting for us

My parents said I was not even at school when I said I was going to be a physicist. At that time, there were two places in Hungary where you could get this kind of training: in Budapest, the capital, and in Debrecen. The latter was closer to my hometown of Miskolc, so it was a logical choice and I ended up studying physics at the predecessor of the University of Debrecen, the Kossuth Lajos University of Sciences.

Initially, I worked on particle physics at the Department of Experimental Physics, but then life's strange events led me to end up at the Faculty of Medicine at the then University of Debrecen. I was almost always studying the same phenomena, photons, just a bit differently - γ and X-rays during my undergraduate years, now fluorescence - and in a different place.

I started to use my physics training to work first with an electron microscope and later on fluorescence signals and computational processes. The late Professor László Kovács - then only an associate professor, but later also vice-rector of science at the University Medical School of Debrecen and then, from 2000, at the integrated University of Debrecen - invited me to work at the Department of Physiology. Professor Kovács was in charge of an

internationally renowned scientific research project and laboratory, perhaps I may say at the forefront of the world at that time, measuring intracellular calcium concentrations in skeletal muscle in the mid-1980s, and even then using computer control. I started to work on programming, process control, and detection of optical signals. Later on I became more and more interested in what I was actually detecting, and I started to learn about wider and wider areas of physiological processes.

After a few years of working in Debrecen, I was able to go to Chicago to Dr. Eduardo Rios' laboratory. He is still a leading figure in the field of skeletal muscle physiology and was already an internationally renowned researcher. During my time there, we started to work on what was then a very burning issue, studying the kinetics of charge movement – the displacement of the voltage sensor of excitation-contraction coupling due membrane depolarization – in amphibian skeletal muscle. The work we did then and there resulted in publications filling a complete issue of *Journal of General Physiology*. Thanks to a Muscular Dystrophy Association scholarship, I was able to continue my work in the laboratory of Dr Martin F Schneider. He is also one of the internationally most renowned researchers in the skeletal muscle. I was thus fortunate to work in two of the most prestigious research laboratories of the field 1980s and 1990s, where we made findings in calcium release that have since been seminal in skeletal muscle physiology.

After returning to Hungary, I started my career at the Department of Physiology as assistant professor, associate professor, and then - as I was awarded the title of Doctor of the Hungarian Academy of Sciences in 2001 in the field of biology - I was appointed full professor in 2005 and became the head of the Department of Physiology, a position I am still holding today.

Nevertheless, I have never given up the opportunity to gain experience abroad, and have been invited on several occasions to France (Claude Bernard University, Lyon), the United States (Rush Medical University, Chicago; Rutgers University, Piscataway) and Australia (University of Queensland, Brisbane) as visiting professor. In 2005, I was also the chairman of the organizing committee of the European Muscle Research Conference, the most prestigious scientific conference on muscle research in Europe and recently I've been elected to chair the oncoming Gordon Research Conference on Muscle: Excitation-contraction coupling. In addition, I initiated several international scientific collaborations, which led to several visits of French, Swedish and Australian colleagues to our Department.



MEET A NEW MEMBER OF THE FEPS EXECUTIVE COMMITTEE: Professor László Csernoch (continued)

In addition to my duties as Head of the Department, I was also involved in the work of the Faculty of Medicine, first as Secretary of the Education Committee, then as Deputy Dean General, and then the Dean, which I continued for two terms. When doctoral training - PhD - started in Hungary, the Doctoral School of Molecular Medicine was established and I became the head of the doctoral school. Latter I was appointed to be the chairman of the Doctoral and Habilitation Council at the University of Debrecen and elected to be the chairman of the National Doctoral Council, a position I held for 9 years.

These years also found me in positions of scientific societies. I worked first as the Secretary General then as the President of the Hungarian Physiological Society. I was elected to be part of the Board of General Assembly of the International Union of Physiological Sciences, and, after serving two terms, to be part of the Council of IUPS as the head of Commission I – Locomotion.

It is both a great honour and a challenge to be involved in the governance of the University as Vice-Rector for Science which I became in 2013. Among other things, this work is a supervision and management of the doctoral training in the 23 doctoral schools at the University of Debrecen, and thus of the scientific nature of the institution. I consider my most important task to preserve the diversity of science and to raise the existing standards. I believe that protecting scientific excellence and maintaining the teaching and research prestige of the University is a priority. As a university leader, I also consider the education and the supporting of the talented in general, as a fundamental task.

The teaching of physiology has accompanied me throughout my career. I have taught everything that the Department of Physiology teaches, I have given practicals, seminars, lectures, in Hungarian, in English, to medical students, and as the training palette expanded to pharmacists, dental students, and biologists. I like teaching because I believe that teacher-student interaction is an intellectual relationship. However, in my opinion, education is not just about the acquisition of lexical knowledge. All the more so because we have now reached a stage where the amount of information exceeds what the human mind can absorb, whatever its memory. Therefore, the *ars poetica* of my teaching is that the teacher must teach students to learn, to think, and to ask questions. Learning this process is difficult. One becomes a good university lecturer and one can give a lecture that engages a student if one can give examples, if one can stimulate thoughts that are not just related to one's narrow professional field. That is why I like physiology. When I teach, I always have that in mind. I believe that the fundamental question is "why?", but only those who are good researchers can ask relevant questions.

Obviously, one's scientific activity changes over the years, with the positions one holds and the network of contacts one has built. As a young researcher, I spent a lot of time at the microscope and making actual measurements. I wrote and read scientific publications and then started to build my own laboratory and find collaborators, and I am lucky to work with many talented colleagues. Now it is important for me to pass on all the information I have gathered over the decades, which is necessary to point out ideas, directions and curiosities in research that help both to progress the research work and to shape the individual careers of colleagues. I am convinced that the most important task of a leader is to nurture the next generation. Science never stands still, there are and will always be new questions, because understanding the world can only be done at a certain environmental-technical-social level. Technology helps science to evolve, and new scientific results generate the evolution of technology. In short, we have a lot of work ahead of us.