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Important: Sign-Up

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Biophysics Week 2026

Biophysics Week 2026 will be held from March 23-27, marking its 11th anniversary! Established by the Biophysical Society (BPS) in 2016, Biophysics Week has grown into a global event to celebrate the interdisciplinary field of biophysics, bringing together biophysicists, researchers, educators, and enthusiasts to highlight the significance and impact of biophysics in science. This anniversary is set to be an engaging and memorable Biophysics Week, with presentations, interactive pane discussions,

networking opportunities, community outreach, and educational activities IUPAB is partnering with BPS for this 11th anniversary celebration. We hope you will participate and celebrate by [hosting](#) or attending an event.



European Biophysics Societies Association (EBSA) Congress 2025, Rome

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, 2 of them (Blessing Oyiogu and Candela Szischik) winning poster prizes. Also, M. Soledad Celej (Argentina) gave the IUPAB-sponsored plenary lecture “*Phase transitions of tau- and alpha-synuclein: implications for overlapping neuropathologies*”, followed by an emotional description of 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).

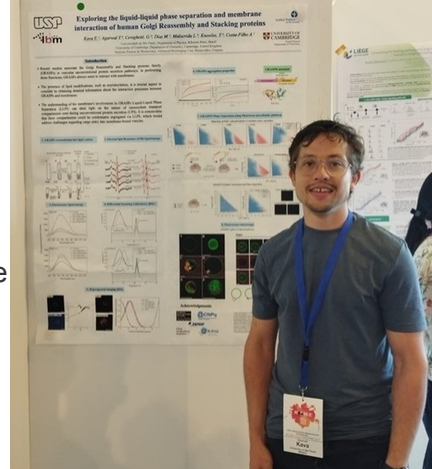
The photo above shows IUPAB student travel bursary awardees at the congress with IUPAB executive committee members. From l. to r.: Caique Malospirito (Brazil) Emanuel Kava (Brazil), Alvaro Recoulat Angelini (Argentina), Anthony Watts (IUPAB President), Candela Szischik (Argentina), Christina Sizun (IUPAB Treasurer), and Blessing Oyiogu (South Africa). Below are photos of the students presenting their posters alongside their reports.

Emanuel Kava, Brazil

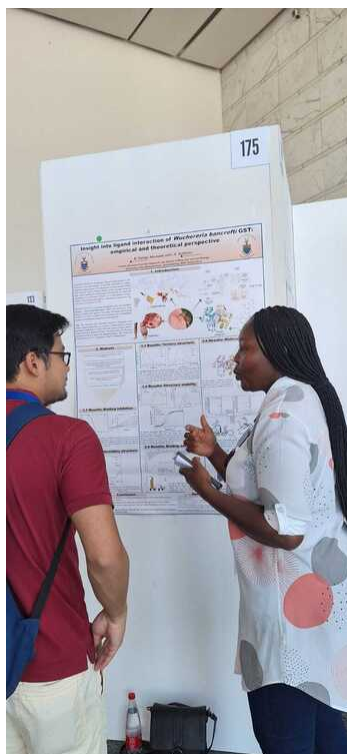
It was a great opportunity to participate in the EBSA Congress. I am extremely grateful to IUPAB for this opportunity. In addition to making connections with young biophysicists, highlighting the importance of organising scientific meetings, I received valuable

feedback on my poster presentation. I have selected 2 important impressions:

1 – Conversations with Dominik Gendreizig, a PhD student in Enrica Bordignon's group in Genève, resulted in insights about using EPR to investigate protein condensate dynamics. I have performed some EPR experiments using the spin label in three different regions of my protein of interest (GRASP55), and Dominik gave me some tips on how to deal with challenges in separating the condensed phase by centrifugation.



2 – The effects of protein engulfment inside GUVs yielded interesting discussions with Ashutosh Kumar, a PhD student in Stefano Vanni's group in Fribourg. His experience with coarse-grained MD simulations involves the investigation of protein phase separation on lipid membranes. The GRASP55-membrane system will be helpful for him to answer some questions on how the condensation mechanism happens, since my confocal microscopy results indicate that the protein condenses on the GUV surface.



Blessing Oyiogu, South Africa

Thank you, IUPAB, for your generous support, which provided me with the opportunity to attend and present at the EBSA 2025 Congress in Rome.

I presented my research during the poster session, titled "Insight into ligand interaction of Wuchereria bancrofti GST: empirical and theoretical perspective", which explores ligand structural impact and inhibition of the enzyme activity. A highlight of my participation was my selection for a Poster Award, recognising the scientific merit and presentation quality of my research. This was a proud and affirming moment in my academic journey.

Participation in the congress not only allowed me to share my findings with a broad scientific audience but also to receive constructive feedback and suggestions for improvement. I also had the opportunity to attend talks led by leading experts in structural and molecular biophysics. Beyond the scientific sessions, the congress offered me an enriching opportunity for networking and

establishing potential collaborations with peers and experts from diverse institutions.

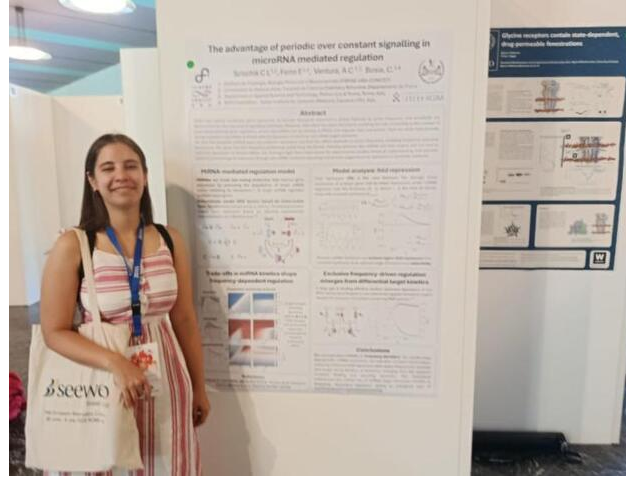
I left the event inspired, equipped with new insights and fresh motivation for the next stages of my research.

Szischik Candela, Argentina

Attending the 15th European Biophysics Congress has been a major

achievement in my career as a young scientist. This conference brought together experts from around the world working in various fields of biophysics.

Coming from an underdeveloped country, where both economic and scientific crises have severely impacted our work, participating in such events is inconceivable without support.



The IUPAB bursary made this opportunity possible and played a key role in helping us build new connections, share our research and find inspiration in other's work. Learning more about super-resolution microscopy, cell communication, molecular simulations and other cutting-edge topics has been a great source of motivation for my future research. It was a rewarding experience to present and discuss my ongoing research on post-transcriptional regulation and frequency decoding strategies. One highlight was a discussion with Prof. Bianca Sclavi, who provided valuable feedback on our work. Moreover, my poster was nominated for an award among more than 300 submissions from young researchers, and I was honored to receive the prize - a recognition for which I am deeply grateful.

I also had the pleasure of meeting a warm and welcoming community of young scientists from different countries. This was not only an opportunity to exchange scientific experiences, but also to learn about their cultures, creating lasting connections that I hope will continue to grow in the future. I would like to express how profoundly moved I was by Prof. Soledad Celej's talk, where she bravely addressed the ongoing scientific crisis in our country. Her words—and the expressions of solidarity I received from fellow participants—were both comforting and encouraging. Many approached me with questions and kind words, showing genuine concern and support.

Finally, I would like to express my heartfelt gratitude for this opportunity, which was not only professionally enriching but also allowed me to visit our collaborators in Turin, Italy. The entire journey was a fantastic experience.

Caique Malospirito, Brazil

Participating in the EBSA 2025 Congress in Rome was a transformative experience — the largest biophysics congress I've ever attended. I was impressed by the breadth of biophysics and how its principles apply to diverse biological contexts I hadn't previously imagined. It became clear to me how vibrant and innovative the field remains. Contrary to my prior belief, that structural biology might be losing ground to computational approaches, the congress revealed a bright, evolving future for biophysics, with applications spanning molecular structures to whole-organism systems.

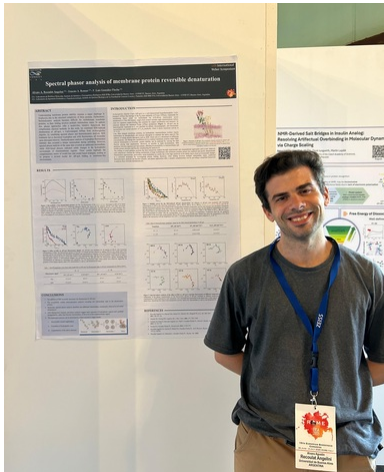
During my poster presentation, I had the chance to share my research on sirtuins and metabolic regulation. I was pleasantly surprised to connect with researchers interested in my topic. This exchange reaffirmed that the work I'm doing is not only competitive but also relevant at an international level — an important realization, especially coming from a developing country where we often underestimate our scientific contributions.

Currently, my lab focuses on tissue engineering through cell culture, immunostaining, and qPCR. Attending the sessions on bioprinting and tissue engineering was especially inspiring. The lecture by Prof. Dr. Marcy Zenobi-Wong particularly stood out, highlighting

how biophysical approaches like scaffold bioproteins can drive innovations in tissue regeneration and in vitro organ modeling — ideas I am now considering for future postdoc proposals.

Beyond the academic sessions, walking through historic Rome, seeing in person the art and architecture I knew only from books, was an unforgettable personal highlight. And of course, the gala dinner was a fantastic moment of celebration and connection.

I'm immensely grateful to IUPAB for supporting my participation and believing in my work. Please count on me to help promote future events and inspire more students to pursue opportunities like this one.



Alvaro Recoulat Angelini, Argentina

I would like to express my sincere gratitude to IUPAB for awarding me a bursary that made it possible to attend EBSA2025 and present my poster “Spectral Phasor Analysis of Reversible Denaturation of Membrane Proteins.” My research focuses on understanding membrane protein stability and folding by combining classical thermodynamic analysis with model-free spectral phasor approaches. Presenting this work at EBSA2025 provided an excellent opportunity to receive feedback from leading researchers in protein biophysics. Attendees at my

poster offered insightful comments about the challenges of applying classical thermodynamics to membrane protein folding studies, and several were interested in using spectral phasor analysis for their own systems.

The conference also featured many excellent lectures and symposia running in parallel, which sometimes made it difficult to choose among them. Nonetheless, the sessions I attended greatly expanded my knowledge and introduced me to novel experimental and theoretical approaches. Beyond these scientific sessions, EBSA2025 offered valuable networking opportunities. I was able to meet fellow early-career researchers as well as established scientists, discuss potential collaborations, and exchange ideas in an open and welcoming environment. These connections are especially important for young scientists coming from outside the European biophysics community, as they promote international cooperation and scientific mobility.

Attending EBSA2025 was a highly enriching experience that strengthened my ties to the global biophysics community. I am truly grateful to IUPAB for supporting the inclusion of researchers from Latin America and Africa.

**17th International Meeting
on the Role of P-Type
ATPases in Health &
Disease, Cairns, Australia**

Reka Nagy, Semmelweis University,
Budapest

The 17th International Conference on P-type ATPases in Health & Disease, provided an excellent opportunity to increase scientific knowledge, network, and develop professionally. Participating in the conference enriched my knowledge of research trends in the field and



allowed me to engage in discussions directly related to my ongoing work on PMCA4b transport and its role in cancer cell motility.

The scientific program was rich and diverse, covering structural biology, physiology, disease mechanisms, and therapeutic targets. Among the lectures most closely related to my research, those dealing with Ca^{2+} -ATPases stood out, especially those dealing with the regulation of PMCA and SERCA. I would like to highlight the presentation by Nikolaj Catois Straarup, who presented the cryogenic electron microscopic structure of PMCA and examined the relationship between autoinhibition and calmodulin-mediated activation. His findings on conformational transitions between autoinhibition and the active state provide important structural context complementing my studies of PMCA4b cell biology. Since my own work has so far focused on endocytic transport and PDZ-dependent recycling mechanisms, it was very useful to learn about PMCA regulation from both structural and biochemical perspectives.

Several presentations highlighted the broader significance of autoinhibition as a universal P-type ATPase regulatory principle. This topic returned in several presentations, pointing out that small changes in regulatory domains, even outside the catalytic core, can influence pump behavior. These data directly enrich my understanding of PMCA function, particularly with regard to how interactions between domains or binding partners such as SNX27 can influence transport-related conformational states.

Important updates on SERCA were also presented, including a presentation by Vinh H. Nguyen and Howard S. Young on SERCA activators and cryogenic electron microscopy studies, showing how small molecules and regulatory peptides modulate pump activity and providing structural snapshots of these interactions. This confirms the importance of combining structural information with cellular observations when interpreting Ca^{2+} handling mechanisms.

Although not directly related to my own research area, Kathleen Sweadner's presentation provided an excellent overview of ATP1A3-related disorders, Poul Nissen spoke on isoform-specific structural regulation, and Chikashi Toyoshima, who solved the structure of the first P-type ATPase, the SERCA pump, provided valuable historical and mechanistic insights. Their presentations provided valuable wider context and were inspiring.

This conference was an extraordinary experience for me, both professionally and personally. From a scientific point of view, it reinforced my understanding of the structure-function relationships of ATPase, highlighted the latest methods, and provided valuable context for interpreting my own data. From a personal perspective, the meeting allowed me to build relationships with researchers from several subfields, including young researchers whose work is similar to mine. Presenting my research to this community of experts was an important milestone, and I received constructive feedback

that will serve as guidance for my future experiments. The conference contributed significantly to my development as a PhD student, and I am deeply grateful for the support that made my participation possible.

Martina Raissa Ribeiro, University of Sao Paulo

Attending last year's ATPase and ATP1A3 joint meeting in Cairns was a special experience for me, both professionally and personally. From the beginning, the atmosphere of the conference felt unique, not only because it was the first time in Australia, but also because of the combination of such different perspectives on P-type ATPases, from molecular mechanisms to disease relevance.

The first days of talks were more functional and chemically oriented. For me, who normally focuses more on molecular pathways and mechanisms, this was a challenge, but also very enriching. I was pushed outside my comfort zone, and I learned a lot. As always, I particularly enjoyed the lecture by Prof Kathleen Sweadner, whose talks always inspire me.

An important moment for me was that this was my first oral presentation at an international conference. It was not easy, but I managed to overcome my shyness and actually enjoyed the experience. I hope to continue presenting my work in oral sessions, as this gave me confidence and motivation. I also presented my poster, and I think this was one of the highlights of the meeting. The poster session allowed me to discuss my results more closely with other researchers. I always have the feeling that I could talk for hours about my project when people are interested. These exchanges gave me new ideas and made me feel even more passionate about my work.

Beyond the scientific program, the conference was extremely valuable for networking. Because it is a specific meeting with a smaller community, it was possible to meet people during coffee breaks and social moments. I had the chance to talk to several researchers, and even to learn about potential laboratories for future postdoctoral positions. This excites me and makes me feel like I am really part of this scientific community.

This conference changed me in many ways. I feel more confident, connected, and inspired to continue my career. I am deeply grateful to IUPAB for this opportunity, which was only possible thanks to the financial support I received.

I am already looking forward to the 18th conference in Leuven. I hope to meet everyone again there, to share new results and to exchange fresh perspectives that will continue to shape and inspire our field.

Amalie Purup, Aarhus University

At the P-type ATPase meeting in Australia, I had the opportunity to present my recent work on the yeast P4-ATPase to an audience of experts. This was a valuable experience, as I received constructive questions and comments from scientists working directly on this protein or on related ATPases.

The conference provided new insights into both the structural and physiological functions of flippases, with particularly inspiring presentations by Todd Graham, Thibaud Dieudonné, and Kazuhiro Abe. In addition, I broadened my knowledge of the P-type ATPase family more generally, including ion pumps and P5-ATPases. I also learned about new methodological approaches applicable to my project, especially innovative strategies for investigating mutations linked to disease, both experimentally and through integration with current structural knowledge.

An enriching aspect of the meeting, not usually included in the conferences I have attended, was the inclusion of a patient advocate, Joy Namdarian, highlighting the

importance of bridging basic research and medical perspectives.

Beyond the scientific content, the conference gave me the chance to connect with researchers from across the world. These interactions provided space for engaging discussions and laid the foundation for potential future collaborations. The combination of scientific exchange and informal interactions made the meeting a highly rewarding experience, both academically and personally.

Nikolaj Catois-Staarup, Aarhus University

I am grateful to IUPAB for awarding me a travel bursary to attend the 17th International Meeting on P-Type ATPases in Health & Disease. The financial support was essential for my participation, and it provided me with an invaluable opportunity to present and discuss my work with the international P-type ATPase community.

At the meeting, I had the opportunity to present my structural studies on Plasma Membrane Calcium ATPase (PMCA) regulation. After the presentation, I received valuable feedback, particularly regarding data processing, experimental design, and optimal PMCA isoforms for my experiments. In addition, discussions with experts on PMCA provided broader insights into the biological properties of PMCA.

Beyond the scientific exchange, the conference provided an excellent opportunity to strengthen my professional network. Meeting other early-career researchers and established investigators has broadened my view of potential career paths and possible collaborations. I am grateful to IUPAB for enabling my participation, which has had a clear impact on both my research and professional development.

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

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

Links will be posted on the IUPAB.ORG website when they are available.

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



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