

September 2009

Aldrich Elected President-Elect

Seven Society Members Elected to Council



Richard W. Aldrich

Richard W. Aldrich of the University of Texas, Austin, was elected President-Elect of the Biophysical Society. He will assume that office at the 2010 Annual Meeting in San Francisco. His term as President will begin at the 2011 Annual Business Meeting in Baltimore.

Seven Society members were elected to Council, each for a three-year term beginning at the 2010 Annual Meeting. They are (pictured below) *Nancy L. Allbritton*, University of North Carolina, Chapel Hill; *Angel E. Garcia*, Rensselaer Polytechnic Institute; *Angela Gronenborn*, University of Pittsburgh; *Antoinette Killian*, Utrecht University; *Tanja Kortemme*, University of California, San Francisco; *Peter So*, Massachusetts Institute of Technology; and *Michael Wiener*, University of Virginia Health Science Center.



Nancy L. Allbritton



Angel E. Garcia



Angela Gronenborn



Antoinette Killian



Tanja Kortemme



Peter So



Michael Wiener

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Twenty-six percent of eligible members cast their ballots for this year's slate of candidates. Thanks to all members who voted and to all the candidates who ran in this election.

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2010 Society Awardees Named

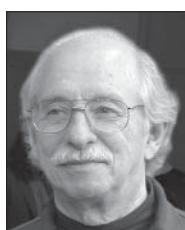
Nine Society members have been selected for the 2010 annual Society awards. They are listed below. Each will be honored at the Awards Ceremony, held during the Annual Meeting in San Francisco, February 20-24, 2010.



Mordecai P. Blaustein of the University of Maryland School of Medicine, Baltimore, will receive the 2010 Distinguished Service Award for his tireless efforts in strengthening the Biophysical Society—and therefore biophysics—in the United States and throughout the world.



Jane Clarke of the University of Cambridge will be awarded the 2010 U.S. Genomics Award for Outstanding Investigator in the field of Single Molecule Biology for pioneering the study of the mechanical properties of proteins, protein folding and stability.



S. Walter Englander of the University of Pennsylvania is the 2010 Biophysical Society Founders Awardee for pioneering the development of hydrogen exchange (“HX”) techniques for exploring the stability, interactions and dynamics of macromolecules and their folding.



James Hamilton of Boston University School of Medicine will be awarded the 2010 Avanti Award in Lipids for his innovative contributions in the application of NMR methods to phospholipids and fatty acids.



Greta Pifat-Mrzeljak of the Rudjer Boskovic Institute has been named the 2010 Emily M. Gray Awardee for her outstanding record of accomplishments and leadership of the triennial international summer schools and textbooks on Supramolecular Structure and Function.



Two candidates will share the Margaret Oakley Dayhoff Award this year. They are *Crina Nimigean* (left) of Weill Medical College, Cornell University, for her contributions to our understanding of K⁺ channel gating and permeation mechanisms, and *Maria Spies* (right) of the University of Illinois, Urbana Champaign, for her exemplary research into the mechanisms of DNA repair and the cell cycle maintenance machinery.



Tom A. Rapoport of HHMI and Harvard Medical School will receive the 2010 Anatrace Membrane Protein Award for providing outstanding mechanistic insights into the processes involved in intracellular protein transport, transport of proteins across the endoplasmic reticulum membrane, and membrane biogenesis.

Grants and Opportunities

Name: The NIH Director's Pioneer Award Program

Submission Deadline: October 20, 2009

Objective: The NIH Director's Pioneer Award Program complements NIH's traditional, investigator-initiated grant programs by supporting individual scientists of exceptional creativity who propose pioneering and possibly transforming approaches to addressing major biomedical or behavioral challenges. To be considered pioneering, the proposed research must reflect ideas substantially different from those already being pursued in the investigator's laboratory or elsewhere. Awardees must commit the major portion (at least 51%) of their research effort to activities supported by the Pioneer Award.

Who may apply: Individuals with the skills, knowledge, and resources necessary to carry out the proposed research are invited to work with their institution/organization to develop an application for support. Individuals from underrepresented racial and ethnic groups as well as individuals with disabilities are always encouraged to apply for NIH support.

Web link: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-09-010.html>

Name: Doctoral Dissertation Improvement Grants in the Directorate for Biological Sciences

Objective: The National Science Foundation awards Doctoral Dissertation Improvement Grants in selected areas of the biological sciences. These grants provide partial support of doctoral dissertation research to improve the overall quality of research. Allowed are costs for doctoral candidates to participate in scientific meetings, to conduct research in specialized facilities or field settings, and to expand an existing body of dissertation research.



Biophysicist in Profile

Mordecai P. Blaustein

Mordecai P. Blaustein, Professor of Physiology and Medicine at the University of Maryland School of Medicine, enjoys the excitement of new concepts. Delivering a presentation isn't just about imparting his insights to others; it's about communicating and sharing ideas. "Every time I'm invited to give a talk," he says, "someone will see things differently and give me a new way to look at the problem."

For the young Blaustein, science itself was a new idea. He got his first chemistry set at age seven or eight and was fascinated by science "before I really knew what a scientist was." His father, a book publisher, did not directly encourage him to pursue science, but books did play a part in Blaustein's becoming intrigued by medicine while in high school. He was enticed into the hunt for answers to medical mysteries as he read about the life of Pasteur and others in Paul de Kruif's *Microbe Hunters* and then further hooked by Anton van Leeuwenhoek and His "Little Animals". A pharmacist uncle gave him extra opportunity to "play with" and learn about chemicals.

Blaustein's early mentors included insect physiologist and developmental biologist [Howard Schneiderman](#) at Cornell University and [Daniel Tosteson](#), at Washington University Medical School, who introduced him to the intriguing sodium pump in 1959, two years after its discovery. "Dan told me that if I didn't hurry up and come to work on this sodium/potassium ATPase that maintains low intracellular sodium, everything was going to be known about it and it would be too late. So I went to work on the pump—and I'm still at it!"

After medical school and an internship in Boston, Blaustein moved further into biophysics. As a naval officer, he studied neurotransmission with [David Goldman](#)—"father" of

the Goldman/Hodgkin/Katz equation, at the US Naval Medical Research Institute in Bethesda, Maryland.

Blaustein's next step in his scientific odyssey was a two-year fellowship from the National Institutes of Health to work with [Alan Hodgkin](#) in Cambridge, England. Blaustein planned to continue in electrophysiology, but Hodgkin's young colleague, [Peter Baker](#), suggested that they study the sodium pump kinetics in squid axons.

Blaustein and postdoc fellow [Richard Steinhardt](#) "serendipitously" discovered the sodium-calcium exchanger. On "a dark and stormy night" when there were no squid to study, he was reading about [R. Niedergerke's](#) work on sodium-calcium interactions in the heart when he had a "Eureka!" moment. The exchanger was the missing link that explained how digitalis glycosides improve heart function. He was so excited he couldn't sleep that night!

"Alan Hodgkin helped me hone skills in thinking critically about research problems and taught me that I should trust my experiment if I know it is right," says Blaustein. This advice served him well in the challenges that lay ahead.

When he returned to the US as a faculty member at Washington University Medical School in 1968, Blaustein met German researcher [Harald Reuter](#), who discovered sodium/calcium exchange in cardiac muscle. "It could have been a serious rivalry, but instead we became friends." A NATO fellowship enabled their collaboration at Reuter's lab in Switzerland. Their resulting manuscript cited evidence that arteries also have the same sodium/calcium exchanger and postulated that it played a role in hypertension. Rejected by multiple refereed journals, it was finally published in a non-refereed journal and did not gain wide acceptance until years later.

In 1977, Blaustein put together the pieces about that relationship to blood pressure. The plant compound ouabain, a cardiotonic steroid that inhibits sodium pumps, had been used in experiments in place of digoxin because it behaves similarly and is water soluble. Blaustein wondered if a similar hormone played a role in linking salt to high blood pressure. "I published my hypothesis that if we eat too much

salt, we secrete this hormone, and the blood pressure goes up.” His hypothesis was popular among clinicians, and his paper was frequently cited but did not immediately generate grant monies.

By 1979, Blaustein was department chair at the University of Maryland School of Medicine. His postdoc, *John Hamlyn*, studied blood plasma from people with untreated high blood pressure and found that their plasmas did, indeed, contain an inhibitor of the sodium pump.

Research on the sodium pump proliferated—but none got grant monies for Blaustein’s team to continue research on their own discoveries. Ultimately Blaustein collaborated with the Upjohn Company. Over a ten-year period, he, Hamlyn and their Upjohn colleagues purified the “ouabain-like hormone” from “tons of plasma” and discovered that it was, in fact, ouabain—an adrenal cortical hormone.

Publishing the findings was again a struggle. Blaustein attributes the skepticism to the realities that there are many “false positive” sodium pump inhibitors, and that new ideas are hard to accept. With years of accumulating evidence, however, “colleagues are coming to believe the story,” Blaustein says. This is reflected by recent research grants as well as awards he has received, from The Robert J. and Clara Pasarow Foundation Award for Cardiovascular Research (1991) to last year’s Novartis Award from the American Heart Association.

Much of his current work is more biophysical as he continues to try to understand calcium metabolism in cells. His lab does calcium imaging with calcium-sensitive dyes to measure levels of calcium in living cells.

Blaustein has made important connections through the Biophysical Society. “I tell my students that the Biophysical Society is the place to go for the best, most uniform, high-quality science.”

He is quick to credit “wonderful colleagues and collaborators.” Colleague *Bruce Krueger*, Professor of Physiology and Psychiatry at the University of Maryland School of Medicine, did his second postdoc in Blaustein’s lab in St. Louis and was impressed by Blaustein’s innovative projects. “Even more remarkable... was his ability to integrate multiple research initiatives,

leading to insight and productivity far greater than would arise from the sum of the individual projects.”

Jason X.-J. Yuan, Professor of Medicine and Vice Chair for Research for the Department of Medicine at the University of California, San Diego, notes that Blaustein “never let the administrative chaos interfere with his appointments and conversation with his fellows and students. Mordy told me many times, ‘it is good, but good is not enough; we need to make it perfect.’”



Blaustein and his wife, Ellen, negotiating San Francisco’s Lombard Street (“crookedest street in the world”) in a GoCar.

Blaustein acknowledges his wife’s important role supporting and encouraging him and often parenting alone. “I was not a great father,” he admits. “I think I’m a much better grandfather.”

His wife Ellen’s ventures have included directing the Goucher Management Institute, managing a private-label business at Black & Decker, and serving on the Maryland Attorney Grievance Commission. Their daughter Laura left a career with a talent agency to be a stay-at-home mom to the daughter she has with her physicist husband. Their son, Marc, is in biotechnology in Boston, is married and has a son and a daughter.

Blaustein acknowledges that it is tempting to live science day and night. When he does get away, it is usually through biking, hiking or collecting books that are mostly about science.

International Opportunities

Did you know that the Biophysical Society, via the International Relations Committee, offers travel grants to students from countries in need to spend a few months in the laboratory of any regular Biophysical Society member? This includes Biophysical Society members who work outside of the United States.

The purpose of these fellowships is to foster and initiate further interaction between established biophysicists around the world and scientists working in countries experiencing financial difficulties.

Requests for support are evaluated on the following criteria:

- Whether an applicant resides in country experiencing financial need
- How the short visit (1-3 months) to an established lab will help him/her acquire skills that apply to PhD thesis in the country of residence
- Quality of the facility and research to be undertaken

Other stipulations

- Support is provided only for receipted costs of travel of the student
- Laboratories involved will be responsible for living expenses.
- Responsible person in receiving laboratory must be a Biophysical Society member or willing to join.

This fiscal year the Society provided an \$1,800 award to a graduate student from the Institute of Organic Chemistry in Novosibirsk in the Russian Federation to visit the laboratory of *Alex Smirnov* at North Carolina State Uni-

versity, Raleigh. The student synthesized and studied EPR active membrane peptides. The BPS also provided \$1,000 for a three-month trip by a graduate student from Universidad de los Andes in Columbia to visit the laboratory of *John Bell* at Brigham Young University in Utah in the context of an ongoing collaboration involving the study of the relationship between lipid phase behavior in apoptotic cells and PLA2 activity.

Proposals can be sent at any time to the Chair of the International Relations Committee, Biophysical Society at society@biophysics.org.

Applications Requirements

1. A letter containing information on all criteria explained above
2. Biographical sketch of applicant (two-page maximum)
3. Biographical sketch of PI of receiving laboratory
4. Letters of acceptance from the receiving laboratory and letter from PhD thesis advisor describing the skill(s) that will be learned and the student qualifications. Both letters should state how the living expenses will be paid.
5. At the end of the stay, the awardee will send a summary statement to the Biophysical Society describing the skills acquired and their use towards a PhD thesis. The awardee will receive, in addition to the travel award, a complimentary one-year membership to the Biophysical Society.

Visit the Society webpage to learn more about these and other opportunities. <http://www.biophysics.org/Awards/TravelAwardsFundingOpportunities/tabid/468/Default.aspx>

Annual Meeting Housing is open... make your reservations today!



BPS has secured a housing block across several hotels in San Francisco. As a meeting attendee, it is important for you to book your hotel room in the BPS housing block to guarantee the best accommodations and most competitive nightly rates, especially in the event of overbooking or construction.

Filling a room block is important to the Society because it provides a “report card” on the Society’s meeting sites. By establishing a history of always filling the room block, the Society is able to secure both competitive room rates and larger blocks in subsequent years. To make your reservation go to: www.biophysics.org/2010meeting.

San Francisco Marriott, the official Headquarters Hotel is just steps away from the Moscone Center.

Where Did All the Stimulus Money Go?

Share Your Story!

Six months after passage of the American Recovery and Reinvestment Act of 2009, many people are wondering where the money went and how it is being spent. The curious include not only your neighbors, but also members of Congress and their staff. While the Congressmen that work most closely on NIH and NSF issues understand the role that the agencies play in funding research across the country, other members are less familiar and can use a reminder that the dollars given to these agencies are awarded to researchers across the country, including those in their home states and districts—fueling the local economy and investing in important research that will improve human health and lives.

You can help make the case for the investment in science and biomedical research by sharing your story. If you have received funding from the stimulus package, please share your story with the local community by writing a letter to the editor of your local newspaper.

Also, send a copy of your submission to your Congressman and Senators to share your story with them. You can find their email and postal addresses at www.house.gov and www.senate.gov. Type your zip code into the box on each site and it will list your elected Representative and Senators. To find information on how to submit a letter to the editor, visit your local newspaper's website; most have a link with instructions. Make sure to follow the instructions and obey all word limits and other requirements.

Please also share your stories with the Biophysical Society. We would like to collect information on how our members are using stimulus funds and share that information with Congress more broadly. Send a copy of your letter to the editor or an email with the pertinent information to eweiss@biophysics.org.

To make it as easy as possible, we have listed what to include in your letter to the editor.

- Who you are
- Where you work
- What you study (in very basic terms)
- Why it is important to the general public (ex: Will it help us understand how cancer spreads?)
- How much funding you received
- How it has made/will make a difference in your ability to conduct research
- How many people it has provided funding for in your lab
- What equipment you have purchased with the funds

The goal of your letter is to put a personal face on the \$10.4 billion NIH received and the \$3 billion NSF received. Create a story people can relate to. They understand when the money is used to fix a local road; show them how it is used to learn more about their health and well-being.

If you would like assistance composing or submitting a letter to the editor, please contact Ellen Weiss at the Biophysical Society office at eweiss@biophysics.org.



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Negotiating the Transition— Spotlight Industry

Prepared by *Susy Kohout and Damien Samways*

The Early Careers Committee panel at the Biophysical Society meeting in Boston entitled *Negotiating the Transition: Differences between Academia and Industry* included four guest panelists who had completed postdoctoral fellowships in academia. Two had chosen to continue the academic career path as tenure-track faculty, and two had chosen instead to transition from academia into industry.

Below are a few of the questions posed by the audience and the answers provided by the two industry panelists, *Jessica Dawson*, Senior Investigator, EMD Serono, and *Dustin Armstrong*, President, 4s3 Bioscience, Inc.

What motivated the transition into the private sector rather than continuing along the academic career track?

The strong emphasis of grant writing in order to maintain research programs in academia was a factor in one panelist's decision to move into the private sector. In large pharmaceutical firms, research goals and fund allocation is tied specifically to product outcomes that are generally dealt with at the senior management level. This leaves the research staff and project managers to concentrate on planning and executing the research rather than expending considerable effort acquiring funding.

On the other hand, spirited entrepreneurs attempting to steer small startup companies through their early years are often required to spend considerable effort attracting investment, which can be equally as demanding as applying for public funds in academia. While startup companies are higher risk, our panelist

emphasized how the increase in responsibilities inherent in a startup increases one's experience and chances of getting a better job later.

If one is considering a career in industry, is it preferable to do a postdoc in industry or in academia?

Given that the research environment in industry can be very different from that in academia, there are certain advantages to acclimating oneself to the environment sooner rather than later. However, our industry panelists were not convinced that opting to do a postdoc in academia would necessarily harm one's ambition to continue his/her career in industry.

Our panelists did raise the caveat that industry postdoc positions are not currently compensated as well as regular scientist positions, and are arguably less stable since they may not lead to a permanent position. Thus, if one is set upon a career in industry during graduate school, it may be preferable to simply apply for scientist positions rather than the postdoctoral positions.

If one does decide to do a postdoc in academia first, perhaps to gain a more thorough knowledge of a certain area or set of techniques, one should consider how these additional technical skills and experience will be valuable to a prospective employer in industry.

How does one go about making the necessary networks in academia that would facilitate a transition into industry?

If you are seeking to transition from academia into industry, it is important to identify academic colleagues who have contacts in industry, or who have worked in industry themselves. Through these initial contacts it will be possible to make a more informed decision as to whether industry is right for you.

Scientific meetings are also excellent places to make your own contacts. Note that it is not always necessary to cold-call complete strangers in order to extend your network. More

importantly, make sure you take advantage of opportunities that naturally arise, such as when somebody from industry takes an interest in your work or is presenting research relevant to your own.

The importance of networking in industry doesn't stop after securing a position. In times of economic downturn, our panelists were eager to point out that networking is crucial to survival in industry, where there is no tenure to provide a safety net!

How important is one's publication record to prospective employers in industry?

Your publications are not as relevant to a career in industry as they are to an academic career, but they still have value. First and foremost they are the best indicators of your productiv-

ity, which is as important a metric in industry as it is in academia. Prospective employers will be interested in defining your contributions in the publications versus what was done by others. Second, these publications can highlight skills that are relevant to working in industry, whether it be in regard to certain techniques used, or perhaps simply your ability to collaborate with other scientists. If your publications indicate skills that seem relevant to an industry position you are applying to, highlight these in your cover letter.

Be mindful of whether an advertisement for a job in industry requests a CV or a resume. If the latter is requested one should be selective of which publications are listed, if any. If they are not relevant to the position being applied for, it's better to omit them.

Members in the News



Michael Edidin of Johns Hopkins University and Society member since 1983 received the 2009 Alumni Professional Achievement Citations Award

given by the Illinois Mathematics and Science Academy.



Zuzanna S. Siwy of the University of California, Irvine, and Society member since 2001 was awarded the Presidential Early Career Award for Scientists and

Engineers given by the President of the United States.



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Announcement of an open position at the Institute of General Physics, (renamed to "Applied Physics" from October 1st, 2009) Faculty of Physics, Vienna University of Technology (TUW)

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Special consideration will be given to the ability to cooperate with national and international scientific institutions, including institutions outside academia. Experience with the acquisition of research grants, including grants for applied research will be expected. The contribution of aspects of biophysics to the cooperation centre "functional matter" would be highly desirable.

A more detailed announcement and information on how to apply can be found at: <http://info.tuwien.ac.at/dektnf/Ausschreibungen.html>

Application deadline: **October 30th, 2009**

Public Affairs

Federal Science Funding for 2010: An Update

President Obama released a detailed 2010 Budget Proposal to Congress on May 7. As of August 3, both the House and Senate Appropriations Committees have considered the President's proposal and passed their own versions of fiscal year 2010 spending bills. In both the House and Senate, the funding provided for in the bills meet or exceed the President's proposed funding levels and the 2009 funding level for these federal science agencies.

For the National Institutes of Health, the Senate appropriations committee allocated \$30.8 billion, the same as the President's request, and the House Appropriations Committee allocated \$31.3 billion. Senator Harkin (IA-D), Chairman of the Senate Appropriations Committee, released a statement regarding the funding levels for NIH, stating:

“Some people might look at funding levels in this bill and wonder why there isn't more money for some of our traditional priorities, such as Title I, Pell Grants, special education and the National Institutes of Health. Those are usually the programs that get the biggest increases in our bill. But those programs received enormous increases in the Recovery Act, and most of that funding will be obligated during the same period covered by this appropriations bill, fiscal year 2010. So instead of providing even more increases to programs that did very well in the Recovery Act, this bill instead emphasizes several other important programs.”

For the Department of Energy (DOE) Office of Science, both appropriation committees allocated \$4.9 billion, \$171 million above last year's enacted level. In the House bill, the basic energy sciences program would receive \$1.7 billion and \$2.4 billion for applied research. The House committee rejected DOE Secretary Steven Chu's initiative to create eight Energy

Innovation Hubs, allocating only \$35 million for the Hubs, rather than the \$280 million the President requested. The committee cited the President's lack of an implementation plan and duplication of current programs in DOE as the reasons for the cut. If the bill becomes law, the Secretary will be able to choose which one of the eight hubs to fund.

For the National Science Foundation, the House Committee and the Senate Committee allocated \$6.9 billion, a \$426 million increase over the FY 2009 enacted level but \$108 million less than the President requested. Of that amount, the House allocated \$5.55 billion for research, \$122 million for research equipment and facilities, and \$857 million for education activities.

The bill includes a requested amount of \$6.9 billion for NSF, \$446 million above 2009 and \$108 million below the President's request.

The full House has passed all three appropriations bills; the Senate has not passed the appropriations bills that include funding for NIH and NSF. Once the Senate passes those bills, the two bodies will then work to reconcile the differences between the bills and vote again before the bills become law. The 2010 fiscal year starts on October 1.

Scientists and the Public Disagree on Science

The Pew Research Center for the People and the Press, in partnership with the American Association for the Advancement of Science (AAAS), surveyed adults from the general public and scientists from the membership database of AAAS, querying their view of science and its societal impact. Based upon the findings of the survey, the public and scientists view science differently, but both agree federal funding is critical to scientific research.

Of the general public respondents surveyed, 84% view science as having a positive effect on society and 70% believe the contribution from scientists has benefited society. However, when asked if science advances are one of the nation's greatest achievements in the past 50 years, only 27% of the general

public agreed. In 1999, 49% agreed. Regarding U.S. scientific achievements, 94% of scientists say it is either above average or the best in the world compared to 64% of the public.

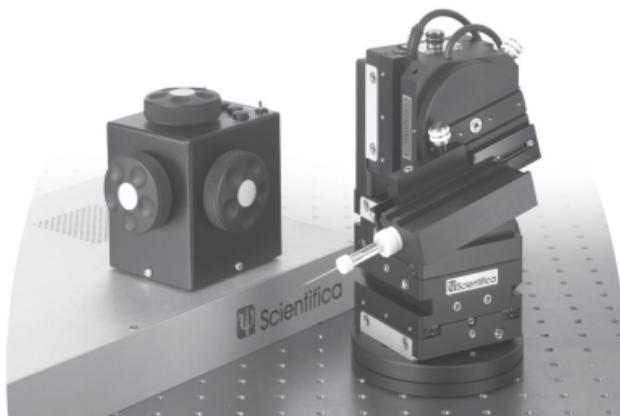
Scientists view public awareness and media coverage as major problems for the future of science. The findings of the survey show that scientists believe the public lacks knowledge of science (85%) and that science reporting usually highlights research that does not have scientific merit (76%). "Fifteen% of scientists rate television coverage [of science] as excellent or good, while 83% say it is only fair or poor." In addition, the opinion of scientists in regards to science coverage in newspapers is "63% rate it fair or poor, while 36% of scientists say it is excellent or good."

Furthermore, scientists have identified funding of basic research and visa problems as the two key obstacles that have delayed new discoveries in science. Lack of funding is viewed be 87% of scientist respondents as either a very serious or a serious problem. Also, 56% of scientists surveyed view visa problems of foreign scholars and scientists as either a very serious or a serious issue that impacts scientific research.

The government is seen by both scientists and the general public as an entity that should invest in science. According to the survey, 84% of scientists say government agencies fund their science specialty. Moreover, more than half of the public (60%) believe government funding ought to be a major source of science research.

Surveyors asked scientists about the current climate for science research. The majority, 76%, believe that it is a "good time for science." Although the nation is in an economic crisis, 67% of scientists still support the pursuit of a science degree and investment in early career researchers of any specialty.

The results of the study were published in a report, *Scientific Achievements Less Prominent Than a Decade Ago: Public Praises Science; Scientists Fault Public, Media*, released July 9, 2009. To read the report in its entirety, go to <http://people-press.org/reports/pdf/528.pdf>.



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Subgroups

Exocytosis-Endocytosis

The Exocytosis-Endocytosis Subgroup Symposium will be held 1:00-5:00 PM, February 20, 2010 in San Francisco preceding the Annual Meeting of the Biophysical Society. The program includes talks by:

Phyllis Hanson, Washington University;
Edwin S. Levitan, University of Pittsburgh;
Thomas F. J. Martin, University of Wisconsin;
Vadim Frolov, NICHD, NIH

R. Mark Wightman, University of North Carolina, Chapel Hill was selected for the Sir Bernard Katz Award for Excellence in Research on Exocytosis and Endocytosis. Wightman is being honored for the development of cyclic voltammetry and amperometry to detect single granule exocytosis. The approach revolutionized the study of the fusion event. He and others have used this approach to explore the molecular events controlling fusion pore expansion and neurotransmitter release. Wightman will deliver the keynote talk at the symposium entitled *Measuring exocytosis at single cells and in intact tissue*.

We urge subgroup members to renew membership in the Subgroup and to encourage students and colleagues to join. The subgroup provides probably the best annual forum to air advances in our field. Its continued success depends on a diverse and committed membership.

There will be a dinner after the symposium. Please prepay so that we can ensure enough seats. Tickets for dinner will probably also be available at the meeting. Josh Zimmerman, who arranged a great dinner last year in Boston, has committed to arrange another one in San Francisco.

—*Ronald W. Holz*, Chair

Intrinsically Disordered Proteins

General Announcements

Now is the time to start thinking about abstract submission, student competitions, and nominations for the IDP Subgroup postdoc travel award for the meeting in San Francisco. Don't wait until the last minute. San Francisco is such a wonderful city! We hope that we can increase the number of participants, both in the main meeting and in our subgroup meeting.

There will be a Gordon Research Conference on IDPs in summer 2010 organized by Uversky, Dunker, Pappu, and Tompa. They are still working on the program, so it is not too late to send them your input. People are encouraged to sign up early. It would benefit our community to have a fully subscribed meeting. This would increase the possibility of having future meetings.

The DisProt database, <<http://www.disprot.org>>, is intended to provide a service to the community. Please visit it and suggest how it can be improved. If you have published work on a protein that should appear in this database but does not, its absence is only from lack of time and money. It's also possible that a protein might be in the database, but maybe your work provides important new information. In either case, you are encouraged to provide the information required and thereby to speed up its inclusion. To do this, first go to the homepage of the database, then click "Contact Us" at the bottom of the page. Go to the third bullet line and download this form, fill out the form, and return it as instructed. Starting in March 2010, the IDP subgroup will have a database forum in the morning before the symposium. Watch for the details in a future newsletter.

Papers of Interest

A list of recently published papers can be found at www.biophysics.org

—[Gary W. Daughdrill](#),
Secretary/Treasurer-Elect

Motility

The subgroup program on Saturday, February 20, 2010, will begin at noon and will include the following talks:

[Thomas Surrey](#), EMBL-Heidelberg. *In vitro assays to study the microtubule-organizing function of mitotic motors.*

[Erika L. F. Holzbaur](#), University of Pennsylvania School of Medicine. *Motor coordination during bidirectional vesicle transport.*

[Nobutaka Hirokawa](#), University of Tokyo. Talk to be announced.

[Daniel A. Fletcher](#), University of California, Berkeley. *Resistance is futile: Loading response of actin filament networks.*

[Margaret A. Titus](#), University of Minnesota. *An unconventional myosin with a role in cell polarization and chemotaxis.*

[Steve S. Rosenfeld](#), Columbia University. *Motoring through the brain with Myosin-II.*

[Douglas M. Swank](#), Rensselaer Polytechnic Institute. *Functional influence of the relay and converter domains revealed by Drosophila myosin.*

[Michael K. Reedy](#), Duke University Medical Center. *Evidence from X-ray and EM supporting a myosin-to-troponin linkage as trigger for stretch activation in insect flight muscle.*

The 8:00PM. Evening Talk will be presented by [Kathleen M. Trybus](#), University of Vermont. *Myosin: Starting conventional and then going astray.*

We urge you to support the annual Motility Subgroup Symposium by joining the subgroup. Remember, it is only \$15 for members, and students join for free. Membership ensures more coffee and cookies and ample seats for the session.

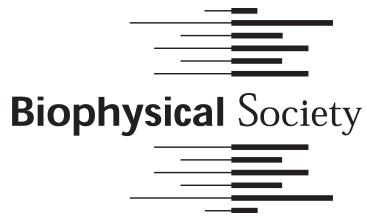
—[Kenneth A. Taylor](#) and [Susan P. Gilbert](#),
2010 Co-Chairs

Bioenergetics

The Bioenergetics subgroup symposia program for February 20 in San Francisco is almost complete. The morning session, entitled *Photosynthesis and Solar Energy Conservation*, will be co-chaired by [Petra Fromme](#), Arizona State University and [Gary Brudvig](#), Yale University. The list of speakers will be announced in subsequent newsletters. The afternoon session, *Mitochondria in Disease*, will be co-chaired by [Jan B. Hoek](#), Thomas Jefferson University, and [Paolo Bernardi](#), University of Padova. Speakers include [Sarah Calvo](#), Broad Institute of MIT/Harvard; [Massimo Zeviani](#), Istituto Neurologico Carlo Besta; [Karin Nowikovsky](#), MFPL-Department of Genetics, University of Vienna; [Narayan Avadhani](#), University of Pennsylvania; and [Daria Mochly-Rosen](#), Stanford University.

The annual subgroup business meeting will immediately follow the afternoon symposium and the day will conclude with the annual subgroup dinner. Please spread the word among your colleagues concerning our exciting program for this year's meeting and encourage their attendance. Finally, we will be having elections for Bioenergetics Subgroup Council in the fall.

—[Lawrence Prochaska](#), Chair



Biophysical Society

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Upcoming Events

November 1–3, 2009

ESMRMB: Meeting of the European Society for Magnetic Resonance in Medicine & Biology

Antalya, Turkey

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

November 2–6, 2009

Erasmus Course on Magnetic Resonance Imaging (EMRI)

Madrid, Spain

<http://www.emricourse.org>

November 7–9, 2009

CMPWG III—3rd Workshop of the Computational Medical Physics Working Group

Atlanta, GA, United States

<http://cmpwg.ans.org/index-source.html>

November 24–27, 2009

LILS—Light in Life Sciences Conference

Melbourne, Australia

<http://www.physics.mq.edu.au/research/fluoronet/LILS09/>