

Newsletter

Biophysical Society

JANUARY

2017

DEADLINES

Meetings 2017

61st Annual Meeting

February 11–15

New Orleans, Louisiana

January 9

Early Registration

Late Abstract Submission

January 13

Blogger Applications

Single-Cell Biophysics: Measurement, Modulation, and Modeling

June 17–21

Taipei, Taiwan

March 1

Abstract Submission

March 24

Early Registration

Conformational Ensembles from Experimental Data and Computer Simulations

August 25–29

Berlin, Germany

April 3

Abstract Submission

May 1

Early Registration

Emerging Concepts in Ion Channel Biophysics

October 10–13

Mexico City, Mexico

May 26

Abstract Submission

June 23

Early Registration

2017 Ushers in New BJ Editorial Board Members and More



The *Biophysical Journal* welcomes 24 new members to the editorial board, beginning January 1, 2017. Editorial board members are all working scientists who volunteer their time to maintain the quality of the journal by assuring fair and rapid handling of submitted and invited papers. They seek qualified reviewers and make editorial decisions based on their own judgments as informed by the reviews.

Members of the editorial board are carefully chosen by the associate editors and the editor-in-chief based on expertise in their field as well as their reviewer and publishing history.

“The process of choosing and inviting editors, which this year was accomplished with the help of incoming Editor-in-Chief *Jane Dyson*, is always gratifying,” said current Editor-in-Chief *Les Loew*. “I am proud that BJ will be led by such an outstanding new class of editors, who will join the eminent and dedicated scientists with continuing terms. Editors are chosen not only for their innovative science but also to span the diversity of biophysics. Another important criterion was that they have demonstrated their commitment to rapid and rigorous peer review, often as frequent reviewers for BJ.”

One notable change this year is that *Elizabeth Rhoades* will move into the associate editor position for Section II, Proteins. The Section has been expertly led by *Nathan Baker* who will continue on as an editorial board member. We thank all of the new members in the class of 2017 for agreeing to serve. And we extend a large thank you to the 20 editors who have fulfilled other terms in 2016 and are rotating off the Editorial Board.

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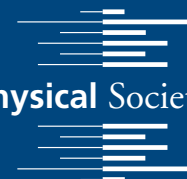
Important Notice to Biophysical Journal Subscribers

The Society is making it easier for members to activate their free online subscription to *Biophysical Journal*. Now all you need is your BPS member ID number! In order to transition to this new process, *all Society members must re-activate their personal online subscription to BJ during January 2017*. Although this year all members will need to re-activate their online access, in future years, the renewal of subscriptions for active members will be automatic. To reactivate your subscription, visit <http://www.cell.com/biophysj/home> and in the upper right-hand corner, click on the Register link.

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Biophysical Society



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Message from the President



Suzanne Scarlata

This year, as I begin to make plans to attend the Annual Meeting in New Orleans, I am looking forward to the meeting as never before. I guess one reason, aside from being the master of ceremonies at the National Lecture, is to remind all those in attendance that the United States, just like all countries, cannot be defined by their politicians and the campaigns they wage. The United States, like other countries this year, is seeing turbulent times that could have significant impact on research funding as well as scientific discourse and policy issues.

It is worth repeating what I stated in a recent email to the Society membership (<https://biophysicalsociety.wordpress.com/2016/11/18/post-election-bps-presidents-message/>): The Biophysical Society is an international, global organization (notice there is no “American” in its name), representing incredible breadth and diversity of scientific areas, as well as diversity in every demographic aspect possible. I cannot stress enough that the Society has always been committed to inclusivity, respect of others and selves, and collaboration among disparate groups. This will never, never, never change. Biophysics as a discipline is inherently diverse, and this diversity has impacted fields far beyond ours, and has led to new technologies, discoveries, cures, diagnostics, and overall improvement to quality of life for everyone.

It is true that today’s world appears divided with growing fissures between different groups, but it’s not something we have to...or should...accept. As biophysicists, we have the power to use the example of how we conduct research to demonstrate how diversity enriches and fuels growth. We have the scientific knowledge to help bridge the divides with those not trained in science and help them understand the scientific realities and financial implications of issues such as climate change, issues that affect them and their children. Now more than ever, all scientists need to support each other and stand strong not only on a global level but also on a local level to make sure that science continues to be supported for the benefit of all. It is a time to come together and show how working together for common goals heals.

That’s why I’m looking forward to the meeting, joining together in New Orleans to get the important work of science done!

See you in New Orleans



2017 Ushers in New BJ Editorial Board Members and More

(Continued from Page 1)

A list of all 130 BJ Editorial Board members is available through the Journal webpage at <http://www.cell.com/biophysj/editorial-board>.

Section I – Nucleic Acids and Genome Biophysics

David Lilley *Gijs Wuite*

Section II – Proteins

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Martin Buehler *Wendy Shaw*

Section III – Channels and Transporters

Baron Chanda *Michael Grabe*
Chris Chipot

Section IV – Membranes

Michael Brown *Dimitrios Stamou*
Charles Deber *Peter Tielman*
Tommy Nylander *Joe Zasadzinski*

Section V – Molecular Machines, Motors, and Nanoscale Biophysics

Steven Rosenfeld

Section VI – Cell Biophysics

Kinneret Keren *Amy Palmer*
Joachim Mueller *Jason Swedlow*

Section VII – Systems Biophysics

Mark Alber *Arthur Sherman*
Vivek Shenoy *Raimond Winslow*

In addition to the new Editorial Board, 2017 brings with it new developments for *Biophysical Journal*.

The Journal is pleased to announce that the length requirement for Letters has been extended from three to five printed pages (inclusive of figures and references). In addition, because the Letter article type is intended for especially urgent and exciting research, they will be placed on a special rapid review track and will be published online ahead of print, in addition to appearing in the next issue of the Journal. Finally, Letters no longer need to be submitted using a template. To see the change in fee structure for Letters, please refer to the ***newly revised Guidelines for Authors*** at <http://bit.ly/2gSFEZo>.

In an exciting development this past year, BJ began accepting manuscript submissions directly from the preprint server bioRxiv. The Journal also continues to welcome submissions that had been previously deposited in arXiv. Now, to document and help readers trace the complete publication record, authors are invited to voluntarily provide a footnote for their BJ article referencing their preprint in bioRxiv or arXiv, including the DOI number and the date the initial manuscript was deposited.

Biophysical Journal authors can now submit multidimensional time series data, such as 3D multichannel time series from

live cell microscopy experiments. Readers can view this data with an interactive viewer called Virtual Microscope, permitting them to scroll through multiple channel z-stacks at a given time point or through time at a selected z-slice. Instructions for submitting these files will be provided during the decision cycle.

Readers can expect several special issues on important topics in the coming year: Genome Biophysics; Liposomes, Exosomes, Virosomes: From Modeling Complex Membrane Processes to Medical Diagnostics and Drug Delivery; Mechanobiology; Challenges in RNA Modeling and Design; and Brain Biophysics. Several of these still have open calls for papers with closing dates that can be found through the BJ website. The Journal also will soon be releasing a new article collection on single-molecule biophysics.

Finally, in the first half of 2017, the Journal will move to a mobile-responsive format to provide an optimized reading experience for all users. You will see some improvements to the home page as well as to the online article format.

Make a New Year's resolution to send your best research to *Biophysical Journal* in 2017!

—*Les Loew*, Editor-in-Chief

—*Beth Staehle*, BPS Director of Publications

Biophysicist in Profile

OLE MOURITSEN



Ole Mouritsen

Ole G. Mouritsen, professor of biophysics at the University of Southern Denmark and director of its MEMPHYS Center for Biomembrane Physics, grew up in a small town on the island of Funen, in the middle of Denmark. As a child, Mouritsen was interested in exploring things unknown to him. “I remember that I wanted to be a plumber like our neighbor,” he says. “I spent many hours in his workshop tampering and tinkering with all sorts of metal plates and tubes.” His family supported his inquisitive mind, encouraging him to study a broad range of subjects, explore all of his talents, and to be open to all opportunities available to him.

Following high school, he entered Aarhus University unsure of what he wanted to focus on. “When I started university, I was split between studying science and history, and it was not possible in Denmark to combine these fields in a dual university degree,” he says. “So I started studying physics and mathematics in 1970 and in the second year I branched into physical chemistry, still having a hidden agenda of later studying the history of science.” He quickly became involved in undergraduate research within statistical thermodynamics and computer simulation of nuclear spin systems. “This was so captivating that I basically got stuck with science,” he jokes.

He earned his master’s degree in physics and chemistry in 1976, his PhD in physical chemistry in 1979, and finally his DSc in computer simulation techniques applied to phase transitions in 1984. For several years he worked on statistical mechanical modeling of phase transitions and critical phenomena, with focus on magnetic systems, solids, surfaces, and monomolecular overlayers.

In 1980, Mouritsen began a postdoctoral fellowship with *Myer Bloom* at the University of British Columbia, where he was introduced to biophysics. “My background in statistical mechanics and phase transitions turned out to be useful to study cooperative phenomena in lipid bilayers as models

of biological membranes,” he says. “I found it first very challenging to work in biophysics, in particular identifying problems that were both very ambitious but also could be tackled and lead to novel results using the techniques and methodologies I knew from basic physics. I learned very quickly that a fundamental understanding of physics and physical chemistry, combined with mastering computational techniques, could open up new inroads to the understanding of the structure and function of biological membranes.”

Since his postdoctoral appointments at Kings College London and University of British Columbia, Mouritsen has held positions as a senior researcher at the University of Aarhus, a research professor in materials science at the Technical University of Denmark, and later a professor of physics chemistry at the same institution. Since 2001, he has been a professor of molecular biophysics at University of Southern Denmark and has served as center director for the MEMPHYS-Center for Biomembrane Physics. Beginning in 2014, he has also served as the center director of the National Danish Center for Taste. As of May 2017, he will assume a new professorship in gastrophysics at the University of Copenhagen.

One of the biggest challenges of his career has been “to successfully make transitions between different research areas and to work on massively interdisciplinary problems,” he says. “I faced it by using generic modeling and the powerful concepts of analogies and principles of universality from the physical sciences.”

Mouritsen’s current research projects involve active membranes and lipid protein interactions; sterol effects on membranes; liposomes as drug-delivery systems; lateral domain structure of membranes; physical chemistry of seaweed materials; the science of taste; and gastrophysics of taste and mouthfeel. “In recent years I have become interested in the biophysics of food and taste, and together with colleagues and students I am trying

to promote and define a new field we have coined gastrophysics,” he shares. “I hope to be able to contribute to this field, for example in relation to clarifying relationships between structure, texture, mouthfeel, and flavor of foodstuff. In this work I am often collaborating with innovative chefs and, being the president of the Danish Gastronomical Academy, I have a very keen interest in gastro-nomic innovation.”

Martin Zuckermann, Simon Fraser University, met Mouritsen in 1980. Both were interested in lipid research at the time and decided to keep in contact in hopes of collaborating in the future. Since then, the two have coauthored — along with members of their research groups and other colleagues — 44 publications. “Ole is an excellent collaborator, who never fails to acknowledge the contributions made by other members of the team. His broad knowledge of physics in general and biophysics in particular and his scientific intuition have helped to stimulate the creativity of those with whom he interacts,” Zuckermann says. “His recent forays into the world of food science have further expanded the role of the physical sciences in this field.”

“Ole is curious and pushes boundaries, which creates an inspiring scientific environment. This is evident from his discoveries of fundamental physical properties and phase behavior of sterol-lipid membrane systems,” shares *Amy Rowat*, who completed her graduate studies in Mouritsen’s lab. “Equally inspiring is the way he asks questions about foods — from sushi to seaweed — and writes books on these topics.”

Mouritsen’s books examining food through a gastrophysics lens include *Sushi: Food for the Eye, the Body & the Soul*; *Seaweeds: Edible, Available & Sustainable*; and *Umami: Unlocking the Secrets of the Fifth Taste*. He has also organized symposia on related topics. “I happened to be in Copenhagen for one day of a workshop he hosted on seaweed and was blown away to meet seaweed harvesters from British Columbia, a researcher from Japan,

and a doctor who has written a recipe book about seaweed from Ireland — all of whom were in awe that Ole had put together this workshop unlike anything they had ever attended before,” Rowat says.

Another avenue through which Mouritsen shares his passion is teaching. Not only has he trained 43 PhD students in his lab, he has also worked to expose students from different disciplines to molecular biophysics. “For 17 years I was the director — and co-founder — of the Danish National PhD School of Molecular Biophysics, running one of Denmark’s most successful interdisciplinary and cross-institutional PhD courses,” he explains. “The special feature of this course is that during the term it takes place one day at a time at different universities across the whole of Denmark.



Mouritsen (right) discussing gastrophysics with chef Klavs Styrbaek.



Mouritsen demonstrates gelation processes for children.

In this way the students get exposed to many different research groups and traditions as well as many different techniques. This is extremely valuable for being able to work in the diverse field of molecular biophysics.”

To those who are just starting out their careers in biophysics, Mouritsen offers the following: “Be curious, keep an open mind, and maintain a broad interest while you dig deep down in your narrow specialization. Learn several techniques and methods, be aware of the power of combining the three pillars of scientific work and thinking — theory, experiment, and modeling/simulation, look out for the unexpected, and when bogged down in details and loads of data, don’t forget to look at the big picture.”

Profilee-at-a-Glance

Institution

University of Southern Denmark

Area of Research

Molecular biophysics, gastrophysics

Public Affairs

BPS Advocacy: An Overview

With the recent election comes not only a new president, but also new agency directors, representatives, senators, congressional committee leaders, and staff. Many of these individuals may not be very knowledgeable about how the US research enterprise functions and the significant role the federal government plays in funding research across the country.

The election has also brought questions from BPS members on how the Society educates and advocates on behalf of its members.

The Society's Public Affairs Committee takes the lead on policy matters for the Society, with input and approval from the Council. As a somewhat small organization in the landscape of federal outreach and advocacy, the Society is an active partner in several coalitions that bring many organizations together to have a stronger voice on Capitol Hill and with the administration. Here is a summary of those organizations:

NDD United

NDD stands for nondefense discretionary, and refers to the programs funded by the annual appropriations process that are not defense programs. After the Budget Control Act was passed, which was the start of sequestration, this group was formed to add a strong united voice for funding for domestic programs, including research, which would counter the voice of the defense community. The coalition has had success in making sure these NDD programs are treated equally to the defense programs in budget discussions to date.

Ad Hoc Group for Medical Research

This long-standing coalition brings together researchers, patient advocacy organizations, medical and health organizations, and universities to advocate for National Institutes of Health funding.

Coalition for National Science Funding (CNSF)

CNSF is a coalition of 80+ organizations focused on the both funding and policy issues affecting the National Science Foundation.

Energy Sciences Coalition (ESC)

ESC is a broad based coalition of organizations representing scientists, engineers, and mathematicians, in universities, industry, and national laboratories, who are committed to supporting and advancing the scientific programs that advocates for funding and policy issues for the Department of Energy Office of Science.

Research!America

Research!America supports public outreach, including efforts to get candidates on the record on public health matters, including support for federal funding for biomedical research. The results of their public opinion polls appear in national publications regularly.

American Association for the Advancement of Science (AAAS)

The Biophysical Society is an affiliate member of the AAAS. Rush Holt, a retired congressman, is its chief executive officer. AAAS is a strong voice in support of science across the disciplines in Washington, DC, as well as within the science community.

Members can stay abreast of the Society's public affairs work through this newsletter, the website, and the BPS in the Beltway email newsletter. Updates on important agency and congressional leadership will be reported in upcoming newsletters. Also, when a vote or important issue is pending on which congressional members need to hear from their constituents, the Society lets members know via email.

21st Century Cures Act Becomes Law

House and Senate health committee leaders came to agreement over the Thanksgiving holiday on a revised 21st Century Cures Act. The bill provides NIH with \$4.8 billion for FY 2017-2026, including \$1.4 billion for the Precision Medicine Initiative, \$1.564 billion for the BRAIN Initiative, \$1.802 billion for cancer research, and \$30 million to expand clinical research for regenerative medicine using adult stem cells. Other sections of the bill focus on easing regulations at the Food and Drug Administration for drug approval and provide funding to combat the prescription opioid and heroin epidemic. The research funding is not as much as in the original bill passed by the House in 2015 and requires yearly congressional approval for the funds to be released. The bill was approved by an overwhelming majority in the House and Senate, and signed by the President before Congress adjourned for the year. The Ad Hoc Group for Medical Research, of which the BPS is a member, issued a statement supporting the NIH provisions.

Congress Passes Continuing Resolution through March

With the election of Republican President-Elect *Trump*, the Republican-controlled Congress passed a second continuing resolution (CR) funding the federal government through April 28, 2017 at FY 2016 levels rather than a full year budget that would require the approval of President *Obama*. The CR does add \$352 million to the NIH budget during that time period to allow NIH to begin to implement the initiatives approved by the 21st Century Cures Act. The Ad Hoc Group for Medical Research sent a letter to leaders of the House and Senate in November urging them to pass a final FY 2017 spending package by the end of the calendar year, and to include the Senate-proposed \$34.1 billion for the National Institutes of Health (NIH) in that package. The Biophysical Society signed the letter along with 228 other organizations. The short-term funding measures make it difficult for agencies to plan and make awards, not knowing what their budgets actually will be. This has a negative impact on grantees whose funding for continuing grants is reduced during the period of uncertainty, and for those seeking renewals or new funding that is usually delayed.

2017 Summer Research Program in Biophysics

Interested in interdisciplinary science? Want to work in the fast growing area of biomedical research? Looking to learn new techniques through hands-on lab experience this summer? If so, then check out the Biophysical Society's Summer Research Program in Biophysics, an 11-week scholarship program that introduces underrepresented* students to the field of biophysics. The program includes lectures, seminars, lab work, team-building activities and field trips.

See what past students have to say...

"...this has been the most useful and wonderful summer of my college career. Not only have I learned academically, I have built multiple bridges that can only benefit me in the future."

"I learned new lab techniques as well as worked on the project independently. I was able to complete my own experiments and when I had questions or hit a snag, my mentor was available to help."

May 9 – July 28, 2017

**University of North Carolina
at Chapel Hill**

**Priority Application Deadline:
February 15, 2017**

To apply and for more information visit the program webpage at www.biophysics.org.

For questions, email Daniel McNulty at dmcnulty@biophysics.org, or call 240-290-5611.

*Financially disadvantaged individuals, students with disabilities, and individuals who have been found to be underrepresented in biomedical or behavioral research are eligible to apply. Nationally, these individuals include, but are not limited to: African Americans, Hispanic Americans, Native Americans/Alaska Natives who maintain tribal affiliation or community attachment, Hawaiian Natives and natives of the US Pacific Islands. Individuals with disabilities are defined as those with a physical or mental impairment that substantially limits one or more major life activities.

Biophysical Journal

Know the Editors



Réka Albert

Réka Albert

Pennsylvania State University

Editor for the Systems
Biophysics Section


Q. What are you currently working on that excites you?

Our collaborative group is working on a mathematical model of the signal transduction network corresponding to drought response in plants. We collected interaction evidence from more than 120 articles and integrated them into a network of 84 nodes and 151 edges. Contrary to the expectation of near-linear signal transduction pathways, we found that almost half of the nodes of this network form a strongly connected (feedback-dense) sub-network (SCC). By formulating a discrete dynamic model, we found that the drought signal stabilizes the bulk of the SCC and interventions that stabilize a node of the SCC lead to a faster response to the drought signal. This SCC is an information processing center of the network. Its inter-connectivity makes it unfit for upstream-downstream type of thinking. Therefore, I believe the appropriate conceptual framework for signal transduction networks is a logic-based framework,

with an explicit consideration of every network architecture that is consistent with the existing causal observations (e.g., that a signal is sufficient to generate a response unless a component is knocked out).

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

The closest to an "aha" moment for me was the realization that logic-based models are a good choice as a first dynamic model of biological systems. It is possible to piece together the existing fragmentary knowledge about genetic or signaling networks, but the resulting network may be missing components and interactions. To construct a quantitative model, we would need to make many assumptions about how to represent and parameterize the interactions among components, and it would be very hard to validate those assumptions. Logic-based models (e.g., Boolean or discrete dynamic models) are compatible with several mechanisms and have no — or very few — parameters. They can predict which components and interactions are key to the normal functioning of the system, and what would happen in case of big perturbations, such as the disruption of a key component. Experimental testing of these predictions leads to new biological knowledge, which can then be used to construct more detailed, quantitative models. I see these simple models as the first step in establishing the coveted feedback loop between modeling and experiments.



BiophysicsWeek
March 6–10, 2017

BJ Paper of the Year Award



Eva-Maria S. Collins

The *Biophysical Journal* Paper of the Year Award recognizes an outstanding paper by a young investigator. This year's winning paper is *Dynamics of Mouth Opening in Hydra* from the laboratory of *Eva-Maria S. Collins* at University of California, San Diego.

It is an elegant piece of biophysics that uses transgenic strains of this small multicellular animal expressing fluorescent proteins in specific classes of cells. The Collins lab studies the mechanics of the feeding process, whereby the *Hydra* rips open a hole in its epithelium to create an on-demand mouth. The hole can be larger than the size of the entire animal and is produced in less than one minute, much faster than might be expected from

cell rearrangements commonly observed during developmental processes. Indeed, Collins and her colleagues show that forces produced by contactile cells are sufficient to break junctions between epithelial cells to rapidly produce the hole. As pointed out by *Alex Dunn* his New and Notable piece about this paper, the work exemplifies how the right model system and simple physics might help us understand seemingly complex biology such as tissue morphogenesis. Also, the cool movies of *Hydra* mouth opening generated lots of interest in the lay press.

Collins will receive the award, which consists of a plaque and \$1,000, and will give a short talk at the Awards Symposium during the Biophysical Society Annual Meeting on February 14 in New Orleans.

Biophysical *Journal*

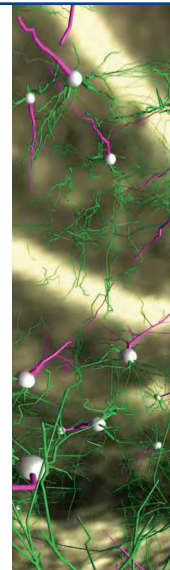
Call for Papers

Brain Biophysics

For publication November 2017

Deadline for submission: May 1, 2017

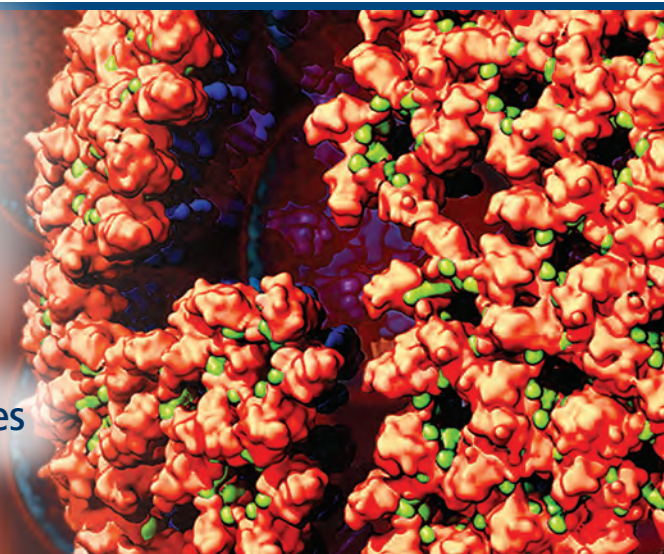
To submit, visit biophysj.msubmit.net



Biophysics Week is a global effort aimed at encouraging connections within the biophysics community and raising awareness of the field and its impact among the general public, policy makers, students, and scientists in related fields.

Keep an eye out for the schedule in the February newsletter and on the website. There will be daily activities, news, publications, blogs, fun facts, and more.

Visit biophysics.org/BiophysicsWeek for updates and to learn how you can get involved!



61ST Annual Meeting

February 11–15, 2017 • New Orleans, Louisiana

Public Affairs Sessions

As you plan your schedule for the upcoming Annual Meeting, make sure to take advantage of the opportunities to broaden your perspective by attending a session or two organized by the Public Affairs Committee. Science is at the heart of many issues the world is currently facing, and it is important to understand those issues as well as how to communicate effectively about those issues to the public. The sessions being offered at the 2017 meeting provide ample opportunity to learn about both!

CRISPR from a Policy Perspective

Sunday, February 12, 2:30 PM–4:00 PM

As scientists interested in public outreach and policy, we must step back from the research for a moment and think about the possibilities raised by the ability to easily edit genes. The panelists in this session will discuss the ethical and policy issues raised by CRISPR-Cas9, what the role of government (national and international) should be in regulating the research, and if/how public opinion is part of the decision-making process.

Setting Standards for Data Sharing: Community by Community

Sunday, February 12, 2017, 7:00 PM–9:00 PM

Data management. Data sharing. Repositories. Sound familiar? There is growing demand to make the data used in research available to other scientists to accelerate the pace of discovery and allow for reproducibility. This sounds simple enough, but what data should be shared and how? To support research communities in developing and adopting data sharing guidelines that work for them, the Society is hosting this workshop to bring together communities that are at various stages of that process so that they can share information and learn from each other. During this inaugural workshop, the discussion will focus on modeling, small angle scattering, NMR, and EM.

NIH Grant Writing Workshop

Tuesday, February 14, 2017, 1:00 PM–3:30 PM

Whether you are a first-time applicant or a scientist with longstanding NIH funding, it is important to stay abreast of the latest changes to the NIH extramural grant process. At this session, NIGMS program directors and officers with expertise in biophysics will be providing details on the NIH grant-review process as it stands in 2017, including the recently adopted requirement for rigor, reproducibility, and data management.

Publications Session

How to Get Your Scientific Paper Published

Monday, February 29, 2:15 PM–3:45 PM

This panel discussion will focus on the practical issues involved in publishing a scientific paper. The panelists have extensive experience in writing, reviewing, and editing papers, and will provide information on the dos and don'ts of submitting research manuscripts. Discussions will focus on strategies to avoid common pitfalls, how to prevent and fix problems before submission, and how to respond to critiques and even rejection of a paper. Attendees are encouraged to ask questions during the session. Moderators: *Gail Robertson* and *Enrique De La Cruz*
Panelists: *Jane Dyson*, *Chris Yip*, and *Cynthia Czajkowski*

#BPS17



Late Abstract Submission Deadline: January 9, 2017

First Timers & New Members

First-Time Attendee Drop By

Saturday, February 11, 5:00 PM–7:00 PM

Make the most of your conference experience. Stop by the First-Time Attendee event on Saturday evening during the opening mixer and get some tips on how to navigate the meeting. Society staff and Membership Committee members will be available to provide helpful advice and answer your questions about the meeting.

New Member Welcome Coffee

Monday, February 13, 10:15 AM–11:15 AM

All new and prospective members are invited to participate and get acquainted with the Biophysical Society. Attendees will have the opportunity to meet members of the Society's council and committees to discuss BPS activities, highlight member benefits and opportunities, ask questions, and enjoy refreshments. Current members are encouraged to come meet the new members.

Dinner Meet-Ups

Sunday, February 12 through Tuesday, February 14

Interested in making new acquaintances and experiencing the famous cuisine of New Orleans? Meet at the Society Booth each evening, Sunday through Tuesday, at 5:30 PM where a BPS member will coordinate dinner at a local restaurant.

Plan. Sync. Connect.



- Create your Itinerary
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Visit www.biophysics.org/2017meeting for more information on the new Biophysical Society Events Desktop Planner and Events App.

Search keyword "BPS Events" on the app stores below.



2017 Sponsors

The Biophysical Society would like to thank the many sponsors for supporting the 61st Annual Meeting.

We would like to recognize the following companies (as of December 12, 2016):

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<i>BioLogic</i>	<i>Mad City Labs</i>	<i>Sutter Instrument</i>
<i>Bruker</i>	<i>Malvern Instruments</i>	<i>TA Instruments</i>
	<i>Molecular Devices</i>	<i>The Journal of Physical Chemistry</i>
	<i>Nanon Technologies GmbH</i>	

Career Development Center & Job Board

Looking for a new position? Have a position to fill? Visit the Career Development Center at the Annual Meeting. Candidates may post their CVs at no charge and apply for job openings. Employers wishing to advertise job opportunities may do so, and 2017 BPS members qualify for a reduced posting fee.

Annual Meeting Special: Employers and Job Seekers Post early to save and increase visibility!

Post your job or resume on the Society Job Board between January 2 and February 2, indicate that you're participating in the Annual Meeting Career Development Center, and receive the following advantages:

For Employers:

- Active job posting on the Society Job Board for 60 days;
- Copies of your job posting for participants to view onsite;
- Space available to conduct interviews onsite;
- Time saved at the Annual Meeting.

For Job Seekers:

- Name along with poster/platform presentation name and number (if applicable) included on the candidate listing page and given to all employers;
- Time saved at the Annual Meeting.



Job seekers looking for the perfect position at a BPS Annual Meeting.

Resume posting is FREE for all attendees. Can't post your job or resume online by February 2? Don't worry! You may still post your resume online at the Annual Meeting, but your job posting or resume will not be included in the items listed above. For more information, please visit www.biophysics.org/2017meeting and click the Career Development Center tab.

Free Networking Cards for Poster and Platform Presenters

Sponsored by Quartzzy

Are you presenting in a platform or poster session at BPS this year? If so, you already have 25 pre-printed Networking Cards waiting for you. Networking cards are like business cards, but designed just for scientists. They carry your contact information, the title of your presentation, your presentation date/time, and your abstract.

Trade your cards with other BPS 2017 attendees:

- Before your platform/poster session, to remind people to stop by your poster/platform session
- During your poster session, to help others remember your research
- At other people's posters, to make connections and collaborations

Pick them up at the "Networking Card" tables in the Lobby of the Convention Center near registration. The cards are sponsored by Quartzzy, the world's leading free online lab management platform.



Fluorescence...

The Shape and Speed of Things to Come

HORIBA Scientific is about to make today's large, slow and multi-step processing fluorometers obsolete.

We've combined a two-in-one fluorescence / UV-Vis spectrometer that collects spectra in the blink of an eye with an **ultrafast CCD**, and put them into a **smaller and more elegant design**.

With a new fast **touchscreen software** with dedicated apps-driven icons enables students and researchers alike to easily perform **simultaneous fluorescence and absorption**.

See the debut of the shape and speed of things to come at the February Biophysical Society Meeting in New Orleans.

...Coming in 2017 **horiba.com/comingsoon**

horiba.com/fluorescence
email: **ad.sci@horiba.com**





Molly Cule Advice

Molly Cule

Dear Molly Cule,

I have to organize a luncheon for a student from our research group who is graduating. But I am having a hard time planning around a web of dietary restrictions in our diverse group. There are people who are gluten-free, pork-free, alcohol-free, or sugar-free. One person is allergic to nuts and another to shellfish. Others are lactose intolerant, vegetarian, or vegan. It seems impossible to please everybody. What guidelines can I use to determine what I can serve?

Sincerely,
Omnivore

Dear Omnivore,

Social events are important for bonding within work groups, and most social events include food. But striking a balance so that everybody in a diverse group is accommodated can be a logistical nightmare. While it is difficult to stipulate absolute guidelines, what is clear is that some flexibility is required from both organizers and participants.

For organizers, the best guiding principle is to offer a selection. Single food items should be

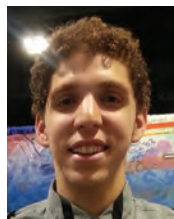
avoided. For example, while it would be easy to just order a few pepperoni pizzas and call it a day, such a decision would leave the lactose-intolerant, gluten-free, vegetarians hungry. It would be much better to offer a variety of ingredients that individuals can select from to customize their own meals. For example, a self-serve sandwich and salad table with multiple ingredients can easily accommodate many different diets.

For participants, it is necessary to recognize that budgetary and logistical constraints do not allow the organizers to accommodate everybody perfectly. So attendees should have an open mind and flexible attitude. In some cases, this means relaxing a bit on dietary preferences. For example, while some folks may eat only organic produce at home, it might be appropriate to relax that stance for a single event. In other cases, however, such as for individuals with severe allergies, it may be necessary to plan ahead and even bring one's own food to play it safe.

As in all parts of society, science works best when everybody recognizes and respects diversity.

—*Molly Cule*

Student Center



Justin Vercellino

Justin Vercellino

University of South Carolina
School of Medicine

Q: What has been your favorite course in biophysics, and why?

My favorite course in biophysics was Biophysical Chemistry II. From protein kinetics to the odd field of quantum chemistry, this course sparked my interest in protein-protein interactions and

protein kinetics. The course provided the foundation that seemed so abstract in class, but in lab you could really appreciate the beauty behind the theory. Biophysical chemistry sounds very daunting. When you tell people you took this course it sounds nothing but impressive!

Calling All Students!

Want to be featured in Student Center? Answer the question: As a student of biophysics, what has been your favorite course and why? Send a photo and your answer to bstaehle@biophysics.org.

Emerging Concepts in Ion Channel Biophysics

Mexico City, Mexico | October 10–13, 2017

This meeting will cover recent discoveries pertaining to the study of the structure and the function of ion channels and transporters and will bring together a diverse group of experts who use precise techniques to study an assortment of ion channels. Themes that will be addressed include leading knowledge on the function of voltage-, ligand- and mechanically gated ion channels and transporters, as well as the use of structural, optical, electrophysiological, biochemical, and modeling techniques to delimit fine structural interactions within ion channels as well as to study their regulation by different molecules.

The meeting will provide a positive environment for feedback and discussion between leaders in the field and junior researchers and students using different approaches to study the physiology of ion channels and transporters, stimulating interactions and collaborations among them.

www.biophysics.org/2017Mexico

Abstract Submission Deadline:

May 26, 2017

Early Registration Deadline:

June 23, 2017

Conformational Ensembles from Experimental Datas

Berlin, Germany | August 25–29, 2017

Structural biology increasingly relies on combining information from multiple sources of experimental data with ever-improving computational models. A fundamental component in structural biology is thus to combine information from experiments and simulations in an efficient and correct manner. This is in particular true in the era of integrative structural biology, where heterogeneous and noisy experimental data are often used in conjunction with computational methods to study large and complex biomolecular assemblies and their structural dynamics. Further, as these molecules and complexes are often highly dynamic, special care needs to be taken to interpret correctly the time- and ensemble-averaged experimental data.

This meeting aims to bring together scientists from across disciplines to advance integrative structural biology into the “dynamic age.” The program will consist of a mix of computation, theory, and a broad range of methods in experimental structural biology, focusing on methods and applications for studying the structural dynamics of biomolecules by integrating experiments and simulations.

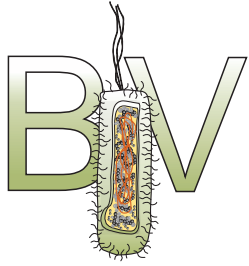
www.biophysics.org/2017Berlin

Abstract Submission Deadline:

April 3, 2017

Early Registration Deadline:

May 1, 2017



Subgroups

BIV

A Prize for Going in Vivo

We are excited to announce the BIV Junior Faculty Award, which recognizes the creativity, accomplishments, and, most importantly, the promise of a junior investigator. The specific intent is to encourage junior scientists focused on understanding the structure, function, and mechanistic intricacies of proteins, nucleic acids, and small molecules in their natural milieu, the cellular environment. Such endeavors were neglected for decades. However, it is becoming increasingly clear that the cell exerts a powerful influence on biomolecular behavior.

Quantifying biopolymer biophysics in vivo is an incredibly fulfilling goal, but this research entails a number of formidable technical challenges associated with exploring events at high resolution within the complex cellular environment. For this reason, the best young investigators deserve special encouragement for their boldness, skills, and their truly cross-disciplinary attitude. The BIV Junior Faculty Award is our way of recognizing these

efforts and sharing the successes of our newest and brightest with the goal of inspiring students and postdocs to embrace the field.

The recipient of our inaugural Award is *Simon Ebbinghaus*, Junior Professor of Chemistry and Biochemistry at the Ruhr-University in Bochum, Germany. Ebbinghaus's research investigates the impact of macromolecular crowding on cellular processes, including protein folding, aggregation, and interactions with molecular chaperones. He combines quantitative modeling and sophisticated experimental tools to explore crowding under physiological and aberrant conditions including osmotic stress and heat shock. The award will be presented to Ebbinghaus at the upcoming BIV Symposium at the Biophysical Society Meeting in New Orleans on Saturday, February 11, 2017. Ebbinghaus will present a lecture on the influence of molecular crowders, ions, and osmolytes. I strongly encourage you to attend and celebrate his science. I also encourage you to join the Subgroup and to sign up for the celebratory dinner that takes place immediately after the symposium.

—*Silvia Cavagnero*, Former Subgroup Chair

Biophysical Society Webinars

Optimizing Your Time at a Conference

January 26, 2:00 PM Eastern
 Presenter: **Alaina G. Levine**

This webinar will offer tips on making the most of your time at a conference, including advice on: using social media to make connections in advance of a conference; starting conversations with people you have never met before; how to behave with speakers; how to meet the most important people at the conference; and how to identify the most valuable sessions, events, and other experiences at the conference.

Biophysical Society Members: FREE
Non-members: \$15



Register Today at
biophysics.org/webinars

From the BPS Blog

<http://biophysicalsociety.wordpress.com>

Using Biophysics to Understand Diabetes

November was National Diabetes Month. To recognize this awareness month, Biophysical Society member *Roger Cooke*, University of California, San Francisco, wrote for the BPS blog about his biophysics research related to diabetes. <https://biophysicalsociety.wordpress.com/2016/11/04/using-biophysics-to-understand-diabetes/>.

Members in the News



Amitabha Chattopadhyay, Centre for Cellular & Molecular Biology, and Society member since 1984, was awarded the TWAS Prize in Biology.



Vasanthi Jayaraman, University of Texas Health Science Center, and Society member since 1996, was named an inaugural McGovern Scholar.



J. Andrew McCammon, University of California, San Diego, and Society member since 1979, was awarded the 2016-17 Joseph O. Hirschfelder Prize in Theoretical Chemistry by the Theoretical Chemistry Institute at the University of Wisconsin-Madison.

Grants and Opportunities

NCI Research Specialist (Laboratory-based Scientist) Award (R50)

Objective: The Research Specialist Award is designed to encourage the development of stable research career opportunities for exceptional scientists who want to continue to pursue research within the context of an existing NCI-funded basic, translational, clinical, or population science cancer research program, but not serve as independent investigators. This award is intended to provide salary support and sufficient autonomy so that individuals are not solely dependent on NCI grants held by others for career continuity.

Deadline: February 2, 2017

Program dates: June 5–9, 2017

Website: <https://grants.nih.gov/grants/guide/pa-files/PAR-17-049.html>

Exosomes: From Biogenesis and Secretion to the Early Pathogenesis of Alzheimer's Disease (R01)

Objective: This funding opportunity announcement encourages collaborative approaches designed to identify and characterize the regulation of molecular machines that are responsible for exosome biogenesis and the secretion of exosomal cargo molecules in Alzheimer's Disease.

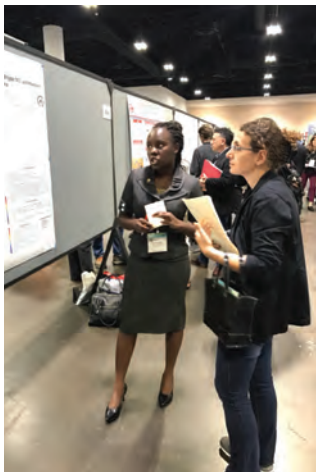
Deadline: February 3, 2017

Website: <https://grants.nih.gov/grants/guide/rfa-files/RFA-AG-17-051.html>

By the Numbers

Over 2,000 BPS members have joined one or more of the Society's subgroups, which bring together researchers with common research interests.

Building a More Diverse Biophysics Pipeline at Conferences for Minority Students in the Sciences



Abigail Kosgei presents her poster to judge Eda Koculi during ABRCMS.

This fall, representatives from the Biophysical Society joined students from all over the country at two of the largest annual conferences for minority students in science, the Society for Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS) National Conference, as well as the Annual Biomedical Research Conference for Minority Students (ABRCMS). Attendees had the opportunity to stop by the Society's booth to learn about the BPS Summer Research Program in Biophysics, as well as other Society activities and events including the upcoming Annual Meeting. Many students who stopped by the booth were already interested in pursuing biophysics research while others had a chance to learn more about what the field encompasses, and career paths available to those in the discipline.

SACNAS took place in Long Beach, California, in October. *Lisa Phillippie*, University of North Carolina's on-site administrator for the Summer Research Program in Biophysics, helped BPS Education and Outreach Coordinator, *Daniel McNulty*, staff the Society's booth to promote the summer program and discuss the many opportunities it provides students. Society members *Juliette Lecomte*, Johns Hopkins University, and *Silvia Cavagnero*, University of Wisconsin, Madison, took a look at biophysics-related posters throughout the meeting and selected students to receive a travel award to attend the BPS Annual Meeting in New Orleans this February. The SACNAS travel award winner is *Manuel Ramos*, University of Texas Rio Grande Valley.

During SACNAS, Cavagnero also hosted a mini-symposium on biophysics, which included speakers *Juliette Lecomte*, Johns Hopkins University, *Bil Clemons*, Caltech, *Pancho Bezanilla*, University of Chicago, and *Luis Marky*, University of Nebraska. The session was well attended by an inquisitive audience that demonstrated the growing interest among STEM students to learn more about op-

portunities and breakthroughs within the field.

Following SACNAS, Society representatives headed to Tampa, Florida, for ABRCMS. Phillippie and McNulty were once again on-site to speak with students about the Society's summer research opportunity. Local BPS Committee for Inclusion and Diversity member *Eda Koculi*, University of Central Florida, judged undergraduate posters on biophysical topics. The winner of a travel award to the BPS Annual Meeting from ABRCMS is *Abigail Kosgei*, Claflin University.

In addition to travel awards, BPS sponsored poster awards at the two meetings. The Society-sponsored poster winners from SACNAS were selected from undergraduates presenting in the area of biomedical research. The awardees were *Junellie Cruz-Lebron*, University of Puerto Rico – Humacao, and *Gabriella Reggiano*, University of Connecticut. Poster award winners at ABRCMS were selected in the category of Engineering, Physics, and Mathematics from which 22 students were provided with awards.

Finally, in mid-November, the Society enlisted members *Mike Jarfster*, University of North Carolina and BPS Summer Program co-director, and *Stephani Page*, former BPS Summer Program participant and current UNC postdoc, to attend the 2016 National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) conference held in Raleigh, North Carolina. There, Jarfster and Page judged graduate and undergraduate posters during the ConneXions Poster Session; four winners were selected, each to receive a \$500 award from the Society for demonstrating a quantitative and biological connection to their research and showing strong promise for contributing to the field of biophysics. Winners included *Stephanie Thre-*

att, California Institute of Technology, *Hosiana Abewe*, University of California, San Diego, *Leah Bartel*, Warren Wilson College, and *Eric Madu*, Chicago State University.

The Biophysical Society congratulates all of the awardees selected from these conferences, and would like to thank the National Institute of General Medical Sciences (NIGMS) for its continued support, which allows the Society to recognize and foster the important work being done by young and talented minority scientists.



NOBCChE Winners left to right:
Stephanie Threatt, Hosiana Abewe,
Leah Bartel, Eric Madu



Get Out of the Lab: Volunteer At Your Local Science Fair!

BPS has sponsored student awards at regional and state science fairs since 2009. So far for 2017, we plan to sponsor awards at over 40 fairs in 19 states across the US. These fairs will need judges! This is an excellent opportunity to make students aware of the field of biophysics and for them to meet and interact with practicing scientists.

For more information about BPS's science fair outreach and to volunteer as a judge, visit biophysics.org/sciencefairs.

If you have any questions, contact Caitlin Simpson at SciFairs@biophysics.org.

Upcoming Networking Events

BPS Networking Events allow you to connect with other biophysicists in your geographic area. These meetings, sponsored by the Society, are the perfect opportunity to share your work and collaborate with others. The upcoming events are:

Western Canada Biophysics Networking Meeting

March 24, 2017, Kelowna, BC, Canada

Musical Notes at the Heart of Biophysics: Insights into the Cardiac Rhythms

March 25, 2017, Winston-Salem, North Carolina

Southeastern Single Molecule Biophysics Networking Meeting

April 6-9, 2017, Dawsonville, Georgia

Second Molecular Biophysics Symposium

April 20, 2017, Blacksburg, Virginia

Learn more about Biophysical Society Networking Events at biophysics.org/networking.

Advice for Job Seekers: How to Get Noticed and Why the Annual Meeting Is a Great Place to Start!

Reprinted from a February 18, 2016, blog post by BPS member Donald Chang

There is a quote I often like to use when describing the process of job hunting: “Experience is a hard teacher, she gives the test first and then the lesson.” I certainly had my share of failed tests and learned lessons when job searching. No doubt many of you are looking for a job and are hoping to network at this year’s Biophysical Society Annual Meeting. Others may not have started job searching yet, but realize that you will soon face this challenge. Regardless of where you are in the process, by sharing some of my job seeking experiences as a recent PhD graduate from the biophysical community, I hope other prospective job-seekers may find my advice useful and utilize the career resources at the Annual Meeting this year to their full potential.

I have been attending the Biophysical Society Meeting every year since 2010. However, the 2015 meeting in Baltimore was unique for me: it was my last as a graduate student. Before I knew it, the conference flew by, my thesis defense took place, and, with the deposit of my thesis and a few firm handshakes, I was cut loose into the job search.

Unlike some of my peers, I didn’t quite know what path to take after grad school. I considered academia, then industry, and finally, settled on the career path I’m on today as a healthcare consultant. In between, I interviewed and worked at a variety of jobs including a small bio-tech start-up and a research diagnostics lab. In these varied experiences, I learned some valuable lessons along the way that I’d like to share with you.

Manage your expectations. Just because you have an advanced degree or heavy science background does not mean you are guaranteed to find a high-paying job or even be granted an interview. It is important to set the right mentality early on, otherwise you may feel quite disappointed. Many PhD graduates find themselves disappointed when they are repeatedly turned away from jobs despite being a “doctor.” I experienced this firsthand as I applied to multiple jobs with none of them giving a call-back. Recognize that despite your educational background, many companies would still consider you “entry level” albeit with higher performance expectations. What your degree does do is underscore your potential to succeed and back up your intellectual merit should you impress — but first you must grab their attention, which leads me to my second point.

Make your presence felt. People always say “Go network, utilize connections,” but what does that actually mean? Let’s try to ground those statements with some real-life actionable items.

An easy entry into networking is to create a LinkedIn profile and keep it updated. We live in a digital world where your online resume commands as much attention as your paper resume — if not more. If you already have one, be sure that it is current and well designed. If you are unsure how to spruce it up, the Career Development Center at the Annual Meeting can offer some great advice. Be sure to visit them and set up an appointment for one-on-one resume review. I recall spending quite a bit of time on my LinkedIn profile and resume, asking multiple people to review it.



Attendees Networking at the 60th Annual Meeting in Los Angeles, California.

Another “networking” to-do is connect with colleagues, both former and current, as well as establish new relationships. The Annual Meeting is a great place to start. I didn’t start taking advantage of the meets-and-greets and networking events until recent years, and regret not doing so earlier. The Annual Meeting is a great opportunity to expand your network with minimal effort on your end — just introduce yourself, make friends, and learn to carry a conversation! Trust me, it’s a lot harder to network behind a computer screen at home than to do it in person.

Lastly, **stay persistent**. Tying into my first point about managing expectations, realize that this is a long process. As a scientist, you’re seeking a job that will challenge you, tap your potential, and open a path for your career to grow. These opportunities do not happen overnight. It is likely you will go through multiple rounds of interviews, lasting anywhere from one month to half a year. One job I applied for had an interview process of over three months and over three rounds of interviews. In hindsight it was an appropriate amount of time, but in the moment, each day seemed to drag on forever. With that in mind, do not be discouraged

if you make it to final interview rounds and don’t get an offer. Declined offers, just like failed science experiments, never feel good, but are by no means a sign to give up. Stay persistent and keep at it.

Please note that there is a lot of advice out there on job searching and this is not meant to be a comprehensive guide. Rather, the suggestions I shared are just selected ones which resonated the most with me when I was job hunting. There is not a “one size fits all” formula for getting a job and I would encourage you to spend some time researching other tips or making an appointment at the Career Development Center at this year’s Annual Meeting to ensure you find the approach that best suits you. I utilized the Career Development Center when I was applying for jobs and the counselors were able to help guide me, improving my resume and advising me on my applicant profile. Whether you need help getting past that final interview or getting an interview to begin with, the counselors at the Career Center have seen and heard it all and are more than willing to help.

Good luck!

Obituary



Klaus Schulten

Klaus Schulten

“When I was a young man, my goal was to look with mathematical and computational means at the inside of cells, one atom at a time, to decipher how living systems work. That is what I strived for and I never deflected from this goal.”

Klaus Schulten, Swanlund Professor of Physics and a full-time faculty member of the Beckman Institute at the University of Illinois at Urbana-Champaign for nearly 25 years, passed away October 31, 2016, after an illness. Schulten, who led the Theoretical and Computational Biophysics Group, was a leader in the field of computational biophysics, having devoted over 40 years to establishing the physical mechanisms underlying processes and organization in living systems from the atomic to the organism scale. Schulten was a strong proponent of the use of simulations as a “computational microscope,” to augment experimental research, and to lead to discoveries that could not be made through experiments alone. The molecular dynamics and structure analysis programs NAMD and VMD, born and continuously developed in his group, continue to be used by many thousands of researchers across the world. Schulten contributed key discoveries to several areas of biological physics: from quantum biology of vision, photosynthesis, and animal navigation to ion channels employed in neural signaling and to neural network organization of brain function; from mechanically gated channel proteins to muscle protein mechanics; from mathematical physics of non-equilibrium processes to numerical mathematics of the classical many-body problem. While Schulten's work remained solidly anchored to molecular detail, his most recent work advanced to molecular cell biology and molecular systems biology.

Schulten received his diploma degree in physics from the University of Muenster, Germany (1969), and a PhD in chemical physics from Harvard University in 1974. He was junior group leader at the Max Planck Institute for Biophysical Chemistry from 1974 to 1980, and professor of theoretical physics at the Technical University of Munich from 1980 to 1988. Schulten came to the University of Illinois in 1988, and in 1989 joined the Beckman Institute for Advanced Science and Technology where he founded the Theoretical and Computational Biophysics Group, which operates the NIH Biotechnology Research Center for Macromolecular Modeling and Bioinformatics. Since 2008 he was co-director of the NSF-funded Center for the Physics of Living Cells. Schulten's awards and honors include: 2015 Biophysical Society National Lecturer, Blue Waters Professorship, National Center for Supercomputing Applications (2014); Professorship, University of Illinois Center for Advanced Study (2013); Distinguished Service Award, Biophysical Society (2013); IEEE Computer Society Sidney Fernbach Award (2012); Fellow of the Biophysical Society (2012); Award in Computational Biology (2008); Humboldt Award of the German Humboldt Foundation (2004); University of Illinois Scholar (1996); Fellow of the American Physical Society (1993); and the Nernst Prize of the Physical Chemistry Society of Germany (1981).

—*Emad Tajkhorshid*

Encourage Your Peers to Join BPS

Do you know colleagues who are not BPS members yet? Encourage them to join BPS and be among thousands of biophysicists like yourself who can take advantage of membership benefits that will help with career advancement.

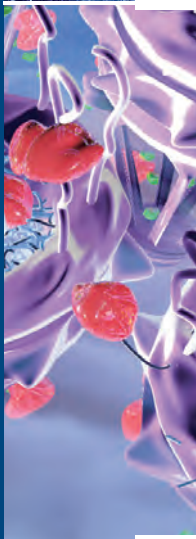
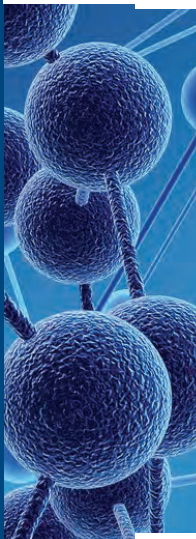
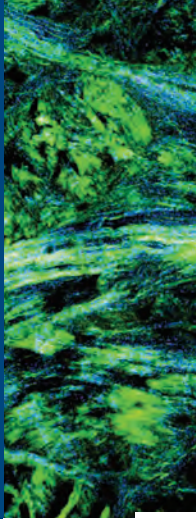
BPS membership benefits can help you:

- Keep up with the latest research – with access to *Biophysical Journal* online – the #1 peer-reviewed journal in biophysics
- Get published for less - publish in the *Biophysical Journal* and pay reduced rates for pages and print color and receive free online color
- Save money on meetings – get significant member discounts to the BPS Annual Meeting – the largest meeting of biophysicists in the world
- Increase your career development skills – through webinars on timely and relevant career development topics
- Expand your network – connect with your peers at Society meetings including BPS Annual Meeting, Thematic Meetings, and local networking events
- Get financial assistance - apply for travel awards and bridging funds to attend the BPS Annual Meeting, or apply for funds to help support your local meetings and events
- Stay connected and informed – gain easy access to other members through the members-only directory and monthly newsletter
- Advance your career – through many career development resources, including the BPS Job Board, external career resources, and career expert columnist “Molly Cule”
- Make your voice count – join thousands of biophysicists across the globe speaking in one strong voice advocating for funding basic science in general and for biophysics specifically

Visit biophysics.org/join

to become a member today!

Biophysical Society





11400 Rockville Pike, Suite 800
Rockville, Maryland 20852

UPCOMING EVENTS

BIOPHYSICAL SOCIETY NEWSLETTER JANUARY 2017

February

February 23–24

NSF INCLUDES Conference on Multi-Scale Evaluation in STEM Education

Knoxville, TN

<http://www.nimbios.org/IncludesConf/>

February 24–25

Phase Separation and RNA Processing as Drivers of Cancer and Neurodegenerative Disease

San Diego, CA

<http://www.zingconferences.com/conferences/cancer-neurodegenerative-disease/>

March

March 15–17

4th Annual Symposium on RNA Science and Its Applications

Albany, NY

<https://www.rna.albany.edu/4th-annual-rna-symposium-rna-science-applications/>

March 22–23

Molecular Imaging and Chemistry: Defining the Future

Buckinghamshire, UK

<https://royalsociety.org/science-events-and-lectures/2017/03/SM-molecular-imaging-and-chemistry/>

April

April 5–7

Chromatin and Epigenetics: From Mechanism to Function

Munich, Germany

<http://www.abcam.com/events/chromatin-and-epigenetics-from-mechanism-to-function>

April 11–14

Cellular Dynamics & Models

Cold Spring Harbor, NY

<https://meetings.cshl.edu/meetings.aspx?meet=COMP&year=17>

May

May 21–23

Molecular and Cell Biology of Membranes

Heidelberg, Germany

<http://www.embo-embl-symposia.org/symposia/2017/EES17-03/index.html>

May 10–12

Immunotherapy @ Brisbane 2017

Brisbane, Australia

<http://www.qimrberghofer.edu.au/news-events/conferences/immunotherapybrisbane-2017/>