

Society Elections

President-Elect



Jane Richardson

Secretary



Lukas Tamm

Jane S. Richardson of Duke University Medical Center was elected President-Elect of the Biophysical Society. She will assume that office at the 2011 Annual Meeting in Baltimore, Maryland. Her term as President will begin at the 2012 Annual Business Meeting in San Diego.

Lukas K. Tamm of the University of Virginia Health Sciences Center was elected Secretary. His four-year term will begin July 1, 2011.

Seven Society members were elected to Council, each for a three-year term beginning at the 2011 Annual Meeting. They are (pictured below) *Karen Fleming*, Johns Hopkins University; *Dorothy Hanck*, University of Chicago; *Amy Harkins*, St. Louis University Medical School; *Peter Hinterdorfer*, University of Linz; *Marjorie Longo*, University of California, Davis; *Gail Robertson*, University of Wisconsin, Madison; *Claudia Veigel*, National Institute for Medical Research, Germany.



Karen Fleming



Dorothy Hanck



Amy Harkins



Peter Hinterdorfer



Marjorie Longo



Gail Robertson



Claudia Veigel

55th Annual Meeting

March 5–9, 2011

Baltimore, Maryland

Member-organized Session Proposals

September 24

Satellite Meeting Proposals Ancillary Meeting Proposals

October 1

Abstract Submission SRAA Poster Competition Travel Grant Applications

October 3

Contents

Society Fellows.....	2
Subgroups.....	3
Biophysicist in Profile	4
Careers.....	6
Members in the News	8
Public Affairs	10
Upcoming Events.....	12

A record 29% of eligible members cast their ballots for this year's slate of candidates. The Society is indebted to all candidates who ran in this elections and to the members who voted.

Biophysical Society

Officers

President

Peter Moore

President-Elect

Richard Aldrich

Past-President

Henry Lester

Secretary

Dorothy Beckett

Treasurer

Linda Kenney

Council

Nancy L. Allbritton

Olaf S. Andersen

Ivet Bahar

Michael D. Cahalan

Patricia Clark

Marco Colombini

Enrique De La Cruz

Laura Finzi

Angel E. Garcia

Susan P. Gilbert

Angela Gronenborn

Donald W. Hilgemann

Vasanthi Jayaraman

Antoinette Killian

Tanja Kortemme

David Millar

Steven Rosenfeld

Catherine Royer

Petra Schwille

Peter So

Michael Wiener

Biophysical Journal

Edward Egelman, Editor-in-Chief

Society Office

Ro Kampman, Executive Director

Newsletter

Alisha Yocum, Production

Erica Retrosi, Profiles & Editing

Ellen Weiss, Public Affairs

The Biophysical Society Newsletter (ISSN 0006-3495) is published twelve times per year, January-December, by the Biophysical Society, 11400 Rockville Pike, Suite 800, Rockville, Maryland 20852. Distributed to USA members and other countries at no cost. Canadian GST No. 898477062. Postmaster: Send address changes to Biophysical Society, 11400 Rockville Pike, Suite 800, Rockville, MD 20852. Copyright © 2010 by the Biophysical Society. Printed in the United States of America. All rights reserved.

Society Fellows Announced

The Biophysical Society has selected six of its members to join the rank of Fellows of the Biophysical Society. The six, listed below, will be honored at the 2011 Annual Meeting Award Ceremony on March 6 in Baltimore, Maryland.



Valerie Daggett, University of Washington, for her technical innovations and improvements in the field of molecular dynamic simulation.



Donald M. Engelman, Yale University, for his substantial and highly influential contributions to the field of membrane structure and the interactions of lipid bilayers with proteins.



Jennifer Lippincott-Schwartz, NIH, for her groundbreaking advances in optical highlighter fluorescent protein technology and impact on the field of superresolution microscopy.



Ruth Nussinov, NIH, for her extraordinary contributions to advances in computational biology on both nucleic acids and proteins.



Lynne J. Regan, Yale University for her pioneering research in protein assembly, recognition, and design.



Anthony Watts, University of Oxford, for his significant contributions to the understanding of membrane structure and dynamics involving lipids, proteins, and ligands.

Subgroups

Membrane Structure and Assembly

The last two subgroup symposia were great successes. The rooms were full, with several rows of participants standing in the back. We are looking forward to another well-attended subgroup symposium in Baltimore next year. What most people do not realize is that only a very small minority of those attending the subgroup symposium are members of the subgroup, and a large fraction of Society members have not paid their subgroup annual dues. Yet, that small, \$15 contribution per member allows us to cover costs of the subgroup symposium and travel for the speakers who make the subgroup meetings a success. The deadline for abstracts for the Biophysical Society Meeting in Baltimore is approaching. We urge all of those who regularly attend and enjoy the subgroup symposium to become members of the Membrane Structure and Assembly Subgroup. And we urge all the subgroup members to pay their subgroup dues before the Baltimore meeting.

— *Paulo F. Almeida*, Chair

Bioenergetics

Two new Bioenergetics Council members were elected this summer. Our two new Council members are *Jan Hoek*, Thomas Jefferson University, and *Kathleen “Casey” Kinnally*, New York University. They replace *Petra Fromme*, Arizona State University, and *Edward Berry*, State University of New York, Albany. Many thanks to Petra and Ed for their contributions to the vitality of the subgroup during their time as Council members.

The Subgroup Symposia are finalized. The morning session, co-chaired by *Gyorgy Hajnoczky* of Thomas Jefferson University and *Shey-Shing Sheu* of the University of Rochester is entitled *Calcium Signaling and Mitochondria*. Contributors include *David Clapham*, Harvard University Medical School; *Israel Sekler*, Ben Gurion University of the Negev; *Heping “Peace” Cheng*, Peking University; *Gyorgy Szabadkai*, University College, London; and *John LeMasters*, Medical College of South Carolina. The afternoon session, co-chaired by *Miguel Aon* of Johns Hopkins University School of Medicine and *Uwe Schlattner* of the University of Grenoble, is entitled *Molecular System Bioenergetics: Combined Theoretical-Computational Approaches to the Analysis of Integrated Energetic-Signaling Networks*. Additional contributors will be *Sonia Cortassa*, Johns Hopkins University School of Medicine; *Ravi Lyengar*, Mount Sinai School of Medicine; *Boris Kholodenko*, University College, Dublin; *Valdur Saks*, University of Grenoble; and *Jeffrey J. Saucerman*, University of Virginia School of Medicine.

Subgroup members are asked to keep in mind a couple of items as they prepare for the annual meeting: 1) nominations of candidates for council and subgroup chair (to replace me), and 2) putative topics for next year’s subgroup symposia. See you in Baltimore!

— *Lawrence Prochaska*, Chair

**View the Subgroup
Annual Meeting
Programs at
www.biophysics.org**



Biophysicist in Profile

Lawrence Prochaska

“It’s not necessary to fear the prospect of failure but to be determined not to fail,” said *Jimmy Carter*, 39th US President, 2002 winner of the Nobel Peace Prize, and *Lawrence Prochaska’s* greatest hero. Carter’s committed service to mankind as well as his reaction to losing the bid for reelection stir Prochaska’s admiration. “Although he was soundly defeated,” Prochaska says, “he retooled himself, never gave up, and pursued excellence in other areas.”

Prochaska’s own career path has followed a similar trajectory. The current Professor of Biochemistry and Molecular Biology at Wright State University’s Boonshoft School of Medicine knew in his teens that he wanted to pursue a particular kind of science, but in getting there he found himself with an armful of proverbial lemons—all the better for making a whole lot of lemonade.

Prochaska’s suburban Chicago high school had a 60% dropout rate, but offered honors programs, in which Prochaska was enrolled. Still, he was bored. “I was a B/C student who was not very interested in regimental learning,” he says. “I wanted the freedom to pursue academic interests at my own speed.” Prochaska’s brother, the first member of Prochaska’s immediate family to go to college, brought college textbooks home for his thirteen-year-old brother. Prochaska read them enthusiastically, simulated by the intellectual challenge they presented. Though his parents’ professions were math-heavy—his mother kept books for a steel company while his father, a floor covering salesman, calculated pricing and square footage—by age 19, it was science that piqued

Prochaska’s interest, not math. He entered Illinois State University as a biology and chemistry double-major.

It was his biochemistry professor who suggested that Prochaska apply to graduate school. Prochaska discussed this option with one of his brother’s friends, a newly minted biochemistry PhD. “He told me that being a biochemist wasn’t easy, but it was interesting,” Prochaska says. He decided to go for it, landing a spot in the late *Elizabeth Gross’* lab at Ohio State University. “She was studying divalent cation regulation of excitation energy between the two photosystems in green plant photosynthesis in chloroplast membranes,” he says. Not only was the research interesting, the lab culture allowed graduate students to come into their own. “Liz was very supportive, interactive, and enthusiastic ... and willing to spend time with her students,” Prochaska says. Gross, an active member of the Biophysical Society and the Bioenergetics Subgroup, delivered the perks of a scientific society to her graduate students firsthand, fostering their professional and academic growth by taking them to Biophysical Society Annual Meetings. “I was given an opportunity to give platform talks, which increased my scientific exposure to my colleagues in the field,” Prochaska says, a practice that he now repeats with his own graduate students. “This is a unique, important role that the Biophysical Society plays for young scientists, giving them exposure and an opportunity to speak in front of a large group concerning their science.”

Prochaska then moved to the Department of Biological Sciences at Purdue University

to begin his first postdoc. *Richard Dille*'s lab was larger than Gross', which proved to be a valuable experience for Prochaska. "Dick was a more hands-off mentor," he says. "I learned how to do proton pumping and Dick allowed me to explore my integral membrane protein biochemical/biophysical research interests."

Prochaska also made friends in the next lab over. The friendship of *William Cramer*, current Distinguished Professor of Biological Sciences at Purdue, turned out to be lasting. The pair worked in similar research areas and played basketball, a boyhood talent of Prochaska's. "Larry has the unique combination of a total devotion to biochemistry and bioenergetics, both in the lab and administratively," says Cramer, "and one of the most accurate 20-foot jump shots in this community."

After his third year in Dille's lab, Prochaska decided it was time to pursue his own research. He applied for a number of academic positions—and got back nothing but rejections. "I remember one day when I received seven letters of rejection for academic positions," he says. Like Carter, he did not give up; instead, he made a change. "I went to the literature and read different areas of membrane protein biochemistry and biophysics," he says. Among his reading, *Roderick Capaldi*'s work on mitochondrial membrane protein bioenergetics at the Institute of Molecular Biology at the University of Oregon stood out. No sooner had Prochaska drafted the letter asking to join the lab than Capaldi's ad for a postdoc appeared in *Science*. Prochaska applied immediately, and was hired through a phone interview. "Rod taught me about membrane proteins and how to work with them and introduced me to cytochrome c oxidase," says Prochaska. "Rod also allowed me to develop my own ideas, encouraged me, and helped me build confidence in my scientific abilities." Capaldi helped him attain his position at the Boonshoft School of Medicine, where Prochaska's current research focuses on structure-function relationships in cytochrome c oxidase and also the role of apoptosis in heart

cells in a failing heart model. "We are interested in using our molecular tools such as antibodies, activities, and dye measurements to study more translational mitochondrial research," he says.

Prochaska is currently Chair of the Society's Bioenergetics Subgroup, a role he fully embraces, according to colleague *Robert Gennis*, Professor of Biochemistry, Biophysics, and Chemistry at University of Illinois at Urbana-Champaign. "One of Larry's most notable traits is his generosity, giving his time and efforts to help others," he says. "He has been active on behalf of our membership, organizing symposia and lectures, nominating members for awards." Another colleague, *Shelagh Ferguson-Miller*, Professor of Biochemistry and Molecular Biology at Michigan State University, agrees. "He has been unstinting in his service to the community and to his university," she says, noting that Wright State University named Prochaska the Frederick A. White University Distinguished Professor of Service.

As much as his research and community involvement thrill him, training his students is the most rewarding aspect of Prochaska's work. "To see students who are interested in science evolving from day to day into the business of doing science as a lifestyle and then watching them flourish in their subsequent careers gives me a profound sense of self-satisfaction," he says. He also teaches them to persevere in their current circumstances—to turn their own proverbial lemons into lemonade. "People who work hard even with limited resources can actually be successful in their careers," he says, and quotes one of his own mentors: "Working hard in science is a prerequisite to success." Prochaska would know.



Prochaska at the Bioenergetics Gordon Conference in 1990 (left to right: Prochaska, C. Cunningham, R. Kaplan, M. Amzel).

Careers

Dear Junior Faculty: Some Wise Advice! Love, the Panel

If you had known at the beginning of your scientific career what you know now that you've been doing it for a while, would you have felt more confident in your career choices? The Committee for Professional Opportunities for Women (CPOW) gave the floor to early career scientists at the Biophysical Society's 54th Annual Meeting to raise this and related questions to a panel consisting of both department heads and the recently tenured. *Ruth Heidelberger* moderated as panelists *Jack Kaplan*, University of Illinois, *Dorothy Beckett*, University of Maryland, *Merritt Maduke*, Stanford University, and *Dan Minor*, University of California, San Francisco, spoke up about what they know now that would have helped their younger selves back then. Some highlights of the discussion follow.

Thoughts on Managing People

When you're looking to take on grad students and postdocs, be discerning, Maduke advises; resist the temptation to simply select anyone interested in your project. Once you've chosen, be present in the lab to teach them your skills—don't disappear and leave them with all the lab work. As Beckett points out, new faculty often forget that they're the best hands in the lab. In Minor's words, "you must lead from the front" to set the tone of your lab's work environment and get the desired results from your assistants. Minor compares starting a lab to starting a small business, with all the trappings that come with it: staffing, finances, resources,

productivity. You are ultimately responsible for the combined success of these elements: a smoothly running lab.

While you're in the lab, get to know your postdocs and grad students so that you can learn how to manage them. As Kaplan puts it, people are different from other resources: Make use of their skills and don't try to make them clones of yourself. It helps, Maduke adds, to get to know each person as an individual. The better you know someone, the better you can learn to manage them effectively. Because not everyone has the same goals, work habits, and personality, being receptive to individuality and adjusting your management style accordingly is crucial.

Additionally, Minor notes, don't fall in love with anybody in your lab. If someone isn't working hard enough, don't ignore this person's lack of work ethic in hopes that he or she will undergo a complete personality about-face. Address the problem quickly and humanely; you'll be doing that person a favor.

For more tips on how to manage your lab and the people in it, check out the Howard Hughes Medical Institute's book (downloadable as a PDF) *Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty* at <http://www.hhmi.org/resources/labmanagement/moves.html>.

Truths about Managing Life

Unfortunately, there is no catch-all solution to the career-versus-family conundrum: It boils down to individual choices. Kaplan's advice is to think introspectively about your priorities and goals, and envision how you would like your life to go. Once you've done this, the panel agrees, you must be prepared to compromise and even make sacrifices.

The concept of waiting until your career settles down before starting a family is un-

realistic; your entire career will likely be a busy one, and you'll miss your chance at family life. On the other hand, if you desire above all to be in the lab 24/7, you will have no time left to devote to having a family. Finding the balance is tough, but if you decide that you want both a career and a family, you just have to jump in, and compromise as you go. It can be done if both partners are willing to contribute. Beckett suggests splitting the kid-caring tasks fifty-fifty with your partner, and hiring some outside help for the housework. As with all academic careers (not just science ones), you must be prepared to give up something to get something else; you can't have your cake and eat it, too.

Reflections on Career

The crux of a satisfying and even a happy scientific career is to know that where you are is where you want to be, in Kaplan's words. Different places have different priorities and different expectations of what adding you to their ranks can do for them. Since you can't change these stipulations, your goal should be to find the place where the set priorities and expectations line up with your own. Spending your professional life somewhere that doesn't suit you, he says, does not a contented professional make. "The way you are now is the way you want to be," says Kaplan. It's never too late to plan a career move, the panel advises. Keep searching until you find a good fit between you and your employer.

Another useful rule of thumb: Don't fall in love—not with your institution, not with your employees. Keep your career path on your own best professional track by maintaining loyalty to individuals rather than institutions. The days of the departmental dean looking out for his or her faculty are gone. As Beckett puts it, the top-down institutional hierarchy that evolved instead has led to a breakdown in the feeling of loyalty among the faculty. In some labs, PIs try to manufacture a feeling of loyalty among lab members by maintaining the illusion that the

lab is one big family. This leads to misplaced loyalty to a lab, and gets in the way of individuals getting the most out of their work, says Kaplan. Be a good colleague, but know that you are at work, and remember that your workplace is not your home.

With regard to salary and resources, be sure in your own mind what you want before you start negotiating, Kaplan says. Beckett advises that you compile a list of what you want in spreadsheet format and provide it to prospective employers. That being said, don't play above your game, Minor cautions; applicants for their first faculty position should remember not to ask for too much right off the bat because their appointment depends on the support of a lot of people. If you have multiple offers, however, go ahead and ask. Remember too that the department hiring you wants you to succeed, and will be invested in helping you excel, Kaplan points out. At most institutions, people do get tenure. Current faculty members should constantly show their institutions that they work hard to get external funding—and their departments may provide matching funds, Beckett points out. Apply for grants. Get that first grant application in as soon as possible, and continue to apply for more. The devil is in the details—don't get so entrenched



in every scientific detail that you never send in your application! In Kaplan's words, you can't win the lottery if you don't buy a ticket.

A big part of doing your research is publishing the results. When considering the speed versus quality question, always default to the culture of your scientific field. Each field has its own set of expectations and regarding publishing frequency and quality of published work, so be sure to address those expectations. If you're switching fields, be sure to learn the publishing culture of the field you're transitioning into—it may be vastly different than the field you know, and you'll want to be on top of it.

Grad Students, This One's for You

As a grad student in biophysics, it often seems as though there is nowhere you can go to find answers, because nobody knows what the answers are any more than you do. The best way to deal with this is to carve a path for your-

self professionally: adopt a rigorous research mentality, take care of the equipment you use, and help your colleagues when they ask for it, advises Beckett. Maybe your labmates will take the hint and get responsible themselves. By the same token, nothing can prepare you for your role as new faculty when you do land that position. Read up on people management to help with the people problems you'll encounter, which will be more prevalent than science problems.

There are two sides to choosing to work with junior faculty. The upside is that you will get lots of individual attention and a mentor who is invested in your success. On the downside, it may turn out to be a rather high-anxiety experience because the new faculty member will also be learning the ropes. It may be worth it to learn from someone so immersed in that field, says Maduke. You'll be learning from each other.

Members in the News



William G. Noid (top) of Pennsylvania State University and Society member since 2006, *Garegin A. Papoian* (bottom) of the University of North Carolina, Chapel Hill, and Society member since 2008, and *Jana K. Shen* (not pictured) of the University of Oklahoma and Society member since 2005 received HP Outstanding Junior Faculty Awards.



Nadrian Seeman of New York University and Society member since 1996 received the 2010 Kavli Prize in Nanoscience as well as a 2010 Guggenheim Fellowship.



Watt Webb of Cornell University and Society member since 1996 was named recipient of the Alexander Hollaender Award in Biophysics.



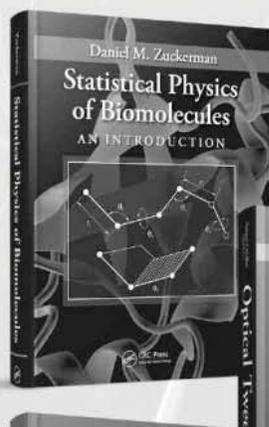
Timothy A. Cross (not pictured) of Florida State University and Society member since 1996 was presented with the 2010 Florida Award.

Make sure your reading habits are as dynamic as your field...

New Books in Biophysics

from  CRC Press
Taylor & Francis Group

Save 20%*

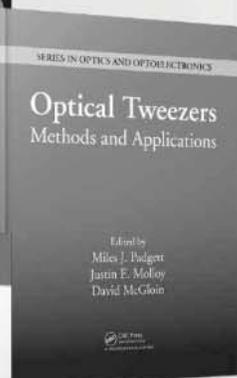


Statistical Physics of Biomolecules An Introduction

Daniel M. Zuckerman *University of Pittsburgh, Pennsylvania, USA*

Catalog no. 73788, June 2010, 356 pp.

ISBN: 978-1-4200-7378-2, **Your Price: \$71.96 / £37.59**



Optical Tweezers Methods and Applications

Edited by

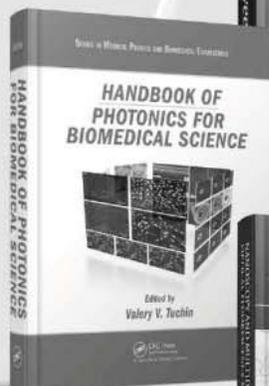
Miles J. Padgett *University of Glasgow, Scotland*

Justin Molloy *MRC National Institute for Medical Research, London, UK*

David McGloin *University of Dundee, Scotland*

Catalog no. C7412, June 2010, 508 pp.

ISBN: 978-1-4200-7412-3, **Your Price: \$119.96 / £66.40**



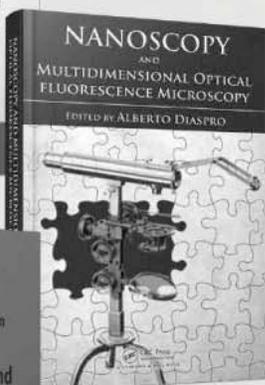
Handbook of Photonics for Biomedical Science

Edited by

Valery V. Tuchin *Saratov State University, Russia*

Catalog no. K10313, May 2010, 868 pp.

ISBN: 978-1-4398-0628-9, **Your Price: \$119.96 / £76.00**



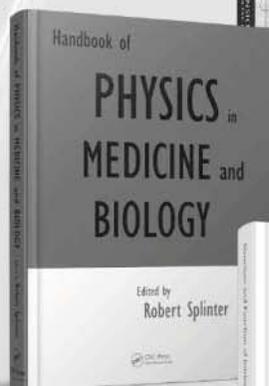
Nanoscopy and Multidimensional Optical Fluorescence Microscopy

Edited by

Alberto Diaspro *The Italian Institute of Technology and University of Genoa, Italy*

Catalog no. C7886, April 2010, 448 pp.

ISBN: 978-1-4200-7886-2, **Your Price: \$103.96 / £65.60**



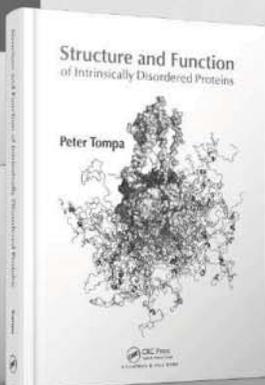
Handbook of Physics in Medicine and Biology

Edited by

Robert Splinter *University of North Carolina at Charlotte, USA*

Catalog no. 75241, April 2010, 548 pp.

ISBN: 978-1-4200-7524-3, **Your Price: \$119.96 / £76.00**



Structure and Function of Intrinsically Disordered Proteins

Peter Tompa *Hungarian Academy of Sciences, Budapest*

Catalog no. C7892, January 2010, 359 pp.

ISBN: 978-1-4200-7892-3, **Your Price: \$79.96 / £51.19**

*Enter discount code 851EM at checkout to Save 20% when ordering at www.crcpress.com.

We never charge for standard shipping.

Offer expires September 30, 2010.

Public Affairs

White House Issues Executive Order

Security of Biological Select Agents and Toxins

On July 2, President *Barack Obama* issued an Executive Order that changes the way highly hazardous pathogens and toxins in the United States are secured against misuse. The changes are a result of a review by the Administration of current federal policies and procedures regarding Biological Select Agents and Toxins (BSAT). The reviewers concluded that the government needed to more fully consolidate its procedures for securing BSAT in order to improve oversight. The Departments of Health and Human Services (HHS) and Agriculture (USDA) will continue to lead that Agent Program/Select Agent Regulations (SAP/SAR) specifically, the Order calls for:

- HHS and the USDA will classify BSAT according to their risk for misuse and evaluate graded protections for these “Tier 1” agents.
- HHS and USDA must review and revise their regulations to reflect the new tiered BSAT list.
- A panel of Federal security and scientific experts will serve as the principal security advisory body to the SAP. In addition, the National Science Advisory Board for Insecurity will serve as a source for external advice and input on SAP/SAR policies and practices.
- Department and Agency heads will establish and implement a plan to coordinate oversight of BSAT security. The

plan will articulate processes by which inspections are conducted in a coordinated and reciprocal manner, security and compliance issues will be identified and resolved, and information legally will be shared among participating Departments and Agencies.

Changes to the classification of select agents and toxins and the HHS and USDA policies will proceed through the normal rule-making process.

On the White House Office of Science and Technology Policy blog, *Peter Emanuel*, Assistant Director for Chemical and Biological Countermeasures, noted that “when implemented by the relevant Departments and agencies, it will help the United States achieve a crucial balance between two goals that are sometimes seen as being in conflict: Increasing the Nation’s defenses against the threat of biological weapons and reducing the hurdles that legitimate scientists face as they pursue research on potentially dangerous microbes.” Emanuel also stated that the new directive simplifies and harmonizes a number of earlier efforts to achieve the right balance between the risks and benefits of scientific research on some of the world’s most dangerous infectious agents and toxins and recognizes that access to these materials and the rules for handling them need to be carefully regulated.

NSF Launches Innovation Online Resource

The National Science Foundation (NSF) has launched its Science, Engineering, & Education Innovation (SEE Innovation) website initiative. The new service provides policy makers, science-related organizations, and the general public with information about NSF-funded research and education projects. Users can access summaries of select projects, read biographies of leading scientists, learn about large-

scale research facilities, and find state-specific statistics about NSF awards received in a given fiscal year.

NSF and Research.gov are currently seeking feedback on the initial content of SEE Innovation. Comments can be submitted using the website's online feedback form found under the "Tell Us What You Think" link. The site can be found at <http://tinyurl.com/research-gov>.

Science Envoys Report to PCAST

Less than one year after being appointed as the first US science envoys, *Elias Zerhouni*, former director of the National Institutes of Health; *Ahmed Zewail*, Nobel Prize-winning chemist; and *Bruce Alberts*, Editor-in-Chief of the journal *Science* and past-president of the National Academy of Sciences, reported on their experiences to date at a July meeting of the President's Council of Advisors on Science and Technology (PCAST). The envoys were appointed to increase US collaboration with the Muslim world on shared energy, environment, and health challenges.

Alberts has focused his envoy activities on encouraging expansion of Indonesian science and technology capacity, placing an emphasis on connecting US and Indonesian scientists and institutions. Indonesia's current investment in science research is 0.06 % of the nation's GDP, a figure Indonesian President *Yudhoyono* pledged to increase.

Alberts has had some initial success, including the establishment of an annual "Frontiers of Science" meeting with 40 US and 40 Indonesian future science leaders, and a new US program to support university exchanges. Indonesia is considering creating a new merit-based research funding agency similar to the NSF. Furthering science education cooperation, Indonesia recently sent an envoy of sci-

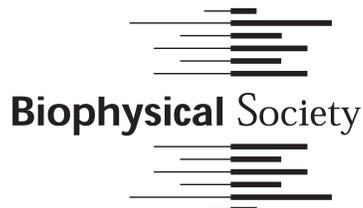
entists and educators to a US conference on science education.

Zerhouni, the current Science Envoy to Algeria, reported that the Gulf and North African nations see progress in science and technology as essential to their future, that the US is uniformly seen as the example to follow and the preferred country to partner with for science and technology, and that visa and security issues since September 11, 2001 have prompted Gulf and North African countries to diversify their science and technology relationships and collaborations towards Europe and Asia.

Four areas—water, food and, energy security; health and environment; and how best to establish evidence and merit-based systems—have emerged as common priorities across countries. To address these issues, Zerhouni outlines common needs in these countries. Science, technology, engineering, and mathematics programs at every level are also needed a problem compounded by unqualified teachers and large youth populations that beleaguer already thin education systems. Zerhouni also identified a need to establish stronger scientific cultures of inquiry as opposed to rote learning.

Zewail, Science Envoy to Egypt and PCAST member, said that he was surprised by a lack of science expertise at US embassies, a hindrance to science diplomacy. Zewail also urged Office of Science and Technology Policy (OSTP) Director *John Holdren* to bring the issue of scholarships and visa issues for foreign students to the attention of the President.

OSTP has created a Global Science Diplomacy webpage, which will be updated periodically and serve as a portal for information about the science envoys. The website can be found at <http://www.whitehouse.gov/administration/eop/ostp/sciencediplomacy>.



11400 Rockville Pike, Suite 800
Rockville, Maryland 20852

Presorted
First Class Mail
U.S. Postage
PAID
Suburban, MD
Permit No. 5460

Biophysical Society Newsletter—September 2010

Upcoming Events

January 23–27, 2011

IS&T/SPIE Electronic Imaging 2011

San Francisco, California

<http://spie.org/x16218.xml>

January 26–29, 2011

*BIODEVICES 2011: 4th International Conference on
Biomedical Electronics and Devices*

Rome, Italy

<http://www.biodevices.biostec.org/>

February 6–11, 2011

*Keystone Symposia: Immunologic Memory, Persisting Microbes
and Chronic Disease*

Alberta, Canada

<http://www.keystonesymposia.org/11B6>

March 1–6, 2011

Keystone Symposia: Biofuels

Singapore

<http://www.keystonesymposia.org/11C3>