

# IUPAB News #93

International Union for Pure and Applied Biophysics



## July 2025

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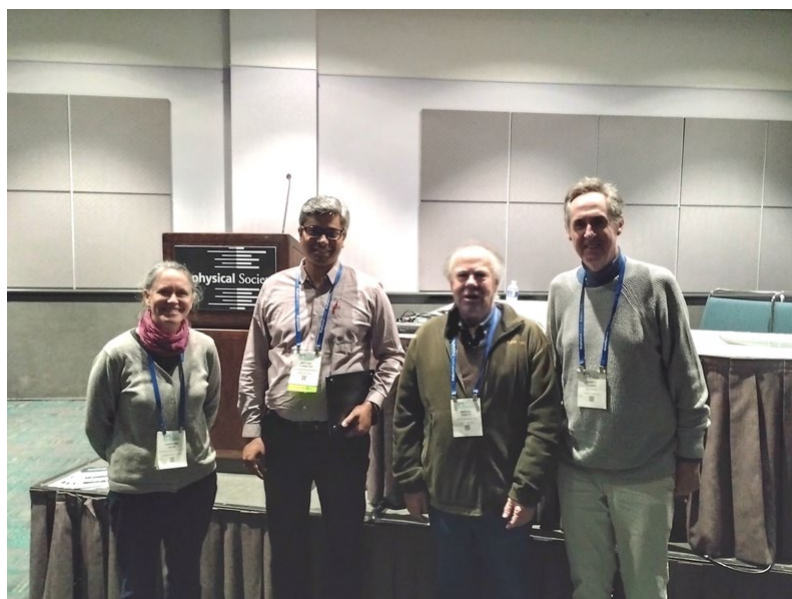
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## Important: Sign-Up

To receive future newsletters, please sign-up to a subscription using the "Sign up"  
link at the end of the newsletter.

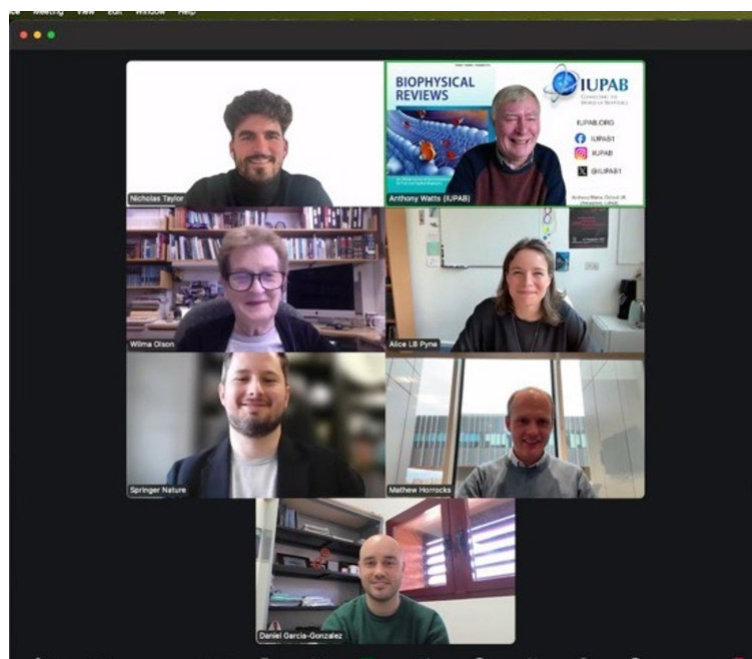


### **Aravind Penmatsa, Indian Institute of Science, Bangalore - IUPAB Lecturer at the Biophysical Society Annual Meeting 2025 in Los Angeles**

The 69th Biophysical Society (BPS) Annual Meeting, held from February 15-19, 2025, at the Los Angeles Convention Center, California, included thousands of scientists from 53 countries and showcased some of the latest research in biophysics. A highlight of the meeting was the BPS Annual Lecture from Eric Gouaux of the Vollum Institute, Oregon Health and Science University "From Clamshells to Clefts: The Molecular Basis of Synaptic Transmission".

BPS Member Aravind Penmatsa (above, with IUPAB Treasurer Christina Sizun, Past-President Manuel Prieto and IUPAB Secretary-General Ron Clarke) from the Indian Institute of Science, Bangalore, India, was the IUPAB sponsored speaker and gave a talk entitled "Mechanisms of GABA Reuptake and Inhibition among GABA".

BPS2025 also featured 19 Subgroup symposia, 21 Annual Meeting symposia, 4 workshops, 6 platforms, and >500 daily poster presentations. Career and education sessions, along with committee programs and exhibitor presentations ensured the 5 days were filled with opportunities to learn and network.



## **Biophysical Reviews - IUPAB Future Leaders Webinar**

On the 27th of March, to coincide with Biophysics Week 2025, *Biophysical Reviews* and IUPAB hosted a Future Leaders webinar including talks by the winner of the 2025 Michéle Auger Award for Young Scientists' Independent Research Associate Professor Daniel Garcia-Gonzalez (Universidad Carlos III de Madrid, Spain) and the runners-up Dr Matthew Horrocks (University of Edinburgh, UK), Dr Alice Pyne (University of Sheffield, UK) and Dr Nicholas Taylor (University of Copenhagen, Denmark).

The titles of the talks were:

Daniel Garcia-Gonzalez, *Soft magneto-responsive biological substrates to open new avenues in mechanobiology*

Matthew Horrocks, *Visualising biology at the single-molecule level*

Alice Pyne, *Developing new tools to probe DNA structure and interactions with sub-molecular resolution*

Nicholas Taylor, *Insights into 5:2 molecular motors from cryo-electron microscopy*

A recording of the webinar can be viewed

at <https://cassyni.com/events/FfStTXNfcTbWTYHboqAs3T>



## European Biophysics Societies Association (EBSA) Congress 2025, Rome, Italy

The 14th EBSA congress took place in Rome (June 30 – July 4) with >800 participants from >25 countries and >600 posters. IUPAB supported the congress with 5 early career scientist bursaries for early career scientists, with two of them (Blessing Oyiogu and Candela Szischik) winning poster prizes. Also, M. Soledad Celej (Argentina) gave the IUPAB sponsored plenary lecture entitled “*Phase transitions of tau- and alpha-synuclein: implications for overlapping neuropathologies*”, followed by an emotional description about the significant reduction in science funding and salaries for her national colleagues. The next EBSA congress will be joint with IUPAB in Berlin (5– 9 September, 2027).

The photo above shows IUPAB student travel bursary awardees at the congress with IUPAB executive committee members. From left to right: Caique Malospirito (Brazil), Emanuel Kava (Brazil), Alvaro Recoulat (Argentina), Anthony Watts (IUPAB President), Candela Szischik (Argentina), Christina Sizun (IUPAB Treasurer), and Blessing Oyiogu (South Africa).



## **Lightsources for Africa, Americas, Asia, Middle east and Pacific (LAAAMP)**

IUPAB has become a partner supporting LAAAMP (Lightsources for Africa, Americas, Asia, Middle east and Pacific; <https://laamp.iucr.org/>). LAAAMP was founded in 2016 through a grant awarded by the International Science Council to the joint IUPAP-IUCr project entitled Utilisation of Light Source and Crystallographic Sciences to Facilitate the Enhancement of Knowledge and Improve the Economic and Social Conditions in Targeted Regions of the World.

Calls for applications from faculty and students have a deadline for submission of 31 October 2025 for access in 2026. Successful applicants can spend 2 months during the calendar year at LAAAMP's AdLS Collaborative Partners to acquire expertise in accelerator technology or AdLS beamline techniques, including those involving crystallography.



## **5th Meeting of Portuguese Young Biophysicists - Biophysics Festival 2025, Monte da Caparica, Portugal**

Organized by masters and doctoral students from throughout Portugal, the 5th Biophysics Festival took place on May 8-9, at the NOVA School of Science and Technology, Monte da Caparica. It hosted 140 undergraduate students and postdocs of diverse nationalities. The program was structured around plenary lectures, providing insight into state of the art cryo-EM (Prof. Paula da Fonseca, University Glasgow) and synthetic protein design (Prof. Alena Khmelinskaia, LMU University, Munich), a lecture on bacterial nanowires by Pilar Portela, who was awarded the 2025 Young Biophysicist Prize of the Portuguese BPS, and 30 excellent student talks. These were followed by lively question and answer sessions. Additional discussion was stimulated by >60 poster presentations, showcasing a large palette of scientific research. The festival concluded with prizes given for the best oral presentation, the two best flash talks, and three best posters. IUPAB partnered the festival again this year as a sponsor, and IUPAB Treasurer Dr Christina Sizun had the honor and



pleasure to be invited to attend. She thoroughly enjoyed meeting and engaging with the Portuguese Young Biophysicists, who have built an event that grows each year and will undoubtedly encourage more students to get involved. IUPAB hopes that it will also inspire young biophysicists in other countries—and across borders—to create similar communities and opportunities, where science lives and grows.

### **Andre Miranda - Report on the 9th International Meeting on G-Quadruplex Nucleic Acids, Minneapolis, USA**

I attended the 9th International Meeting on G-Quadruplex Nucleic Acids held from June 2 – 5, 2025 in Minneapolis, MN, USA. The conference brought together leading researchers in the field of quadruplex nucleic acids, offering a platform for exchanging the latest findings and methodologies. Keynote presentations covered structural biology, chemical biology, and therapeutic applications of G-quadruplexes. I presented an oral communication about a B-MYB G-Quadruplex as a therapeutic cancer target and its interaction with small molecules and their biological effects, which received valuable feedback. The sessions were highly informative, fostering discussion on emerging techniques and unresolved questions. Networking opportunities were abundant and productive. Overall, the conference was an inspiring and insightful experience that deepened my understanding of nucleic acid structures. I thank IUPAB for the award of a travel bursary which enabled my attendance.





**Annika Blum and Sinja Goetz - IUPAB Poster Prize Awardees at the 23rd Annual Membrane Study Group (GEM) Conference "Diving into the Secrets of Cellular Membranes", Boulogne-sur-mer, France**

Annika Blum - I attended the 23rd Annual GEM Conference in Boulogne-sur-Mer (April 1-4) to learn about the latest advances in membrane science, focusing on the structure, dynamics and interactions of cellular membranes. The conference provided a valuable platform to network with leading researchers and gain insights into innovative approaches to membrane technology. As my current work focuses on understanding the interaction of polymers with membranes, the presentations and discussions with fellow researchers were highly relevant. Attending GEM allowed me to share my research as well as gain ideas and learn new methods that could enhance my research. It was an inspiring experience that deepened my understanding and broadened my academic network.

Sinja Goetz - I became aware of the GEM XXIII conference through my supervisor and was particularly interested because of its similarity to the International Membrane Biophysics Meeting in Drübeck, Germany. As our working group had not attended before, I saw this as a good opportunity to get to know the format. I appreciated the interdisciplinary exchange and open discussions, providing valuable insights and feedback for my own research. The conference provided a supportive environment to present my work and network with other researchers in the field. Overall, it was a very positive experience and I would like to participate again.

**Social Media**

**IUPAB is now on social media platforms!** These include Twitter (@IUPAB1), Instagram (IUPAB1) and Facebook (IUPAB2). Please head over to any of these pages to keep up to date on all IUPAB activities. A IUPAB Wiki page has also been created – details [here](#).

## Future IUPAB Events

2025 IUPAB Focused Meeting on P-Type ATPases (September 15 – 19) Cairns, Australia, details will be posted [here](#).

2027 IUPAB Congress (September 5 – 9) Berlin, Germany

Links will be posted on the [IUPAB.ORG](https://www.iupab.org) website when they are available.

2030 IUPAB Congress (June 17 – 21) Quebec City, Canada



## International Science Council (ISC) Events and Opportunities

### News

Launch of the Asia-Pacific Academic Mentoring Program:

<https://council.science/news/australia-and-new-zealand-academics-sow-seeds-of-success-with-pacific-islands-scholars/>

Establishment of Biological Weapons Convention expert group:

<https://council.science/news/announcing-isc-expert-group-biological-weapons-convention/>

### Past Events

Muscat Global Knowledge Dialogue and Third ISC General Assembly - Muscat, Oman 26-30 January 2025- <https://council.science/events/isc-ga-2025/>



Nigerian Academy of Science (NAS) – 6th scientific conference

<https://council.science/events/nas-6th-scientific-conference-nigeria/>

Webinar The Art of Drug Design - July 16,

2025: <https://url.au.m.mimecastprotect.com/s/HH0VCwV1vMfynPp3GSVfriJc9IJ?domain=council.science>

### **Calls and Applications Open**

Call for proposals to strengthen science-policy nexus across Asia, deadline: 25 August 2025:

<https://url.au.m.mimecastprotect.com/s/Wo4qCxngwOfxjBOo1uvhviyNaoV?domain=council.science>

### **Publications**

Strengthening the Biological Weapons Convention through science:

<https://url.au.m.mimecastprotect.com/s/AKkPCyojxQTL3Jn5riQiOixFvX0domain=council.science>

Trust in science for policy

nexus: <https://url.au.m.mimecastprotect.com/s/2KNDCzvkyVC4znLoMTKsDi94RWP?domain=council.science>

Futures thinking and strategic foresight in action: Insights from the Global

South: <https://url.au.m.mimecastprotect.com/s/mecNCANpgjCE5VYANiQvtiGzM0S?domain=council.science>



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