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Egelman to Take Helm of *BJ* in 2007



Edward Egelman

Edward Egelman, of the University of Virginia Health Sciences Center (UVHSC), will be the new *Biophysical Journal* Editor-in-Chief beginning July 2007, when the five-year term of Bob Callender, the Journal's current Editor-in-Chief, ends.

Egelman has a long history of involvement with the Society and the Journal. He was elected a Society Fellow in 2005, was Program Chair for the 2003 Annual Meeting in San Antonio, served on Society Council from 1999-2003, is active in the Society's Public Affairs Committee, and is a long-standing member of the *BJ* Editorial Board.

As professor at UVHSC, Egelman studies protein-DNA complexes involved in homologous recombination, DNA helicases, actin and muscle, structure of macromolecular complexes, helical polymers, electron microscopy, and image analysis.

Correction:

Dayhoff Awardee Kalina Hristova's name was misspelled in the September/October issue of the newsletter.

2007 Annual Meeting

March 3—7, 2007
 Baltimore, Maryland

Deadlines

Early Registration

December 14

Abstracts Issue Print Order

December 14

General Housing

February 8

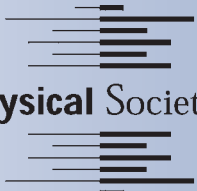
Biophysics at NIH & the Future of Medical Research: Views from the Director

Baltimore Convention Center
 Tuesday March 6, 2007
 2:30-3:30 PM

Elias Zerhouni, Director of the National Institutes of Health, will be the featured speaker at the Society Annual Meeting session organized by the Public Affairs Committee. The Tuesday event will provide a unique opportunity to hear the NIH Director's thoughts on the role of biophysics at the NIH, interdisciplinary research, and the future of medical research.



Elias Zerhouni



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Message from the President



Barry Lentz

A lot has been happening within your Society in the past year, and I take the opportunity of the Newsletter "President's Message" to fill you in on what your elected leaders have been doing.

I decided to stand for election because I felt that our Society had become so large so quickly that we needed to examine how we could continue to feel like a small, bottom-up society even as we grow with the success of our field. I have always made the BPS my professional home both because of my passion for learning about biological mechanisms but also because our meetings feel friendlier than those of the mega societies. For me, this was easy, since the Society has always had a significant membrane biophysics involvement. While this has not changed, the number of other subfields that have adopted the Bio-physical Society meeting has grown considerably. It is now a challenge to organize the program for a BPS

meeting in a way that is inclusive of all our many subfields.

Another issue I faced as I became more involved in our Society was that I could not always discern how and why we did things. I felt this challenge in my roles as a subgroup chair, as an organizer of symposia and workshops, as a member of Council and chair of the Minority Affairs Committee, and even as I approached my current role of president.

When I raised the issue of our expanding membership and scope at my first Executive Board meeting, I found that several other members of the Board were also concerned with this issue. In discussions with these folks and with Ro Kampman, our exceptionally devoted Executive Director, it became clear that addressing this was critical to my goal of finding ways that we could continue to feel small even as we become large. Ro had already identified this problem and, with her staff, was in the process of developing an "Operations Handbook" for the Society so that how and why things were done could be more transparent to the membership and could be thoughtfully reviewed and discussed by the Society leadership. At this initial

At this initial discussion, some Board members raised the fact that, while we had been a Society for nearly fifty years, we had never done a comprehensive self-evaluation.

discussion, some Board members raised the fact that, while we had been a Society for nearly fifty years, we had never done a comprehensive self-evaluation. There was some opposition to this idea ("if it ain't broke, don't mess with it"), but I felt that any organization, no matter how successful, would benefit from such a process. Council agreed

and directed me at its second meeting of the 2006 meeting in Salt Lake to initiate a fiftieth-anniversary review in a way that would ultimately involve Council in the discussions.

Thus began a long, intense, and, from my perspective, fruitful collaboration with a number of people with the aims to 1] carry out this self-evaluation, 2] identify possible changes in how we accomplish our stated mission, and 2] expand the "Operations Handbook" in the process. For me, the end goal has always been involving more of our members in the functioning, governance, and decision making of their society. But I'll be pleased if we can initially just accomplish these aims, which we are well on our way to doing.

With very useful input from Subgroup and Committee Chairs, the Editor-in-Chief, and Board members, Ro and I organized a comprehensive review of our procedures for the Executive Board Retreat held in July in Bethesda. Every aspect of Society governance and operations was on the table, including even a revisiting of the Society's stated goal (Article II of the Society's Constitution: The purpose of the Biophysical Society is to encourage development and dissemination of knowledge in biophysics). While the Board saw no need to alter the Society's stated goal, this retreat identified 1] several changes and clarifications in our Operations Handbook that were adopted, 2] questions and charges that have been put before several committees, 3] potential changes to the Society Bylaws needed to make current practice consistent with the Bylaws, 4] a need for discussion of the role of Council in the BPS, 5] a need for guidelines for participation in independent small meetings and the Biophysical Discussion, and 6] possible procedural changes to increase

the role and participation of Subgroups in the Society. A draft of the

I encourage you to participate in this process and in your Society.

Operations Handbook was circulated to Subgroup and Committee Chairs and Council members for feedback. Out of this arose an agenda for the second phase of the Board Retreat, to be held November 4 & 5 in Bethesda. The outcome of that meeting will be an agenda for the Council Retreat planned for the first Council meeting at the 2007 meeting in Baltimore. At that time, Council will discuss the most cogent issues and proposals arising from the Board retreat. I will ask Council to decide on and implement needed changes to the Operations Handbook, consider putting several Bylaws changes on the ballot for the 2007 elections, and discuss

.....complete a brief survey and offer input on any issue that you see as important to your participation in your Society.

and act on changes that will increase its role in the governance of the Society. If Council is unable to accomplish all this at the 2007 meeting, I will propose that it appoint an ad hoc committee to complete this process. I hope that Council will be able to act on all this, and we will have accomplished the Aims we set forth roughly a year ago.

Whether this accomplishes my goal as Society president will depend both on how well we did this job and on YOU. I encourage you to participate in this process and in your Society. You can do this in several ways. First, attend and present at our annual meetings. A recent analysis of membership statistics indicated that 80% of our members attend at least one meeting in a three-year period. This is a remarkable statis-

tic, but how can we better meet the needs of the remaining 20%? Second, whether or not you are in that 20%, you can give us feedback by taking a minute to complete a brief survey and offer input on any issue that you see as important to your participation in your Society. You can fill this out at <http://www.surveymonkey.com/s.asp?u=205952800194>. If you would like to know more about specific changes and proposals, you can request pdf files of the draft Operations Handbook from the July Board meeting (email jwittig@biophysics.org to make this request). Third, you can join and become involved in one or more of our Subgroups. Their symposia on Saturdays prior to the regular meeting have become an important part of my and probably your meeting experience. If so, spring for 15 bucks and become involved in their activities. The

Membrane Structure and Assembly Subgroup was the springboard to my current involvement in our Society. Finally, volunteer for the work of our Society done by its committees. A volunteer form is included in the survey link I have provided. You will meet some wonderful people and make a difference in the lives of the many others to whom we offer services, altogether a very rewarding experience.

It has been my honor to serve our Society and to lead this process of self-evaluation. It has been my pleasure to work with Ro, her marvelous staff, and the wonderful and dedicated people who lead our Society and its activities. Please let us hear from you through the survey. See you in Baltimore!

—Barry Lentz, President

Public Affairs

What Happens After an Election? Starting Over with a New Congress

Every two years, after you (hopefully) have gone to the polls to vote in the November election, some new faces arrive in Congress, and some familiar faces pack their bags.

With all those new faces comes a new legislative session. The 109th Congress, which began in January 2005, will come to a close in January 2007 and members of the 110th Congress will then be sworn into office. An empty slate will accompany the new Congress. Any bill introduced and not passed into law by the end of a Congressional session is no longer actively on the table. Those bills that received a great deal of attention by members and staff, through committee hearings and markups, probably will be reintroduced in a similar version early in the new session, since the provisions of such a bill will reflect a great deal of work and compromise.

Now that the the majority party has changed hands, there will be more changes early in a session and it will take longer for each chamber to begin its legislative work. Each party elects its leadership at the beginning of a session, Senators and Representatives physically change offices based on seniority and committee assignment shift.

When a new chairman assumes the leadership of a committee, as will happen on the House Science Committee, the focus of a committee's work can change. Whoever replaces retiring Chairman Sherwood Boehlert (R-NY) will probably have different priorities. They will also hire a different staff based on those priorities.

During the 109th Congress, the Biophysical Society has worked on educating Congress on the need for the federal government to invest in research at the interface of the life and physical, mathematical, and computational sciences. Provisions creating programs to fund this type of research were included in a bill that passed the House reauthorizing the National Institutes of Health and a bill that passed the House Science Committee focused on Competitiveness at the National Science Foundation. If those two bills do not become law during the lame duck session of Congress in November, which is very likely, the Society must work to educate the leadership of the next Congress on the need for the government to fund the bridging sciences.

With the entire House of Representatives and one-third of the Senate up for reelection every two years, educating elected officials about scientific policy issues is a perpetual responsibility and task of the scientific community.

Report Finds Barriers to Advancement for Women in Academia

A committee of the National Academies released a report in September, *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*, focused on the status of women in academe. "Women are capable of contributing more to the nation's science and engineering research enterprise, but bias and outmoded practices governing academic success impede their progress almost every step of the way," stated committee chair *Donna Shalala* in a press release. She added, "Fundamental changes in the culture and opportunities at America's research universities are urgently needed. The United States

should enhance its talent pool by making the most of its entire population."

The committee refutes many commonly held beliefs used to explain the dearth of women in leadership and other esteemed positions in academia and makes two dozen recommendations on how universities, the government, and professional societies can take steps to remove the barriers women face in academia. The recommendations include changing the culture to allow for the needs of scientists at different times of their careers, providing child care and paid parental leave, organizing training sessions for department chairs, and creating a monitoring body led by national higher education organizations.

The full report is available at <http://www.nap.edu/catalog/11741.html#toc>

New Face in the NIH Budget Office

John J. Bartrum was appointed and assumed the role of Associate Director for Budget at the National Institutes of Health (NIH) on October 15. In this position, Bartrum will oversee the Office of Budget and have primary responsibility for NIH-wide budget policy, planning, analysis, formulation and presentation.

Bartrum joins the NIH from the Executive Office of the President where he served as a Senior Examiner in the National Security Division of the Office of Management & Budget. In this role, he was responsible for management, policy, and budget development for over \$40 billion in annual expenditures on health and medical activities within the Department of Defense and Defense Health Program budget. Bartrum also worked on budget and health programs at the Department of Veterans Affairs and served in the Air Force.

NSF Study Reports on Demographic Changes in Doctoral Degree Recipients

A new report released by the National Science Foundation (NSF) documents trends and patterns that reveal the rapid growth and changing demographics of doctoral education during the 20th century, especially over the last 25 years.

U.S. Doctorates in the 20th Century reveals many factors about who is educated and where. It also describes the complex changes taking place in the pursuit of doctoral degrees, many in new interdisciplinary fields.

Some of the report's major findings are:

- Men received 73 percent of all doctorates awarded in the 20th century, but in the 1990s, women made significant gains, receiving over 40 percent of all doctorates;

- Two-year colleges vastly increased their role in educating those who go on to pursue a PhD. In the century's final five years, 1995-1999, one-fifth of all American Indians/Alaska Natives who received doctorates attended two-year colleges. One-sixth of all Hispanic PhD recipients also reported having attended two-year colleges;

- From 1995-1999, almost a third of African-American PhD recipients reported receiving an undergraduate degree from a Historically Black College or University; and

- In 1999, for the first time, more than half of all graduating doctorates reported debt from their undergraduate and graduate education.

The report is based on the Survey of Earned Doctorates, which had a 95 percent response rate. It can be read in its entirety at <http://www.nsf.gov/statistics/nsf06319/>.

NSF Sets Goals and Priorities Through 2011

The National Science Foundation (NSF) released its strategic plan to guide the agency's priorities and investments for the next five years. The plan, titled *Investing in America's Future*, is the first to be published under NSF's current leaders and will influence the agency's FY 2008 budget request.

The new plan identifies four outcome-based goals: discovery, learning, research infrastructure and stewardship. Each is linked to specific investment priorities, and emphasizes actual results or outcomes. The NSF, in keeping with its mission, plans to continue to support fundamental research while also supporting transformative and visionary research. The NSF also has set goals to improve education and workforce development, raise limits on instrumentation funding, and strengthen the bridges between agencies, nationally and internationally.

NSF received hundreds of comments from colleges, universities, professional societies and members of the public during the plan's development. NSF also integrated input from its advisory committees, the National Science Board and NSF staff. The Biophysical Society submitted comments based on the draft plan produced in the summer.

To read the entire plan, visit <http://www.nsf.gov/pubs/2006/nsf0648/nsf0648.jsp>.

Subgroups

Membrane Structure and Assembly

It is time for the Biophysical Society Membrane Structure and Assembly Subgroup to elect a new chair for the 2009 meeting, which will be held in Fort Lauderdale, Florida. The chair-elect for

the 2008 meeting, which will be in Long Beach, California, is *Scott Feller*, and the chair for the 2007 meeting is *Frances Separovic*, who has organized a session on Antimicrobial Peptides for Baltimore.

Please nominate any MSAS member(s) whom you think would organize an interesting meeting. You may submit your own name if you would like to take on this responsibility, which includes some fundraising activities with sponsor companies, organizing the subgroup meeting talks and appointing judges for the student poster competition.

Nominees will be approached to confirm their interest, and the governing council of the MSAS may narrow the list. The candidates will be asked for a brief resume and a statement of purpose for the subgroup, which will be circulated to MSAS members by email for a final vote.

Please respond with a nomination to *Frances Separovic* (fs@unimelb.edu.au) by Monday, 4 December 2006.

Your interest in our new chair is greatly appreciated

—*Frances Separovic*, Chair

Membrane Biophysics

The 2007 Membrane Biophysics Symposium will be on Saturday afternoon at the Annual Meeting in Baltimore. The theme of the symposium is *Reducing Reductionist Thinking: Biophysical Approaches to the Study of Membrane Protein Assemblies*. Speakers include: Nael A. McCarty (Chair), Kurt Beam, Michel Bouvier, William A. Coetzee, Joe Falke, Jianpeng Ma, and Inga Schmidt-Krey.

The subgroup will have a brief business meeting to elect the Chair-Elect (chair for 2008-2009). The Chair is responsible for selecting the theme and inviting speakers for the annual symposium.

(Continued on page 11.)

Biophysical Society Career Development Workshop Schedule

Ed Bocko will again lead career development workshops throughout the Annual meeting. The complete workshop schedule is listed below. Workshops will be held in the Baltimore Convention Center, Room 327. All meeting attendees are invited to attend. In addition, Bocko will provide one-on-one sessions to review and improve resumes and CVs beginning on Saturday, March 3. Appointments for one-on-one sessions will be available on a first-come, first-served basis. Space is limited so sign up early onsite at the Career Placement Center in Room 327 to reserve a spot. See you in Baltimore!

March 3-6, 2007

Saturday, March 3, 2007

1:00-5:00 PM 1-on-1 Resume Critiques (12 20-minute sessions by appointment only)

Sunday, March 4, 2007

10:00 AM Creating a Competitive Life Science Resume
 11:30 AM The Importance of Business Correspondence: Cover, Broadcast and Follow-Up Letters
 1:30 PM ED's TOP TEN: Ten Ways to Ensure a Positive and Lasting First Impression in the Employment Arena
 2:30 PM 1-on-1 Resume Critiques (6 20-minute sessions by appointment only)
 4:30 PM Interview Basics

Monday, March 5, 2007

9:00AM 1-on-1 Resume Critiques (3 20-minute sessions by appointment only)
 10:00 AM Your Job Search: A Sequential Process with Different Goals at Each Step of the Way
 11:30 AM Uncovering the Hidden Job Market: Tactics That Work
 1:30 PM Creating a Competitive Life Science Resume
 2:30 PM Career Open Forum: Career Q&A Session
 4:00-6:00 PM 1-on-1 Resume Critiques (6 20-minute sessions by appointment only)

Tuesday, March 6, 2007

9:00 AM 1-on-1 Resume Critiques (3 20-minute sessions by appointment only)
 10:00 AM So, You Don't Want to Work at the Bench Anymore? Planning your Career Transition in the Sciences
 11:30 AM ED's TOP TEN: Ten Ways to Ensure a Positive and Lasting First Impression in the Employment Arena
 1:30 PM The Truth About References and Reference Checking
 3:00-5:00 PM 1-on-1 Resume Critiques (6 20-minute sessions by appointment only)

MARCH 3-7, 2007, BALTIMORE, MARYLAND

Careers Events

Postdoctoral Breakfast

Are you a postdoc interested in networking with other postdocs to discuss career development? Then don't miss the Postdoctoral Breakfast! The Early Careers Committee will host this annual breakfast, where discussion will focus on the career development activities of postdocs in the field of biophysics. Members of the Early Careers Committee will also be present to discuss plans for future postdoctoral events and other issues facing the Early Career members of the Society. Remember to arrive early as attendance will be limited to the first 100 attendees.

Career Roundtable Luncheon

This popular working luncheon, sponsored by the CPOW, will address several career-related issues that researchers face throughout various stages in their career. Discussion topics will include: 1) grant writing, 2) collaborations, and 3) how to find the right funding agency for your research. Society scientists and leaders with extensive experience in these areas will moderate these informal roundtable discussions. Attendance is open to all meeting attendees but pre-registration is required. Fee includes a box lunch. Registration form may be found at www.biophysics.org.

Negotiating the Transition to Non-traditional Careers

Organized by the Early Careers Committee, this popular panel series will discuss pathways to non-traditional careers in biophysics such as: 1) working at funding agencies, 2) science lobbying & policy development, 3) consulting, and 4) defense/intelligence/law enforcement. If you are interested in learning more about the wide range of career possibilities in the field of biophysics be sure to attend this session!

How to Recruit and Retain the Best Scientist in Your Department

Successful biophysics programs at colleges and universities are built from the ground up beginning with people working in and for these programs. This panel, organized by the CPOW, will present speakers who have been successful in developing and implementing recruitment and retention policies for scientists in academia and industry. If you are interested in techniques to attract and keep the best scientists within your biophysics department plan to attend this session.

Visa Information

Scientists planning to enter the US to attend the 2007 BPS Annual Meeting should apply for a VISA at least three months before the meeting. International 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
<http://www.unitedstatesvisas.org>

National Academies of Science
<http://www7.nationalacademies.org/visas/>

US Department of
 Homeland Security
<http://www.dhs.gov/dhspublic/index.jsp>

Use the Housing Block When Making Hotel Reservations

What is a housing block and why is it important? What is a Housing Office/Bureau and what are the benefits of using one?

A housing block is a group of hotels with which the BPS has contracted for a specific number of rooms at competitive nightly rates. Part of the contract includes guarantees for meeting attendees in the event of overbooking, construction, or problems with a room. A Housing Office/Bureau is a central clearinghouse for all reservations in the block. On any day, the Office/Bureau can see how many rooms are available in each hotel and provide the hotels with lists of those who have made reservations. The Office/Bureau immediately takes care of any problems that arise for attendees who have booked through their service.

If, for example, a hotel within the block overbooks and the attendee used the Housing Office/Bureau to secure the room, the attendee is guaranteed either a room at that hotel or a very specific and generous compensation. If, on the other hand, an attendee secured a room outside the room block and/or not through the Housing Bureau, the hotel is under no contractual obligation to provide a room or compensation. In that scenario, the hotel will always move the outside-the-block attendee.

Filling a room block is important because it provides a "report card" on the Society to future 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.

Onsite Childcare Services

Childcare services will be offered for attendees of the 2007 Annual Meeting. The services will again be provided by KiddieCorp. The program is for children ages six months through twelve years and will be located in the Hyatt Regency Baltimore, headquarters hotel for the Annual Meeting, which is connected to the Convention Center by air walk. Snacks and beverages will be provided. Full meals may be supplied by parents or purchased when checking in each day. The service is available to all meeting attendees, but pre-registration is required. The cost is \$15 per hour per child (regular attendees), \$10 per hour per child (postdoc attendees), and \$6 per hour per child (student attendees). There is a two-hour minimum required. The dates/hours of the childcare program are as follows:

Saturday, March 3	8AM-6PM
Sunday, March 4	8AM-6PM
Monday, March 5	8AM-6PM
	7:30PM-12AM
Tuesday, March 6	8AM-6PM
Wednesday, March 7	8AM-3PM

Pre-registration for the childcare program is available at
<https://www.kiddiecorp.com/bpskids.htm>

THE PREREGISTRATION DEADLINE IS FEBRUARY 2, 2007.

Special Annual Meeting Travel Rates

The Biophysical Society has made special arrangements for those attending the Annual Meeting with the companies below. When making reservations please refer to the respective meeting ID number for extra savings.



800-521-4041
 Meeting ID Number: 513ZY



800-654-2240
 Meeting ID Number: 987685

Biophysicist in Profile



Richard Ludescher

The 12 teaching awards he has received so far attest to what drives Rutgers University's Richard Ludescher: his passions for biophysics and the education of future scientists.

Ludescher was born in Dubuque, Iowa, to Oliver and Margaret Ludescher, and grew up there with his brothers Bill and Chris and sister Hannah. "I was always in trouble for taking things apart," he explains, including a camera from his grandfather. At the age of nine his parents bought him a chemistry and erector set that included a microscope. By age 11 he was convinced his future lay in medicine. To get a head start, he memorized all the bones in the human body.

Once he entered Wahlert High School, however, his initiative suddenly dissipated. "I had my own interests," he states, "and they weren't always the interests the teachers had." He got good grades in the classes he liked, but not so in all the others. Steering clear of sports, he became the literature editor of his high school newspaper by his

senior year. After graduation, he attended the University of Toronto but, not seeing eye to eye scholastically, transferred to the University of Iowa after one semester.

His interest in social sciences, especially archeology, led Ludescher to major in anthropology. "I thought anthropology would be exotic," he reminisces, but by his junior year he realized anthropology was not his calling and changed his focus to philosophy.

After graduation, he began work on a PhD in philosophy at the University of Iowa, but quickly realized that was a mistake as well after one semester. Bored by school and not sure what he wanted to do, Ludescher worked odd jobs for awhile. Deciding that he wanted to find a fulfilling career, in the fall of 1977 he re-enrolled as an undergraduate at the University of Iowa in basic sciences.

"I got sufficient background to apply to graduate school in chemistry or biology," says Ludescher, who worked in a biology lab under Carol Newlon. "He worked in my lab on identifying yeast cell cycle mutants that

when he grew up', was the depth of his thinking as well as his skills in math and chemistry." In the winter of 1976-77, Ludescher attended a lecture by Frank Stahl, now professor emeritus at the University of Oregon, whose exper-

"I had my own interests," he states, "and they weren't always the interests the teachers had."

iment on the semi-conservation mechanism for replication of DNA in the late 1950s earned him worldwide recognition. Following the lecture, he was able to talk to Stahl, who noticed Ludescher's love of physical biochemistry. Stahl recommended that he go to the University of Oregon to study molecular biology. Later that year Ludescher graduated from the University of Iowa and moved to Oregon to start work on his PhD in chemistry.

In 1984, PhD in hand, Ludescher left Oregon to take a postdoctoral fellowship at the University of Minnesota Medical School with David Thomas. "He did research on the application of time-resolved phosphorescence to muscle protein structural dynamics," says Thomas. "He combines a profound

"He combines a profound understanding of photo-physics with an appreciation for the complex structural dynamics of proteins and other biomaterials."

cause the production of defective mitochondria," says Newlon, now Chair of the Department of Microbiology and Molecular Genetics at UMDNJ-New Jersey Medical School in Newark. "The thing that most impressed me about Rick, who at that point was trying to figure out 'what he was going to do

understanding of photo-physics with an appreciation for the complex structural dynamics of proteins and other biomaterials." After three years at Minnesota, Ludescher decided it was time to move on. He found a job at Wichita State University in the chemistry department, but within a year "saw an ad for the science department at Rutgers for protein chemists."

Eighteen years later he remains at Rutgers, where he works on developing optical techniques to look at local structure and mobility in an amorphous, solid biomaterial. "I think what I'm doing now is really enjoyable because it involves an area which has always been my love in science: optical spectroscopy," he says. "It involves identifying novel molecules with unusual spectroscopic properties and trying to identify how those properties can report on the local environment."

Ludescher is also the graduate and undergraduate program director for the Foods Science Department. At Rutgers, Ludescher has the challenge of making undergraduates "understand what are really advanced topics in physical chemistry even though they have never had an advanced course in physical chemistry," he explains. Developing methods to teach students these theories of physical chemistry—without ending up with a lecture hall full of blank stares—took a lot of practice. His methods have evolved by looking at the problem in a practical way and working towards the theory. "I have to approach it in an intuitive fashion rather than a quantitative fashion," he explains.

Ludescher has a real passion for education. "Teaching has an immediate return," he states. "I really enjoy working with students. Even on the level of research I do, it's almost all on the level of working with students." His contact with undergraduate and graduate stu-

dents has spurred many innovative programs to help them better understand science. He believes biophysics is extremely important and encourages young students to think about the

"Developing methods to teach students these theories of physical chemistry—without ending up with a lecture hall full of blank stares—took a lot of practice."

world in a scientific way. He also believes biophysics will continue to expand and become a major player in biomedicine. "It's going to play a strong role in molecular biotechnology," he explains. "As we more fully understand the physics and chemistry of these macromolecules and how they interact,



Richard Ludescher (right) with fellow Biophysical Society member Cathy Royer (center) and his wife Lisa (left) on a hilltop just north of Montpellier, France.

we'll be able to manipulate them in novel ways." It is this devotion to teaching that has resulted in so many awards, the most recent of which is the 2005 Endel Karmas Award for Excellence in Teaching. These awards are well deserved according to Suzanne Scarlata, professor of

Physiology and Biophysics at Stony Brook University, who says that "as far as education, Rick is truly gifted in generating student excitement about science."

Ludescher attended his first Biophysical Society meeting in 1981 in Denver, on a student travel award. "I just had a good time," he raves. "I enjoyed the science. I enjoyed the people I met."

He has missed few meetings since. "The kind of science that is presented there is the kind of science I love," he admits. He also confesses that the meetings have an element of a reunion to them. There are some people he sees only at the Annual Meeting. He has also met new colleagues and collaborators there.

Since that initial meeting, Ludescher has become active in the Society, having served on and been elected Chair of the Education and the Professional Development committees. "Rick looks for new, effective solutions for presenting biophysics at many levels, mostly undergraduate and graduate, but also how science is presented in the lower grades," says fellow Education Committee member Sandy Ross, of the University of Montana, "this

includes how the Society might effectively deal with school boards that, for example, wish to restrict teaching evolution." Ludescher believes his continuous contact with students, as well as his varied background, have helped him while on the Education Committee because he can relate to student needs.

Since 1992, he has been involved in the annual Student Symposium, often presenting an introductory lecture that explains biophysics to high school and undergraduate students for the first time in ways that immediately engage them.

Aside from teaching and research, Ludescher is an ardent book collector, a hobby that can get expensive. He also enjoys hiking and kayaking with his wife, Lisa, a graphic designer who teaches at the local community college, and son Sam. Sam, who turns 13 this month, shows a talent for math and science, but does not show much interest in those areas yet.

As Ludescher's personal experience shows, the road to a research career is not always direct; it has a lot of twists

and turns. Richard uses these experiences to help students who are following a similar path.

Membrane Biophysics (Continued from page 5.)

sium. For additional information on the responsibilities of the Chair, please see our section on the webpage or contact this year's chair, *Nael McCarty* (nael.mccarty@biology.gatech.edu).

The 2007 Cole Award Dinner will be held on Saturday evening, March 3 (location to be announced) following the Subgroup Symposium presented that afternoon. The Kenneth S. Cole Award is presented annually to an investigator who

has made a substantial contribution to our knowledge of membranes. If you want to attend the dinner but did not prepay with your dues, you can reserve a ticket by contacting *Carol Beck* at carol.beck@jefferson.edu. To encourage student participation in the subgroup, the subgroup is once again offering a free ticket to the Cole dinner for any student member of the Biophysical Society who enters the student poster competition. Additional free tickets will be available on a lottery basis to student members who do not enter the poster competition. The deadline for students to request tickets is January 31, 2007.

—*Nael McCarty*, Chair

Members in the News



Three Society members recently received the Pioneer Award, which honors scientists who use new and innovative ways to complete biomedical research. Pictured above from left to right, the awardees were *Arup K. Chakraborty*, of MIT and member since 2006; *Lila Gierasch*, of the University of Massachusetts and member since 1981; and *Gary J. Pielak*, of the University North Carolina, Chapel Hill and member since 1990.

Marc Baldus, of Max Plank Institute and member since 2001, received the Founders Medal of the International Council on Magnetic Resonance in Biological Systems. This award is given to scientists who have made contributions to developments in the magnetic resonance in biological systems.

Have you or someone you know who is a Biophysical Society member recently received an award or have accomplished something newsworthy? Then send information and a photo to Lee Bien at lbien@biophysics.org

The Joint Meeting of the
Biophysical Society 52nd Annual Meeting
16th International Biophysics Congress

February 2-6, 2008 / Long Beach, California



Look for more information about this joint meeting in upcoming newsletters
and on the Society's website at www.biophysics.org



Call for Classic Papers in Biophysics

Thriving in our 51st year, can we identify pivotal papers written during the Society's first 25 years? Papers that:

- Changed the course of our learning?
- Clarified our thinking?
- Continue to teach us today?

Citation rates are only one indicator of influence. Originality may be so profound that a paper's content has become an intrinsic part of our culture. Clarity might be so strong that a paper is used for teaching without thought of citation.

We all know that a read through Darwin (1859) or Onsager (1931) or Pauling (1951) gives us insights into our present understanding. What about biophysics papers written during our Society's early years?

What paper from 1956 to 1981 was, and is, such a good read that you recommend it to an incoming postdoc or grad student, possibly use it in an undergraduate survey course?

What paper from this period revealed a new feature or introduced a new measurement only to be forgotten in the flood of papers that it originally inspired?

We hope to glean 25 to 50 such papers published anywhere during those 25 years, write short commentaries on their lessons and importance, and post these commentaries together with links to texts of the original papers on the Society's website.

Email your suggestions to rkampman@biophysics.org.

Submissions will be considered by the Landmark Papers Committee, chaired by *Adrian Parsegian*.

Li Receives International Visiting Student Award

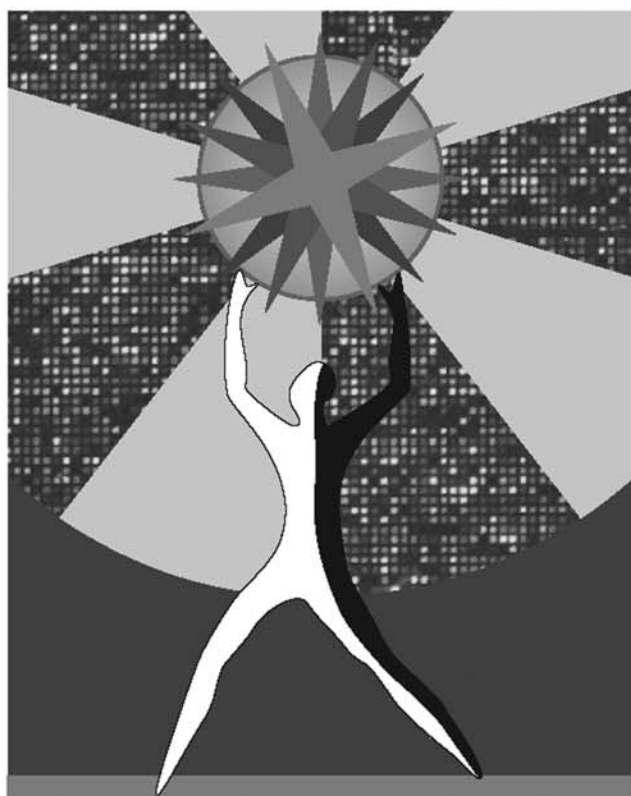


Qubuan Li was awarded a Biophysical Society International Visiting Student Travel Award. Li is a graduate student at Sun Yat-sen University in China. The award covers travel expenses associated with Li's three-month visit to *Rodger McEver's* laboratory at the Oklahoma Medical Research Foundation. In McEver's lab Li will learn flow chamber techniques and high-speed video microscopy to measure cell adhesion, which Li will be able to use to accelerate the development of a flow chamber system in Jianhua Wu's lab at Sun Yat-sen University.

Award Nominations

April 1 is the deadline to nominate candidates for the 2008 Society awards. For awards information and instructions for submitting nominations, visit www.biophysics.org in the awards & funding opportunities section.

NIH DIRECTOR'S



PIONEER A·W·A·R·D

The National Institutes of Health invites applications for the 2007

NIH Director's Pioneer Award

A key component of the NIH Roadmap for Medical Research, the NIH Director's Pioneer Award supports exceptionally creative scientists who propose highly innovative—and potentially transformative—approaches to major challenges in biomedical research.

In September 2007, NIH expects to make 5 to 10 new awards of \$500,000 in direct costs per year for 5 years.

Women, members of groups that are underrepresented in biomedical research, and individuals in the early to middle stages of their careers are especially encouraged to apply.

Open to Scientists Who Are

- U.S. citizens, non-citizen nationals, or permanent residents
- Currently engaged in any field of research
- Interested in exploring biomedically relevant topics
- Willing to commit at least 51% of their research effort to the Pioneer Award project

Apply Online

- Streamlined application includes 3- to 5-page essay and 3 letters of reference
- Apply between December 1, 2006 and January 16, 2007
- See <http://grants.nih.gov/grants/guide/rfa-files/REA-RM-07-005.html> for application instructions

More Information

- See the Pioneer Award Web site, <http://nihroadmap.nih.gov/pioneer>
- E-mail questions to pioneer@nih.gov



AAUW International Fellowships

The American Association of University Women (AAUW) is offering International Fellowships open to Prospective/Current Graduate Students and Postdoctoral Scholars. 57 fellowships will be awarded for full-time study or research to women who are not U.S. citizens or permanent residents. Both graduate and postgraduate study at accredited institutions are supported. Targeted field - open to all fields. There are no citizenship requirements; however U.S. citizens or residents are not eligible. Applicants must hold the equivalent of a U.S. bachelor's degree and must intend to return to their home countries after graduation. Preference is given to applicants who show prior commitment to the advancement of women and girls. The fellowships are open only to women. The yearly stipend for the doctorate fellowship is \$20,000 and for the postdoctoral fellowship \$30,000. The deadline is 12/1/2006. For more information please visit www.aauw.org or contact:

AAUW Educational Foundation
International Fellowships
301 ACT Drive
Iowa City, IA 52245
(319) 337-1716 ext. 60
aauw@act.org

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Contact Melissa Pewett, Advertising & Exhibits Coordinator at (301) 634-7325 or mpewett@biophysics.org. For more information regarding classified advertising, the Biophysical Society Newsletter and the *Biophysical Journal* visit www.biophysics.org.

Upcoming Events*

February 4-9, 2007

Trends in Optical Micromanipulation

Obergurgl, Austria

<http://www.esf.org>

February 17-19, 2007

SPIE: Medical Imaging

San Diego, California

<http://spie.org/conferences/calls/07/mi/>

March 3-7, 2007

Biophysical Society 51st Annual Meeting

Baltimore, Maryland

<http://www.biophysics.org>

March 26-27, 2007

Nanoscale Physics and Technology: the Interface with Medical and Biological Sciences

Southampton, United Kingdom

http://www.iop.org/Conferences/Forthcoming_Institute_Conferences/index.html#mar07

May 19-21, 2007

Molecular Mechanisms of Neurodegeneration (Third Meeting)

Milan, Italy

<http://users.unimi.it/triplet/2007>

July 1-6, 2007

ESF-EMBO Symposium, Biological Surfaces and Interfaces

Costa Brava, Spain

www.esf.org/conferences/07222

February 2-6, 2008

Joint Meeting of the Biophysical Society 52nd Annual Meeting and the 16th International Biophysics Congress

Long Beach, California

<http://www.biophysics.org>

*Please visit <http://www.biophysics.org/> for a complete list of upcoming events.



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