

Biophysical Society

Newsletter

July/August 2008 Issue

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2009 Annual Meeting Deadlines

Abstract Submission

October 5

Travel Awards

October 5

Student Housing

November 28

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A Biophysics-Filled Summer

The Biophysical Society 2008 *Summer Course in Biophysics: Case Studies in the Physics of Life* program began May 25, 2008, at the University of North Carolina, Chapel Hill. The ten students selected for the intense 11-week program come from all over the US and from diverse backgrounds. To meet the students, see page 14.



Barry Lentz (center right), Summer Course Director and Program Director in Molecular and Cellular Biophysics at UNC, Chapel Hill, welcomed participants to the Summer Course as they enjoyed a Welcome Dinner feast.

Call for Papers Mailed in July

All Society members were mailed the 2009 Annual Meeting Call for Papers, which can also be found at www.biophysics.org. For more information about the meeting see page 13.



Biophysical Society

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Treasurer's Update



Mordecai Blaustein

Society Membership Surpasses 8,000

The Society achieved another milestone this year: membership grew past 8,000 to nearly 8,300 members. Although there was growth in all member categories, what is particularly healthy for the future of the field and of the Society is the large increase in student and early career members. This reflects the growth of biophysics in general, and the importance of the Society as the home for biophysics interaction. Members outside the US now comprise over 30% of the membership, reflecting the growth that biophysics is experiencing throughout the world.

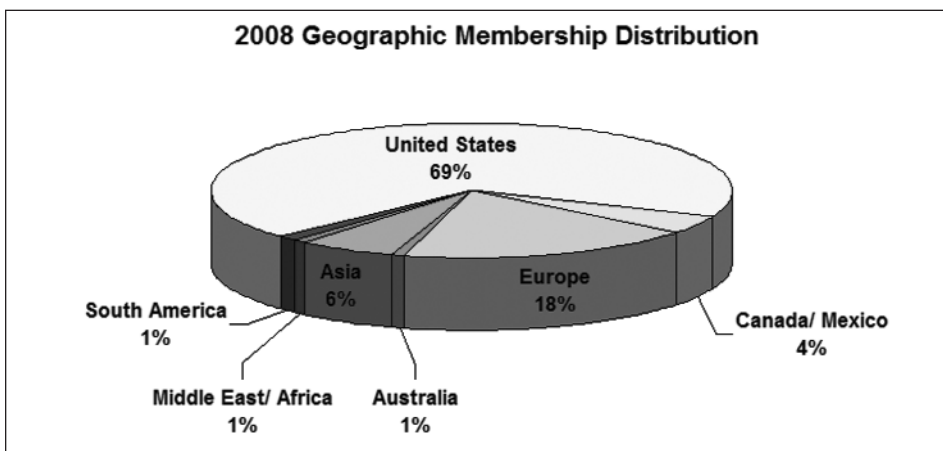
Reserves Grow

The Society reserves, which are the funds to be used in the event of a catastrophic event, such as, for example, cancellation of the annual meeting, are currently at 93% of one year's operating expenses. Nearly ten years ago, the Board and Council agreed that the prudent level for

reserves would be 100% operating expense level. We anticipate that the goal will be reached within the next year. The Board just recently approved a spending policy for reserves over that level to ensure that excess funds are put into sound programs and that those programs can depend on sustainable funding. A New Programs Committee has been charged with evaluating requests for new and enhanced programs, and at least 10% of reserves over the 100% operating expense level will be available for those programs each year.

The Future

The field of biophysics could not have developed as it has had it not been for the existence of the Biophysical Society. As the Society and field continue to grow, so do the services and activities the Society provides to and conducts on behalf of its members. Advocacy for basic research in general and biophysics in particular, outreach to the next generation of biophysicists, and better collaborative biophysics across geographic and economic borders all require financial resources and member involvement. The Society's growth and fiscal health relies on growth in membership, the Annual Meeting, and Biophysical Journal; the Society's dynamism relies on the continued participation of its members. Those of us elected by you, the members, will continue to work towards ensuring the health of the Society and enhancing services to members.



New Feature!

Programs in Biophysics

Has your institution recently created a new biophysics program or department? Has it recently reorganized or expanded an existing program? Does it have a dynamic program it would like to highlight? From time to time, the BPS Newsletter will highlight new or existing biophysics programs. Interested in highlighting your program? Send your information to society@biophysics.org.

University of Michigan Undergoes a Biophysics Transformation

Biophysics at the University of Michigan has a long and distinguished history that extends back to the early part of the 20th century. This program served as the academic home for researchers like *Cyrus Levinthal* (of the Levinthal Paradox fame), *Lawrence Oncley*, *Martha Ludwig* and *Rowena Matthews*, to mention just a few, who have made major contributions to biophysics, especially in the area of structural biology and the development of innovative biophysical methodologies. For over sixty years this program has been known as the Biophysics Research Division and was also the home of the University's interdisciplinary graduate program in biophysics, which has been supported continuously since 1988 by an NIH Training Grant on Molecular Biophysics.

In recognition of its excellence in biophysics research on campus and the growing interest on the part of

both graduate and undergraduate students to study biophysics, the University of Michigan created a new tenure granting unit in the College of Literature, Science and the Arts called Biophysics on July 1 of last year. The unit incorporated the Biophysics Research Division as well as adding a completely new undergraduate degree in Biophysics. The faculty in Biophysics have joined together to transform the highly interdisciplinary research unit into a fully functional interdisciplinary training unit for both undergraduate and graduate students.

The new undergraduate degree is easily completed in four years. Rather than use existing courses from other departments, Biophysics, with the guidance of the noted single-molecule expert *Jens-Christian Meiners*, has created an entirely new curriculum with new courses aimed directly at the core areas of training in biophysics. The educational philosophy is based on the idea that biophysics has now developed to the point that it should be taught as a separate science. The curriculum also includes a new freshman seminar called *The Mysteries of the Double Helix* that was full last year and loved by the students. Taught by NMR spectroscopist and RNA structural biologist *Hashim Al-Hashimi*, this course takes the students through the excitement of discovery of the genetic code, through reading and hands-on work in laboratories. Examples of other courses that are part of the program include, *Physics of the Body and Mind*, which provides upper level students in biophysics and other disciplines with hands-on training in the basic concepts and applications of such techniques as nuclear magnetic resonance, x-ray crystallography, optical tweezers, and advanced microscopy.

Students who are attracted to this program include physical science students with an interest in fundamental biology, students aiming for a post-graduate position in a Medical Scientist Training Program, and students who plan to enter the job market after graduation working in industry or the government with technical expertise in physical methodologies in the life sciences.

The graduate program is also undergoing rapid evolution and is headed up by *Ari Gafni* who applies diverse biophysical tools to understand mechanistic aspects of protein folding. With the arrival of *Charles Brooks* from The Scripps Institute, Biophysics now has a 1600 processor super computer that is dramatically expanding the advanced training opportunities for graduate students. A new 600-MHz magnet for solid state NMR spectroscopy purchased from NSF and NIH funds successfully generated by *Ayyalusamy Ramamoorthy* is being installed to expand the structural biology work and work in the areas of single molecule manipulation and spectroscopy, ultrafast laser and x-ray absorption spectroscopy and neuro-biophysics is continuing to grow at a rapid pace.

With anticipated recruiting of additional faculty in the coming years, Biophysics at Michigan under the chairmanship of *Duncan Steel* is looking forward to expanding its role in frontier research at the emerging boundary between the physical sciences and the life sciences. For more information, visit their website at <http://www.umich.edu/~biophys/>.

—*Duncan Steel*,
University of Michigan

Biophysicist in Profile



Felix Goñi

“If I today was told “you cannot go on working in science,” I would go back to the business of fireworks,” says Felix Goñi, Director of the Biophysics Unit of Basque Country University in Bilbao, Spain. In college, Goñi and some friends owned their own fireworks business. While working on a display for the Princess of Monaco, Goñi was injured and quickly decided science was a physically safer option than fireworks. “I am a scientist,” Goñi explains of the career path he chose, “science is my main passion.”

The eldest of eight children in a middle class family, Goñi admits he was spoiled and never lacked for anything.

... Science was a physically safer option than fireworks”

His mother, Maria Jesus, ran a menswear shop and his father, Clemente, ran a furniture store. Born on May 12, 1951, he soon discovered that he never had to work hard to get good marks in school. Not particularly interested in athletics, he

ended up spending much more time “reading than playing.”

There were many people who were seminal in moving Goñi toward a career in research. The first was Clemente Goñi’s friend, Joaquin Landa, a chemist. “He spoiled my future as a doctor,” jokes Goñi about the chemistry books Landa lent him while Goñi attended The University of Navarra Medical School in Pamplona. While his first three years at the university consisted mainly of science classes, it was the classic chemistry books that Landa lent Goñi to read during the summers that resulted in Goñi becoming a “star in biochemistry.”

It was his first science professor, Esteban Santiago, his mentor at University of Navarra and a pioneer of biochemistry in Spain, who taught Goñi what science entailed. He shared with Goñi a love for mitochondria and encouraged him to continue studying. While in Medical School Goñi took biophysics summer courses in Portugal at the Gulbenkian Foundation. Through these courses Goñi met Dennis Chapman, a pioneer in lipid bio-

physics, and a professor at the Royal Free Hospital at the University of London, where Goñi eventually did his postdoc. Goñi calls Chapman his “scientific father.” As Goñi’s mentor Chapman introduced him to instru-

mentation. MDs are not trained in this aspect of research. “He (Chapman) made me lose any fear of instruments,” Goñi explains.

When his postdoc came to an end, Goñi received a call from former professor at the University of Navarra, Jose Maria Macarulla, who was starting a biophysics program at Basque University in Bilbao. Unable to resist the opportunity, Goñi joined him and helped create one of the first biophysics programs in Spain. Since

At the time, most Europeans were not Society members, so he couldn’t find two members to sign his application.

then the program has flourished, and Goñi is now Professor and Head of the Biophysics Unit. His work continues to focus on membranes, specifically with interest in lipid-protein interactions in the field of lateral heterogeneity in membranes, membrane domains. He is now starting to apply new advanced fluorescence techniques, confocal or two photon fluorescence, and fluorescence correlation spectroscopy.

Goñi enjoys experimenting and feels fortunate that his wife, Alicia Alonso, is also a scientist. Goñi explains that they work well together because she is great at instrumentation while he prefers seeing and interpreting the results.

It was not until 1990 that Goñi attended his first Biophysical Society Annual Meeting. Before then, America was much farther away from Europe and, following his postdoc at

“...we owe him, not just for organizing a great program that year, but also for giving us an example for how the job of Program Chair could and should be done.”

a British institution, he had come away with certain prejudices of American life. However, they all blew away once he attended his first meeting. Since then, he has attended nearly all meetings. Joining the Society was a different story. At the time, most Europeans were not Society members, so he couldn't find two members to sign his application. He mailed his completed application to a member in the United States and asked him to find another person to sign. It worked and Goñi was admitted to the Society in 1995.

Since those days, Goñi has become an active participant in Society activities. In 2005, then-President-Elect Barry Lentz appointed him Chair of the Program Committee. “I already knew of his devotion to excellence as a scientist,” explains Lentz, “but I asked Felix to be Program Chair because I learned while visiting with him of his tremendous leadership and organizational abilities.” Lentz, Department of Biochemistry & Biophysics Director, Program in Molecular and Cellular Biophysics at the University of North Carolina, Chapel Hill, adds that “as a Society, we owe him, not just for organizing a great program

that year, but also for giving us an example for how the job of Program Chair could and should be done.”

Goñi and his wife have two daughters, Ines, 21 and Helena, 17. His theory that “children imitate unconsciously and hate consciously what their parents do,” turned out to be true. Neither girl studies science. Ines is currently studying modern languages and Helena is preparing to enter college. To those



Felix Goñi singing Masterclass in Nice, France, with pianist Paloma Camacho and world-acclaimed teacher Dalton Baldwin. (Photo M.L. Demangeat).

The work was well worth it, according to Goñi. “The Biophysical Society provides simply the best meetings in biophysics in the world and the best by far journal in Biophysics.” he says. Goñi is also active in other societies, most notably the Federation of European Biochemical Societies, where he is chair of the publications committee.

who know and work with him, Goñi is the consummate gentleman with an incredible sense of humor. “I spent about two weeks with him and the folks in his department talking membranes,” says Lentz. “It was a delightful time. Aside from being a top-notch scientist, he is an accomplished singer and made a spectacular tomato sauce!”

“children imitate unconsciously and hate consciously what their parents do”

Negotiating the Transition to an Academic Job

This is the first of a two-part series that summarizes the main discussion points raised during an Early Career Sponsored Panel Discussion held during the Society's Annual Meeting in Long Beach.

Panelists included *Kenneth Campbell*, University of Kentucky; *Tharin Blumenschein*, University of East Anglia; *Brian Delisle*, University of Kentucky; *Dana Lawrence*, Hood College; and *Seth Robia*, Loyola University.

The points raised have been organized into three main topics: Publications and Teaching-oriented Institutes, which are included in this newsletter, and Applying for a Job, which will appear in the September/October Newsletter. The articles were prepared by *Damien Samways* of St. Louis University.

Publications

How many publications are expected for an average length postdoc?

One would expect a postdoc to have at least generated sufficient data for a single original research publication during their fellowship! But beyond that, the strength of a postdoc's publi-

cation record has more to do with the quality of the publications produced, the nature of the work being conducted, and the frequency, rather than total number of publications.

Note that it is not uncommon for the writing and submitting of manuscripts to occur mainly towards the end of a postdoc fellowship, meaning that they will be listed in your CV as submitted, or in preparation. This is not necessarily going to count against you, although submitted is generally preferable to in preparation.

... project choices should be made on the basis of aiming for the highest impact possible.

ty member, you will likely begin to receive endless solicitations to write reviews.

What constitutes a good quality publication?

Clearly, high impact papers published in high impact journals are very useful for an early career scientist. They demonstrate that your work is of a high standard and has broad significance beyond your own specific field. Then there are strong publications of a more focused sort that, while not

... these are not considered evidence of research productivity, so only involve yourself with these if it doesn't distract you from doing your own original research.

Should I take time to write reviews?

Although review articles are sometimes useful for putting your name out in a field (they often are more widely read and cited than original research articles), these are not considered evidence of research productivity, so only involve yourself with these if it doesn't distract you from doing your own original research. Later, as facul-

ty member, you will likely begin to receive endless solicitations to write reviews. rocking the heterogeneous readers of *Science* and *Nature*, may still be considered important advances within a certain field. Further down are gap-filling research publications that perhaps clarify certain or enhance current knowledge in a certain field. Ultimately, project choices should be made on the basis of aiming for the highest impact possible.

How are non first-author papers rated?

The primary aim of a postdoc is to demonstrate competence in designing and executing a research project from start to finish as part of establishing oneself as a viable future independent investigator. First author publications are the most accurate indicators of

... the strength of a postdoc's publication record has more to do with the quality of the publications produced, the nature of the work being conducted, and the frequency, rather than total number of publications.

success here. By all means engage in collaborations, but unless you are the leading author, these should take a lower priority under your own self-directed work.

Bear in mind that search committees are well aware that a first-author paper does not necessarily mean that the first author designed the project. There are countless publications in which the first author has simply been operating under the instructions of the PI, and a key part of the search process is to establish whether applicants can prove that they have contributed to the research design, and not just the manual labor.

Teaching-oriented Institutes

What is the pace of research at a teaching-oriented college?

Generally slower than research-oriented institutes, because much of the laboratory work is conducted by a PI with the aid of undergraduate students.

What should graduates aim to accomplish during their PhD and following postdoc in order to best position themselves for a career at a teaching-oriented institute?

Teaching experience is a tremendous advantage. So be proactive in pursuing opportunities that allow you to prepare and give lectures and

tutorials, and if possible even involve yourself in curriculum design.

Are teaching postdocs worth doing if a graduate student wishes to work at a teaching-oriented institute?

There are both pros and cons to these kinds of postdocs. The pro side is clearly that you should receive more instruction on aspects of curriculum design and execution. However, this

ing one's teaching skills. Giving research talks both within the institute and research meetings will boost one's communication skills, and one's confidence in a public speaking role. Also consider giving visiting seminars to local schools and undergraduate colleges. In addition, it's very likely

... be proactive in pursuing opportunities that allow you to prepare and give lectures and tutorials, and if possible even involve yourself in curriculum design.

comes at the expense of research productivity, which arguably limits one's career choices. Teaching-based postdocs are relatively new, and their value remains to be determined.

To coin a Fox News term, "Some people say..." that the skills required for teaching can be easily picked up in a conventional research-based postdoc (see below).

What can a research-oriented postdoc do to enhance his/her teaching resume?

Many research-oriented universities have ample opportunities for enhanc-

that you will be allowed (nay, encouraged!) to give an undergraduate lecture or two at your own institute.

Many institutes also have courses on teaching, ethics, and curriculum design that are worth attending, time permitting.

A good source of experience in instruction can also be gained from being actively involved in the training of undergraduate and graduate students working in the laboratory. This also provides solid experience in mentoring, which will be an important element of your future career as an independent investigator.

Obviously, take care to organize your time well, and ensure that your attempts to enhance your teaching resume do not distract you from your research.

Giving research talks both within the institute and research meetings will boost one's communication skills, and one's confidence in a public speaking role.

Public Affairs

Lend Candidates Your Scientific Expertise

With the Presidential election taking center stage, many Society members have asked how to get science on the national agenda. One of the best ways to do this is to get involved at the campaign stage. While the presidential campaigns have staffed up by this point in the election cycle, the candidates for Congress can still use some assistance. They would probably be thrilled to have a scientist from a local or state university/college on board to help them develop positions on science-related issues that come up during the campaign. This is especially true for non-incumbent candidates.

If you have a favorite candidate, call the local campaign office and ask to speak to the policy director. Let

him/her know that you would like to be a resource for the candidate throughout the election. Also let them know that even if a particular question falls outside your area, you can help them connect with a scientist from the appropriate discipline. Be prepared to offer facts—not agendas.

If you do not have a favorite candidate, you can research candidates at two websites: *Your Candidate Your Health 2008* and *Innovation 2008: Rebuilding America's Scientific Edge*. *Your Candidates Your Health 2008* is an initiative sponsored by Research!America and 37 partners that provides candidates answers to health policy related questions. The address is <http://www.yourcandidatesyourhealth.org/>. *Innovation 2008*, sponsored by Scientists and Engineers for America, provides candidates answers to a broader range of science issues. The address is <http://sharp.sefora.org/>.

The purpose of these initiatives is to get Congressional candidates on the record to raise the profile of these issues and to be able to hold them accountable once elected.

You can also volunteer to help with efforts to register voters, drum up support for the candidate, or attend rallies. If the candidate has a town hall meeting, attend and ask a scientifically relevant question.

Some of the science-related issues that may come up during this campaign season are: genetic discrimination, drug reimportation, science education, the teaching of evolution, healthcare reform, FDA funding, medical records privacy, electronic medical records, bioterrorism, pharmaceutical regulations, Avian flu, federal support for stem cell research, and biofuels.

NIH Changes to Peer Review

After a year long review that included both a self-study and input from the external community, the NIH has announced changes it plans to make to improve its peer review system. According to the report announcing the changes, implementation of the plan will take place over the next 18 months.

In a press release, Director *Elias Zerhouni* stated, "The scientific community became truly engaged in this comprehensive effort to figure out how to make peer review work better for both the reviewers and the applicants. The results of this collective effort are concrete solutions that will maximize flexibility, remove any unnecessary burden, stimulate new innovation, and promote transformative research."

Want information on candidates positions on health and science? Go to:



SHARP Network: <http://sharp.sefora.org>



Research!America: <http://www.researchamerica.org>

The Implementation Report outlines four priorities for the NIH and steps the agency will take to achieve them. The priorities are to 1) ensure that the NIH is able to get the best reviewers to serve on study sections, 2) improve the quality and transparency of review, 3) ensure reviews are fair across all fields and career stages, and 4) develop a permanent process for continuous evaluation of the peer review system (see side bar).

According to the plan, NIH will shorten its application from 25 pages to 12 and emphasize research impact over methods and details. NIH will also provide applicants with more detailed feedback on proposals. To improve recruitment and retention of reviewers, NIH will lengthen the time on a study section from 4 years to six years so that participants can spread the commitment over a longer period of time. In addition, NIH plans to pilot online reviews and provide study section members who attend at least 18 meetings a grant supplement of up to \$250,000. To increase funding for early-career investigators, NIH also plans to have reviewers consider these submissions separately from the rest of the application pool and assign a different NIH-wide cutoff score to ensure that at least 1,500 are funded each year.

While earlier drafts of the Implementation Report suggested that NIH disallow resubmissions of grants (A1s and A2s) or that weak grants be labeled “not recommended for resubmission,” these proposals are not part of the final plan. Rather the NIH has indicated that they plan to use the advisory councils to rebalance the funding rate between strong first submission applications and amended applications.

The Biophysical Society did not submit a statement on peer review on behalf of Society members due to the divergent opinions on the matter but

NIH PEER REVIEW PRIORITIES

Priority 1 — Engage the Best Reviewers

Increase flexibility of service, formally acknowledge reviewer efforts, further compensate time and effort, and enhance and standardize training.

Priority 2 — Improve Quality and Transparency of Reviews

Shorten and redesign applications to highlight impact and to allow alignment of the application, review and summary statement with five explicit review criteria, and modify the rating system.

Priority 3 — Ensure Balanced and Fair Reviews across Scientific Fields and Career Stages

- Support a minimum number of early stage investigators and investigators new to NIH, and emphasize retrospective accomplishments of experienced investigators.
- Encourage and expand the Transformative Research Pathway
- Create a new investigator-initiated Transformative R01 Award program funded within the NIH Roadmap with an intended commitment of a minimum of \$250 million over five years.
- Continue the commitment of — and possibly expand the use of — the Pioneer, EUREKA, and New Innovator Awards. NIH will invest at least \$750 million in these three programs over the next five years.
- Reduce the burden of multiple rounds of resubmission for the same application, especially for highly meritorious applications.

Priority 4 — Develop a Permanent Process for Continuous Review of Peer Review

Use a more rigorous and independent prospective evaluation that favor adaptive and innovative approaches to review and program management, pilot and evaluate new models of review, pilot and evaluate high bandwidth electronic review, and develop metrics for monitoring performance of review.

did solicit members' thoughts about peer review and submitted them to the NIH for consideration. The Society also sent representatives of the Board and Public Affairs Committee to regional meetings held to gather input from the external NIH community. The Implementation Plan includes several suggestions made by BPS members, including shorter reviews, special attention to early career investigators, reviewing peer review on a regular basis, and paying particular attention to funding high-risk, high impact research.

For more information about enhancing peer review at NIH and to learn about the implementation plan, please visit <http://enhancing-peer-review.nih.gov>.

Support for Early Career Faculty and High Risk, High Reward Research Key to US Competitiveness

The American Academy of Arts and Sciences released a report entitled, *ARISE: Advancing Research in Science and Engineering*, on June 3. The report focuses on two areas where the United States can improve its support for research: in its support for early-career investigators at universities and in its efforts to support high-risk, high-reward research. Rather than advocate for more money, the report focuses on changes to current policy that are needed, regardless of funding levels, to improve these two areas.

In regards to improving support for early career investigators, the report outlines steps that individuals, universities, societies, and government agencies can take. At the university level, the report suggests that institutions improve mentoring of young faculty members, develop policies to recognize the needs of primary caregivers, and rewrite promotion and tenure policies so that they recognize collaborative projects and well-developed projects with negative outcomes. The report also suggests that universities shoulder greater responsibility for faculty salaries. Having to raise 100% of one's salary places too heavy of a burden on early career principal investigators and discourages them from risk-taking in their research.

At the federal level, the report suggests that agencies create or strengthen multi-year awards for early career faculty, pay special attention to early-career faculty during merit reviews of regular grant programs, provide seed funding for early-career faculty, and develop policies to respond to the needs of primary caregivers, such as grant extensions.

To enhance support of high-risk, high-reward research, the Report recommends that federal agencies create targeted programs for this type of research and establish metrics to judge success, strengthen the application and review process, and invest in program officers.

To read the report in its entirety, go to www.amacad.org/ARISE.

Visited the
Biophysical Society
Website Lately?

See the new
www.biophysics.org

Biophysical Society Job Board

The Job Board includes several biophysics-related job postings as well as the opportunity to post job openings from your institution or company. Check out the Job Board at www.biophysics.org

Subgroup News

Motility

The theme for the Saturday symposium at the 2009 Annual Meeting in Boston will be *Flexibility in Motor Function*. Molecular motors are not binary machines that click between states, but are soft matter subject to thermal fluctuation. The symposium will explore how this flexibility impacts the function and regulation of the dynein, kinesin and myosin motors that drive biological motility. We are delighted to have *Kazuo Sutoh*, University of Tokyo, as our Evening Speaker. He is well known for his fundamental studies of myosin and dynein mechanisms.

—*Peter Knight* and *Sarah Rice*,
Subgroup Co-Chairs

Bioenergetics

The 2009 Bioenergetics subgroup symposia will include a morning session entitled *Role of Lipid in Bioenergetic Function*, co-chaired by *Shelagh Ferguson-Miller*, Michigan State University, and *William Cramer*, Purdue University. The title of the afternoon session is *Integration of Ion Transport and Metabolism in Mitochondria*, co-chaired by *Tatiana Rostovtseva*, National Institutes of Health, NICHD, and *John Lemasters*, Medical University of South Carolina. A complete program with final titles for each presentation will be published in a subsequent newsletter. The co-chairs of both sessions

have done a great job recruiting outstanding speakers for our subgroup symposia. Please spread the word among your colleagues concerning our line-up of speakers for this year's meeting and encourage their attendance.

This will be my last newsletter where I serve both as Chair and Treasurer of the subgroup as *Uwe Schlattner*, University of Grenoble, has been elected as Treasurer of the subgroup. To my colleagues in the subgroup, I ask that you treat Uwe as well as have you have treated me regarding subgroup financial matters. You all have all made the job easy and the subgroup continues to maintain a solid financial foundation. Thanks!

—*Lawrence Prochaska*,
Subgroup Chair

Membrane Biophysics

Be sure to join us in Boston on Saturday afternoon before the start of the Annual Biophysical Society meeting for the Membrane Biophysics symposium. The theme for this year's symposium is *Ion Channels with Borderline Personalities*. Speakers will include *Tom DeCoursey*, Rush University Medical Center; *Fred Lamb*, University of Iowa; *Joe Mindell*, National Institute of Neurological Disorders and Stroke; *Ann-Marie Surprenant*, University of Manchester; *H. Criss Hartzell*, Emory University School of Medicine; and others.

Please remember to pay your subgroup dues—dues support the symposium and the Cole Award.

Don't forget the September 15, 2008, deadline for nominations for the 2009 Cole Award. Nominations should be sent to the Chair (*Criss Hartzell*, criss.hartzell@emory.edu), the Advisory Committee (*Eitan Reuveny*, e.reuveny@weizmann.ac.il, *Nael A. McCarty*, nael.mccarty@biology.gatech.edu, *David T. Yue*, dyue@jhmi.edu, or *Dan Minor*, daniel.minor@ucsf.edu), or subgroup Secretary/Treasurer (*Carol L. Beck*, carol.beck@jefferson.edu). The Cole Award will be presented at the dinner following the symposium on March 1.

—*Carol L. Beck*, Secretary-Treasurer
—*Criss Hartzell*, Subgroup Chair

Interested in Creating a New Subgroup?

Forming a subgroup supporting the advancement of a specific area of biophysics is easy. Simply submit a petition signed by 100 regular members along with proposed constitution and bylaws must be submitted to society@biophysics.org

Petitions and bylaws are then submitted to Council for approval.

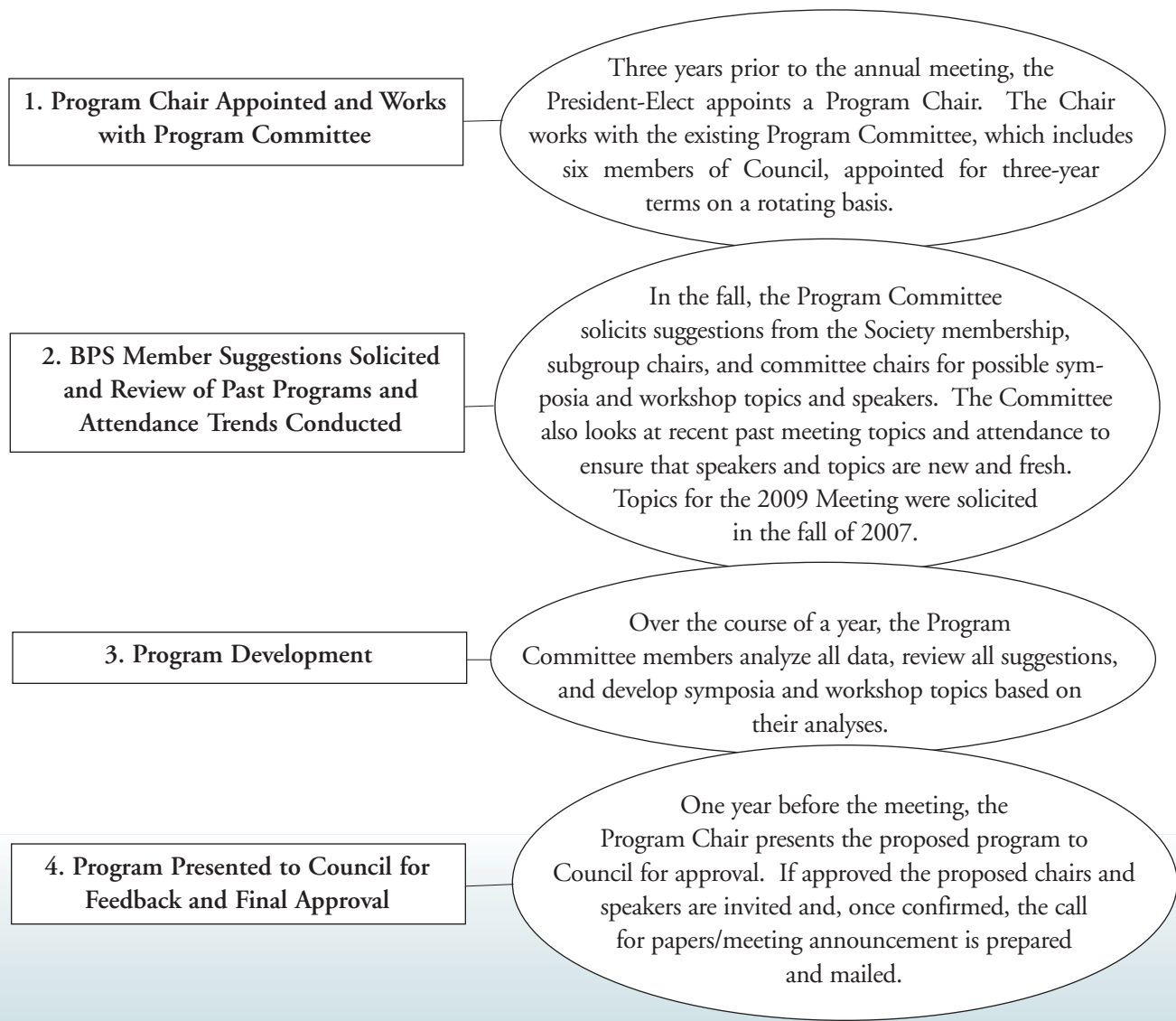
For more information on existing subgroups, visit www.biophysics.org

How the Society Works

How Is the Scientific Program for the Annual Meeting Developed?

When a President-Elect is elected in August of each year, he/she names a Program Chair who oversees the development of the scientific program for the annual meeting to be held three years later. The Chair, together with the Program Committee that includes six members of Council serving three-years terms on a rotating basis, compile a program that represents the diversity in scientific areas, demographics, and geography of the Society membership and that represents the best and most exciting biophysics in the world. That program is presented to Council for approval one year before the actual meeting.

The 53rd Biophysical Society Annual Meeting will take place February 28 through March 4, 2009, in Boston, Massachusetts. The Program Co-Chairs, *David Warshaw* of the University of Vermont College of Medicine and *Ming-Ming Zhou* of Mount Sinai School of Medicine, began working on the 2009 program with the members of the Program Committee members in 2007!



2009 Annual Meeting News

October 5 Abstract Deadline

All abstracts must be submitted through the abstract submission site, found at www.biophysics.org by October 5, 2008. Revisions will be accepted until midnight, October 10, 2008. Abstracts submitted by the October 5 deadline and accepted for programming will be published as a supplement to the *Biophysical Journal*.

Member-Organized Sessions

Society interested in organizing their own platform session on a specific topic or theme not included in the poster or minisymposia categories may submit a request to the Program Committee in the form of a member-organized session. Anyone interested in organizing a member-organized session must submit the title of the session, chair of the session, and a proposed list of speakers and titles of each of their abstracts to the Society office by September 26, 2008. All abstracts proposed in the session must then be submitted by the October 5 deadline. Selection of the member-organized sessions is made by the Program Committee. Abstracts not selected for member-organized sessions will be programmed in an appropriate poster session.

New on the Exhibit Hall Floor in 2009

Need to check your e-mails or just take a load off? Stop in the Wireless Café and check your e-mails from your own laptop. Bring your laptop to the Wireless Café and sit back and connect to the rest of the world. Open during Exhibit Hall hours only.

Morning Coffee & Afternoon Snacks

Drop in the exhibit hall for a morning cup of java or an afternoon snack. Coffee is served from 10:00-11:00 AM on March 1-3, in the hall. Treat yourself to an afternoon snack to tie you over until dinner. Snack time in the hall is 2:00-3:30 PM March 1-3.

Exhibit Hall Hours: Sunday, March 1 – 10:00 AM – 5:00 PM
Monday, March 2 – 10:00 AM – 5:00 PM
Tuesday, March 3 – 10:00 AM – 5:00 PM

Housing Opens August 1, 2008

Reserve early to guarantee your hotel room through the official Housing Bureau for the Biophysical Society's 53rd Annual Meeting.

Booking a room within the housing block is a benefit for meeting attendees because in addition to the lower room rates, the Housing Bureau guarantees rates and rooms to those who use this service in the event of over-booking, construction, or problems with a room. The Housing Bureau is in place to immediately serve meeting attendees by taking care of any problems that arise for individuals who have booked through their service.

To view rates and amenities for all hotels within the meeting housing block and to complete your hotel reservation, visit www.biophysics.org.

Visa Information

Scientists planning to enter the US to attend the 2009 Annual Meeting should apply for a VISA at least three months before the meeting. Meeting attendees are encouraged to visit the following websites for information regarding obtaining a visa for entry into the US:

US Department of State
http://travel.state.gov/visa/visa_1750.html
National Academies of Science
<http://www7.nationalacademies.org/visas/>
US Department of Homeland Security
<http://www.dhs.gov/xtrvlsec/crossingborders/>

Members in the News

Society members elected to NAS



Richard Aldrich



Steve Boxer



Ken Dill



*Jennifer
Lippincott-Schwartz*



Peter Wright

Five members of the Biophysical Society were recently elected members of the National Academies of Sciences. They were: Richard Aldrich, University of Texas, Austin, and Society member since 1980; Steve Boxer, Stanford University and Society member since 1979; Ken Dill, University of California, San Francisco, and Society member since 1979; Jennifer Lippincott-Schwartz, National Institutes of Health and Society member since 2000; and Peter Wright, Scripps Research Institute and Society member since 1985.



William E. Moerner of Stanford University and Society member since 1996 and Allen J. Bard (not pictured) of University of Texas at Austin and Society member since 1996 were awarded the Wolf Prize in Chemistry.



Andre F. Palmer of Ohio State University and Society member since 1998 was awarded the Lloyd Ferguson Young Scientist Award.

Xiaowei Zhuang (not pictured) of Harvard University and Society member since 1998 was awarded the 2008 Coblentz Award.

Obituary

Robert (Bob) F. Rakowski, Biophysical Society member since 1979, died from cardiac arrest on February 19, 2008. Rakowski earned undergraduate and masters degrees in Chemical Engineering from Cornell University, and a PhD in Physiology under Paul Horowitz at the University of Rochester School of Medicine and Dentistry. He did postdoctoral work first with W. Knox Chandler at Yale University, where together with Martin Schneider he made the first recordings of the displacement currents that mediate excitation-contraction coupling in muscle, and then with Lord Richard Adrian at Cambridge University. Rakowski became Assistant Professor of Physiology and Biophysics at Washington University in 1975, and from 1984 to 2000 he was Associate Professor and then Professor and Chairman of Physiology and Biophysics at The Chicago Medical School, now the Rosalind Franklin University of Medicine and Science. From 2000 to 2005 Rakowski was Chairman of Biological Sciences at Ohio University, Ohio, after which he devoted himself exclusively to research and teaching. Rakowski was an outstanding biophysical electrophysiologist with a knack for exploiting electronics and computers, yet with a deep sense of biological reality. He was also a champion oarsman and an expert fisherman. For the past 27 summers Bob studied the tiny transmembrane currents generated by the electrogenic sodium pump in squid giant axons, in a longstanding collaboration with Paul De Weer, University of Pennsylvania School of Medicine, David Gadsby, Rockefeller University, Miguel Holmgren, National Institute of Neurological Disorders and Stroke, and, more recently, Francisco Bezanilla, University of Chicago, at the Marine Biological Laboratory in Woods Hole. Rakowski had planned to retire this year to settle in Falmouth, Massachusetts with his wife Linda who, together with their three daughters, has established in his memory the Robert F. Rakowski Award for Outstanding Research in Biological Sciences at Ohio University.

Meet the Summer Course in Biophysics Students



Travels so much he lives out of his truck.

Alonza Brown

Norfolk State University



Enjoys cooking, and makes the best enchiladas.

Cheryl Law

Spelman College



Can't sleep without socks, enjoys nature, but doesn't like camping. Her favorite animal is the seahorse.

Maria Colorado

American River College



Is an adrenaline junky, speaks seven languages fluently, two semi fluently. The other students enjoy his entertaining storytelling abilities.

Sumuna Mwimba

North Carolina Central University



Is a first degree black belt in Tae Kwon Do, about to receive his second band. Also enjoys performing and inventing chemistry experiments at home.

Giovanni Cruz

University of Puerto Rico, Cayey



Cast as an extra in a scene in Firestarter with Drew Barrymore.

Stephani Page

North Carolina A & T State University



Likes to travel, drink lots coffee, and enjoys playing video games.

Tsega Gegre-Egzi

North Carolina Central University



Likes to write plays and poetry.

Yalidette Rivera-Colon,

University of Puerto Rico, Cayey



Car enthusiast, loves working on and driving his car.

Kimani Gopaul

Florida A&M University



Dabbles in digital art photography, painting, and drawing.

Melissa Weimken

University of South Florida



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Biophysical Society Newsletter—July/August Issue

Upcoming Events

Biophysical Society

September 12 - 16, 2008

ASBMR 30th Annual Meeting

Montreal, Quebec, Canada

<http://www.asbmr.org/meeting/meetingsindex.cfm>

September 14-19, 2008

Gordon Research Conferences: Biointerface Science

Aussois, France

[http://www.grc.org/programs.aspx?year=2008
&program=bioint](http://www.grc.org/programs.aspx?year=2008&program=bioint)

September 15-17, 2008

*Colloidal Nanoparticles - From Synthesis to
Biological Applications*

Marburg, Germany

<http://www.physik.uni-marburg.de>

September 30, 2008

Nanotechnology in Medicine and Biotechnology

London, United Kingdom

<http://www.imeche.org/events/event.asp?id=s1262>

October 1-4, 2008

2008 BMES Annual Fall Meeting

St. Louis, Missouri

<http://www.bmes.org/>

October 12-17, 2008

13th International Biotechnology Symposium

Dalian, China

<http://www.iupac.org/symposia/2008.html#121009>