

Five Society Fellows Announced

The Society is proud to name five Fellows this year from among its membership. Fellows are members who have demonstrated excellence in science and contributed to the expansion of the field of biophysics. The awards will be presented at the 2007 Annual Meeting Awards Ceremony in Baltimore, Maryland on Monday, March 5.



Steven G. Boxer
Stanford University

For his seminal contributions and advancement of the field of biophysics through his groundbreaking research in several areas including supported membranes, Stark effect spectroscopy of proteins, properties of autofluorescent proteins, and photosynthetic reaction centers.



Maurizio Brunori
University of Rome,
La Sapienza

For over 40 years of work in biochemistry and biophysics of metalloproteins and electron transfer reactions, with discoveries on the structure, function, evolution, and dynamics of heme proteins, and for his efforts in bridging biophysics across nations.



William A. Cramer
Purdue University

For his enthusiastic contributions to the field of biophysics research and education and his impact on the study of membrane protein structure and function, photosynthetic processes, and membrane transport.



Elliot L. Elson
Washington University

For his creative, pioneering, influential work in biophysics and, specifically, for significantly extending our understanding of the dynamics of biological macromolecules, cells, and tissues, and the development of novel techniques to study these systems.



George P. Hess
Cornell University

For his long and distinguished career in the application of biophysics in understanding biological processes and expansion of the field of biophysics through his research on the function and mechanism of protein-mediated reactions by developing and then applying innovative techniques.

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51st Annual Meeting Call for Papers



The 2007 Call for Papers, in its expanded poster format, has been mailed to all Society members. All forms and detailed information are available online at:

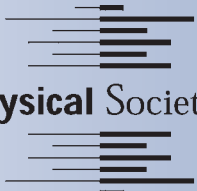
<http://www.biophysics.org>

The Meeting will take place in Baltimore, Maryland, March 3-7, 2007. Below are a few of the important deadlines

- Abstract Submission. October 1
- SRAA Poster Competition. October 1
- Abstract Revision. October 6
- Early Registration. December 14
- Abstracts Issue Print Order. December 14



The molecule above is part of the presentation that will be given by the National Lecturer, Chikashi Toyoshima, at the National Lecture, Monday, March 5, 2007.



Biophysical Society

9650 Rockville Pike
Bethesda, Maryland 20814-3998
Tel: 301-634-7114; Fax: 301-634-7133
E-mail: society@biophysics.org
<http://www.biophysics.org/>

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Biophysicist in Profile



Carmen Mannella

Carmen Mannella believes that the next decade will be a defining one in scientific and philosophical ways. "We're approaching the point where we can start to effect changes in the species by genetic manipulation," he says, "but just because scientists might have the ability to effect changes doesn't mean we're the ones who should decide which types of changes might be considered."

"The fact that we're making rapid progress is good," Carmen explains, but he would like people to take the time to integrate what everything means and try to understand the bigger picture. "To some extent I would like to be able to say slow down, but you can't. Progress is what it is. Things are moving fast and you just have to work harder to keep up."

And work hard he does. Mannella is currently Division Director of Molecular Medicine at Wadsworth Center in Albany, New York, professor at the School of Public Health at SUNY Albany, and an adjunct professor at Rensselaer Polytechnic Institute.

Mannella was born in Buffalo, New York, on June 15, 1947, to Patrick and Nicolina, neither of whom were scientists. Patrick was a factory worker, and

Nicolina a homemaker with a love of music and cooking. Mannella's three brothers and one sister did not pursue science, but he cannot remember a time when he was not "fascinated by how things work." In addition to his regular course work, Mannella participated on the debate team in high school, where he learned the value of intellectual combat and the importance of communication, a skill he feels is essential in the scientific field.

After high school, Mannella attended Canisius College, where he studied physics as well as the classics. During the summer between his junior and senior year, he participated in an NSF-funded internship that focused on membrane biophysics. The experience, he says, "opened a new world to me because I had never thought of anything bigger than an atom. Now all of a sudden you had all these complicated molecules forming higher order structures that had predictable physical properties. All of a sudden I was a biophysicist."

After graduating with a BS in physics, Mannella earned a PhD in biophysics at the University of Pennsylvania Johnson Foundation. There he worked in the lab of Walter Bonner, a plant bioenergeticist who also became his mentor. The Johnson Foundation had an intense productive atmosphere where the scientists con-

"Progress is what it is. Things are moving fast and you just have to work harder to keep up."

ducted research in controversial aspects of mitochondrial bioenergetics. Mannella worked with then-postdocs Roland Douce and Alan Lambowitz on the structural aspects of mitochondria. "If you can isolate the mitochondria,"

(Continued on page 13.)

Society Award Recipients Named

The 2007 Society awardees, listed below will be presented their respective awards during the Awards Ceremony at the Annual Meeting on March 3-7 in Baltimore, Maryland. Each will also present a lecture in the Awards Symposium during the Annual Meeting. The Emily Gray Lecture will be given at the Student Symposium.



Avanti Award in Lipids

Klaus Gawrisch, of NIAAA and NIH, will receive the 2007 Avanti Award in Lipids for his groundbreaking work in the development of NMR techniques for characterization of lipid structure and dynamics, and for his original and influential contributions to the modern picture of highly unsaturated lipids.



Outstanding Investigator in the Field of Single Molecule Biology

Howard C. Berg, of Harvard University, will receive the 2007 Outstanding Investigator in the Field of Single Molecule Biology award for his biophysical studies in bacterial motors and other seminal contributions to this field.



Distinguished Service Award

Ken A. Dill, of the University of California, San Francisco, will receive the 2007 Distinguished Service Award for his extensive and continuous work on behalf of the Biophysical Society and biophysics in general, which has ranged from service as president of the Society to his recent very important efforts as co-chair of the Public Affairs Committee and Bridging the Sciences Coalition.



Founders Award

Clara Franzini-Armstrong, of the University of Pennsylvania, will receive the 2007 Founder's Award for outstanding achievement in biophysics by significantly contributing to our understanding of the excitation-coupling mechanism of striated muscles through her ultrastructural analyses of muscle, and the correlation of the structure with the physiological EC coupling mechanism.



Michael & Kate Barany Award for Young Investigators

Taekjip Ha, of the University of Illinois, will receive the 2007 Michael & Kate Barany Award for Young Investigators for his development and application of novel single molecule physical methods and techniques; co-invention of single molecule fluorescence resonance energy transfer methods; his work to manipulate single molecules to elevate their behavior and interactions; and his groundbreaking discoveries in the single molecule research field.



Emily M. Gray Award

John Steven Olson, of Rice University, will receive the 2007 Emily M. Gray Award for his outstanding contributions to education in biophysics and his impact on many undergraduates and graduate students through teaching, mentoring, organizing programs between universities to promote biophysics training and his ability to engage both scientists and non-scientists through his lectures.

Treasurer's Report



Mordecai Blaustein

The Society continued to grow in the fiscal year ending December 31, 2005. The membership at the end of 2005 was 7,958, an increase of 439 members over the prior year. That growth was divided among all member types, with a 13% increase in non-US members. The annual audit for the fiscal year shows that the Society had net operating revenues of \$258,980. That amount is \$176,976 above budget. The main reason for the variance is the unexpectedly high interest and dividends. The rising interest rates were not anticipated at the time the budget was prepared. In total, the Society's assets grew from \$3,258,955 in FYE 2004 to \$3,565,813 at the end of FYE 2005.

Society Reserves

As has been done in past years, the net operating revenues were moved to the Society's reserves account to ensure that those funds continue to build

toward the prescribed level of 100% of one year's operating budget. The reserves level at the end of FYE 2005 stood at \$3,407,708, or 79% of one year's operations budget level.

Change in Allocation Policy

The reserves account in the past fiscal year increased by 5%, excluding growth provided by operating revenue. In an effort to increase the reserve account more quickly and become less dependent on operating revenues, the Board and Council agreed to change the allocation from a 60/40 ratio of bonds to equities and move to a 50/50 ratio over the next two years. The new allocation remains conservative, yet allows for more potential growth.

Auditors' Note

This year's audit report included a note of concern about the accumulating *Biophysical Journal* (BJ) bad debt, which results when authors, who submit manuscripts and agree to pay page charges if the manuscripts are accepted, do not pay those charges once the

paper is published. These are not waivers, which the Journal does budget for and does grant before papers actually enter production. Unfortunately, the Society cannot tell the printer that we won't pay for costs incurred, even when authors who agree to pay the charges don't do so. In FYE 2005, the incurred \$95,000 of such bad debt. BJ page charges and color charges are very reasonable for members, and are made very clear at the start of the manuscript submission process. Furthermore, BJ has a waivers policy for those who prove financial need. The Board and Council therefore approved new policies to deal with authors who do not pay outstanding invoices. First, all authors with outstanding invoices at the end of FYE 2005 will be contacted one final time and asked for payment or an explanation of why they cannot pay. Once they have provided payment or explanation, those unpaid invoices will be written off as bad debt and no longer considered outstanding. Second, effective immediately, credit card or purchase order information will

7-Year Highlights

FYE Audited Financial Positions on June 30th

(in thousands)

	1999	2000	2001	2002	2003	2004	2005
Net Revenues	\$ 3,005	3,287	3,457	3,469	3,411	4,087	4,565
Net Expenses	\$ 2,716	2,811	2,811	3,398	3,323	3,669	4,306
	\$ 289	476	646	71	88	418	259
Investment Acct	\$ 1,779	2,063	2,151	2,335	2,592	2,981	3,408

be required from all authors when they return their page proofs. If the information is not provided, the paper will be put on hold until the issue is resolved. Third, from now on, any author on a paper that incurs a delinquent invoice and who subsequently submits a new paper will be asked to resolve the delinquency issue before the new paper is processed. These new measures should eliminate the problem and ensure that the Society is handling its fiduciary responsibility.

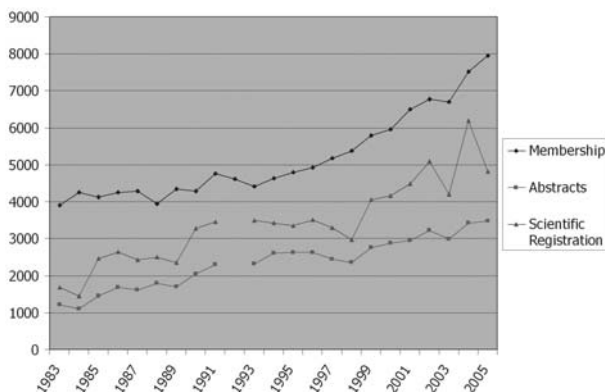
The Future

During the past year, the Society reflected on its 50 years of existence. As those of you who read the profiles of some of the founding members published in this newsletter know, the field of biophysics could not have developed as it did had it not been for the existence of the Biophysical Society. As the Society and field continue to grow, so do the services and activities the Society provides to and conducts on behalf of its members. Advocacy for basic re-search in general and biophysics in particular, outreach to the next generation of biophysicists, and better dissemination of biophysics across geographic borders and economic barriers all require financial resources and member involvement. The Society's growth and fiscal health relies on growth in membership, the Annual Meeting and the Biophysical Journal. The Society's dynamism relies on the continued and active participation of its members.

FYE 2005 Audit by Activity Centers

Centers	Amount
Annual Meeting	
Revenue	1,280,799
Expenses	1,042,152
Net	238,647
Biophysical Journal	
Revenue	2,005,811
Expenses	1,848,668
Net	157,143
Membership Services	
Revenue	1,114,279
Expenses	1,415,053
Net	-300,774
Reserve Income	
Revenue	163,964
Total Revenue	4,564,853
Total Expenses	4,305,873
Total Net Revenue	

Membership and Meetings Trends



Annual Meeting Symposia, Workshop, and Subgroup Schedule

Symposia

Sunday, March 4

8:15-10:15 AM

Symposium 1: Calcium Activated Switches

Madeline A. Shea, University of Iowa, Carver College of Medicine, Chair and Speaker.

David J. Weber, University of Maryland, Baltimore, School of Medicine.

Anthony Persechini, University of Missouri, Kansas City.

Stephen L. Mayo, California Institute of Technology.

Symposium 2: Biophysics and the Molecular Origins of Life

Gerald Joyce, The Scripps Research Institute, Chair and Speaker.

Robert Hazen, The Carnegie Institution of Washington.

Piet Herdewyn, Katholieke Universiteit Leuven, Belgium.

Jack Szostak, Harvard Medical School.

10:45 AM -12:45 PM

Symposium 3: Protein Biophysics In Living Cells

Tom Kerppola, University of Michigan, Chair and Speaker.

Tobias Meyer, Stanford University School of Medicine.

Patricia L. Clark, University of Notre Dame.

Catherine H. Berlot, Weis Center for Research, Geisinger Clinic.

Symposium 4: Membrane Transporters

H. Ronald Kaback, University of California, Los Angeles, Chair and Speaker.

J. Eric Gouaux, Columbia University.

Gary Rudnick, Yale University.

Shimon Schuldiner, The Hebrew University of Jerusalem, Israel.

4:00-6:00 PM

Symposium 5: Multiscale Phenomena in Biology

Benoit Roux, University of Chicago, Chair.

Thierry Emonet, University of Chicago.

David Chandler, University of California, Berkeley.

George Oster, University of California, Berkeley.

Qiang Cui, University of Wisconsin, Madison.

Symposium 6: Membrane Asymmetry and Trans-Membrane

(Flip-Flop) Motion

Philippe F. Devaux, Institute of Biological Physical Chemistry, Paris and

University Paris 7-Denis Diderot, Chair and Speaker.

Marjorie I. Longo, University of California, Davis.

Patrick Williamson, Amherst College.

Michael M. Kozlov, Tel-Aviv University, Israel.

Monday, March 5

8:15 -10:15 AM

Symposium 7: RNA: Protein Particles

David Draper, Johns Hopkins University, Chair and Speaker.

James R. Williamson, The Scripps Research Institute.

Leemor Joshua-Tor, Cold Spring

Harbor Laboratory.

Sandra Wolin, Yale University School of Medicine.

Symposium 8: Intracellular Calcium Dynamics: The Interplay of Experiment and Modeling

James Sneyd, University of Auckland,

New Zealand, Chair and Speaker

Erwin Neher, Max Planck Institute for Biophysical Chemistry, Gottingen, Germany.

Ernst Niggli, University of Bern, Switzerland.

Karel Svoboda, Howard Hughes Medical Institute, Janelia Farm Research Campus.

Michael J. Sanderson, University of

Massachusetts Medical School

10:45 AM-12:45 PM

Symposium 9: New and Notable (Speakers announced in February 2007.)

Symposium 10: Molecular Mechanisms of Cell Migration

Rick Horwitz, University of Virginia,

Chair and Speaker.

Martin Schwartz, University of Virginia.

Peter Deureotes, Johns Hopkins University.

Alex Mogilner, University of California, Davis.

4:00 -6:00 PM

Symposium 11: Traffic: Regulation of Membrane Traffic in the Secretory and Endocytic Pathways

Sergio Grinstein, Hospital for Sick Children, Toronto, Chair and Speaker.

Suzanne Pfeffer, Stanford University.

Henk Tabak, Utrecht University, The Netherlands.

Benjamin S. Glick, University of Chicago.

Symposium 12: RNA and Gene Regulation

Robert Batey, University of Colorado, Boulder, Chair and Speaker.

Wade Winkler, University of Texas Southwestern Medical Center.

Susan Gottesman, National Cancer Institute. Additional Speaker to be Announced.

Tuesday, March 6

8:15 -10:15 AM

Symposium 13: Lateral Membrane Organization and Lipid-Protein Interactions

Michael Edidin, Johns Hopkins University, Chair and Speaker.

Sarah L. Keller, University of Washington.

Ken Jacobson, University of North Carolina, Chapel Hill.

Richard Anderson, University of Texas Southwestern Medical Center.

Symposium 14: Modeling as a Tool in Biophysics

Robert Eisenberg, Rush University Medical Center and Argonne National Laboratory, Chair and Speaker.

H. Eugene Stanley, Boston University.

Fred Salsbury, Wake Forest University.

Zuzanna Siwy, University of California, Irvine.

10:45 AM-12:45 PM

Symposium 15: Awards Symposium (Speakers announced in fall 2006)

4:00-6:00 PM

Symposium 16: Nanomachines and Nanotechnologies

Wah Chiu, Baylor College of Medicine, Chair .

Hagan Bayley, Oxford University.

W.E. Moerner, Stanford University.

Michael P. Sheetz, Columbia University.

Tanja Kortemme, University of California, San Francisco.

Symposium 17: Structural Basis of Voltage Sensing in Ion Channels

Frederick J. Sigworth, Yale University, Chair.

Francisco Bezanilla, University of Chicago.

Roderick MacKinnon, Rockefeller University, HHMI.

Stephen H. White, University of California, Irvine

Ehud Y. Isacoff, University of California, Berkeley.

MARCH 3-7, 2007 BALTIMORE, MARYLAND

Wednesday, March 7

8:15-10:15 AM

Symposium 18: Vesicle Dynamics*Robert H. Chow*, University of Southern California, Chair.*Jurgen Klingauf*, Max Planck Institute for Biophysical Chemistry, Germany.*David Zenisek*, Yale University School of Medicine.*Robert Zorec*, University of Ljubljana, Slovenia.*Jonathan F. Ashmore*, University College, London.**Symposium 19: Modulation of Primary Sensory Function***Paul Fuchs*, Johns Hopkins University, Chair.*Mike Caterina*, Johns Hopkins University.*Nirupa Chaudhari*, University of Miami School of Medicine.*Fred Rieke*, University of Washington.*Elisabeth Glowatzki*, Johns Hopkins University.

10:45 AM -12:45 PM

Symposium 20: The Ribosome as a Molecular Machine*Peter B. Moore*, Yale University, Chair.*V. Ramakrishnan*, MRC Laboratory of Molecular Biology, Cambridge, United Kingdom.*Marina Rodnina*, University of Witten/Herdecke, Germany.*Gloria M. Culver*, Iowa State University.*Jamie Cate*, University of California, Berkeley.**Symposium 21: Myosin Motor Mechanism in Muscle***Malcolm Irving*, King's College London, Chair and Speaker.*Michael A. Geeves*, University of Kent.*Bernhard Brenner*, University of Hannover, Germany.*Vincenzo Lombardi*, University of Florence, Italy.**Workshops****Sunday, March 4**

7:30-9:30 PM

Workshop 1: Using Ion Channel Structures to Simulate their Function*Peter C. Jordan*, Brandeis University, Chair and Speaker.*Maria G. Kurnikova*, Carnegie Mellon University.*Susan L. Remppe*, Sandia National Laboratory.*Shin-Ho Chung*, Australia National University.*Mark P. Sansom*, Oxford University, United Kingdom.**Workshop 2: Fluorescence Fluctuation Spectroscopy***Elliot L. Elson*, Washington University School of Medicine, Chair and Speaker.*Watt W. Webb*, Cornell University.*Claus Seidel*, Heinrich-Heine University Duesseldorf, Germany.*Petra Schwille*, Dresden University of Technology, Germany.*Joachim Mueller*, University of Minnesota.**Workshop 3: New Technologies for Networks And Pathways***Douglas Sheeley*, National Institutes of Health, Chair.*Jef Boeke*, Johns Hopkins University.*John Carson*, University of Connecticut Health Center.*Alan Waggoner*, Carnegie Mellon University.*John Aitchison*, Institute for Systems Biology.*Jeffrey Smith*, The Burnham Institute for Medical Research.**Tuesday, March 6**

7:30-9:30 PM

Workshop 4: Protein Dynamics: Computational and Experimental Approaches*James Andrew McCammon*, University of California, San Diego, Chair.*Arthur G. Palmer III*, Columbia University.*Robert Callender*, Albert Einstein College of Medicine.*James Andrew McCammon*, University of California, San Diego.*Rebecca C. Wade*, EML Research, Germany.**Workshop 5: In vitro Reconstructions of Synaptic Vesicle Fusion and Exocytosis.***Axel T. Brunger*, Stanford University, Chair and Speaker.*James A. McNew*, Rice University.*James C. Weisshaar*, University of Wisconsin, Madison.*Thomas J. Melia*, Baylor College of Medicine.*Lucas K. Tamm*, University of Virginia Health Science Center.**Minisymposia**

One Minisymposium will be held each day, Sunday-Wednesday, running concurrently with platform sessions. Presentations will be chosen from submitted abstracts.

Biophysics of Gene Regulation*Alexander van Oudenaarden*, Massachusetts Institute of Technology and*Jose Vilar*, Memorial Sloan-Kettering Cancer Center, Co-Chairs.**Biological Pacemakers***Donald M. Bers*, Loyola University and*Steven A. Siegelbaum*, Columbia University,

Co-Chairs.

Advances in Ion Channel Structure*Declan Doyle*, Oxford University, United Kingdom, and*Youxing Jiang*, University of Texas Southwestern Medical Center, Co-chairs.**Calcium Signaling in Neurons***Helmut Koester*, University of Texas, Austin, and*Kerry Delaney*, University of Victoria, British Columbia, Canada, Co-Chairs.**Subgroup Programs**

All subgroup programs will be held on Saturday, March 3.

Bioenergetics*Marco Colombini*, University of Maryland, College Park, Subgroup Chair.**Morning Symposium: Structural Biology: Proteomics and Bioenergetics***James P. Allen*, Arizona State University and*Edward A. Berry*, Lawrence Berkeley National Laboratory, Session Co-Chairs.*Thomas Terwilliger*, Los Alamos National Laboratory.*Petra Fromme*, Arizona State University.*Leonid Sazanov*, Medical Research Council, Cambridge, United Kingdom.*Chang-an Yu*, Oklahoma State University.*Melvin Okamura*, University of California San Diego.**Afternoon Symposium: The Outer Limits of Bioenergetics:****The Mitochondrial Outer Membrane.***Marco Colombini*, University of Maryland, Speaker and*Carmen Mannella*, Wadsworth Center, New York State Department of Health,

Session Co-Chairs.

Thomas Malia and Gerhardt Wagner, Harvard University.*Robert Jensen*, Johns Hopkins University School of Medicine.*Gyorgy Hajnoczky*, Thomas Jefferson University.**Biological Fluorescence***Ari Gafni*, University of Michigan, Subgroup Chair.**Exocytosis/Endocytosis***Robert Chow*, University of Southern California, Subgroup Chair.

Intrinsically Disordered Proteins

A. Keith Dunker, Indiana University, Interim Subgroup Chair.
Vladimir Uversky, Indiana University School of Medicine, and
Richard Kriwacki, Saint Jude Children's Research Hospital, Session Co-Chairs.

Plenary Lecture I: Protein Intrinsic Disorder, Cell Signaling, and Alternative Splicing.

Keith Dunker, Indiana University School of Medicine.
Gary Pielak, University of North Carolina.
George Rose, Johns Hopkins University.
Peter Tompa, Hungarian Academy of Sciences, Budapest.

Plenary lecture II : Intrinsically Disordered Proteins: Function, Folding, and Flexibility.

Peter Wright, The Scripps Research Institute.
Sonia Longhi, Centre National De La Recherche Scientifique, Marseille, France.
Jan Hob, Johns Hopkins University School of Medicine.
Richard Kriwacki, Saint Jude Children's Research Hospital.

Membrane Biophysics

Nael A. McCarty, Georgia Institute of Technology, Subgroup Chair.

Reducing Reductionist Thinking: Biophysical Approaches to the Study of Membrane Protein Assemblies.

Inga Schmidt-Krey, Georgia Institute of Technology.
Jianpeng Ma, Baylor College of Medicine.
Joseph Falke, University of Colorado.
Michél Bouvier, University of Montreal.
William A. Coetzee, New York University School of Medicine.
Kurt Beam, Colorado State University.

Membrane Structure & Assembly

Frances Separovic, University of Melbourne, Australia, Subgroup Chair.

Breaking the Barrier with Antimicrobial Peptides

Michael A Zasloff, Georgetown University.
Maria Luisa Mangoni, La Sapienza University of Rome, Italy.
Richard M. Epand, McMaster University, Canada.
Yechiel Shai, Weizmann Institute, Israel.
 Mark Sansom, University of Oxford, United Kingdom.
Huey Huang, Rice University.
 Ayyalusamy Ramamoorthy, University of Michigan.
Anne Ulrich, University of Karlsruhe, Germany.

Molecular Biophysics

Peter Hinterdorfer, University of Linz, Austria, Subgroup Chair and Speaker.

Single Molecular Recognition and Unfolding Forces

Evan Evans, University of British Columbia.
Carlos Bustamante, University of California, Berkeley.
Ziv Reich, Weizmann Institute of Science, Rehovot, Israel.
Matthias Rief, Munich University of Technology, Germany.
Daniel Müller, Dresden University of Technology, Germany.
Vincent Moy, University of Miami.

Motility

Josh E. Baker, University of Nevada, and
Enrique de la Cruz, Yale University, Subgroup Co-Chairs.

Permeation Transport

Benoit Roux, Cornell University, Subgroup Chair.

New in Baltimore: Minisymposia

The Annual Meeting in Baltimore will feature a New Opportunity for Attendees to Present their Work: The Minisymposium. When submitting abstracts, authors will have the option of choosing to be considered for minisymposium presentations in one of the following topics:

Biophysics of Gene Regulation
Biological Pacemakers
Advances in Ion Channel Structure
Calcium Signaling in Neurons

One minisymposium will be held each day, during the second morning session, running concurrently with symposia and platforms. Each minisymposium will feature four speakers. Abstracts not selected for minisymposia will be scheduled in the appropriate poster sessions.

MARCH 3-7, 2007 BALTIMORE, MARYLAND

Camden Yards Site of 2007 Annual Meeting Social



The 2007 Annual Meeting social will be held in the unique and historical setting of Oriole Park at Camden Yards. The ballpark is a distinctive blend of tradition and state of the art design. Though its image and many of its most unusual features grew from the baseball parks built in the early 20th century, it seats 48,876 and took nearly three years and \$110 million to complete. Visitors will find many features similar to those big league ballparks built in the early 1900s, including steel trusses, an arched brick facade, a sunroof over the upper deck, an asymmetrical playing field, and natural grass turf. The site, now called Camden Yards, was once the railroad center of Baltimore and is just two blocks from the birthplace of baseball's most legendary hero, George Herman "Babe" Ruth. The family residence was located at Conway Street and Little Poca, now centerfield at Oriole Park.

Register for the Annual Meeting to join your colleagues and make new friends on Monday, March 5, 2007, from 9:30pm-12:00 midnight in an evening of music, food, and fun in the club level of Oriole Park at Camden Yards!

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 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, constructions, 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, 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.

2006 Satellite Meeting Summary

By *Ian Herzberg*

The sixth annual Drug Discovery for Ion Channels satellite meeting, co-sponsored by Molecular Devices and ALA Scientific Instruments, was held at the Biophysical Society meeting in Salt Lake City in February 2006. Despite the snowstorm that grounded incoming flights and eliminated the talk of one speaker, the meeting was remarkably well attended. As in past meetings, Drug Discovery for Ion Channels VI continued the trend of expanding the range of included topics in this rapidly expanding and evolving field. Speakers presented results obtained with the most sophisticated instruments for high-throughput ion channel screening, demonstrating a variety of approaches for acquiring patch clamp quality data from ion channels expressed in mammalian cell lines that preserve the fidelity and high information content of the traditional patch clamp assay and allow sufficient throughput for practical use in secondary screening procedures. Several speakers also discussed results obtained with automated two electrode voltage clamp and presented instruments with novel technologies designed to measure cellular volume and to accelerate and automate solution delivery to multiple experimental preparations. Also featured were talks discussing the discovery of ion channel inhibitors, without the use of channel based screening assays, and a provocative interpretation of the physical chemistry of ion channel/drug interactions. The keynote speaker, *Terrance Snutch*, is one of the few individuals who has participated in the entire ion channel drug discovery pipeline, from the cloning of targets to the generation of lead compounds. His talk provided an excellent overview of the state of the field and its future potential.

Subgroups

Intrinsically Disordered Proteins

By *Richard Kriwacki*

In the fall of 2005 we collected more than 180 signatures on a petition to form this new subgroup. The Biophysical Society kindly hosted an organizational meeting that was held in Salt Lake City, and more than 35 members attended this meeting. At that meeting, Keith Dunker was asked to be interim chair and Richard Kriwacki and Vladimir Uversky were asked to develop a program for the first meeting, which will occur on March 3, 2007. A timely and interesting program has been developed as described in the May/June Newsletter. For this subgroup to succeed, we need active participation. Please sign up for this subgroup. The tentative bylaws, which will be approved at the first official business meeting, list a Chairman, a Chairman-elect, two Program Co-Chairs, and three Council members as the governing body of the Subgroup. Note that the Chairman-elect will serve one year, followed by one year as Chairman. The Program Chairs serve one-year terms. Finally, the Council members are slated to serve staggered three-year terms. Please contact us to stand for election for any of these positions or to nominate appropriate individuals to stand for election.

Public Affairs

House Competitiveness Package Passes; Includes Bridging Program

On June 7, 2006, H.R. 5356, the Research for Competitiveness Act of 2006, passed unanimously in a vote of the House Science Committee. H.R. 5356 includes a provision creating a

Bridging the Sciences program at the National Science Foundation. The program would be run out of the director's office.

The bill has been sent to the floor for consideration by the full House. It is expected that the floor vote will take place in September.

The inclusion of a program to foster cross-disciplinary research has been pursued by the Bridging the Sciences Coalition, formed by the Biophysical Society in 2003.

The purpose of the Coalition is to increase the federal funding available for scientific research that takes place at the interface of the physical, mathematical, and computational sciences and the biological sciences. The coalition currently counts thirteen scientific societies, one company, and a pharmaceutical trade group as members and represents over 260,000 scientists.

The Coalition has sent a letter of thanks to *Chairman Boehlert* for including this provision in his bill.

Other provisions in H.R. 5356 authorize programs at the National Science Foundation (NSF) and the Department of Energy's (DOE) Office of Science to provide grants to researchers just starting their careers to conduct high-risk, high-return research at the cutting edge of new scientific fields. Some of the grants would go to researchers to perform innovative work for which the government would match funds provided by businesses. The bill also expands an NSF program that helps universities acquire high-tech equipment that is shared by researchers and students from various fields.

H.R. 5358, Science and Mathematics Education for Competitiveness Act also passed the House Committee. The programs in the bill will develop and provide teacher training, attract math and science majors to teaching, improve undergraduate math, science, and engineering courses, and expand interdisci-

plinary graduate work. H.R. 5358 builds upon and expands existing programs at NSF.

Together, H.R. 5358 and H.R. 5356 comprise the Science Committee's competitiveness package, which builds upon the President's American Competitiveness Initiative and implements key recommendations from several recent reports on U.S. economic competitiveness, including the National Academy of Sciences' report, *Rising Above the Gathering Storm*.

BPS Questions Need for Congress to Mandate Public Access

The Biophysical Society signed letters sent to *Senators Cornyn* (R-TX), *Lieberman* (D-CT), and *Collins* (R-ME) questioning the need for legislative intervention in the matter of public access to scientific literature. The letters were written in response to the introduction S.2695, the "Federal Research Public Access Act of 2006."

S.2695 would mandate that all NIH-funded manuscripts be publicly released six months after publication. The current NIH policy calls for authors to voluntarily make their manuscripts available on PubMed Central, a free online database of articles, twelve months after publication. The Biophysical Society currently makes unedited manuscripts available to society members immediately, and edited manuscripts available to the public after twelve months.

As of press time, it was unclear whether *Senator Collins* would schedule time for her committee to consider S.2695 in September.

BPS Asks Senators to Fund NSF at President's Request; Don't Ignore Biology

The Biophysical Society signed a letter sent to *Chairman Cochran* (R-MS) and *Ranking Member Byrd* (D-WV) of the Senate Appropriations Committee, asking them to provide \$6.02 billion to the National Science Foundation for 2007. This is the amount the President requested and the House Appropriations Committee has approved.

The letter, sent by the Biological & Ecological Sciences Coalition (BESC), expressed particular support for the NSF's Biological Sciences Directorate, which would receive \$607.8 million, a 5.4 percent increase, under the President's plan. Congressional members as well as the general public often forget that NSF funds 65% of fundamental biological research, areas not covered by the National Institutes of Health.

The letter also encouraged the Senators to support all the NSF's programs, including social and behavioral sciences research and formal and informal science education programs. Social Science research was under attack during a Senate hearing on NSF funding in May. *Senators Hutchison* (R-TX), and *Sununu* (R-NH) both indicated that they would rather increased funding for NSF go to the physical sciences than to other areas of research. After the community responded through meetings and letters such as the BESC letter, *Senator Hutchison*, who chairs the Appropriations Subcommittee responsible for funding NSF, backed off her previous comments.

While the 2007 budget for NSF has not yet been agreed upon by the Senate appropriations committee and the full House have passed their respective bills. The Senate has approved \$5.99 billion a 7.4% increase in funding for NSF over

the agency's 2006 budget. The House bill provides \$6.02 billion, a 7.9% increase, consistent with the amount requested by the President for 2007.

Roundup:

House: Representatives *Randy Neugebauer* (R-TX) and *Mario Diaz-Balart* (R-FL) were recently appointed to the House Science Committee by House Speaker *J. Dennis Hastert* (R-IL). Neugebauer previously served on the Committee during the 108th Congress. Neugebauer will serve on the Subcommittee on Energy and Diaz-Balart on the Subcommittees on Space and aeronautics, and Environment, Technology, and Standards.

DOE: On May 26th, the U.S. Senate confirmed by unanimous consent the nomination of *Raymond Orbach* as the Under Secretary for the Office of Science, a new position created in the Energy Policy Act of 2005. Energy Secretary *Samuel W. Bodman* administered the Oath of Office to *Raymond L. Orbach* on June 1st.

NIH: A new section of the NIH Web site highlights research advances made possible with NIH funding. The section features fact sheets on cross-cutting as well as disease-specific topics, and a number of additional fact sheets will be added to the section soon. These fact sheets can be a useful resource when making the case for more funding in Congress. The fact sheets can be found at <http://www.nih.gov/about/researchresultsforthepublic/index.htm>.

Commerce: The Department of Commerce has announced they will form a committee of experts to reconsider their proposal to highly restrict the access of foreign nationals to laboratory equipment and other technologies. Last year, the higher education and scientific community, raised strong objections to a proposed regulation from the Commerce

How to Advance in a Leadership Position

By Kathy Giangiacomo, CPOW Chair

Mention leadership to anyone, and what usually comes to mind are people in powerful positions, the President of United States, corporate executives, Alan Greenspan. Positions that are untenable for most. But leadership is much more accessible and commonplace than these images suggest. This is what attendees learned at the CPOW-sponsored panel discussion on *How to Advance in a Leadership Position*, held at the 50th Annual Biophysical Society Meeting in Salt Lake City.

The panelists, experienced leaders in the Society, academia and industry were: *Jill Trewhella*, distinguished scientist from the University of Sydney and former director of the Biosciences Division at Los Alamos National Laboratory (moderator); *Ken Dill*, former Society President and Chair of the Public Affairs Committee; *Kathleen Matthews*, Dean of the Weiss School of Natural Sciences at Rice University; and *Ray Salemm*, CEO of the Linguagen Corporation and founder and former president of 3-D-Pharmaceuticals. Below, is an expanded report on insights from the panelists and discussion with the audience.

What is required. Leadership is about helping people achieve shared goals. Anyone can be a leader if they have a passion for something and want to achieve their goals. Being a leader requires willingness to help and doing your homework before the meeting. If you have a vision for how things could be improved in your society or institution and are willing to do the work, then you can be a leader.

How to get started. The first step to becoming a leader is to know what you like to do, and decide what is important to you. Understand your goals and decide whether you are willing to help. The easiest way to find out if you like leadership is to start out small. Try volunteering to do small leadership tasks in the Society or your institution to see if you like it. If you are starting out in a new job and want to get involved, let your employer know that you are interested in helping with some task important to the group, and that you are willing to do the work. If you are just starting out in any leadership role, it helps if you understand your own style and get mentorship. This can be as easy as shadowing leaders you know and admire. Observe successful leaders around you and decide on a style that suits you. Often these leaders will be happy to share advice and help on how to become a leader.

Leadership skills. While anyone can be a leader, certain skills can be helpful when leading a group of people. It is important to learn how to read a group. This helps in knowing the group you are serving and in negotiating for the things your group needs. Learn how to find allies that can help you achieve your goals. Don't be afraid to innovate to achieve the goals of the group. Identify those you can trust for advice. Every leader needs a confidant, someone he/she can trust as a sounding board for ideas. Successful leaders also need to learn how to listen "between the lines and around the edges." It is important to know when to trust what someone says, even if it is not what you want to hear. These people skills help leaders better understand issues and needs of the group.

Dos and Don'ts of leadership.

1. Do know what you need to get the job done, and do ask for it. Don't shortchange yourself. Make a good case for what you need.
2. Do stay calm no matter how difficult the situation—leaders must provide calm in the storm.
3. Do take time to reflect on what makes you happy.
4. Do have well grounded personal ethics.
5. Don't take on a leadership position if your goals are not aligned with the institution, or if you are not sure you can commit.
6. Do learn how to say no without making enemies—say it with gentleness and offer something else as an alternative.
7. Do engage your constituency—know the needs and goals of your constituents and help facilitate those goals. Social gatherings such as wine and cheese parties can be a good way to get to know your constituents and provide a sense of community.
8. Do fix problems fast.

How to inspire people to achieve shared goals. Successful leaders inspire ordinary people to do extraordinary things. Passion and vision inspire others to participate in achieving shared goals. A strong set of competencies and personal ethics will inspire the group to trust your vision. To achieve the goals of the group you need to be able to find the right person for the job. When recruiting new workers, written references do not reveal everything you need to know about someone. Verbal references can be more helpful in deciding whether a worker can meet the needs of your group. It is very important to know what you need and want done for a particular job or task. When hiring or recruiting workers, it is critical that you clearly communicate

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Profile (Continued from page 2.)

Mannella explains, "you can you take them apart in a controlled way and understand the compartmentalization of the enzymes, the mechanical properties of the membranes, and what you can learn by how changes in shape can be affecting the metabolic activity." Mitochondria continue to be his main focus of research to this day.

As his research progressed, Mannella was awarded a National Cancer Institute Postdoctoral Fellowship at Roswell Park Cancer Institute. While there, he worked closely with Don Parsons on X-ray scattering from membranes. After two years, he left the Roswell Park lab and joined Lambowitz at St. Louis University Medical School as a postdoc and Research Assistant Professor in the Edward A. Doisy Department of Biochemistry. Lambowitz, currently Director of the Institute for Cellular and Molecular Biology at the University of Texas at Austin, explains that "Carmen did seminal work on RNA splicing and mitochondrial DNA rearrangements, which were key to the success of the lab."

While at St. Louis University, Parsons moved his lab to the Wadsworth Center in Albany, New York, and invited Manella to join him. Mannella accepted the invitation and joined The Wadsworth Center, which is an arm of the New York State Health Department. He enjoys the lively environment at Wadsworth, which mixes public health issues with lab work, focusing on basic fundamental biological and biophysical phenomena. There, Mannella also met colleague Kathleen Kinnally, currently a Professor of Basic Sciences at NYU. Kinnally credits Mannella with bringing

"long-term contributions to the development of new imaging techniques," contributions that are well recognized.

"If you can isolate the mitochondria, you can you take them apart in a controlled way and understand the compartmentalization of the enzymes, the mechanical properties of the membranes, and what you can learn by how changes in shape can be affecting the

She adds that it is his personality, however, that makes him a good director. "His honesty and integrity make you trust him as a man. His intelligence, focus and vision make you trust his judgment. Thus, he has been very successful as a mentor and as a manager," she explains.

Mannella's enthusiasm for science is contagious. He is amazed by the details of cellular structure never before seen, images that modern technology has allowed. "What we're seeing now is revolutionizing how we think of the cell," Carmen states. Currently he is working on applications of cryo electron tomography of frozen hydrated specimens. "I think electron microscopy is at the stage now where the founders wanted it to be fifty or sixty years ago," he states. He also thinks that as science is moving at incredibly high speeds and the technical aspects become increasingly complex, keeping track of everything is nearly impossible. He admits that keeping up with the literature in his own field is sometimes difficult.

He imparts his love of research to others through his teaching and mentoring as well. Friend and colleague Henry

Tedeschi, currently Professor Emeritus in Biological Sciences at SUNY Albany, notes that Man-nella "influences students and fellow researchers with novel ideas and challenges." Tedeschi adds that Man-nella "taught the use of logical approaches in science without preconceived notions

and communicated a strict sense of ethics." Mannella admits to using Walter Bonner as a guide for his teaching style, trying to be fair and understanding. Lambowitz notes that Mannella has succeeded in that, "Carmen is exceptionally fair, and has exceptionally good common sense." Lambowitz adds that not only are Mannella's scientific skills valuable to his students, but "his learn-by-doing philosophy for teaching gives them independence."

In 1989, Mannella organized a summer internship program in biophysics. "It's something I wanted to do because I know it can have an impact on career decisions," he explains. Students from all over the country take part in the program, which continues today under the

He warns that these talks need to be done responsibly if scientists want to continue to have the freedom to study without constraints put on them by the government.

leadership of Randy Morse, faculty member, and Caitlin Reid, Assistant Chair of the Graduate Program in Biomedical Sciences at SUNY, Albany.

Mannella has been a member of the Biophysical Society since 1983. He

(Continued on page 14.)

How to Advance In a Leadership Position (Continued from page 12.)

your expectations so that the workers are 100% sure about what is expected. This clear communication is critical to successfully leading your group. If someone is not meeting expectations, let them know immediately. Be sure to send them the message in a way that allows them to change their behavior in a positive way. The success of your leadership depends on how well you motivate the people around you. To do this, you need to learn how to recognize the personalities and abilities of your group. Ultimately you need to empower people so they can pursue the vision you have inspired in them.

Profile (Continued from page 13.)

credits the Annual Meeting as his entry into the Society. "The annual meetings of the Society were the one place where the different aspects of biophysics would come together every year," he says, "I couldn't think of not going to the meeting." Mannella has served as treasurer of the Bioenergetics Subgroup and then as subgroup Chair. He is co-chairing a symposium on the outer mitochondrial membrane at the 2007 Annual Meeting in Baltimore.

Mannella is married to Linda, an interior designer, whose input he credits with providing him with research ideas. They have two children, Marc, a teacher, and Susan, who is currently pursuing her degree. In addition to science, Mannella has a deep interest in philosophy. "Science addresses reality in a way that you absolutely have to use in order to understand physical reality," he explains, "while philosophy is dealing with things in a way that you can't touch or in a way that you can't dissect through approaches to understanding." He is also a history buff, especially the

history of science. Outreach at Wadsworth Center keeps Carman busy as well. He organizes lectures on science given to the general public to help them understand today's research.

Mannella has created his own style of teaching and his own system of beliefs about where science should lead us. "I've turned a PhD in biophysics into a career that really spans many different aspects of biomedical research and public health service."

As for the future, Mannella forecasts that "we're going to be able to really understand how the molecular machinery of the cell operates," and that serious discussions about genetic engineering of the species will become more prevalent. He warns that these talks need to be done responsibly, and that scientists ought not say things publicly for their shock value. "We are part of the ongoing discourse about stem cells and genetic engineering, but we need to learn to listen better to the opinions from other sectors of society. The failure of initiatives for improved science funding may reflect a lack of trust in scientists that only we can restore."

Public Affairs

(Continued from page 11.)

Department regarding deemed exports. The policy was purported to try to control access of foreign students and scientists to sensitive technologies, but would have forced universities and research institutions to obtain licenses for thousands of students and researchers working on campus.



Member in the News

Ariele Warshel of the University of South Carolina and member since 1982 received the 2006 President's Award in Computational Biology of The International Society of Quantum Biology and Pharmacology. The award is presented every two years to an individual who has made a significant contribution to the field of computational chemistry and biology.



GORDON RESEARCH CONFERENCES
FUNDING AVAILABLE!

GRC is pleased to announce the availability of
Carl Storm Underrepresented Minority Fellowships
to support the participation of minority students and scientists at Gordon Research Conferences in 2006.

Awards of \$600 will be made available to African American, Hispanic American and Native American graduate students, post docs, faculty, and research scientists who will be attending a GRC for the first time in 2006. Applicants must be U.S. citizens or have permanent resident status and be working at a U.S. institution.

Anyone interested in receiving support from this fellowship program must also submit an application to attend the Gordon Conference of interest.

Apply now! Support is limited and awarded on a first-come, first-served basis.

For more information, please visit our web site (www.grc.org) or email Holly Tobin (htobin@grc.org).

GRC gratefully acknowledges the Alfred P. Sloan Foundation for supporting the GRC Diversity Initiative.

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Biophysical Society Volunteer Biographical Sketch

The Biophysical Society Committees are essential to the implementation of the Society's stated purpose to encourage development and dissemination of knowledge in biophysics. Committee members and chairs in all but two of the Society's fourteen committees serve three-year terms, renewable once. All new and continuing committee appointments are approved by Council when it meets each year at the Annual Meeting. Committee members must be current Society members at the time of their appointment. Society members who wish to be considered for a committee appointment are encouraged to submit this form.

Volunteer forms received prior to November 15, 2006, will be considered for appointment in 2007.

I wish to be considered for (indicate office): _____

I am interested in serving on the following committee(s): _____

Full name: _____

Highest degree: _____ Year received: _____

Discipline/Field: _____

Institution where degree was received: _____

Present title/department/institution: _____

Research interests and experience: _____

Previous Biophysical Society experience (Officer, Executive Board, Council, Editor, Committee Chair or member, Subgroup Chair, etc.):

My reason for running for this office or serving on this committee is: _____

Signature: _____ Date: _____

Mail or fax completed form to:
 Secretary
 Biophysical Society
 9650 Rockville Pike, Bethesda, MD 20814-3998
 301-634-7133

Upcoming Events*

September 8-10, 2006

EuroStemCell International Conference

Advances in Stem Cell Research

Lausanne, Switzerland

http://www.eurostemcell.org/News/Lausanne_2006.htm

October 9-10, 2006

International Society of Drug Delivery Sciences & Technology:

Skin and Formulation 2nd Symposium

Versailles, France

<http://www.apgi.org/en/ensommaire.ht>

November 5 - 8, 2006

4th International Congress on Electron Tomography

San Diego, California

<http://4icet.org>

November 12 - 15, 2006

American Heart Association Scientific Sessions 2006

Chicago, Illinois

<http://scientificsessions.americanheart.org>

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



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