BPS Bulletin
THE NEWSLETTER OF THE BIOPHYSICAL SOCIETY
Biophysical Society

2025 BPS Elections Now Open

Voting Is Open June 1 through August 1

The Biophysical Society is pleased to announce the 2025 slate of candidates for President-Elect and Council.

The two candidates for President-Elect are *Enrique M. De La Cruz* of Yale University and *Pernilla Wittung-Stafshede* of Chalmers University of Technology (through June 30, 2025) and Rice University (beginning July 1, 2025). The President-Elect will serve a one-year term, beginning February 2026, followed by a year as President, starting February 2027, and one subsequent year as Past-President, beginning February 2028.


Enrique M. De La Cruz


Pernilla Wittung-Stafshede

This year's slate includes nine candidates for Council, shown below. The four members who are elected will each serve a three-year term beginning February 24, 2026.

Full biographical information and candidate statements are available at www.biophysics.org/elections/bps-elections. All Society members, including students, with 2025 dues paid by May 30, 2025, are eligible to vote. Eligible members may vote electronically through August 1, 2025, by means of the secure site at www.biophysics.org/elections/bps-elections.

The Society is indebted to the Nominating Committee for developing the slate of candidates. The committee members were *Valeria Vásquez* (Chair), *Margaret Cheung*, *Taekjip Ha*, *Kumiko Hayashi*, *Syma Khalid*, and *Kresten Lindorff-Larsen*.


Clemens Anklin


Robert Best

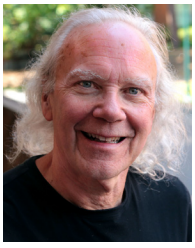

Phillip Biggin


Ashley Carter


Timothy Craggs


Kandice Levental


Tanja Mittag


Gary Pielak


Neelanjana Sengupta

Inside

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www.biophysics.org/election


Lynmarie K. Thompson

Highlighting the Breadth and Promise of Biophysics

Recently I attended a workshop on "Transforming Research into Real Talk," which aimed to enable participants to translate a research paper into a short essay for a lay audience. I've always been interested in this sort of discussion, but also always thought that I didn't have the time to spend on this. In the current context of major funding cuts and attacks on research and expertise, it now feels like a critical priority. So, I was thrilled to see the changes that Harvard has made to its website, which (as of this writing) leads with "Research Powers Progress" and links to many vignettes describing research advances in the discovery of causes and cures for a range of diseases.

Wouldn't it be fabulous if all research universities and scientific societies were to make similar changes so that our websites would highlight for the public the tremendous value of research to society? To help BPS make a change like this, we invite BPS members to send us a vignette (or a link to an existing one) that provides a clear and compelling description of the value of biophysics research to humanity. Please send them to society@biophysics.org. Your vignette need not be related to a funding cut, as the importance of showing the value of biophysics research goes well beyond this current moment. Finding opportunities to communicate the value of science is an ongoing priority.

Prior to being inspired by the "Real Talk" workshop, my original plan for this column was motivated by February Council, during which I learned that approximately 60% of the 20 regular symposia and 5 workshops for the proposed 2026 Annual Meeting program grew out of member proposals. It struck me that this is important information to share with BPS members: you can and do shape the range of topics covered at the Annual Meeting.

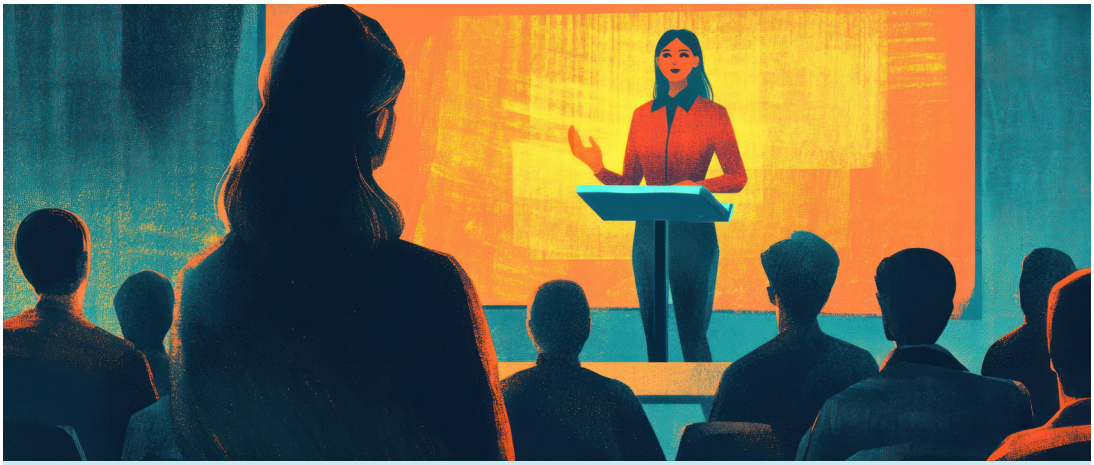
In the May 2024 issue of the *BPS Bulletin*, then-President *Gabriela Popescu* provided a clear overview of how the Annual Meeting is assembled (www.biophysics.org/bps-bulletin/behind-the-scenes-organizing-the-bps-annual-meeting). With this column, I want to highlight how BPS members can shape the content of the Annual Meeting. Member proposals for symposia and workshops are a great opportunity to ensure that the Annual Meeting covers the wonderful diversity of biophysics research, ranging from important cornerstone areas of BPS to exciting emerging areas that might be new to our meeting. If you think a key topic has been missing at the Annual Meeting, submit your proposal! These proposals will also include your suggestions for session chairs and speakers, which again is an opportunity to highlight individuals and science that might not be familiar to the Program Committee or Council. When these proposals are considered, the goal is to select a diverse set of exciting areas and speakers that have not been included in recent meetings. The Program Committee will also consider statistics from prior meetings, including the numbers of abstracts submitted in each category, to ensure that the range of chosen symposium and workshop topics aligns with member interests. The annual call for proposals for symposia and workshops opens in mid-July, and we look forward to receiving your best ideas to shape the 2027 meeting.

The 70th BPS Annual Meeting will be held February 21–25, 2026 in San Francisco. Our hard-working Program Chairs *Ariane Briegel* and *Ilya Levental*, along with the Program Committee, Council, and Subgroup Chairs, have been putting together a fabulous program. Informed by member proposals, topics have been chosen and speakers have been invited for the 20 regular symposia and 5 workshops. These regular symposia and workshops will all feature four invited speakers and a fifth speaker selected from submitted abstracts. These "SympSelect" and "WorkshopSelect" speakers, introduced at the 2024 meeting in Philadelphia, provide an opportunity at abstract submission to nominate yourself or encourage a colleague for these fifth speaker slots at the 2026 Annual Meeting.

BPS members can further influence the program by nominating speakers for the named symposia. Chairs of the "Black in Biophysics," "Future of Biophysics," "New and Notable," and "President's Symposium" will be reaching out through various calls this summer for your suggestions for speakers for these sessions. Finally, your abstract submissions matter! The numbers of abstracts submitted in each category influences the number of platform sessions. Council periodically updates the categories with expansions, contractions, and new categories. So vote with your submissions, and your suggestions. We are very excited to introduce a new abstract category for the 2026 meeting: Biophysics of Sustainability. We look forward to your abstracts that, as always, will shape the major content of our Annual Meeting.

In closing, we hope BPS members will submit: 1) your best stories of the value of biophysics research to the public for the BPS website, 2) your best symposium/workshop proposals and speaker suggestions for the BPS Annual Meeting, and 3) abstracts that reflect the diverse and exciting work being done in biophysics. Your contributions will enable us to highlight, for BPS members and for the general public, the full range and value of biophysics!

—*Lynmarie K. Thompson*, President



Call for Thematic Meetings

Organize a meeting on a topic you are passionate about while benefiting from full administrative support from the Biophysical Society.

Each year the Society selects three to four Thematic Meetings on timely, focused topics that have not been recently presented. These meetings are fully supported by the Society, with up to $10,000 in funding and comprehensive meeting management, including both online and onsite logistics. What makes these meetings unique from other small meetings is that they bring together researchers from disparate disciplines to work on a common problem, which is the essence of biophysics. Held in locations around the world, these meetings also extend the Society's reach to scientific communities that may not have access to the Annual Meeting.

To be considered for a BPS Thematic Meeting, proposals must meet the following criteria:

- Organizers must be Society members;
- Topics must be timely and not recently addressed and should foster interdisciplinary and international research;
- Proposed meetings must be standalone meetings, not satellites to other meetings or an established small meeting that already meets periodically;
- Speakers must present new and exciting research;
- The proposed list of speakers must reflect the diversity of Society membership; and
- Meetings are to take place outside the United States.

Only complete proposals submitted through the online submission site (https://www.surveymonkey.com/r/PBDR9WP) will be considered by the Thematic Meetings Committee.

Previous and upcoming Thematic Meetings can be viewed at www.biophysics.org/thematic-meetings.

Submission deadline for proposals is Friday, July 18, 2025.

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Andrew Feig

Andrew Feig

Areas of Focus
Science philanthropy, support of early-career researchers, interdisciplinary science, and using data-driven approaches to understand the impact of grant programs on the trajectories of individual scientists and scientific communities

Institution
Research Corporation for Science Advancement

At-a-Glance

Andrew Feig, Senior Program Director at Research Corporation for Science Advancement, took a part-time job in high school that set him on a path that would lead to a lifelong career in research, teaching, and now scientific philanthropy.

Andrew Feig's first exposure to scientific research came at the University of California, Los Angeles (UCLA) School of Medicine, where he worked after school for a physician-scientist, *Robert Seeger*. Feig's job was to build a database to track neuroblastoma patients enrolled in national clinical trials. The system correlated the lab results and various clinical outcomes across the national study. This allowed him to become familiar with the research going on in the laboratory and the tests being performed at different points along the therapeutic timeline.

"During the summers, when I could work full time, I volunteered to do bench work alongside my database responsibilities," Feig said. He learned how to grow cells in culture and perform immunohistology studies, eventually developing antibodies to study a cancer-related gene called "N-myc." The work helped him understand how lab science could connect to real patient outcomes and gave him an early taste of research.

Feig grew up in Los Angeles, near UCLA's campus in Westwood. His father was a pediatric hematologist and his mother a special education teacher. After high school, he went on to study chemistry at Yale University. During college, he returned to UCLA each summer to work in the lab of *David Sigman* studying chemical nucleases, derivatives of the *o*-phenanthroline-copper system that Sigman had invented, and this work was far more biochemical and biophysical than his earlier lab work.

His undergraduate senior thesis research at Yale with *Bob Crabtree* sparked an interest in bioinorganic chemistry, designing and synthesizing model systems for nickel hydrogenases. That led him to the Massachusetts Institute of Technology, where he earned his PhD in chemistry in 1995, working with *Steve Lippard* on synthesizing new model systems for non-heme iron enzymes such as methane monooxygenase and the kinetics of their reaction with dioxygen. Feig says, "Those five years of work ultimately taught us about the many reasons small molecule catalysts of that time failed to convert alkanes to alcohols. I helped catalog many of the side reactions they were prone to undergo. This variety of training experiences made me a bit of a tool collector, which has continued throughout my career. I have always been willing to learn about and try new techniques that might add to our ability to solve a problem in the systems we studied."

His graduate training gave him a strong foundation in chemistry, but Feig's next step took him in a new direction. He joined *Olke Uhlenbeck*'s lab at the University of Colorado Boulder as a postdoc, where he learned to work with RNA and to study the activity of ribozymes. He recalls, "My letter to Olke was the one and only postdoc application that I submitted. The independent proposal I wrote as a second-year graduate student, to study the role of metal ions in RNA catalysis, was largely based on Olke's pioneering work with the hammerhead ribozyme. As I approached graduation, what I had proposed to do still had not been done. I wrote to him and asked if I could join his lab to work on it, and I never looked back. During that period, Colorado was a hub for RNA science, and the biochemistry, biophysics, and molecular biology of RNA was all around us. It was a great place to be immersed in the field, and as someone transitioning from chemistry to biophysics, it was a fantastic experience that changed the trajectory of my career and where I made a collection of lifelong friends and colleagues."

Feig became particularly interested in biomolecules with metastable folds during his postdoctoral work while studying RNA catalysis and the role metal ions played in both folding and catalysis. He explains, "The small ribozymes underwent large-scale rearrangements to achieve their catalytic confirmations. Similarly, large molecular machines like the ribosome or the spliceosome would interconvert between various conformations to catalyze specific steps in their respective processes. I had been taught the lock-and-key formalism for biological kinetics, and these systems clearly did something far more complex that was fascinating, so I sought out sys-

tems that were tractable but required these large movements to carry out their biological function."

Feig joined the faculty of Indiana University, Bloomington in 1999 and moved from there in 2006 to Wayne State University, where over the years he was promoted to full professor and served four years as associate dean of the graduate school.

Over the years, his research relied on a wide mix of methods—chemical, biochemical, computational—often in collaboration with other labs. Feig said these partnerships were some of the most rewarding parts of running a lab.

In 2019, after nearly two decades in academia, Feig made a major career change. He left his faculty position to join Research Corporation for Science Advancement (RCSA), a foundation that had supported his research from early on. He states, "I was funded by RCSA across much of my academic career, starting with my Cottrell Scholar Award in 2002, and this became a career-spanning relationship with the foundation and members of the Cottrell Scholar community. When I was approached about joining RCSA, it was an opportunity I could not pass up as it had been so influential in the way I taught, mentored students, and pursued science. Positions like the one I currently have do not open up frequently, so the likelihood of it becoming available again during my career was small. Thus, it was a 'now-or-never' moment." Now a Senior Program Director at RCSA, Feig helps design and run programs that support early-career scientists and foster interdisciplinary research.

The main program he oversees is called "Scialog" (short for "science + dialog"). He shares, "For each initiative (we typically run four to six themes concurrently on different topics), we curate a cohort of about 50 participants (fellows) interested in the problem on the table who represent the different disciplinary areas and scientific approaches needed to address it. Over 2.5 days, the fellows undergo a structured set of conversations and meetings that help them get to know each other, build trust, and learn from each other, culminating in the writing and submitting of short research proposals by small teams of scientists who have not worked together previously. These proposals get reviewed rapidly, and the best of these high-risk/high-reward projects receive funding in the form of a seed grant to launch the collaboration and test the idea. There is a lot more that goes into this as we curate the interactions throughout the meeting on the basis of data we collect about the fellows and their connectivity to the other participants, and over the three years of the typical Scialog initiative, we monitor the evolution of this network of scientists and how well they coalesce into a coherent community across their disciplinary breadth."

Although he's no longer in the lab, Feig still studies science in a different way. He and colleagues have been working with applied mathematicians to study quantitatively the social dynamics at Scialog conferences and how they support the formation of new collaborations, the decisions of who chooses to work with whom at Scialog, and how the interactions at the meeting foreshadow the future success of the team. "We use this work to further refine how we structure our meetings and manage the relationships with our Scialog fellows," he says. "I also get to live vicariously off the science being done in the labs of our grantees and seeing the fields evolve as a result of the network of scientists whom we connect through our work."

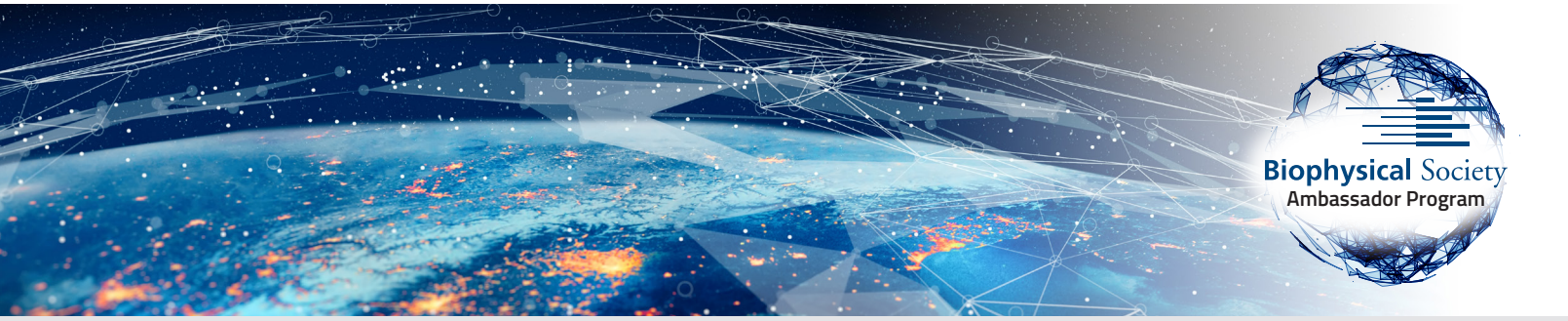
Feig says that one of the biggest challenges he's faced over the course of his career was managing the ups and downs that come with research funding. "There was a time when we had a gap in support," he says. "Trying to keep things going and support my trainees during that time was really hard." He also pointed out the difficulty of balancing two careers within one family—something he says isn't a one-time decision but an ongoing conversation.

Looking ahead, Feig sees scientific research becoming even more collaborative and interdisciplinary. "The days of a single principal investigator solving a really big problem alone are fading," he asserts. "The most important science will come from teams that include biophysicists, chemists, physicists, engineers, mathematicians, and disease experts—whatever the problem requires. Learning to work well with colleagues who have a wide range of expertise and experiences is critical and should be an important component of training the next generation of scientists."

Feig has long been active in the Biophysical Society, and the Annual Meeting has played different roles at different stages of his career. As a trainee, it was a place to learn about new techniques and areas of research. Later, it became a venue to meet collaborators. Now, as a funder, it helps him stay connected to scientists in the field and identify promising new directions the foundation may wish to support. He is currently an associate editor for *The Biophysicist* and a member of the Education Committee.

Outside of work, Feig enjoys cooking and spending time outdoors with his wife. "There's a saying that you shouldn't trust a chemist who can't cook," he jokes. "The process of cooking—following a protocol, adjusting as needed—is a lot like learning to run an experiment." He's also an avid hiker and cyclist, taking full advantage of the outdoor opportunities in and around Tucson, Arizona, where he's based.

Feig encourages early career scientists to stay open to new opportunities, even ones that might seem uncertain at first. "Sometimes a big opportunity only comes along once," he declares. "You have to be willing to step out of your comfort zone. Science is always changing, and we need to be willing to change with it."



Call for BPS Ambassador Applications

Are you an advocate for biophysics education and knowledge sharing? Put your skills into action! The BPS Ambassador Program was developed to help make biophysics a more dynamic, inclusive, and interdisciplinary community to better serve the needs of our international membership. Currently, BPS works with 12 Ambassadors—four-member cohorts serving three-year terms.

For the next class of Ambassadors (2026–2028), we are accepting applications from all international members residing in countries outside of Australia, Cameroon, Japan, Lithuania, Mexico, Spain, United Arab Emirates, and Uruguay. An ideal Ambassador is actively engaged in biophysics research and committed to remaining in the field for the duration of the Ambassadorship, an active paid member of the Society in good standing, able to attend the Annual Meeting at the start of their term, has working proficiency in English, and has a demonstrated ability to contribute to organizations or scientific societies outside of their normal job duties. **Applications close on July 18.**

To learn more about the program, Ambassador eligibility, and benefits, please visit www.biophysics.org/outreach/ambassador-program.

BPS Welcomes Sarah Smaga as the BPS Congressional Fellow

We are pleased to announce the selection of *Sarah Smaga*, who earned her PhD in molecular biophysics and biochemistry from Yale University, to be the BPS Congressional Fellow for the upcoming 2025–2026 cycle. After completing an intensive orientation program, Sarah will interview with and select a Senate or Congressional office that best suits her skills and expertise. BPS looks forward to working with Sarah throughout her fellowship year and as she shares that experience with you. Learn more about the fellowship program at: www.biophysics.org/policy-advocacy/congressional-fellowship.

BPS Establishes Its Ask to Congress for Fiscal Year 2026 Funding for Research Agencies

While we await, and fret over, the President's budget for fiscal year 2026 (FY26), the Biophysical Society has been working behind the scenes and alongside our coalition partners from the larger scientific and biomedical community to continue to pursue the Society goal of providing members with sustained, predictable federal funding opportunities. The current political environment for FY26 and beyond means that science and federal science funding is facing an uphill battle, not only to not lose ground in terms of total research funding, but to garner enough support from Congress to grow those funds to allow for annual cost increases and growing research opportunities. BPS is working with our science colleagues to ask Congress to provide at minimum $51.30 billion for the National Institutes of Health, in addition to support for the Advanced Research Projects Agency for Health. This recommendation would represent a $4.22 billion (9.0%) increase over FY25. For the National Science Foundation, BPS is requesting a minimum of $9.98 billion, or an increase of 4.5%, over FY25.

New Director Outlines Plans for the Future of NIH

In late April, *Jayanta "Jay" Bhattacharya*, the new Director of the National Institutes of Health (NIH), made his first public remarks to the NIH's Council of Councils about his plans to restore regular order to the agency after funding cuts and delays, firings, leadership purges, and other upheaval. Bhattacharya addressed a broad array of questions, including

about a leaked White House budget proposal that would reorganize the agency from 27 institutes and centers to 8.

The new director elaborated on his top five priorities of addressing chronic diseases, ensuring data reliability, fostering scientific dissent, advancing cutting-edge research, and regulating risky research. He emphasized the importance of replicating existing studies and making reproducibility a core activity of the NIH. In addition, Bhattacharya announced that the agency will launch a journal in which scientists can publish replication studies and will reward scientists who embrace this work. Just days after this public meeting, the NIH announced that they will bar new grants for institutions that promote diversity, equity, and inclusion policies or support boycotting, divesting from, or sanctioning companies that do business with Israel.

Sweeping Gain-of-Function Executive Order Nearly Final

At the time of writing, May 6 was the anticipated date of a new executive order issuing a sweeping ban on gain-of-function research. The order is expected to take a broad strokes approach, banning research amplifying the infectivity or pathogenicity of any virulent and replicable pathogen, according to the source, who requested anonymity to speak candidly about the anticipated executive action. Leading the charge on this order is *Gerald Parker*, head of the White House Office of Pandemic Preparedness and Response Policy. Sources report that federal agencies that have supported the use of gain-of-function research and worked to stave off regulation to restrict its use have been left out of the discussion and drafting of the planned order.

Parker previously served as the head of the National Science Advisory Board for Biosecurity, a group of outside experts that advises the National Institutes of Health (NIH) on biosecurity matters, and in that role he recommended that Congress create a new agency to advise on gain-of-function research. Former Centers for Disease Control and Prevention Director *Robert Redfield* has also endorsed moving gain-of-function research decision making out of the NIH to an independent commission. It remains to be seen whether the executive order will articulate carve-outs for gain-of-function research without risks of harm and whether the executive order will define "gain-of-function research" tightly enough to stand up to legal scrutiny.

Around the World

Ongoing Tariff Battle Causes Researcher Strife for Both the US and China

As the United States and China continue to battle each other on tariffs, researchers on both sides are seeing project delays and escalating costs as they work to secure essential supplies for their work. For US scientists, tariffs of 145% on most Chinese imports have meant far pricier reagents, glassware, and other lab essentials from their largest Asian trading partner. In China, scientists are suffering because China has responded to the US moves with a tariff of 125% on all US imports—including high-end instruments and specialty research materials that Chinese firms cannot easily supply. Although the pandemic led to more long-term planning by China's science ministry—a vow to establish emergency reserves and investments in reagent manufacturing—the ongoing back-and-forth between the two countries leaves questions as to how well prepared either side is for self-sufficiency as tensions continue to grow.

Know the Editor

Eleonora Grandi
University of California, Davis

Editor, Channels, Transporters, and Receptors
Biophysical Journal

Eleonora Grandi

What are you currently working on that excites you?

My research focuses on uncovering the fundamental processes that govern the heartbeat and understanding how these processes vary across populations. A central question that we explore is why individuals of different sexes experience heart rhythm disorders differently. To investigate this, my team builds biophysical computer models that replicate how heart cells behave. These models allow us to study the electrical activity of the heart and its response to therapies in ways that are difficult to achieve through experiments alone.

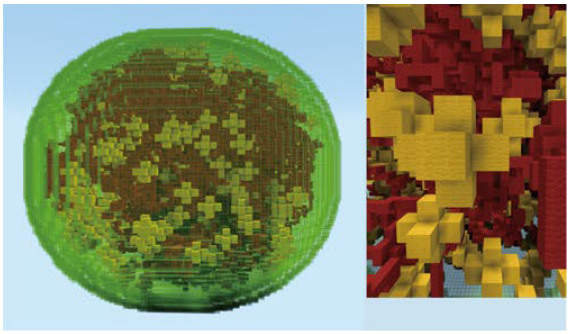
These tools help build a stronger mechanistic foundation for therapies and translate findings across sexes, with the goal of supporting more inclusive and effective approaches to preventing and treating arrhythmias. Ultimately, we aim to advance precision medicine strategies that account for biological variability, leading to better outcomes for all patients.

In addition to research, I'm deeply committed to mentoring the next generation of scientists. Helping students and trainees develop their own questions, sharpen their thinking, and grow into confident contributors to science is a true privilege and one of the most rewarding parts of my work.

What has been your biggest "aha" moment in science?

One of the most enlightening aspects of my work is when the models produce unexpected or counterintuitive results, or the wrong results! These moments often signal that there is something we do not yet fully understand and point us toward overlooked mechanisms or assumptions that need to be reexamined. On these occasions, the models become not just predictive tools, but powerful methods for discovery.

Editor's Pick



The Biophysicist
Visualizing cell structures with *Minecraft*
Tianyu Wu, Zane R. Thornburg, Kevin Tan, Seth Kenkel, Stephen A. Boppart, Rohit Bhargava, and Zaida Luthey-Schulten

"Many microscopic images and simulations of cells give results in different kinds of formats, making it difficult for those lacking computational skills to visualize and interact with them. *Minecraft*—the best-selling video game known for its three-dimensional, open-world, voxel-based environment—offers a unique solution by allowing the direct insertion of voxel-based cellular structures from light microscopy and simulations into its worlds without modification. This integration enables *Minecraft* players to explore the ultrastructure of cells in a highly immersive and interactive environment. In this paper, the authors demonstrate several workflows that can convert images and simulation results into *Minecraft* worlds. Using the workflows, students can easily import and interact with a variety of cellular content, including bacteria, yeast, and cancer cells. This approach not only opens new avenues for science education but also demonstrates the potential of combining scientific visualization with interactive gaming platforms for facilitating research and improving appreciation of cellular structure for a broad audience."

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Reaffirming Our Commitment to Educating the Next Generation of Biophysicists

Recent events have spotlighted the American scientific enterprise in extraordinary ways. It is time to reaffirm not just the scientific questions we seek to answer and why they are important (which we should all, regardless of career stage, seek to articulate to different groups including the public), but also how we educate biophysicists. In times of duress, it is important for our community to recognize that the most vulnerable members of any upheaval are the trainees and early career researchers. The beauty of biophysics lies in its inherent multidisciplinary approach—indeed it takes years of training in biology, engineering, mathematics, physics, chemistry, and related disciplines to even begin to grapple with the complexity of biophysical problems. Such training comes in multiple forms: in the classroom, in summer schools, through graduate programs and training grants, and from day-to-day experience. If we are involved in training the next generation of biophysicists, then we are all biophysics educators.

The Biophysicist is the Biophysical Society's education journal, dedicated to publishing peer-reviewed articles that outline best practices in biophysics education. In 2017, BPS Council approved a proposal for a new journal to support biophysics education in the Society, and the result was *The Biophysicist*.

At *The Biophysicist*, we pride ourselves in publishing articles that enable our community to answer questions such as, "I wonder how I might use ChatGPT to teach undergraduates how to read papers? Does it work well? Do students learn?" Possible answers might be found in *The Biophysicist* article by Sambar et al. (https://doi.org/10.35459/tbp.2024.000281). Or, "Are there simple biophysics experiments I can teach school students to understand viscoelasticity?" Kardashina et al. (https://doi.org/10.35459/tbp.2024.000278) dive into this question.

Another unique feature of *The Biophysicist* is the culture of mentoring authors. We recognize that not all of us are used to writing articles that might include survey data or educational assessments. There are different article types, including Research Articles, Novel Learning and Teaching Approaches, and Laboratory and Computational Teaching Tools, and we encourage potential authors to contact us if they are considering submitting an article (see Information for Authors and all article types at www.thebiophysicist.org). When a new article is submitted to *The Biophysicist*, all editors comment on the submitted article and arrive at a consensus on whether it will be sent for review. It has been our experience that when there is a majority opinion that an article is worthy of peer review, we find that reviewers are able to make constructive comments, and the article eventually can meet the publication standards of *The Biophysicist*. Rather than viewing this as editorial gatekeeping, we view it as one round of peer review. In many cases where the article is not deemed suitable for peer review, the editors provide extensive feedback that is then summarized in the decision letter. More often than not, we offer to meet with the authors to talk them through how they might tailor their initial submission and resubmit to meet the journal's goals.

All BPS members have a chance to document their best practices in education by submitting their articles to *The Biophysicist*. We would like to directly address a perceived conflict that sometimes arises among members of our community. Most, if not all of us, will define ourselves as researchers and scientists first. Perhaps our institutional and departmental affiliations further refine the label we apply to ourselves. We rarely describe ourselves as educators. And yet, we teach, mentor, educate at different levels, and we may have tried and tested methods that work across the board. So, when we self-identify as researchers or scientists, that implicitly includes "and educators." As such, then it behooves us to document the best practices that work for educating biophysicists in a peer-reviewed format.

By way of this first column in a series in the *BPS Bulletin*, we invite you to document your best practices in teaching biophysics in *The Biophysicist*. History has proven time and time again that the written word and documented record are what protect institutional and individual legacies. Even as science is under threat on many fronts, your support and contribution to biophysics education will ensure that the next generation of trainees will know how to carry on the baton of biophysics. *The Biophysicist* stands ready to serve BPS at this critical juncture!

—*Padmini Rangamani*, Editor-in-Chief, *The Biophysicist*
—*Les Satin*, Associate Editor, *The Biophysicist*

Understanding Peripheral Membrane Protein Interactions: Structure, Dynamics, Function and Therapy

Thessaloniki, Greece | November 9–13, 2025

This interdisciplinary meeting will bring together participants from around the world, who are active in image analysis, applied statisticians, mathematical modelers, and experimentalists investigating protein-membrane interactions, such as regulated exocytosis, endocytosis, and mitochondrial fusion and fission, among others.

The scientific program will address the growing need for collaboration between experimentalists and theorists to fully take advantage of the quantitative nature of the experimental observations in this field and to improve the quantitative descriptions of membrane events.

Abstract Submission Deadline:
August 18, 2025

Early Registration Deadline:
September 5, 2025

ORGANIZING COMMITTEE

Matthias Buck, Case Western Reserve University, USA

Zoe Cournia, Biomedical Research Foundation Academy of Athens, Greece

Alemayehu Gorfe, The University of Texas Health Science Center at Houston, USA

Themis Lazaridis, The City College of New York, USA

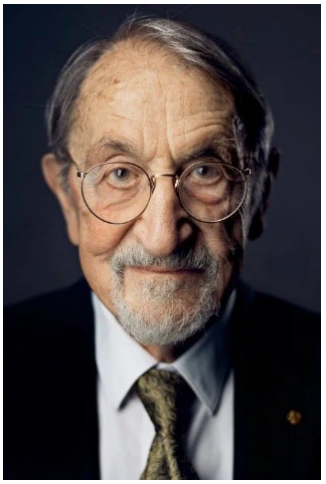
SPEAKERS

Daniel Abankwa, University of Luxembourg, Luxembourg
Ivet Bahar, Stony Brook University, USA
Francisco Barrera, University of Tennessee, USA
Patricia Bassereau, Institut Curie, France
Nir Ben-Tal, Tel Aviv University, Israel
Phil Biggin, University of Oxford, United Kingdom
Rainer Boeckmann, University of Erlangen-Nuremberg, Germany
Paolo Carloni, Forschungszentrum Jülich GmbH, Germany
Xiaolin Cheng, The Ohio State University, USA
Chris Chipot, University of Illinois at Urbana-Champaign, USA
Linda Columbus, University of Virginia, USA
Matteo Dal Peraro, EPFL, Switzerland
Marco De Vivo, Italian Institute of Technology, Italy
Karen Fleming, Johns Hopkins University, USA
Monika Fuxreiter, University of Padova, Italy
Jay T. Groves, University of California, Berkeley, USA
Kalina Hristova, Johns Hopkins University, USA
Helgi Ingólfsson, Lawrence Livermore National Laboratory, USA
Anne Kenworthy, University of Virginia, USA
Syma Khalid, University of Oxford, United Kingdom
Jeffery Klauda, University of Maryland, USA
Vittorio Limongelli, University of Svizzera Italiana, Switzerland
Ben-Zhou Lu, Chinese Academy of Science, China
Nathalie Reuter, University of Bergen, Norway
Adam Smith, Texas Tech University, USA
Phillip Stansfeld, University of Warwick, United Kingdom
Antoine Taly, CNRS, France
Lukas Tamm, University of Virginia, USA
Stefano Vanni, University of Fribourg, Switzerland
Gregory Voth, University of Chicago, USA
Harel Weinstein, Weill Cornell Medical College, Cornell University, USA
Winfried Weissenhorn, Institute of Structural Biology, France

Biophysical Society

Biophysical Journal Call for Papers

Special Issue: Martin Karplus: In Memoriam



To celebrate the contributions of theoretical and computational molecular biophysics pioneer Martin Karplus, Nobel Laureate in Chemistry 2013, we invite contributions of original research articles in molecular dynamics, biomolecular simulations, and related fields to a special issue dedicated to his memory.

Reviews and perspectives may also be considered, but they must be approved in advance by the editors.

Deadline for submission: September 30, 2025

- Instructions for authors can be found at: https://www.cell.com/biophysj/authors.
- Please include a cover letter stating that you would like to contribute to the Martin Karplus: In Memoriam special issue and please describe why the work fits into the issue.
- All accepted articles will be reviewed upon receipt and will appear online as soon as accepted, even if submitted early.
- Normal publishing charges will apply.
- Questions can be addressed to the BJ Editorial Office at BJ@biophysics.org or to (240) 290-5600.

Biophysical Society

CellPress
Science that inspires

To submit, visit https://www.editorialmanager.com/biophysical-journal/

Cheers! for Volunteers

Semire Uzun Göçmen

Education Committee

Semire Uzun Göçmen

Is this your first volunteer position for BPS? If not, what other positions have you held?

This is not my first volunteer experience with BPS. The first thing I did for BPS was to establish the Hatay Mustafa Kemal University Student Chapter in July 2018. In addition, I have been a member of the Education Committee, where I still serve now. As part of that committee, I helped to establish BPS's Primarily Undergraduate Institution (PUI) Network and am a BPS-PUI Permanent Member. I am very happy to have chosen the field of biophysics as my area of expertise and work, to be a member of BPS, and to volunteer. I see and feel that I am together with people who serve humanity with love like me.

Why do you volunteer?

I volunteer and will continue to volunteer because BPS plays a very important role in improving science, bringing scientists together, and attracting and motivating early career scientists to the biophysical area. This is necessary for all fields of life science, health science, and medicine and for understanding molecular mechanisms in health and diseases. Biophysics gives insight to all scientists and professionals and improves the quality of life for humankind as well as the environment, ecosystems, and all living organisms and allows them to live in freedom and harmony.

What has been a highlight from your volunteer experience?

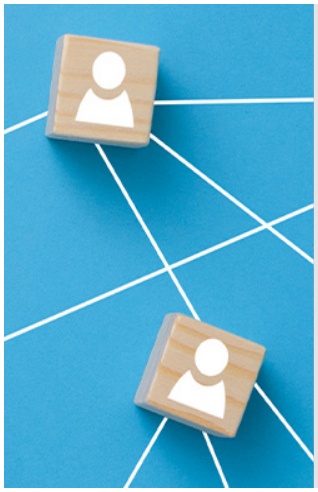
I am very happy and proud to be a member of and volunteer for the Biophysical Society, which gives opportunities to all biophysicists and scientists from related disciplines to participate in its events and activities without any discrimination. I appreciate that BPS strives to involve young scientists and undergraduate, graduate, and PhD students, and to attract them to this field that is essential for understanding human beings, the life sciences, the structure and function of living organisms, and molecular mechanisms in health and diseases.

Do you have advice for others who might be thinking about volunteering?

Yes, I advise them that the interests of society and humanity should always be prioritized over personal interests. Volunteering for BPS is one way to give back to your community.

When not volunteering for BPS, what do you work on?

I choose tasks and hobbies that would serve humanity, preserve the existence and peace of our world, and improve quality of life for all.



Join the BPS PUI Network

Are you looking to connect with other PUI faculties or interested in obtaining academic positions at Primarily Undergraduate Institution (PUIs)? Join the BPS PUI Network. The network creates opportunities for current PUI faculty to network and share experiences with one another. Members of the Network exchange tips and ideas such as teaching strategies, latest trends in education technology, online teaching, and more. Graduate students and postdocs interested in obtaining academic positions at PUIs are encouraged to join.

Questions can be directed to *Ethan Rogers-Yosebashvili* at eyosebashvili@biophysics.org.

www.biophysics.org/PUI-Network

Spotlight on Subgroup Awards

In addition to Society Awards, there are 22 Subgroup awards. See below for the available Subgroup Awards for 2026.

Student Bioenergeticist Award, given to an outstanding master's or graduate student in the bioenergetics field.

Young Bioenergeticist Award, given to an outstanding postdoc or young PI working in the bioenergetics field.

NEW **Award for Exceptional Contributions to Biophysics & Bioengineering**, sponsored by AIP Publishing, recognizes extraordinary contributions of biophysics to advancing biophysics, and bioengineering to advancing fundamental biophysical studies.

Gregorio Weber Award for Excellence in Fluorescence Theory and Applications, honoring distinguished investigators who have made significant and original contributions to the advancement and applications of fluorescence techniques.

Young Fluorescence Investigator Award, given to an outstanding researcher at the beginning of their career for significant advancements and/or contributions in or using fluorescence methodologies.

Student Award in Biological Fluorescence, given to an outstanding master's or PhD student who has recently made a significant contribution to our research community, for example, by a first scientific paper with a focus on experimental or theoretical approaches with fluorescent probes and/or fluorescence techniques used in biophysical sciences.

Biopolymers in Vivo Young Faculty Award, intended to boost the visibility of an emerging faculty member whose research and recent achievements focus on cutting-edge investigations of biomolecular processes in living organisms.

Kenneth S. Cole Award, given to investigators in the field of membrane biophysics in recognition of their research achievements as well as their potential for future contributions.

The June Almeida Award for Mid/Senior-Career Women in Cryo-EM, recognizing a mid/senior-level woman in the field of cryo-EM who has made significant contributions during her independent career.

Intrinsically Disordered Protein Postdoctoral Award, which honors an outstanding Postdoctoral Fellow for their research accomplishments during their career.

Mechanobiology Early Career Award, recognizing a young PI who has made outstanding contributions to the way we understand how mechanics shape molecular and cellular processes.

Sir Bernard Katz Award for Excellence in Research on Exocytosis and Endocytosis, bestowed on an investigator who has made a substantial contribution to our understanding of exocytosis and endocytosis.

Thomas E. Thompson Award, recognizing an outstanding contribution in the field of membrane structure and function.

Motility & Cytoskeleton Early Career Award, which recognizes significant contributions to the field of motility and cytoskeletal research and boosts the visibility of early career investigators.

NEW **Motility & Cytoskeleton Spotlight Award**, honoring those who have incorporated a commitment to mentoring, community engagement, and public service into their research accomplishments.

NEW **The Chris Miller Award**, recognizing extraordinary scientific achievement in the field of membrane transport. It honors scientists whose work has transformed our understanding of how metabolites, ions, drugs, and other molecules cross biological membranes.

Physical Cell Biology Early Career Award, given to an outstanding postdoctoral researcher or young PI working to understand the functioning of biological systems from a physical perspective, from single molecules in individual cells to whole living organisms.

Physical Cell Biology Student Award, recognizing a master's or PhD student who has just made their first significant research contribution to understanding how cells work from a biophysical perspective.

Early Career Award in Single-Molecule Forces, Manipulation, and Visualization, which recognizes a young PI who has made significant contributions to the advancement and application of single-molecule techniques.

Theory & Computation Award for Early Career Scientists, recognizing an outstanding scientist in the first six years of their first independent appointment, in the field of theory and computation in biophysics.

Theory & Computation Award for Mid-Career Scientists, recognizing an outstanding scientist in the first 6–12 years of their first independent appointment, in the field of theory and computation in biophysics.

NEW **Theory & Computation Postdoctoral Researcher Award**, given to postdoctoral trainees working in topical areas covered by the Theory & Computation Subgroup.

To learn more about each award and to apply, visit www.biophysics.org/awards-funding/subgroup-awards.

Biophysical Society

Upcoming 2025 Meetings

THEMATIC MEETING

Beyond Simple Models: The Consequences of Membrane Complexity in Living Systems

Copenhagen, Denmark | July 7–10, 2025

BPS CONFERENCE

Proton Reactions: From Basic Science to Biomedical Applications

Estes Park, Colorado, USA | August 3–7, 2025

Late Abstract Submission Deadline: June 10

BPS CONFERENCE

Membrane Fusion and Budding

Estes Park, Colorado, USA | October 5–9, 2025

Abstract Submission Deadline: June 16
Early Registration Deadline: June 29

THEMATIC MEETING

Spatial Organization of Biological Functions

Bangalore, India | October 20–25, 2025

Abstract Submission Deadline: June 30
Early Registration Deadline: July 21

THEMATIC MEETING

Understanding Peripheral Membrane Protein Interactions: Structure, Dynamics, Function and Therapy

Thessaloniki, Greece | November 9–13, 2025

Abstract Submission Deadline: August 18
Early Registration Deadline: September 5

For more information visit **www.biophysics.org**

Gratitude for Our Volunteers

The Society would like to express our gratitude for the outgoing committee members listed below for their time, participation, and expertise. These volunteers have made a tremendous impact and difference within the Biophysical Society and the biophysics community. Thank you again—your efforts are truly appreciated!

Awards Committee
Linda Columbus
Tanja Mittag

BPS Conferences Committee
Marta Filizola
Samantha Harris
Anne K. Kenworthy
Arthur G. Palmer
Suzanne F. Scarlata

Committee for Inclusion and Diversity (CID)
Christopher Bassey
Walter J. Chazin
Anne Hinderliter
Catherine Royer
Carlos A. Villalba-Galea

Committee on Professional Opportunities for Women (CPOW)
Anne Carlson
Lukasz Cwiklik
Karen G. Fleming

Early Careers Committee
Matthias Buck
Patrick C. Van der Wel

Education Committee
Semire U. Göçmen
Jefferson Knight

Fellows Committee
Gilad Haran
José Onuchic
Lee Sweeney
Pernilla Wittung-Stafshede

Finance Committee
Cynthia Czajkowski

Membership Committee
Carmen Domene

Publications Committee
Andrea Gohlke
Ilya Levental
Maria Spies

Thematic Meetings Committee
Teresa Giraldez
Syma Khalid
Jinwoo Lee
Lukas Tamm

Young Scientists Receive Biophysics Award at Science Fairs

The Biophysics Award, sponsored by the Biophysical Society's Education Committee, is presented to high school students at regional and state science fairs across the United States. The award is presented to the student with the best biophysics-related project, as determined by local judges and BPS volunteers. Each student winner receives a monetary award of $100 and recognition from BPS for their outstanding achievement. The winning projects covered a wide variety of topics and subject areas, such as bioinformatics, equitable cancer detection, and veterinary procedures. In 2025, BPS was proud to present The Biophysics Award at the following fairs:

- Anne Arundel County Regional Science and Engineering Fair
- BCC/Rensselaer Region III Science and Engineering Fair
- California Science and Engineering Fair
- Colorado Science and Engineering Fair
- Connecticut Science and Engineering Fair
- Fairfax County Regional Science and Engineering Fair
- Georgia Science and Engineering Fair
- Greater New Orleans Science and Engineering Fair
- Greater San Diego Science and Engineering Fair
- Montgomery County Science Research Competition
- Northeastern Indiana Tri-State Regional Science Fair
- Northwest Science Expo
- San Luis Valley Regional Science Fair
- Terra North Jersey STEM Fair

BPS could not have provided these awards without the assistance of member volunteers. We are so grateful to the judges who make the time to share their passion for biophysics with young scientists. For many students, science fairs present a unique and invaluable opportunity to give a science-related talk outside of an in-school presentation, which might be their first step toward a scientific career. Several students shared their gratitude for the award and their pleasure at being able to present to real scientists in the field.

Looking For the Right Job Candidate?

The Biophysical Society (BPS) Job Board serves as a premier platform for posting open positions in biophysics research and related fields. By leveraging our platform, you can find talented and passionate candidates to join your team.

For a limited time, you can boost your employer branding with our Summer Special!
For $399 for members and $499 for non-members, this will include:

- FREE 30-Day banner ad on Job Search page
- 30-day job posting on career center
- Upgrades to have job remain high in search results and highlighted
- Job emailed to over 6,500 BPS members and job seekers

Summer Special will be running from June 1 through August 31 and offers over $500 in savings!

For more information or to post your job, go to:
biophysics-jobs.careerwebsite.com

Grants & Opportunities

AAAS Mentor Awards
The American Association for the Advancement of Science (AAAS) has two categories of Mentor Awards (Lifetime Mentor Award and Mentor Award). Both honor individuals who, during their careers, demonstrate extraordinary leadership to increase the participation of underrepresented groups in science and engineering fields and careers. Both awards recognize an individual who has mentored and guided significant numbers of students from underrepresented groups to the completion of doctoral studies or who has impacted the climate of a department, college, or institution to significantly increase the diversity of students pursuing and completing doctoral studies.

Who can apply: The award is open to all individuals, regardless of nationality or citizenship, who have mentored students at a US institution.

Deadline: June 30, 2025

Website: https://www.aaas.org/awards/mentor/about

The *Science* and SciLifeLab Prize for Young Scientists
This prize recognizes excellence among young researchers from around the world with the vision to recognize that global economic health is dependent upon a vibrant research community. This cycle's categories are: Cell and Molecular Biology; Genomics, Proteomics, and Systems Biology approaches; Ecology and Environment; and Molecular Medicine.

Who can apply: Applicants must have received their doctoral degree in the previous two years. The prize will be awarded without regard to sex, race, or nationality.

Deadline: July 15, 2025

Website: https://www.science.org/content/page/how-enter-science-scilifelab-prize-young-scientists

Tips for Preparing A Successful Grant Application

Whether you love it or loathe it, grant writing is essential for a successful scientific career. It not only requires scientific writing skills that you may have honed writing research articles, reviews, and abstracts, but also the ability to emphasize the vital importance of your work and what it would mean to the field for it to be funded. Although the thought of submitting a grant application can be overwhelming, following the tips below will make the task more manageable and hopefully more enjoyable!

Do your research into the funding agency and their requirements. Every funding agency and call has their own remit. Understanding what they want, what they fund, and what you need to submit to be eligible for funding is the first step in grant preparation. Writing your application to meet these needs and emphasizing key points, such as their mission and how your work aligns with their goals, will help the reviewers recognize that your research meets their priorities and is relevant for review. Following simple rules on page limits and formatting may seem minor, but they are imperative for successful applications and are an easy thing to get right.

Tailor your application to the specific type of grant for which you are applying. Some grants focus solely on a project or research question, whereas others—particularly those aimed at early-career researchers—also focus on you as an applicant. For these, the funding agency is investing not only in your research but also in you as a future leader in the field. As such, in addition to developing a strong research plan, you may need to provide a detailed training and development plan that explains how the agency's support will help you to achieve your professional goals and become a successful independent scientist.

Assemble a strong team of collaborators and mentors and get their feedback. The support of experienced experts is invaluable. To increase your chances of success in grant applications, you can minimize any potential risks by showcasing the expertise and backing of a team of mentors and collaborators to the reviewers. This often involves submitting letters of support alongside your application. Receiving these letters often takes time, and you will need to work according to your mentors' and collaborators' time frames, whether they get things done way in advance or right at the last minute. Drafting these letters yourself can save them time and allow you to emphasize key points and deliverables that are critical to your proposal. Another benefit of assembling a strong team of mentors and collaborators is that they can provide valuable feedback on your application. Giving yourself time to learn from their experience and make revisions based on their comments can give you a fresh perspective and help improve the clarity and structure of the proposal.

Write concisely and clearly about the research problem. Although reviewers will be familiar with your broader field, they may not be experts on your specific topic. As such, you need to clearly define the problem, state its importance, and provide key background information for context while making the proposal understandable to a wider audience. Keep your proposal focused and include details about your methodology, innovation, objectives, research questions, and hypotheses. Incorporating relevant preliminary data will demonstrate the feasibility of your research and provide evidence that your approach is grounded in evidence. Because the abstract and specific aims pages are the first things reviewers will read, they should be especially strong, succinct, and engaging to generate interest in your work and its potential impact.

In summary, grant writing is a crucial skill requiring both strong scientific writing and the ability to effectively communicate the importance of your research. It involves tailoring your application to the specific requirements of the funding agency, understanding their priorities, and ensuring that your proposal aligns with their goals. Whether applying for project-based or career-focused grants, it is essential to present a compelling case for both your research and your potential as a future leader in the field. A well-prepared application also relies on the support of a strong team of mentors and collaborators who can provide feedback and letters of support, enhancing the credibility of your proposal. Writing concisely and clearly, with attention to detail in methodology, innovation, and research objectives, is key. By following these guidelines, you can make the daunting task of grant writing more manageable and increase your chances of success.

—*Molly Cule*

Connect, Collaborate, and Discover.
Join Us at Upcoming BPS Networking Events

Looking to share ideas, spark collaborations, or explore new frontiers in biophysics? Don't miss these exciting upcoming networking opportunities hosted around the globe:

Southern California Users of Magnets Meeting, 2025
Irvine, CA, USA
September 6, 2025

UK Midlands Biophysics Network Meeting
Nottingham, UK
September 18, 2025

DNA Double-Strand Break Repair Mechanisms Meeting in Paris 2025
Paris, France
October 10, 2025

Boosting Biophysical Analyses with Machine Learning Models
Kolkata, India
October 10, 2025

Explore details and stay up to date at www.biophysics.org/upcoming-networking-events. Additional events will be announced soon!

Whether you're advancing research or building your professional network, BPS Networking Events are your local gateway to global biophysics.

By the Numbers

Since the program started in 2011, BPS has supported 130 Networking Events, both virtual and in-person, hosted by members from around the world.

Members in the News


Gabriela Popescu

Gabriela Popescu, Jacobs School of Medicine and Society member since 2002, was elected to the Board of Directors of the American Association for the Advancement of Science (AAAS).

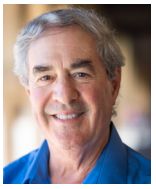
Gregory Voth, University of Chicago and Society member since 1996, received the American Chemical Society National Award in Theoretical Chemistry.


Gregory Voth

Carolyn Bertozzi, Stanford University and Society member since 2024, was awarded the American Chemical Society Priestley Medal.


Carolyn Bertozzi

Steven Boxer, Stanford University and Society member since 1979, was the recipient of the Nakanishi Prize.


Steven Boxer

Eleven Society members were named AAAS Fellows:

In the Section on Biological Sciences: *James Berger*, Johns Hopkins University and Society member since 2005; *Karen Fleming*, Johns Hopkins University and Society member since 2004; *Polly Fordyce*, Stanford University and Society member since 2002; *Katherine Henzler-Wildman*, University of Wisconsin–Madison and Society member since 1999; *Tobin Sosnick*, University of Chicago and Society member since 2000; *Lucia Strader*, Duke University and Society member since 2019; *Witold Surewicz*, Case Western Reserve University and Society member since 1990; and *Jil Tardiff*, University of Arizona and Society member since 2000.


James Berger


Karen Fleming


Polly Fordyce


Katherine Henzler-Wildman

In the Section on Chemistry: *Angel A. Martí*, Rice University and Society member since 2024.


Tobin Sosnick


Lucia Strader


Witold Surewicz


Jil Tardiff

In the Section on Medical Sciences: *Henry Pownall*, Houston Methodist Research Institute and Society member since 1979.

In the Section on Neuroscience: *Emily Liman*, University of Southern California and Society member since 2003.


Angel A. Martí


Henry Pownall


Emily Liman
Photo credit: Don Arnold

Student Spotlight


Papa Kobina Van Dyck

Papa Kobina Van Dyck
University of Notre Dame

What inspired you to study biophysics?

My journey in biophysics began during my sophomore year of college when I joined a protein folding lab as a research assistant. The hands-on experience in the lab sparked a deep fascination with the intricacies of protein folding and dynamic allostery and fueled my desire to explore the field further. As my time in the lab grew, so did my passion for biophysics, leading me to pursue graduate studies in the field. The excitement of unraveling complex research questions and contributing to scientific advancements continues to inspire my dedication to biophysics.

Biophysical Society

6903 Rockledge Drive, Suite 540
Bethesda, Maryland 20817

BPS Bulletin
THE NEWSLETTER OF THE BIOPHYSICAL SOCIETY

June 2025

2025 BPS Elections Now Open

Voting is open June 1 through August 1

www.biophysics.org/election

BPS Important Dates

Estes Park Membrane Fusion and Budding BPS Conference Abstract Deadline
June 16, 2025

***Biophysical Journal* Retinal Proteins Special Issue Submission Deadline**
June 30, 2025

BPS2026 Travel Awards Submission Opens
July 1, 2025

Estes Park Membrane Fusion and Budding Early Registration Deadline
July 11, 2025

Call for Thematic Meetings Deadline
July 18, 2025

Last Day to Vote in BPS Election
August 1, 2025

Please visit www.biophysics.org for a complete list of upcoming BPS Important Dates.