

NEWSLETT

VOLUME 28,

Werb Becomes President

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In Memory of **Hans Ris**

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New: InCytes from MBC

Page 48

ASCB Annual Meeting Held in New Washington Center







The Keynote Symposium featuring Peter Kim and Sir Paul Nurse



Meeting participants in the Exhibit

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Classified

Council Approves New Post-Docs Awards, Meets with NIH Official, Improves Financial Oversight

The ASCB Council met last month to review the Society's programs and publications, to consider finances and a budget for the fiscal year starting April 1, to discuss policy and to finance new initiatives.

Presiding at the two-day meeting was Harvey Lodish of the Whitehead Institute and MIT, whose term as President concluded at year-end; he is succeeded by Zena Werb of UCSF. Other Councilors,

See Council/Committee Reports, page 4

Meeting Ends With a Bang

Attendees of the 44th **ASCB** Annual Meeting enjoyed the new 2.3 million square foot Washington Convention Center with its natural light and original art by local artists. The destruction of the old convention center, located just a block away from the new





center, was delayed until after the ASCB meeting, so that members would not have to be evacuated from adjacent hotels. ASCB members recall the old center from meetings there in 2001, 1999, 1997, 1995 and 1986.

44th ASCB **Annual Meeting Statistics**

The 44th ASCB Annual Meeting boasted record exhibit booths in the new Washington Convention Center.

Лembers	2,948
Nonmembers	843
Students	1,534
Guests of Exhibitors	491

Total Scientific Participants	5816
Exhibitors	2,229
Press	76
Total Registration	8,121
Companies Exhibiting	350

Exhibit Booths520

The American Society for Cell Biology

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PRESIDENT'S Column

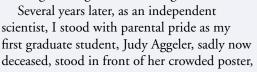


Why Senior Scientists Should Go To The Annual Meeting

As I listened to graduate students and post-doctoral fellows at the ASCB Annual Meeting recount the excitement of discussing their posters and their ideas with famous cell biologists like Joan Brugge, Rick Horwitz and Dick McIntosh,

I recalled my own first ASCB meetings several decades ago.

My first ASCB meeting as a graduate student was unforgettable. It set me on the course of events that has culminated in the supreme honor of being elected President of the ASCB. It was my first time in warm, sunny California and made me vow to return. But the indelible mark was made by meeting cell biology luminaries like Marilyn Farquhar, Joe Gall, Alex Novikoff and Keith Porter for the first time. I found the meeting exciting and welcoming.



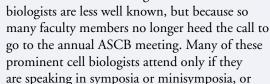
mounted with a hammer and nails on those brown carpet covered poster boards that the Society used to own, explaining her work to George Palade and others as if they were having an intimate one-on-one conversation. After that she was sold on cell biology for life.

That scenario has been repeated countless times for several generations, and I am now the cell biologist listening to the students and post-doctoral fellows as they

present their ideas and work. Many of the cell biologists that influenced me are retired or gone. My fellow students are now senior scientists, as are their scientific children (and grandchildren). Talking to my friends at the ASCB meeting, I found that they have similar stories of how this unique collegiality and family inclusion aspect of the ASCB meeting was seminal in starting them on their way to successful careers.

Cell biology has changed in the intervening years. When I started, cell biology was largely

light and electron microscopy and cell fractionation. Immunocytochemistry and fluorescent microscopes were virtually unheard of, and recombinant DNA had not yet been invented. But the ASCB meeting has also changed, as cell biology became the dominant biological discipline. Mostly, the meeting has gotten bigger, from a few hundred posters to many thousands. But as I look around. I see proportionally fewer senior cell biologists. It is not because the newer generations of cell



when they are members of ASCB Council, committees or editorial boards. I hope we can return to a time not so long ago when every past president and major honoree of the Society who was physically able attended the annual meetings. Sure, it is tempting to skip the big meeting when there are so many other meetings. Some meetings are smaller, like the ASCB used to be; others are just as big, but only the ASCB has that sense of community for our

particular craft. It is worth nurturing.

Why should senior members of the ASCB attend the Annual Meeting? We all benefit from ASCB's advocacy for research funding and science visibility. Attending the Annual Meeting supports these activities, both in contributing to



Zena Werb

It is incumbent upon us, the leadership in the field of cell biology, whether we went to ASCB meetings in our youth or not, to be there for today's trainees.

the spirit of the ASCB community, and because the presence of senior scientists at the meeting keeps exhibitors coming back to the meeting and our exhibits are one of our greatest sources of income. The feeling that it is important for us to continue to show the flag at the ASCB is not driven by a desire to dwell in the past. Rather, it is to look to the future. We must also take responsibility for the next generation of cell biologists. It is incumbent upon us, the leadership in the field of cell biology, whether we went to ASCB meetings in our youth or not, to be there for today's trainees. The ASCB Council met with students and post-docs over the past two years. These trainees told us clearly that the Annual Meeting provides a forum to meet their role models, as well as to showcase their science. The popular view is if these youthful cell biologists show their science, we will come. We must all attend to keep faith with those who will be our legacy, to encourage them and inspire them. We must also encourage our trainees to volunteer abstracts for the Annual Meeting, and we need to go along with them and introduce them to their heroes.

As cell biology evolves, it has become the universal language for disciplines like microbial

pathogenesis, cancer biology, diabetes, neuroscience, computational biology and systems biology. The ASCB can also lead by encouraging scientists in these other disciplines to see the ASCB as their home. The best way for the ASCB to promote these new areas of cell biology is to have its leaders participate in the most important of its activities, attending and participating in the Annual Meeting. In this way, the leaders of the new cell biology

Meeting. In this way, the leaders of the new cell biology guarantee its future by being role models, and thereby infuse its youth by example with the excitement of the field and its good practices.

Comments are welcome and should be sent to president@ascb.org.

As cell biology evolves, it has become the universal language for disciplines like microbial pathogenesis, cancer biology, diabetes, neuroscience, computational biology and systems biology.

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Sunday June 19 to Wednesday June 22, 2005, Glasgow, Scotland

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Genome Stability: A Ashworth (UK), A Clarke (UK), I Hickson (UK), S West (UK) Cell Cycle: M Barbacid (ES), J Bartek (DK), N Dyson (US), R Laskey (UK) Oncogenesis: H Clevers (NL), W Muller (CA), A Trumpp (CH), D Tuveson (US) Tumour Suppression: R Agami (NL), P Pandolfi (US), N Tapon (UK), E Wagner (AT) Invasion and Metastasis: J Brugge (US), M Olson (UK), E Sahai (US), T Xu, (US)

Aims of the conference

The focus of this conference is on the use of biological models of human cancer that provide powerful insights into the causes of cancer and enable the discovery and testing of new cancer therapeutics.

Short talks will be granted to a select number of abstracts. Some financial assistance will be available to presenters of short talks through sponsorship from the Association for International Cancer Research. For additional information, registration forms and details for poster presentation please contact:

Tricia Wheeler, Conference Co-ordinator, Beatson Institute for Cancer Research, Garscube Estate, Switchback Road, Bearsden, Glasgow G61 1BD, UK Tel: (24hrs) +44 (0)141 942 0855. Fax: +44 (0) 141 330 6426.

e-mail: t.wheeler@beatson.gla.ac.uk.
Website, on-line registration and abstract submission: http://www.beatson.gla.ac.uk/conf

Deadline for registration and abstract submission: April 1, 2005







Council/Committee Reports, continued from page 1

Councilors-elect and Executive Committee members present were Mary Beckerle, Helen Blau, Kerry Bloom, Tony Bretscher, Juan Bonifacino, David Burgess, Pietro De Camilli, Peter Devreotes, Larry Goldstein, Linda Hicke, Rick Horwitz, Kathryn Howell, Caroline Kane, Suzanne Pfeffer, Daphne Preuss, Jean Schwarzbauer, Janet Shaw, Peter Walter and Gary Ward.

Council reviewed the report of the Finance Committee which had received the independent audit for the fiscal year ending March 31, 2004. The ASCB enjoyed an extraordinary year,

> with revenues exceeding expenses significantly (see November, 2004 ASCB Newsletter for detail.) This was due principally to income and gains from the Society's investments, and to Molecular Biology of the Cell, revenues for which considerably exceeded budget.

On the Spring 2005 ballot, ASCB members will be asked to endorse changing the name of the ASCB Finance Committee to the ASCB Finance and Audit Committee, to make more explicit the responsibilities of the Committee, and to expand membership to include outside financial expertise. These changes are intended to conform with the Federal Sarbanes-Oxley Act of 2002. Although the Act only applies to publicly-traded (for-profit) companies, the Committee and Council felt that sound and prudent fiscal oversight suggests that some of the provisions of the Act should be voluntarily adopted by the ASCB.

Lodish reported on progress of the campaign to raise money to fund the new ASCB Web-based Image and Video Library: over \$100,000 had been pledged for the project (subsequently new commitments have brought the amount to nearly \$200,000.) On the strength of this initial funding, Council allocated funds to hire a professional curator for the Library (see page 34) and to provide for the first year of operating expenses. The Council also voted to fund post-doctoral Annual Meeting travel awards, and to finance a new ASCB Cell Film Contest proposed by the Public Information Committee (see page 10.)

National Institute of General Medical Sciences (NIGMS) Director Jeremy Berg attended part of the meeting of Council to discuss recent developments at the NIH. There was considerable discussion of the NIH "Pioneer Awards", worth \$2.5 million over five years for each winner; the ASCB had been critical of the process that resulted in all nine Awards going to men in the first year (see November 2004 ASCB Newsletter). Berg explained how the Awards were solicited, reviewed and selected, and announced that responsibility for organizing selection in the future had been transferred from the NIH Office of the Director to the NIGMS. Berg asked for the ASCB's recommendations for excellent evaluators who are representative of the breadth of the scientific community.

The Council also discussed with Berg progress on the NIH proposal to provide public access to the scientific literature, which the ASCB had endorsed (see November 2004 ASCB Newsletter), the NIH "Roadmap" and the budget outlook for FY2005 and beyond.

CBE Moves toward Ambitious

Malcolm Campbell and Sarah Elgin, Coeditorsin-Chief of Cell Biology Education, reported on progress and changes for the journal. Guidelines for electronic resources were revised, and a policy on prior publication was implemented. The annual printed copy of CBE will now be highlights of the year (replacing the Winter issue). A list of new Editorial Board nominees was presented, and making the copyright of CBE consistent with an "Open Access" philosophy was discussed. The coeditors reported that the ASCB Council is strongly supportive of the journal; it encouraged the CBE Editorial Board to re-evaluate its suggestions regarding Open Access copyright to make sure that the rights of the Society and the authors are protected.

ASCB Publications Director Ray Everngam reviewed a series of significant revisions to the online manuscript submission system that will be implemented this month.

Much of the meeting was dedicated to a discussion of strategies to increase and enhance manuscript submissions. It was suggested that Editorial Board members be asked to recruit four submissions to the journal each year. The Board considered developing special issues on topics in life sciences education. The coeditors will be working closely with volunteers from





Student volunteer Rachel Marincola serves customers at the ASCB booth

Annual Meeting Lost & Found

There are a few unclaimed items from the Annual Meeting. Please contact Trina Armstrong, Meeting Manager, at 301-347-9300, for more information.



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the Editorial Board and the ASCB staff to determine an effective strategy for producing special issues of the journal.

The Board expressed the belief that its most important role is to assist authors in preparing manuscripts suitable for publication

in *CBE*. Considerable discussion occurred on assessment techniques for teaching methods. The Editorial Board will focus on coaching potential authors on these techniques.



Sandy Schmid and 2004 ASCB President Harvey

The ASCB sponsored wireless Internet service for attendees

Education Committee Appoints New Members

Education Committee

Committee Chair Ken Miller announced the appointment of four new members to the Committee: Brian Greuel, Prudence Talbot, William Wood and Robin Wright.

The Committee hosted the 4th annual K-12 Partnership Lunch, Education Workshop, Education Initiative Forums, Bruce Alberts Award presentation, Undergraduate Reception and the Education/Minorities Affairs Committees Booth during the Annual Meeting. The Committee discussed ideas for next year's topics and speakers.

Miller reported that the ASCB Council had approved the initiation of travel awards

to postdocs starting for the 2005 ASCB Annual Meeting. The Subcommittee on Postdoctoral Training (SCOPT) is recruiting postdoctoral and senior committee members.

Schmid Takes Helm at MBC

Keith Yamamoto handed the editorship of Molecular Biology of the

Cell to Sandra L. Schmid. Yamamoto served three years as Editor-in-Chief and also served as Editor from 1992–2002, and, along with David Botstein, recast *Cell Regulation* as *MBC*.

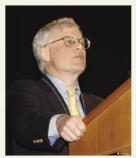
Schmid acknowledged Yamamoto for his tremendous effort not only in structuring the journal but in building strong relationships among the journal's authors and editors. In departing comments, Yamamoto thanked the Associate Editors for their help and support and noted the remarkable experience of being associated with the journal.

Schmid reported on the resignation of Pam Silver, who served on the Editorial Board since 1996 and as Editor since 2002. Richard Hynes and Tom Pollard have agreed to become Editors, joining Randy Schekman and Mark Solomon.

ASCB Director of Publications Ray Everngam reported that *MBC* continues to grow in new submissions and published articles. By the end of October, 946 new manuscript submissions had been received, which surpasses the total submissions for all of 2003 (908). Also, the journal has been handling a larger number of revised manuscripts. In total, the journal is expected to handle more than 1,600 manuscripts in 2004, compared with 1,446 in 2003. Total printed pages also increased by 12% in 2004.

Everngam reported that despite the increase in submissions and printed pages, turnaround times for peer review and publication decreased during 2004. The average time from submission to first review decision of 29 days in 2003 dropped to 21 days in 2004. Time from acceptance to release

Keynote Symposium Cell Biology: Rising to Meet the Medical Challenges of the Next Century



ASCB President Harvey Lodish introduces Keynote speakers







From left:
Peter Kim of
Merck Research
Laboratories and
Sir Paul Nurse
of The Rockefeller
University





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onto *MBC* in Press dropped dramatically from 44 days in 2003 to 12 days in 2004, while time from acceptance to publication decreased from 118 days to 62 days.

Bruce Alberts Award





Education Committee Chair Ken Miller of Brown University, Alberts Award recipient William Wood of the University of Colorado and ASCB President Harvey Lodish. Wood spoke on From Pedagogy to Pipetting, and Back.

Everngam also noted that the vast majority of article accesses (20,000-30,000) consistently occurs during the first six weeks following the release of the online journal. Access drops off

dramatically afterward and becomes level. This trend suggests that the ASCB policy of releasing content of *MBC* freely after two months may optimize the balance between the Society's financial interests (by retaining an incentive to libraries to subscribe) and public access to journal content.

Everngam reviewed a series of significant changes to the online manuscript submission system implemented in 2004. Revisions were completed and tested by Associate Editors, a volunteer author, and the ASCB staff.

The journal is financially healthy. A new contract with Cadmus Journal Services resulted in negotiated reductions of charges for page composition and printing.

Schmid indicated her priorities to increase the size and diversity of Associate Editor representation, to provide more detailed instructions for peer reviewers, and to promote *MBC* content in the *ASCB Newsletter* by introducing InCytes from *MBC* (see page 48). The purpose of InCytes is to raise awareness and educate the membership about the interesting research that is published in *MBC*.

The ASCB Social National Museum of Women in the Arts













Over treated to a culinary tour of the United States and music by DJ Dan Goldman.

In 2004, 26 new Associate Editors were appointed. The Editorial Board discussed in depth the two-tier review process, especially procedures for declining to send submissions for full peer review if the focus or completeness of a submission is inconsistent with the scope and philosophy of *MBC*. The importance of involving at least two Associate Editors was emphasized to assure authors that they would receive fair consideration.

The Board discussed the role of the Editorial Board, currently numbering 75. Associate Editors reaffirmed the value of the Editorial Board and determined to revisit its role so its members could contribute more effectively to the peer review process. Schmid agreed to develop a strategy to make better use of the Board by better defining its roles and responsibilities and ensuring that it provides a broad base of expertise. The name will be changed to Board of Reviewing Editors, to more accurately reflect its important role in maintaining consistent, high-quality peer review.

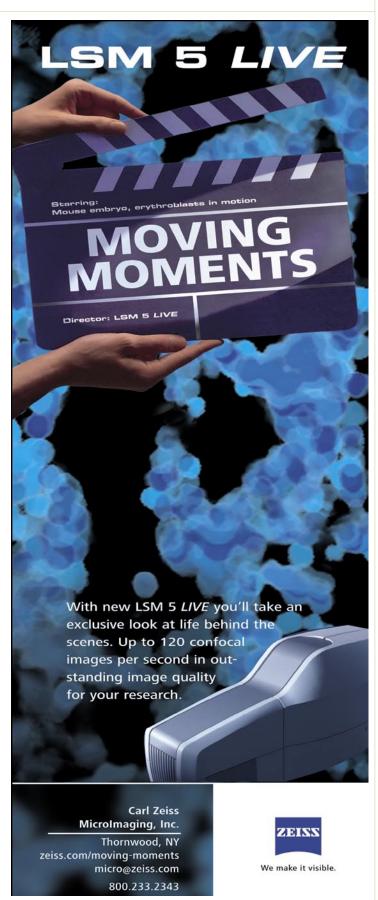


ASCB Annual Meeting attracted record number of exhibitors

Minorities Affairs Committee Focuses on Evaluation

The Minorities Affairs Committee discussed evaluation of the current National Institutes of Health (NIH) Minority Access to Research Careers (MARC) grant with grant evaluators Cheryl Leggon and John Brown (both from Georgia Tech). They presented design strategies for proposed quantitative and qualitative methodologies to evaluate five ongoing NIH MARC programs involving faculty and students: Visiting Professors Program; Linkage Fellows Program; Travel Awards to ASCB Annual Meeting; summer courses at the Marine Biological Laboratory and summer courses at Friday Harbor Laboratory.

Kevin Moses from the Howard Hughes Medical Institute (HHMI) spoke to the MAC on research opportunities expected at Janelia Farms in northern Virginia. Janelia Farms will seek to provide researchers with the opportunity to explore "risky" science. The site will provide housing for researchers who are expected to serve a term of five years, to be followed by five years of additional start-up funding to take with them to universities or other institutions to further their research.



EB Wilson Medal Presentation



2002 ASCB President Gary Borisy, 2004 President Harvey Lodish and 1988 President and 2004 EB Wilson Medalist Tom Pollard



Pollard speaks on The Molecular Basis of Cellular Movements

An overflow crowd for Pollard

Public Information Committee Plans Film Contest

With approval and funding from the ASCB Council, the Public Information Committee organized the new ASCB Cell Film Contest. Led by Committee Chair Rex Chisholm and video subcommittee chair Kip Sluder, the Contest will result in a "winners' reel" of prize entries to be unveiled at the 45th ASCB Annual Meeting in San Francisco and released over the Internet for open

access use in classrooms and by science journalists. It is hoped that the ASCB Cell Film Contest will be an early contributor to the permanent ASCB Image Library which Council has endorsed as the central goal of an ASCB fundraising campaign.

The PIC reviewed the 2004 Annual Meeting press book, *Cell Biology* 2004: 13 stories selected by PIC members from among over 1,300 abstracts submitted to minisymposia. ASCB Science Writer John

Fleischman described this year's publication as the "best ever". Despite its success, the Committee recognized that it may need to contract for expert media services in order for the ASCB Annual Meeting to gain wide coverage by the national press.

Tom Egelhoff reported on the struggle in Ohio where Creationists prevailed upon the school board to add an "Intelligent Design" lesson plan to the secondary school biology curriculum. Egelhoff felt that the ASCB's high profile opposition may have changed few votes, but, importantly, strengthened the conviction of pro-science members of the state Board of Education to continue to fight the issue. Egelhoff, Chisholm and Fleischman agreed to work on a proposal for the ASCB to formally engage in events to recognize the bicentennial of the birth of Charles Darwin in 2009.

Public Policy Committee

In attendance at the full-day ASCB Public Policy Committee meeting were Mary Beckerle, Lucie Bruijn, David Burgess, John Gearhart, Larry Goldstein, Ursula Goodenough, Dan Kiehart, Doug Koshland, Sean Morrison, Bob Palazzo, Tom Pollard, Daphne Preuss and Maxine Singer. Also present were ASCB staff Peter Kyros, Elizabeth Marincola, Kevin Wilson and Matt Zonarich.

The Committee discussed the results of the 2004 political campaigns and the impact they may have on biomedical research. Congressional Education Liaison Peter Kyros reported that, once again, Congress had not completed its

Press Room



ASCB Science Writer John Fleischman conducted daily press briefings

work on the annual Federal budget before the budget year began in October. The bills funding the NIH and the NSF and seven others were combined into one large "Omnibus" bill to enable the agencies to operate pending passage of the funding bills.

The House of Representatives had provided \$28.5 billion for the NIH, \$727 million or 2.6% more than the FY2004 budget. The increase matched the recommendation of President Bush. The Senate Appropriations Committee included \$28.9 billion for the NIH, a \$1.1 billion or 4% increase above FY2004. The NIH was expected to receive \$28.4 billion, a \$563 million or 2% increase above its 2004 budget.

The House-passed 2005 NSF budget was at \$5.467 billion, \$111 million or 2% less than funding in 2004. A Senate Committee approved an NSF budget of \$5.745 billion, a \$167 million or 3% increase. The NSF is expected to receive \$5.47 billion, a \$108 million or 2% reduction in funding compared to 2004.

The Joint Steering Committee for Public Policy continues to work closely with the Congressional Biomedical Research Caucus, with membership of over 100 Representatives and 10 Senators. Matt Zonarich also reported that a visit to the NIH campus for Members and their staff is being planned through the Caucus.

Zonarich reported on the Congressional Liaison Committee Capitol Hill Day program which brought over 90 scientists to Washington

for nearly 150 Congressional meetings. CLC membership has grown to almost 4,000 since it was initiated in 1992. Zonarich also reported on the implementation of a travel award program funded by a grant from the Open Society

Keith R. Porter Lecture



Tim Mitchison of Harvard Medical School introduces the 2004 Porter Lecturer, Edward "Ted" Salmon.



University of North Carolina at Chapel Hill delivers the Porter Lecture on Achieving Accurate Chromosome Segregation

Ted Salmon of the

The Ted Salmon Fan Club at the Porter Lecture

EE Just Lecture



2004 ASCR President Harvey Lodish honors EE Just Lecturer Sandra Murray of the University of Pittsburgh School of Medicine. She spoke about Function at the Junction: Analysis



of Gap Junction Protein Expression and Dynamics in the Adrenal Cortex.

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Undergraduate poster presenters

Institute. The awards had been particularly helpful bringing constituents to meet with Members of Congress previously unvisited by CLC members.

The Committee discussed facilitation of stem cell research within the constraints of Federal policy. It is estimated that just 19 of the 78 embryonic stem cell lines eligible for Federal funding are available to researchers.

Goldstein briefed the Committee on the results of the California ballot initiative which provides \$3 billion to enable stem cell research in the state. The Committee discussed similar proposals pending in Illinois and Wisconsin.

Goldstein and Wilson briefed the Committee on the results of efforts in the United Nations to impose an international ban on nuclear transplantation. The ASCB helped organize a scientific briefing at the UN that contributed to the delay of a worldwide ban.

The Committee considered ongoing efforts at the state and local level to limit or qualify the teaching of evolution in science classes.

It was agreed that the duration and nature of post-doctoral training would be the topic of discussion at the Practice of Science session in 2005, to be organized by Maxine Singer and Bob Palazzo.

Committee members discussed the NIH proposal to make NIH-funded research papers available to the public after a six-month embargo. Goldstein informed the Committee that the ASCB had endorsed the proposed NIH policy.

Women in Cell Biology Committee

The Women in Cell Biology Committee met on Saturday and discussed its programs, including the workshop on managing difficult people, the annual Career Lunch, the Evening Program, and selection and presentation of the WICB Junior and Senior Awards.

Topics for the popular monthly ASCB Newsletter WICB Column for 2005 were discussed, and potential authors identified. The Committee published Career Advice for Life Scientists II, a compilation of selected WICB columns from 2002 through 2004. ■

WICB Awards

WICB Chair Ursula Goodenough of Washington University introduces the 2004 WICB Senior and Junior Award Winners



WICB Junior Award recipient Inke Näthke of the University of Dundee, UK





Women in Cell Biology Career Discussion Lunch



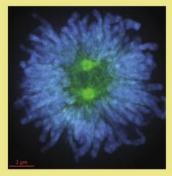


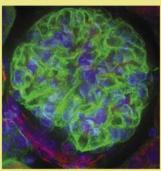


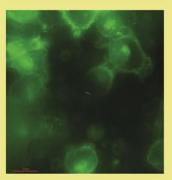


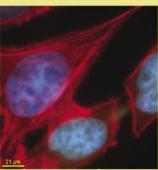
Attendees at the Women in Cell Biology career discussion lunch

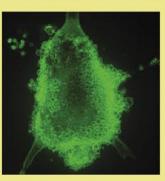
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Congress 101



Congress 101/CLC Meeting

The 2004 ASCB Annual Meeting featured two interactive science policy events.

"Congress 101" was hosted by Congressman Michael Castle (R-DE), who heads the Republican Main Street Partnership, a coalition of moderate Republicans. Castle, an advocate

of basic biomedical research, joined

Rep. Diana DeGette (D-CO) in the 108th Congress to introduce legislation to expand President Bush's embryonic stem cell policy. Rep. Castle told a packed room of over 150

fellow panelists Daphne Preuss, Tom Pollard

become involved and work with their elected

and Peter Kyros, Rep. Castle urged scientists to

The Joint Steering Committee for Public

(CLC) reception drew about 100 people for a series of mock Congressional office

Policy's (JSC) Congressional Liaison Committee

people that he first became interested in biomedical research policy because of the large number of his constituents with serious disease. With

officials.

Above: high school students outside the Washington Convention Center

Left: Alan Rick Horwitz of the University of Virginia spoke on Cells and Molecules: The Mosh Pit of Life

K-12 Science Education

Partnership Lunch



Nancy Hutchison (left) facilitates discussion at the K-12 Lunch, No Scientist Left Behind: Tips, Tricks and Tools to Bring Science into Your Local Schools.

appointments with four Congressional staff members from the offices of Democratic and Republican Members of Congress.

The Congressional staff members were Meagan Tiara with Rep. Diana DeGette (D-CO), Amy Judge with Rep. Jim Langevin (D-RI), Amy Muhlberg with Sen. Chuck Hagel (R-NE) and Josh Sharfstein with the House Government Reform Committee.

High School Program

Over 450 metropolitan Washington, DC high school students participated in the popular high school program at the ASCB Annual Meeting this year. The program featured a seminar by ASCB member and Councilor Rick Horwitz, followed by a tour of selected exhibits. Horwitz' presentation, on "Cells and Molecules: the Mosh Pit of Life", exposed the students to the complexities of cell migration and rewarded them with dazzling videos of cellular processes.

K-12 Science Education **Partnership**

Isolating DNA from strawberries was a highlight of the annual K-12 Science Education Partnership lunch. Toby Horn of the Carnegie

> Academy for Science Education led the workshop, modeling handson activities for the middle and high school science classroom.

Attendees smashed strawberries in sandwich bags and released the DNA using shampoo and table salt, learning how the simple procedure can enhance lessons on DNA structure and function. Horn emphasized the importance of hands-on experiences for students in learning

cell biology. She also presented ideas for scientists to bring their research into classrooms, and how recently developed national standards can guide education in cell biology. The workshop ended with an enthusiastic discussion on ways to volunteer in local schools.

Subcommittee on Post-**Doctoral Training**

The General Meeting of the Subcommittee on Postdoctoral Training (SCOPT) presented a panel of four speakers who gave advice on mentoring. The audience of about 150 included almost as many graduate students present as postdocs. Panelist James Sabry of Cytokinetics encouraged persistence and assertiveness, especially when it comes to communicating with a mentor who is very busy. Clare Waterman-Storer, of The Scripps Research Institute, said that it helps to have a specific question in mind when you want to make contact with someone. She said that it is essential that academic advisors give their postdocs opportunities to review papers and give them the chance to speak at large meetings. Donna Dean of the National Institutes of Health urged that jobs shouldn't be viewed as "alternative" just because they don't involve working at the bench. She reminded the group that they can get valuable career advice from people who aren't their full-time mentors. Jeffrey Mervis, of Science, said the most impor-

Subcommittee on Post-Doctoral Training



Waterman-Storer of the Scripps Research Institute



Science Reporter Jeffrey Mervis. Cytokinetics CEO James Sabry, and Donna Harvey Lodish Dean of the NIH



President



Attendees at the SCOPT meeting



Peter Walter and post-docs

tant thing for writing is to practice. Several people asked about networking and how to make the transition from bench science to another scientific profession.

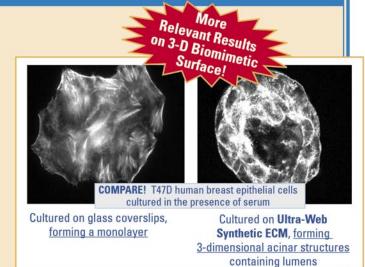
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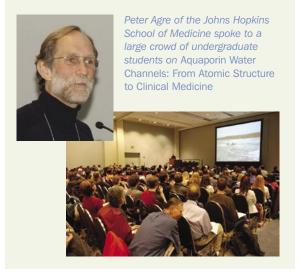


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Student Program



Students Drink in Nobel Advice and Aquaporins

shared with an enthusiastic audience of college students not only the importance of water, but also the importance of interacting with people and having fun doing science. Agre recounted

> that one of the highlights of growing up in Minnesota was hands-on, undergraduate summer laboratory research and the satisfaction of continued vibrant interactions with scientists from all over the country and world.

Agre's lab is famous for having discovered a water selective channel protein. The cloning, purification, and structure-function determination of Aquaporin-1 resulted in the understanding of its mechanism and allowed Agre and other groups to identify more than 200 members of the aquaporin family.

Agre encouraged the students to share ideas and approaches, to be good team players, and to remember that there are no small problems.



The annual Minorities Affairs Committee Mentoring Symposium

attracted about 200 participants, including 43 MAC travel awardees. Maggie Werner-Washburne from the University of New Mexico and Chad Womack, President of NIH Black Scientists Association spoke on "Making Your

Goals Tangible: Understanding Written and Unwritten Rules for Career Success."

The plenary session was followed by a panel discussion which also included Muriel Poston of the National Science Foundation and George Littleton from Howard University. The panel addressed strategies for better research collaboration among young scientists and finding a bold and consistent vision that can sustain junior scientists throughout their careers.

Break-out groups considered ways of resolving common dilemmas facing graduate students, postdocs, and junior faculty. A poster session followed. Over 50 posters were reviewed by a distinguished panel of judges, including present and former members of ASCB Council. This year's MAC Poster Competition winners were: Undergraduates: 1st Place: Sara Herrera, Lake Forest College; 2nd Place: Anthony Hunt, University of North Carolina, Pembroke; 3rd Place: Joshua Wilson, Long Island University. Graduate Students: 1st Place: Derek Applewhite, Northwestern University; 2nd Place: Damon Jacobs, University of North Carolina, Chapel Hill; 3rd Place: Alissa Richmond, College of William and Mary. Postdoctoral fellows: 1st Place: Noel Gerard, NIH/NIAID; 2nd Place: Souvenir Tachado,

ASCB member and Nobel Laureate Peter Agre



The Annual Meeting Career Center



Down time.

Education Workshop

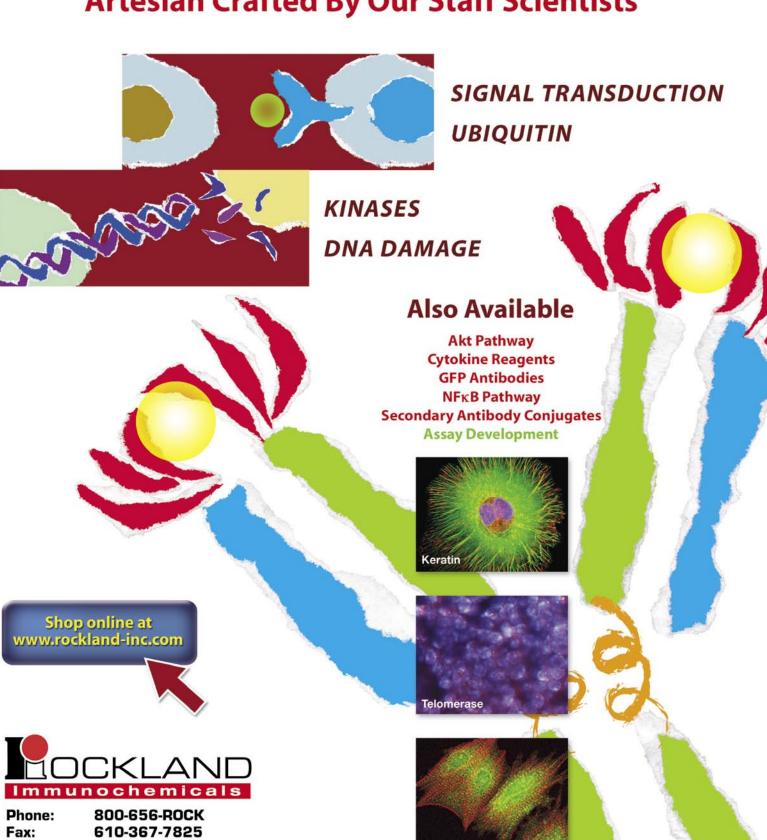




Participants at the Education Workshop, Learn How to Make Your Course a Blast



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Beth Israel Hospital/Harvard University; 3rd Place: Patricia Burgos, University of Colorado.

> Faculty: 1st Place: Luis Martinez, University of Texas El Paso: 2nd Place: Kristine Garza.

The Education and Minorities Affairs booth featured presenters the National Institutes of Health, the National Science Foundation, the U.S. Department of Education, the Howard Hughes Medical Institute, and colleges and universities.



WICB Workshop

Is there another postdoc in the lab who insists on having her name first on the paper repre-

senting the last three years of your research life? The highly spirited Women in Cell Biology Workshop on Managing Difficult People and

Difficult Situations gave dozens of participants the opportunity to understand and effectively deal with situations like these.

Guided by ASCB member Carl Cohen, recently-appointed Chief Operating Officer of Biovest International, participants learned that scientists often resort to managing conflict with less-than-ideal strategies. In role-playing exercises, participants were taught to look for underlying interests of the negotiating parties and focus on the problem, not the people involved, to work toward a resolution.

WICB Career Lunch

The WICB-sponsored Career Lunch drew almost 500 participants discussing topics that ranged from the traditional (Obtaining an Appropriate Postdoc Position, Mentoring and Being Mentored, Setting Up Your First Laboratory) to current (Biotech & Pharmaceutical, Management Consulting & Venture Capital, Patent Law/ Intellectual Property) and lots in-between (Scientific

WICB Workshop



Managing Difficult People and Difficult Situations

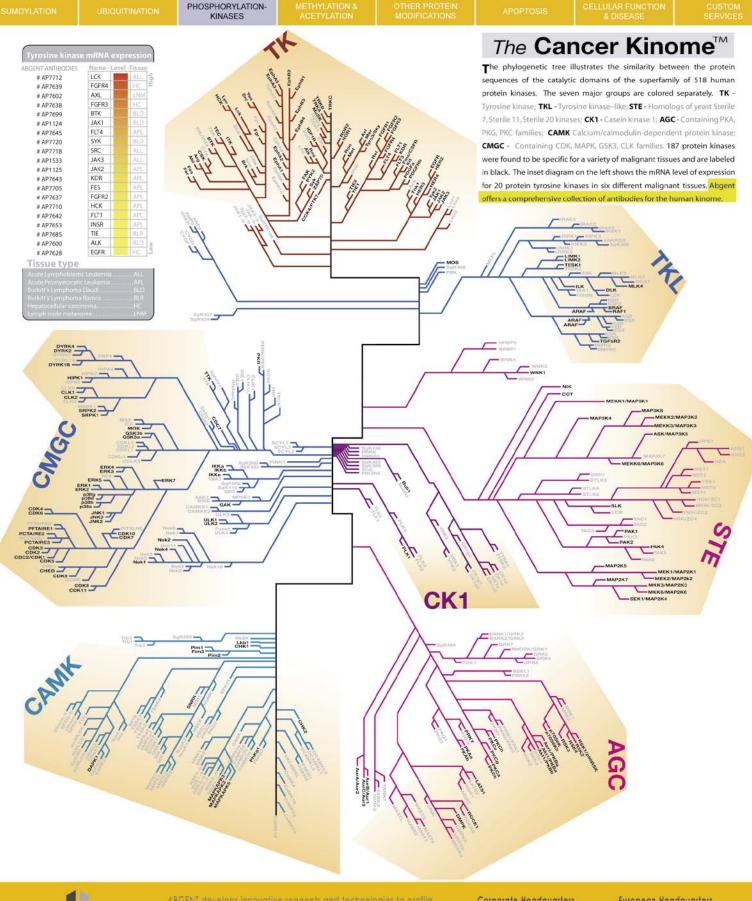
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Journalism, Family and Career Issues, Gay and Lesbian Issues in Science). The noise of animated conversation filled the room and evalutions from

the participants were outstanding.

Some participants attend the event annually and choose new topics as they mature in their careers or their interest changes. "We have been delighted to see the number of other societies that have instituted a similar Career Lunch for their own annual meetings — definitely a measure of our success," said Sandy Masur, who organizes the WICB lunch.





The reception after the Keynote Symposium

Women in Cell Biology Evening Program

ASCB member thespians David Drubin, Yixian Zheng, Susan Forsburg and Elizabeth Marincola parodied and then seriously led a panel discussion about how best to increase one's visibility in science. All four indicated that establishing relationships with senior scientists is critical. These scientists can provide advice and help advance consideration of their younger colleagues as speakers, authors and awardees. Audience members were advised to speak up at professional meetings, in platform or poster sessions. This advice led to

Practice of Science

William Wells
of The Rockefeller
University Press
and Vivian Siegel
(below) of the Public
Library of Science
discussed How
to Write a Good
Research Paper





an extensive audience discussion about speaking out in large settings. The general challenge of overcoming shyness and fear of public speaking resonated with many people who were present.

WICB Evening Program



WICB panelists Susan Forsburg of the University of Southern California, ASCB Executive Director Elizabeth Marincola, Yixian Zheng of the Carnegie Institution of Washington and David Drubin of the University of Calfiornia, Berkeley





Caroline Kane of the University of California, Berkeley, facilitated the WICB Evening Program on Becoming

Visible: Effective Self-Promotion

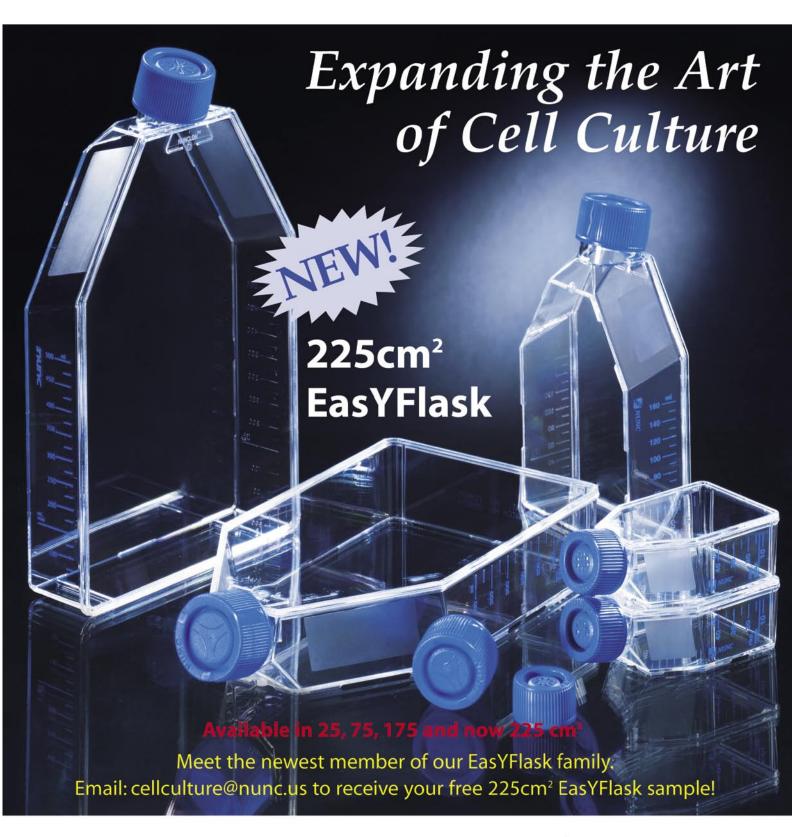






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Minorities Affairs Committee Activities

MAC Mentoring Symposium







Chad Womack of the National Institutes of Health, George Littleton of Howard University and Maggie Werner-Washburne of the University of New Mexico spoke on Making your Goals Tangible: Understanding Written & Unwritten Rules for Career Sucess



MAC Poster Session



Anthony DePass of Long Island University speaks at the MAC posters session



Andrea Morris of Haverford College at the MAC poster session



MAC poster session winners Anthony Hunt, Noel Girard, Derek Applewhite, Alissa Richmond, Souvenir Tachado, Louis Martinez, Kristine Garza, and Joshua Wilson with MAC member Anthony DePass of Long Island University

MAC Awards Lunch





A special feature of the Awards Lunch this year was a tribute to the service of MAC Chair Donella Wilson and MAC Vice Chair J.K. Haynes, shown at top left, and with 2004 ASCB President Harvey Lodish

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Cool Stuff ...



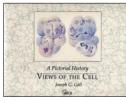
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ASCB Summer Meetings Make Your Travel Plans

The American Society for Cell Biology will host three Summer Meetings in 2005. Details and registration will be announced in the *ASCB Newsletter* and at www.ascb.org.



PUBLIC POLICY Briefing

Science Poorly Funded in Federal Budget

Funding for life science research will be only slightly increased in the recently passed 2005 Federal budget. The National Institutes of Health (NIH), which provides almost 80% of Federal funding for life sciences and almost 90% of Federal support for biological research, will receive a 2% increase over 2004, the smallest increase in over 20 years. The National Science Foundation (NSF) budget will actually be reduced by 2% compared to 2004. At the Department of Energy, biological and environmental research in the Office of Science will be reduced by 3% from the previous year.

The FY2005 budget for the NIH will be \$28.4 billion, \$563 million more than the FY2004 budget. The President had asked for \$28.5 billion for the agency, which would have been \$727 million or 2.6% more than 2004. The modest NIH budget will have a significant impact on what would already have been an austere year for the NIH. Under the President's 2005 budget request, the number of new grants would have returned to the FY2003 level, up slightly from FY2004. The NIH was already anticipating a decrease in the success rate for new grant applications to about 27%, off from a high of 32% in FY2001. The 2% increase could reduce the success rate even more.

Congress approved a 2005 budget for the NSF of \$5.47 billion, \$108 million below the 2004 budget of \$5.578 billion. Most of the research directorates at the NSF face budget

NIH and NSF Budgets in Jeopardy

Go To
www.ascb.org/public policy
and
"Write To Congress"

reductions, including the Biological Sciences Directorate, which is cut by 1.6%.

The NSF budget passed by Congress falls far short of a bill passed by both the House and the Senate and signed into law by President Bush in 2003 that called for a doubling of the NSF budget between 2002 and 2007. The 2005 budget is almost \$2 billion short of the \$7.4 billion authorized for 2005 under the doubling plan.

Despite a 4% increase in funding for the Department of Energy's Office of Science, the Biological and Environmental Research (BER) account will be cut by 3%.

The only research budget to realize a significant increase is in the Defense Department. Included in the Pentagon's R&D budget is support for basic and applied research, including biological, cognitive and neurological sciences. The 2005 Defense budget includes \$1.5 billion in funds for basic research including \$11.5 million in the Army budget for molecular genetics and musculoskeletal research.

HHS Gets New

Boss

As expected, HHS Secretary Tommy Thompson resigned as Secretary of the Department of Health and Human Services. President Bush nominated Environmental Protection Agency (EPA) administrator Mike Leavitt, who served as Republican Governor of Utah for three terms, to succeed Thompson.

Leavitt earned the respect of Utah scientists during his governorship. ASCB President-elect Mary Beckerle of the Huntsman Cancer Institute at the University of Utah called Leavitt a



Michael Leavitt



Tommy Thompson

"consensus builder," and noted his considerable investments in biomedical research in the state.



POLL: 13% of Americans Think Humans Just Evolved*

Humans evolved, God did not guide process

All Americans: 13% Kerry voters: 21% Bush voters: 6%

God created humans in present form

All Americans: 55% Kerry voters: 47% Bush voters: 67%

Humans evolved, God guided the process

All Americans: 27% Kerry voters: 28% Bush voters: 22%

In favor of schools teaching creationism and evolution

All Americans: 65% Kerry voters: 56% Bush voters: 71%

In favor of schools teaching creationism instead of evolution

All Americans: 37% Kerry voters: 24% Bush voters: 45%

Is evolution well-supported by the evidence?

35% - Yes 35% - No

29% - Don't know enough

1% - No opinion

*Source: CBS News telephone survey

NIH Bill Includes Policy Directives

Within the 2005 National Institutes of Health (NIH) budget, Congress inserted several policy instructions for the NIH.

The NIH had requested the authority to fully fund multi-year grants in the FY2005 budget, but, as in previous years, Congress denied the request and instructed the NIH to fund grants, with rare exceptions, on a year-to-year basis. The legislation also includes the annual amendment which prohibits Federal funds from being used for embryo research.

The bill also reaffirms its previous directive to the NIH to develop policy enabling public access to NIH-funded research papers.

States Follow California's Lead

On the heels of the successful 10-year, \$3 billion Proposition 71 stem cell initiative in California, copycat proposals are taking shape in other states.

In Illinois, State Comptroller Dan Hynes has introduced a plan to create a state-funded institute that would award \$1 billion in stem cell research grants and loans over 10 years. Under the proposal, \$100 million in bonds would be issued each year for 10 years. \$15 million in start-up costs and initial grants would be provided by a 6% tax on voluntary aesthetic cosmetic procedures. Implementation will require approval by the state

Creationism Monitor



Harrisburg, PA—The American Civil Liberties Union and the Americans United for Separation of Church and State have filed a lawsuit on behalf of eleven parents who say that the decision by the Dover Area School Board to require teachers to present "Intelligent Design" as an alternative to the scientific theory of evolution violates their religious liberty by promoting particular religious beliefs under the guise of science education.

Source: The National Center for Science Education

general assembly and Illinois voters. The state legislature must also approve the tax.

In Connecticut, Governor Jody Rell (R) has announced that her 2005 budget will include a proposal to spend \$10 million - \$20 million in state funds for stem cell research. In Wisconsin, Governor Jim Doyle (D) has proposed spending \$750 million to promote and invest in stem cell research and biotechnology.

New Jersey, the second state to pass legislation permitting stem cell research, has formed the Stem Cell Institute of New Jersey and allocated \$6.5 million in state funds as part of \$10 million public/private funding.

The governors of Pennsylvania, New Jersey and Delaware have supported a tri-state, \$1 billion joint stem cell initiative. Legislation is also expected to be introduced in Massachusetts, Maryland and Minnesota.



ASCB Public Policy Director Kevin Wilson and Executive Director Elizabeth Marincola meet with Senator Hillary Rodham Clinton (D-NY) in New York

Bill To Examine Health Benefits of Marijuana Dies

In the closing days of the 108th Congress, opponents of peer-reviewed but controversial grants awarded by the National Institutes of Health (NIH) introduced legislation that would have required the NIH to conduct an analysis of the available scientific data on the safety and health risks associated with smoking marijuana, including for medicinal reasons.

The legislation, the Safe and Effective Drug Act, which was introduced by Rep. Mark Souder (R-IN) and cosponsored by Reps. Jack

Kingston (R-GA), Christopher Smith (R-NJ), and Henry Bonilla (R-TX), died at the close of the 108th Congress. It gave the NIH 120 days to formulate the report and then required the Food and Drug Administration to circulate the report to those organizations and health care professionals that advocate the use of marijuana for health reasons.

Rep. Souder has not indicated if he will introduce the bill again in the 109th Congress.

House, Senate Name Appropriations Committee Leadership

Republicans in the Senate and House of Representatives selected new Appropriations Committee Chairs. Democrats Sen. Robert Bryd (WV) and David Obey (WI) will remain the top Democrats on the Committees.



Sen. Robert C. Byrd (D-WV)



Sen. Thad Cochran (R-MS)



Rep. Jerry Lewis (R-CA)



Rep. David R. Obey (D-WI)

DEAR Labby



Dear Labby,

I am a scientist at a private research organization. I generally work 55-60 hours a week. We are required to fill out daily time sheets accounting for 40 hours/ week. I have partial salary support through a couple of small projects which I bid to cover the time I actually spend working directly on those projects. I also work on three other projects for which I am not the PI, and one project that is very important to me, personally and career-wise, for which I have no salary support. I am willing to "volunteer" my time for the latter (the difference between the 40 hours a week I fill out on my time sheet and the 55-60 I actually work), hoping it will eventually be leveraged into a grant that will provide salary support. Direct activity on the other funded projects totals around 30 hours a week. My problem is, I don't know where to charge the rest of my time, which I spend on: reading papers, writing grants, doing literature research for grants (for myself and others),

attending seminars and journal clubs, reviewing papers and occasionally grants, working on presentations for meetings, assisting other people with use of instruments for which I am the expert user, not to mention innumerable administrative things. Obviously, in the future, I need to include my own "overhead" time in estimating my effort on various projects I apply for, but any suggestions on how to handle the current situation? Don't most places provide a minimal level of "overhead" support for their staff at least for the administrative and required training stuff?

--- Underfunded

Dear Underfunded,

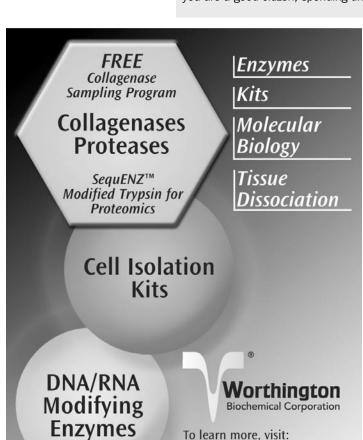
Since you are affiliated with a private research organization, I presume that you are expected to raise in grants all or most of the funding needed to conduct your research, including your laboratory operations. In such an atmosphere, it is important that you remain focused on your own research productivity, which is the key to garnering sufficient independent funding to support yourself and your group. It appears that you are a good citizen, spending time helping others with instrumentation. But it is your responsibility to

manage your time to allow you to succeed in your own research efforts and your own career development first and foremost. I know of no institution that provides overhead return for collegiality, which is expected among peers. If this is going too far, you might consider making yourself a little less available and focus on your own work. Most institutions maintain core facilities and directors for major infrastructure needs, and institutional overhead is typically used to cover such costs.

Regarding your time spent and reporting, 55-60 hours a week doing research and managing a laboratory is not uncommon. Institutions often use a 40 hour week denominator simply for the purpose of reporting percent of time. You might check with your department administrator to make sure that a timesheet is actually necessary for "non-exempt" employees like you. If so, estimate the proportion of your time spent for each allowable project or function the best you can, and allocate your time accordingly, based on 40 hours as 100% effort. For example, if 60% of your billable time is spent on Project X, allocate 60% of your journal reading time to Project X.

You have already figured out that in the future you must account for the "fully loaded" time it takes you to do your work so that your budget (time and money) projections can be more realistic.

—Labby



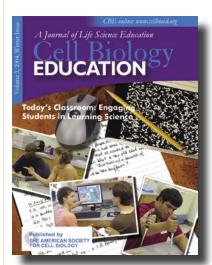
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CBE Discussion Forum Offers Dialog with NRC/NAS

An advantage of an on-line journal is the opportunity for a dialogue among readers and authors. The ASCB's journal, *Cell Biology Education (CBE)*, provides a Discussion Forum for every column, essay, and article that it publishes. With a click, readers can submit a comment, question, or reflection.

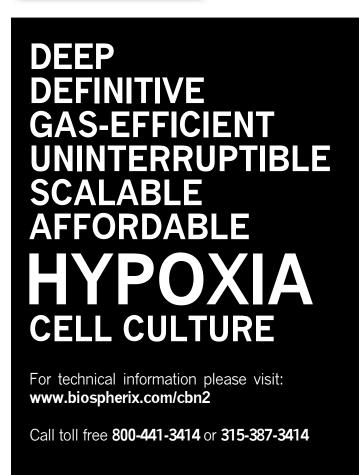
The Board on Science Education of the National Research Council is now using the *CBE* Discussion Forum to solicit input from the life science community on two issues of major importance to science education. In the 2004 Winter issue of *CBE*, Jay Labov's column considers the role of introductory college science courses, asking what should be accomplished, probing whether and what kind of changes are needed to achieve those goals, and asking what policy drivers that influence course structure might need to change to achieve them.



Are you happy with the introductory science courses at your college or university? What issues would you like to see the Board on Science Education address? Now is an opportunity to be heard! To read the article and participate in the Discussion Forum, visit http://www.cellbioed.org/articles/vol3no4/article.cfm?articleID=132.

In the Spring 2005 issue, Labov will discuss an external driver of introductory science courses, the MCAT, and ask for input on the relationship among the undergraduate curriculum, the MCAT, and medical school curriculum. Does the current system serve its intended purpose, to the benefit of all sectors? Or is the system outdated, or otherwise in need of change? All Discussion contributions will be posted, and made available to the Board on Science Education.

The *CBE* Editorial Board hopes that members of the ASCB will make their voices heard on these important topics.





ASCB Profile

Peter Walter

"He thinks very carefully about experiments, not only when they go right, but especially when they go wrong."

Peter Walter

"Since all of our new knowledge is built on existing knowledge, we need to have full access to the scientific literature to do our jobs as scientists," says Peter Walter. "The knowledge base of mankind is a global resource that belongs to the citizens of the world. It shouldn't be locked up in the archives of some private publishers who are basically driven by the need to make greater profits." Walter's passionate views on access to the scientific literature have made him, along with UCSF colleague Keith Yamamoto, a national advocate. Their efforts led in 2003 to the organization of a boycott of six prestigious scientific journals published by Elsevier.

Walter's advocacy has made him a momentary media darling. "At times, I felt like one of those little pop-up generals on CNN," Walter says. "Whenever there's a war somewhere, they pop up to talk about it, because suddenly they are experts."

Walter, who is an HHMI Investigator and Professor of Biochemistry and Biophysics at UCSF, is even better known for his groundbreaking research in cell signaling, protein localization, and the regulation of organelle abundance. He is particularly noted in recent years for his work on the "unfolded protein response" or UPR, a novel, cyto-protective signaling pathway that controls ER abundance in cells according to need, and seems to stand a number of cell signaling "rules" on their heads.

"The UPR is what happens when you overload the system with too much protein or with proteins that don't fold correctly. This triggers a response that has an effect on the transcription gene expression profile," says Vivian Siegel, Peter Walter's first graduate student at UCSF. Of Walter's recent work, Siegel says, "Peter first studied the UPR in yeast. There are all sorts of puzzles so it isn't just a simple kinase activation. It has mechanistic twists and turns. But it's a brand new secretory-regulatory mechanism, a feedback loop that regulates transcription without being a genetically programmed response."

Peter Walter has been attracting notice in cell biology since his early days as a graduate student in the Rockefeller University laboratory of Günter Blobel. Walter joined the lab in 1977 as Blobel was gaining hard-fought acceptance for the signal hypothesis which he had published two years before and for which he was eventually

awarded the Nobel Prize in Chemistry in 1999. Blobel's signal hypothesis postulated a protein-conducting channel that is made up of protein subunits that attached polypeptide "addresses" to target proteins to the ER. "This was a large bone of contention for the next 20 years," says Blobel, who served as President of the ASCB in 1990. "But when Peter came, we had the hypothesis. We had a cell-free system. The question was how we get the components of the system."

Walter had unique skills at the bench and as an experimental thinker, says Blobel. "He was among the best graduate students I've ever had in my lab. He is a very good thinker, supremely well organized logistically, but also willing to take risks. He thinks very carefully about experiments, not only when they go right, but especially when they go wrong." This, says Blobel, is how Walter made his key contribution to the search for the SRP, the "signal recognition particle" that was at the center of Blobel's hypothesis.

Walter was instrumental in finding the six polypeptides that the lab published as the SRP, but they had not detected the real RNA particle. "Two years later, by accident, we found it," says Blobel. Walter was running samples of super gradients on a spectrometer that had been accidentally left at 260 nm instead of 280 nm. The response was double what was expected. "I say, 'by accident,' but Peter knew exactly how much to expect so when he got a much higher peak, it caused him to stop and ask himself, 'Why did I get twice as much signal?' When he discovered the mix-up in the settings, he immediately realized that there must be a nucleic acid in there. He looked and quickly identified it as a small RNA that had already been by published by Harris Bush but nobody knew what it did. Peter recognized that this was our SRP, only it wasn't a protein. We changed the name from 'signal recognition protein' to 'signal recognition particle' so we could keep the initials," says Blobel.

"His subsequent career has just been brilliant and this latest thing, the unfolded protein response, it's a departure into a completely new area of cell biology. Peter all but created the field with his work," affirms Blobel.

Peter Walter was born and educated in West Berlin at the height of the Cold War. His father owned a "chemist's shop," a drugstore which included a compounding lab bench. The chemicals fascinated Peter. "I love chemistry from when I was very little. In part, I got into it from being in my father's shop. From the age of 12, I was determined to become a chemist, and I admit there was a certain pyrotechnic interest in it as well." His parents were not college-educated themselves, but totally supportive. "Both my parents were incredibly encouraging of me, especially my mother. Her childhood was in the war so at the age when she should have been learning in school, she was sent out onto the streets to collect scrap metal, essentially to feed the German war machine. She wanted me to have the education she'd lost."

In school, Peter Walter was a wizard in science but a dud in languages. "I was always a 'C' student in English. Chemistry was my passion, that and recycling all kinds of electronic

"We are four people

three nationalities

and 10 passports."

with three last names,

junk. In high school, I built a chromatography cell out of junk that was fully automated." He was unimpressed, though, with biology. "The biology I was taught in school was basically taxonomy. I thought it was like stamp collecting, and it didn't appeal to me at all."

Walter entered the Free University in West Berlin and also took some advanced classes in protein chemistry at the Max-Planck-Institute in West Berlin. But the need to learn better English was becoming apparent, and an exchange year in the US seemed the best way to immerse himself. "My intent was to stay in the States for nine months," Walter recalls. Decades later, "my mother keeps reminding me and asking when these nine months will be over." He was assigned, through a government program, to Vanderbilt. "I had to look Nashville up on the map because I had no idea where it was." Luckily, the movie "Nashville" had just come out, so at least he had heard of it.

The culture shock was striking, but scientifically it was to Walter's liking. "Students were treated so differently," he recalls. "In Germany, it is very much practical courses and historical experiments. By contrast at Vanderbilt, even as young students we were being trained to work as independent researchers." Walter says he was lucky to be taken into the lab of Thomas Harris. "I did hardcore organic chemistry, working on the synthesis of an alkaloid, slaframine, that is

produced by a fungus that grows on red clover in Tennessee. When cows eat that clover, they slobber. I never quite felt a long-term commitment to that project."

By squeezing in required courses and writing a thesis, he was able to earn a Master's degree at Vanderbilt in nine months. In Nashville, Walter also met Stanford Moore, a Rockefeller University biochemist who'd won the Chemistry Nobel in 1972 for his work on protein chemistry. Moore ("an impeccably dressed Southern gentleman," recalls Walter) was also a Vanderbilt graduate and trustee. Moore suggested Walter should look at Rockefeller. Walter looked, applied, and was rejected. Then he got in off the waiting list. "Many years later, I gave one of the Harvey Lectures at Rockefeller,"

Walter recalls. "It's a big deal, a black tie lecture. My first slide was my initial rejection letter from Rockefeller."

Walter loved everything about Rockefeller, the Blobel lab and New York City, calling this period, "the best six years of my life - so far." Among his contemporaries

in the lab were David Anderson (now at Caltech), Larry Gerace (now at Scripps), and Keith Mostov (now at UCSF).

It was also at this time that he met his wife,

Patricia Caldera, a Mexican studying for her doctorate in chemistry at NYU. Today they live in San Francisco's Inner Sunset District in a house that they bought from a departing Bay Area scientist and Walter renovated himself. Caldera works for the UCSF Science & Health Education Partnership with the San Francisco Public Schools. Their eldest daughter, Gabriela "Gabi" Walter-Caldera, 18, is an architecture student at USC. Their youngest, Sylvia Walter-Caldera, 16, is a high school junior, interested in musical theatre. Both parents are naturalized Americans, both children are tri-nationals. As Walter puts it, "We are four people with three last names, three nationalities and 10 passports." The

family celebrates its international diversity, says
Walter, but finds San Francisco the ideal home. "I
wouldn't make a good Mexican. Patricia wouldn't
make a good German. So we live on neutral
territory."

Continued

"The biology I was taught in school was basically taxonomy. I thought it was like stamp collecting, and it didn't appeal to me at all."

"My intent was to stay in the States for nine months," Walter recalls. Decades later, "my mother keeps reminding me and asking when these nine months will be over." Walter also finds UCSF ideal scientific territory, with fascinating colleagues but limited

expansion room that discourages empire building. Walter was a key player in the development of the new UCSF facility at Mission Bay. The move is what triggered the Elsevier boycott, says Walter. Without the old Parnassus campus' library at hand, it was assumed that Mission Bay could easily arrange electronic access to journals for those who moved to the new facility. At first, Elsevier offered those at Mission Bay full access. But just as students were arriving on campus and starting their assignments, Elsevier cut off access. Walter said, "You must be joking to cut us off now." Elsevier wasn't joking, nor was Walter, who launched the UC system-wide boycott drive a few days later. The boycott and the UC-Elsevier dispute are over for now, says Walter, but

the battle has moved to other universities. "The scientific community needs to wake up and save itself," he says.

Walter has just finished a three-year term on the ASCB Council, and has served the Society in other critical capacities, including as 1991 Program Chair and as an Associate Editor of *Molecular Biology of the Cell*. He was recently appointed Chair of the International Affairs Committee. Almost 3,000 of the ASCB's 11,000 members are outside the U.S. "We have to figure out what's important to the international members," says Walter. The first step in that direction will be a survey of visa problems being encountered by international members.

Walter is also deeply involved with textbook writing since joining Bruce Alberts et al. as a co-author for the 4th edition of *Molecular Biology of the Cell*. Walter realizes now that being a member of "et al." is much more time consuming—but also much more rewarding—than he had ever imagined.

Walter's greatest non-scientific recreation is woodworking, he says. Besides renovating his house, he converted half the garage into a woodshop, where he makes furniture. "I need to do something with my hands. With furniture building, you see right away if it's going to be a perfect fit, or a perfectly machined piece of firewood."



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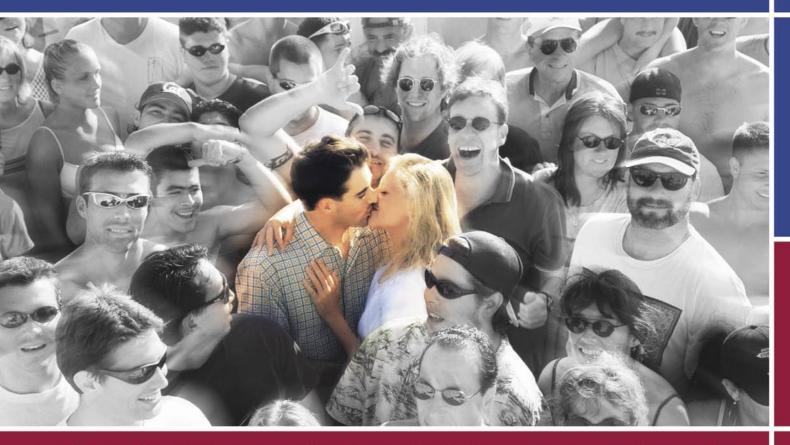
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WOMEN in Cell Biology



Some people think of retirement as an event that will occur at a specific date, a Rubicon to be crossed that all too much resembles the River Styx.

Some older scientists are still full of energy but bored with the problems they have studied for a significant time.

Late Career Opportunities and Challenges for Cell Biologists

Conversation with any group of cell biologists 55–65 years old will elicit a range of opinions about their ideas for the years ahead. Some are committed to ever more research and/or teaching, essentially a continuation of mid-career activities. Others are looking forward with enthusiasm to the prospect of doing something different, perhaps doing nothing at all, while many fall in between.¹

There is no general solution to optimizing late career options, because the pertinent issues are so complex and personal that each individual must think things through for him/herself. There are, however, a number of processes that seem generally important for the personal decisions that must be made.

Some people think of retirement as an event

that will occur at a specific date, a Rubicon to be crossed that all too much resembles the River Styx. One can, however, approach one's late career with more personal control, organizing a gradual change. Many employers will permit and even encourage a phased retirement in which duties diminish over some years, either through part time work or a negotiated agreement.2 If one is enjoying most of professional life but finding that the pace has become too demanding, a gradual retirement probably

makes sense. This course may also be advantageous for one's department, allowing several older scientists to wind down and release their positions, while the department initiates hirings that will bring in new blood.

Some older scientists are still full of energy but bored with the problems they have studied for a significant time. Unfortunately, most funding agencies are conservative about new endeavors, so a change of field is not easy at any career stage (new grants are harder to get than renewals for everyone). Late career does, however, offer opportunities for change that are less obvious. Seniority can allow you to reduce the stresses of running a lab, providing a welcome splash of freedom. If, for example, you enjoy lab work but not the struggle for resources, you can probably find a congenial younger colleague who would welcome you into the lab as an associate to work on scientific

problems of common interest. This would give chances both to train students in techniques and thought processes that you know well and to pursue your own research. Similarly, many institutions have budgets for lab instruction that can help to pay the expenses of independent study students (undergraduates, summer visitors, even medical students); these young people could come to your own lab and help with research questions of your choosing. The point is that there are ways to continue research, albeit at a slower pace, without the pressure of competing for major research grants. Such changes can readily be initiated, given the independence that accompanies outgrowing the need for further professional advancement.

Some older scientists find that a new perspective

on teaching can provide a change of pace and an exciting challenge, as well as significant personal reward. Recent research on interactive learning suggests ways to engage students, even in large lecture courses, helping them learn more effectively.3 Modern information technology can provide instructors with immediate feedback on the success or failure of their exposition, allowing lecture modification on the fly and a significant increase in the efficacy of information transfer.4

Computers can serve as teaching machines or as surrogates for hands-on laboratory work. While such ideas are not necessarily new, one can find rewarding and effective ways to use a professional lifetime of teaching and learning experience to enrich the pedagogic process. As a senior scientist, one has the opportunity to revisit teaching with creativity rather than regarding it a chore.

Helping younger people understand the craft of science can also be highly rewarding. Time spent mentoring younger colleagues one-on-one, or in a workshop setting, can make a significant contribution. One can also teach as far afield as pre-college, even elementary school. Big cities have benefited tremendously from the work of senior scientists who have worked with teachers to effect curriculum change or subject innovation.⁵ Such efforts can be a big commitment, but even occasional volunteer work as a tutor in a school can

make a significant difference to a few students and provide a valuable alternative to continuing your customary work.

The issue of volunteering brings up two complicated subjects. One is finances, since working without compensation is a luxury that not everyone can afford. Universities, the Teacher's Insurance and Annuity Association⁶, and many investment companies offer information and guidance about financial planning for retirement. Attending seminars or workshops by several such organizations is sensible, since it provides multiple viewpoints and demystifies this planning process. Such interactions may reduce one's sense of dependency and can provide assurance that resources in retirement will be sufficient. One's retirement package can stretch even further if one undertakes something adventurous, like working as a volunteer teacher in a poor country. Living costs in the Third World are so low that

a retired American can live very graciously on modest resources. It is rare that a school or university in such a country can pay a salary, but a volunteer is almost certain to be welcomed with gratitude and enthusiasm. Such opportunities can be organized independently, through Internet and email, but Fulbright⁷, the Peace Corps⁸ and several nongovernment organizations⁹ can also help.

The second issue related to volunteering is freedom. It is easy to view the winding down of professional activities as a loss of privilege and power. Certainly some valuable things will go, but constructive additions can compensate. A reduced professional load can provide freedom that is simply not available under the pressure of competitive paper- and grant-writing. This suggests that an important part of late career thinking should be identifying the things that you would like to initiate.

Some people think of new activities in terms of hobbies while others think of new academic projects. The point is that one of the greatest opportunities offered by late career flexibility is the chance to explore activities, fields, and ideas for which there has previously been no time. Retired people often talk about their opportunities for travel, reading, attending lectures, music, and sociability. For someone who has led an intensely

focused life in science, such "opportunity" may sound foreign, even terrifying. This is why a gradual transition may be important for capitalizing on the opportunities of late career development. As

one ages, life will change, of this there is no question. With luck, the changes will not be crippling ill health but instead the chance to explore and enjoy things one cares about and finds worthwhile. Emerging from a total focus on a specific field of science can include elements of metamorphosis and ecdysis that will allow the spreading of newfound wings.

Underlying the issue of late career transition is the fact that although our country's investment in science is large, it is not infinite. A grant to a senior scientist is money not given to someone younger; a position occupied by an old-timer is one not filled by a beginner. Some senior scientists claim

Emerging from a total

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of new-found wings.

that they have always been under-paid, and if they are now earning more for less work, it's about time and they deserve it. Frankly, I disagree. Most of us have done science because we wanted to. Earning a good, middle-class wage for following one's own interests is an appropriate reward. At some point it makes sense to bow out and give someone else a

chance.

The above generalities hardly constitute a plan, but they do contain a message: if you build upon your career in science to identify and/ or generate opportunities for exploration, it is possible to make and use freedoms that will enrich the latter part of your career, potentially making it one of the best stages of your life.

—J. Richard McIntosh

- ¹ For an audiotape of a 2001 American Society for Cell Biology Annual Meeting panel on Late Career Options, see http://ascb.org/audio/audio01mtg.html.
- ² For an analysis of the policies found in many American universities, see http://www.aaup.org/Issues/retirement/ retrpt.htm.
- ³ Handelsman et al., *Science*, 304: 521-2 (2004).
- ⁴ See, for example, http://umperg.physics.umass.edu/library/ UMPERG-2001-12.
- ⁵ See, for example, http://www.nas.edu/rise/.
- 6 http://www.tiaa-cref.org/.
- 7 http://www.iie.org/
- 8 http://www.peacecorps.gov/
- 9 http://www.crossculturalsolutions.org/ or http://www.iearn.org/.

The issue of volunteering brings up two subjects. One is finances. The second ... is freedom. It is easy to view the winding down of professional activities as a loss of privilege and power.

Retired people often talk about their opportunities for travel, reading, attending lectures, music, and sociability. For someone who has led an intensely focused life in science, such "opportunity" may sound foreign, even terrifying.

MEMBERS in the News



Mina Bissell of the Lawrence Berkeley National Laboratory, an ASCB member since 1973 and 1997 Society President, received the *Doctor Medicinae Honoris Causa*, from the University of Copenhagen.



Janice Blum of Indiana University-Purdue University at Indianapolis, an ASCB member since 1989, received the University's 2004 Alvin S. Bynum Award recognizing outstanding faculty mentoring.



Ernesto Canalis of St. Francis Hospital and Medical Center, an ASCB member since 1990, received the Avioli Founders Award from the American Society for Bone and Mineral Research.



Carl Cohen, an ASCB member since 1978 and Society Treasurer from 1995-2001, has been named Chief Operating Officer for Biovest International.



Miguel Angel Del Pozo of the Cardiovascular Research National Center in Madrid, an ASCB member since 2002, received a EURYI Award from the European Science Foundation.



B. Brett Finlay of HHMI/University of British Columbia, an ASCB member since 1989, won the 2004 Squibb Award from the Infectious Diseases Society of America.



Joseph Gall of the Carnegie Institution of Washington, an ASCB member since 1961, has received the Elsevier Lifetime Achievement Award from the Society of Developmental Biology.



Nobutaka Hirokawa of the University of Tokyo, an ASCB member since 1981, was elected a member of the Japan Academy and an Associate Member of EMBO.



H. Robert Horvitz of HHMI/Massachusetts Institute of Technology, an ASCB member since 1988, was elected to the American Philosophical Society.



Dale Laird of the University of Western Ontario, an ASCB member since 1990, was appointed by the Prime Minister to a Canada Research Chair.

ASCB Members Elected to the American Academy of Microbiology



Stephen BeverleyWashington University
Member since 2000



Janet Butel
Baylor College
Member since 1982



Ronald Butow
University of Texas
Southwestern
Medical Center
Member since 1997



Kevin Campbell HHMI/ University of Iowa Member since 1978



Pascale Cossart
HHMI/
Institut Pasteur
Member since 1993



Martin Gorovsky
University of
Rochester
Member since 1965



Stephen Elledge HHMI/ Harvard Medical School Member since 1993



Joseph Heitman HHMI/Duke University Member since 2001



Dan Littman HHMI/ New York University Member since 1997



Erin O'Shea HHMI/ University of California, San Francisco Member since 1997



Arthur Weiss HHMI/ University of California, San Francisco Member since 1994



Erin O'Shea of HHMI/University of California, San Francisco, an ASCB member since 1997, received an Irving Sigal Young Investigator Award from the Protein Society.



Robert Palazzo of the Rennselaer Polytechnic Institute, an ASCB member since 1988, has been appointed director of the Institute's Center for Biotechnology and Interdisciplinary Studies.



Clifton Poodry of the NIH National Institute of General Medical Sciences, an ASCB member since 1994, received a Distinguished Award for program directors from the Society for Advancement of Chicanos and Native Americans.



Matthew Scott of HHMI/Stanford University, an ASCB member since 1999, won the 2004 E.G. Conklin Medal from the Society for Developmental Biology.

ASCB Members Appointed to California's New ICOC



Edward Penhoet

Murphy



Susan



Bryant



Oswald Steward

Edward Penhoet of the Gordon and Betty Moore Foundation, an ASCB member since 1998, was appointed Vice Chair of California's Independent Citizens Oversight Committee (ICOC) of the new Institute for Regenerative Medicine. Susan Bryant of the University of California, Irvine, an ASCB member since 1988, Richard Murphy of the Salk Institute, an ASCB member since 1979, and Oswald Steward of the University of California, Irvine, an ASCB member since 1981, were appointed members of the ICOC.



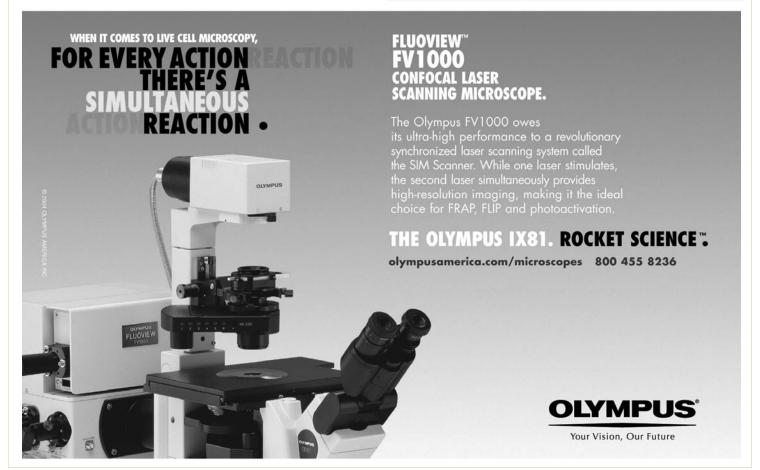
Joan Steitz of HHMI/Yale University, an ASCB member since 1983, received the Howard Taylor Ricketts Award from the University of Chicago. She also received the RNA Society Lifetime Achievement Award.



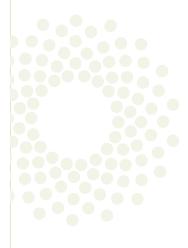
Roger Tsien of HHMI/University of California, San Diego, an ASCB member since 1987, received the Keio Medical Science Prize from Japan's Keio University.



Margaret Werner-Washburne of the University of New Mexico, an ASCB member since 1990, won a 2004 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring.



LETTERS to the Editor



Linking Federal Funding to Stem Cell Research

To the Editor:

I am writing to discourage linking the efforts of the ASCB for increased Federal support of the NIH to embryonic stem cell research. I have been an ASCB member for seven years and it is clear that both issues are of great importance to the ASCB, but they are not necessarily linked. Harvey Lodish's recent President's Column [*Private Philanthropy and the Biomedical Sciences*, December 2004] gave a very strong impression of linking these two issues.

In my opinion there are two important reasons to make sharp distinctions between our efforts to increase overall NIH funding and embryonic stem cell research funding. First, I have come to a conclusion separate from many of my researcher colleagues. As a scientist, I realize that our genetic material is a large aspect of what makes us an individual and as such I conclude that the embryo is entitled to protection. I certainly realize that many of my colleagues have different opinions with very compelling arguments.

My point, however, is that while we wholeheartedly agree on continued Federal support of the efforts of the NIH, some of us do not support Federal funding of embryonic stem cell research.

This debate over stem cell research leads to my second reason. Embryonic stem cell research is highly controversial and if we wish to win public support for NIH funding, I believe we will have much greater success if we emphasize the vast majority of research that is funded by the NIH that is widely supported by the public. For those that support stem cell research, if we clearly present our effectiveness in those efforts widely approved by the public, then gaining support for embryonic stem cell research will likely be more well received.

Finally, I would like to point out that many of the Clinton Administration budgets started with proposals to provide small increases in NIH funding but ultimately ended with more greatly increased funding from the efforts of Republicans like Senator Specter. I am strongly opposed to most of the policies of our current Administration but I think there remains hope with Congress.

—David A. Antonetti

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NIH Pioneers

To the Editor:

Thanks to 2004 ASCB President Harvey Lodish and Women in Cell Biology Chair Ursula Goodenough for challenging the allmale list of NIH Pioneers. In the same mail as the November ASCB Newsletter, I received an issue of The Scientist with a supplement about New York City. Featured was a list of nineteen top scientists in New York, called "Top of the Heap". It includes seven Nobel Laureates (no challenge there; two ASCB members), and a number of others that are unrepresentative of the breadth of basic biomedical research community in New York City (apologies to the single other ASCB member). There are no women on the list. I keep hoping that our scientific societies will not need to have committees named, "Women in ---", but I guess the time has not come. Thanks to WICB for its continued service to women in science, as well as those of the other gender.

—Sarah Hitchcock-DeGregori

ASCB Members Elected to the American Association for the Advancement of Science

This page
has been modified
since the printed
publication. Updated
on 2-24-05.

The following ASCB members were among those elected to membership in the AAAS last month.



Bonnie Bassler Princeton University Member since 2002



David BurgessBoston College
Member since 1978



Donna Dean
National Institutes of
Health
Member since 1995



Elliot Elson Washington University Member since 1984



Susan Forsburg
University of Southern
California
Member since 1993



Warner Greene
University of
California,
San Francisco
Member since 1991



Joseph Heitman Duke University Member since 2001



Arthur Johnson Texas A&M University Member since 1987



Wayne Lencer Children's Hospital, Boston Member since 1992



Daniel SchoenbergOhio State University
Member since 1979



Morgan Sheng Massachusetts Institute of Technology Member since 1996



Christopher Somerville Carnegie Institution of Washington Member since 1994



James Townsel
Meharry
Medical College
Member since 2001

The Miami Nature Biotechnology Winter Symposium

Signal Transduction in Cancer

www.med.miami.edu/mnbws

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Poster Competition for students and postdocs. See website.

Awardees:

The Feodor Lynen Lecturers - Sara A. Courtneidge and Alfred G. Gilman $\,$

The Distinguished Service Award -Philip Cohen

The Special Achievement Award -Tony Pawson

The IUBMB Jubilee Lecture -Louise N. Johnson

The Lifetime Achievement Award -Edmond H. Fischer and Edwin G. Krebs

Speakers:

Natalie G. Ahn
Lee D. Arnold
Stephen K. Burley
David A. Cheresh
Benjamin F. Cravatt
Shoukat Dedhar
Julian Downward
Richard Gaynor
James J. Gibbons
Thomas K. Harris

Nancy Hynes Hans E. Huber Kozo Kaibuchi Michael Karin Christopher J. Marshall Paul G. Polakis Jacques Pouyssegur Judith S. Sebolt-Leopold George Thomas Nicholas K. Tonks

The American Society for Cell Biology 2005 Call for Nominations

Bruce Alberts Education Award

Who is Eligible: An individual who has demonstrated innovative and sustained contributions to science education with particular emphasis on the local, regional and/or national impact of the nominee's activities. The primary nominator must be a member of the ASCB but the candidate and support letter authors need not be.

How to Apply: Provide a letter of nomination, letters of support and CV.

Award: The winner is presented a plaque and will give remarks at the 45th ASCB Annual Meeting. Expenses to attend the Annual Meeting are paid.

Deadline: March 31.

Early Career Life Scientist Award

Who is Eligible: An individual who has received a doctorate since 1993 and has served as an independent investigator for no more than seven years. The primary nominator must be a member of the ASCB but the candidate and support letter authors need not be.

How to Apply: Provide the candidate's CV, a brief research statement and a nominating letter plus no more than three letters of support, at least one of which must come from outside the candidate's current institution.

Award: The winner gives a lecture at the 45th ASCB Annual Meeting. Expenses to attend the Annual Meeting are paid.

Deadline: March 31.

Public Service Award

Who is Eligible: An individual who has demonstrated outstanding national leadership in support of biomedical research. Any ASCB member may submit a nomination. The award winner may but need not be a scientist.

How to Apply: Provide a letter of nomination with a description of the nominee's advocacy for and promotion of scientific research.

Award: The winner gives the Public Service Award Lecture at the 45th ASCB Annual Meeting and receives a certificate. Expenses to attend the Annual Meeting are paid.

Deadline: March 31.

Merton Bernfield Memorial Award

Who is Eligible: An outstanding graduate student or postdoctoral fellow who has excelled in research

How to Apply: The student or post-doc or their advisor should submit a one-page research statement, a list of publications, a copy of the abstract submitted to the current year's Annual Meeting, and the advisor's letter of recommendation. Post-docs may also submit the recommendation of their graduate student advisor. Duplicate applications from graduate students may be submitted for the Gilula and Bernfield Memorial Awards.

Award: The winner speaks in a Minisymposium at the 45th ASCB Annual Meeting and receives an honorarium. Expenses to attend the Annual Meeting are paid.

Deadline: August 1.

Norton B. Gilula Memorial Award

Who is Eligible: An outstanding graduate or undergraduate student who has excelled in research.

How to Apply: The student or advisor should submit a one-page research statement, a list of publications, if any, the abstract submitted to the current year's Annual Meeting and the advisor's letter of recommendation. Duplicate applications from graduate students may be submitted for the Gilula and Bernfield Memorial Awards.

Award: The winner is presented a plaque. Expenses to attend the Annual Meeting are paid.

Deadline: August 1.

E.E. Just Lectureship

Who is Eligible: A minority scientist who has demonstrated outstanding scientific achievement. The primary nominator must be a member of the ASCB but the candidate need not be.

How to Apply: Provide a nomination letter with a description of the nominee's scientific achievement and mentoring support of underrepresented minority students and scientists.

Award: The winner gives the E.E. Just Lecture at the 45th ASCB Annual Meeting, and receives a plaque. Expenses to attend the Annual Meeting are paid.

Deadline: March 31.

MBC Paper of the Year Award

Who is Eligible: A student or post-doc first author who published the best paper in *Molecular Biology of the Cell* from June 2004 through May 2005.

How to Apply: Submit your best work to *MBC*. The winner is determined by *MBC* Associate Editors. All papers are considered; no additional application or nomination is required or invited.

Award: The winner speaks in a Minisymposium at the 45th Annual Meeting. Expenses to attend the Annual Meeting are paid.

Deadline: Associate Editors make recommendations by June 18.

E.B. Wilson Medal

Who is Eligible: An individual who has demonstrated significant and far-reaching contributions to cell biology. The primary nominator must be a member of the ASCB but the candidate need not be. The E.B. Wilson Medal is the ASCB's highest award for science.

How to Apply: Provide the candidate's CV and no fewer than three and no more than five letters of support.

Award: The winner gives the E.B. Wilson Lecture at the 45th ASCB Annual Meeting, and receives the E.B. Wilson Medal. Expenses to attend the Annual Meeting are paid.

Deadline: March 31.

WICB Career Recognition Award

Who is Eligible: The Junior Award is for a woman in an early stage of her career (assistant professor or equivalent) who has made exceptional scientific contributions to cell biology and exhibits the potential for continuing a high level of scientific endeavor while fostering the career development of young scientists. The Senior Award is for a woman or man in a later career stage (full professor or equivalent) whose outstanding scientific achievements are coupled with a long-standing record of support for women in science and mentorship of young scientists.

How to Apply: For the Senior Award, provide a letter of nomination, CV of the candidate and a maximum of five letters of support. For the Junior Award, provide a letter of nomination, CV of the candidate, and a maximum of three letters of support.

Award: The winners are presented an honorarium and plaque at the 45th ASCB Annual Meeting. Expenses to attend the Annual Meeting are paid.

Deadline: March 31.

ALL APPLICATIONS AND NOMINATIONS MAY BE SUBMITTED TO THE AMERICAN SOCIETY FOR CELL BIOLOGY, 8120 WOODMONT AVENUE, SUITE 750, BETHESDA, MD 20814-2762; ASCBINFO@ASCB.ORG. FOR NAMES OF PRIOR AWARDEES OR MORE INFORMATION, SEE WWW. ASCB.ORG OR CONTACT THE ASCB AT 301-347-9300, ASCBINFO@ASCB.ORG.

IN Memory

Hans Ris

We mourn the passing of one of cell biology's giants, Hans Ris, who died on November 19, 2004, at the age of 90. Among his many honors and awards, Hans was a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He was also a founding member of the ASCB, and a recipient of the ASCB's prestigious E.B. Wilson Medal. As a scientist, he had an uncanny, sometimes startling ability to see in a micrograph something new or special that had escaped the attention of others, epitomiz-

ing the late Dan Mazia's description of the gifted microscopist as a person who can "think with the eyes and see with the brain." Hans dispensed many successful "hunches" (actually hardwon products of disciplined thought and encyclopedic knowledge) to his colleagues, often to their great benefit, and without insistence on receiving credit. Many of his insights formed the foundation of our understanding of endosymbiont organelle evolution, chromosome and nu-

clear pore structure, and cytoskeletal organization.

Despite Hans's prodigious intellectual and intuitive gifts and his many scientific accomplishments, he eschewed personal "clout" and believed that scientists should be a welcoming, worldwide community of diverse scholars working for common good. Hans learned Chinese (in his seventies!) and led trips to the Peoples' Republic to support Chinese cell biologists in a difficult political climate. Early in his career, he was concerned about the lack of opportunities for professional advancement of female scientists, and began redressing such inequalities long before it was politically fashionable to do so. His egalitarian attitude, decency, and commitment to providing serious scientific training to all are remembered with great affection and appreciation.

Hans's joy of discovery derived from his childhood fascination with the natural world, a world he described to friends and family as his "secret garden". While the cell nucleus commanded his greatest attention, his "garden" excluded no structure nor organism (nor collaborator, regardless of stature). Hans's deep curiosity, and his knowledge

of the structural basis of gene organization and redistribution, enabled him to tackle the relatively obscure terrain of the nucleus long before the EM technologies of his day had much to offer. He refined those views by use of new technology. In his sixties, he installed one of the 20th century's greatest marvels of electrical engineering at Wisconsin: the million-volt AEI electron microscope from Great Britain (the top floors had to be built around the two-and-a-half story behemoth). He led the way in optimizing sample preparation for its use, and along

with Jim Pawley and others, coaxed the best out of this magnificent microscope. He was realistic about its shortcomings, but he mastered it with his characteristic elegance, care, and steady application.

Hans enthusiastically recruited many biologists to use the Madison HVEM facility for their work. With his healthy skepticism and exacting scholarship, he set high standards for rigorous and careful interpretation of

careful interpretation of the resulting data. Hans "retired" at age 75, by which time the Madison EM facility had expanded to include other state-of-art microscopes, including the first FESEM in the U.S. His passion for science remained undiminished; he continued working at the bench well into his eighties, and generated revolutionary, new 3-D FESEM images of nuclear pore complexes in *Xenopus*, which he fondly called "fish traps" after those he saw in rural

Many colleagues remember him as tall, elegant, vigorous, taking steps two at a time up to his modest office at the HVEM or "loping" his way across campus. Hans reveled in the elegance of an experiment or an idea, and had a profound appreciation for the aesthetic in biological structure and function. A piller of integrity, Hans was a trusted colleague and mentor to all who had the privilege of working with him.

Hans is survived by his wife Theron, son Christopher, daughter Anet and grandchild Shallin. A memorial will be held on April 9, 2005 in Madison, Wisconsin. ■

—Soo-Siang Lim & Sol Sepsenwol



China.

Hans Ris

New Members

The ASCB Council admitted 1,216 new members and granted Emeritus status to eight members of the Society last month:

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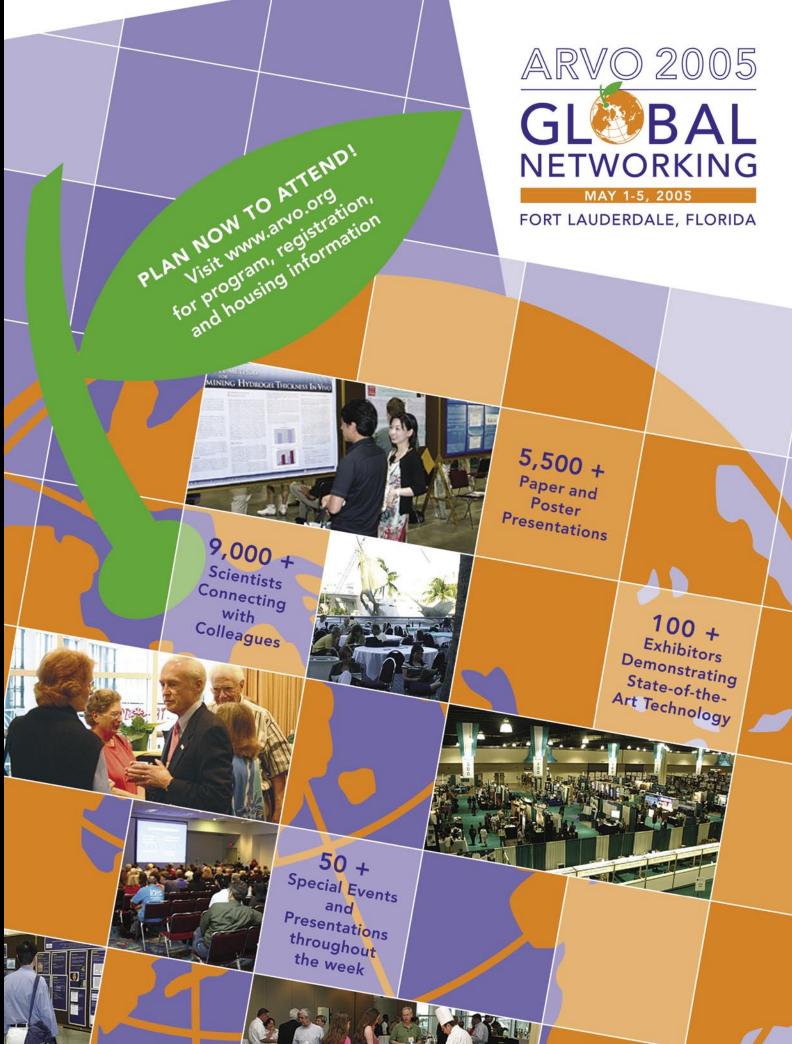
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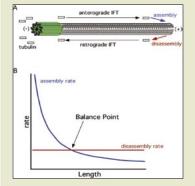
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INCYTES from MBC

A new feature in the ASCB Newsletter, InCytes will highlight four papers from the current issue of Molecular Biology of the Cell. This serves to 1) educate members of major advances in cell biology; 2) raise visibility of papers submitted to MBC; and 3) provide candidates for The MBC Paper of the Year. Following are the articles highlighted in the January 2005 issue of the journal:



Flagellar Length Control System: Testing a Simple Model Based on Intraflagellar Transport and Turnover

Wallace F. Marshall, Hongmin Qin, Mónica Rodrigo Brenni and Joel L. Rosenbaum

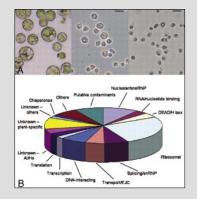
How is organelle size regulated? Flagella are microtubule-based structures assembled from a cytosolic pool of precursors that must be transported to their growing tips, where assembly has been shown to occur. The 'balance-point model' suggests that flagellar length is controlled at steady-state by a balance point determined when the length-dependent rate of assembly corresponds to the length-independent rate of disassembly. This quantitative and predictive model was subjected to a series of experiments designed to potentially invalidate it. The model held. The approaches described here can potentially be applied to other organelles for which sufficiently precise models have been proposed to account for regulation of organelle size.

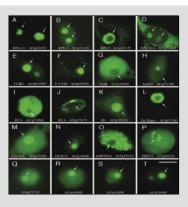
Proteomic Analysis of the Arabidopsis Nucleolus Suggests Novel Nucleolar Functions

Alison F. Pendle, Gillian P. Clark, Reinier Boon, Dominika Lewandowska, Yun Wah Lam, Jens Andersen, Matthias Mann, Angus I. Lamond, John W.S. Brown, and Peter J. Shaw

Powerful new mass spectroscopic techniques, the availability of complete genomes and subcellular fractionation have combined to allow identification of protein constituents of isolated cellular organelles. A comparison of nucleolar constituents across widely divergent species (Arabidopsis and human) serves to reinforce shared aspects of nucleolar function (i.e., in ribosome assembly and pre-mRNA splicing) and to reveal a novel function for the plant nucleolus in late stages of mRNA processing and export. As sensitivity

placing gene products in their appropriate functional context.





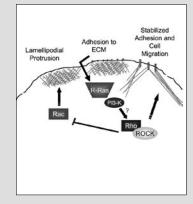
Efficiency of Protein Compartmentalization into the Secretory Pathway Corinna G. Levine, Devarati Mitra, Ajay Sharma, Carolyn L. Smith, and Ramanujan S. Hegde

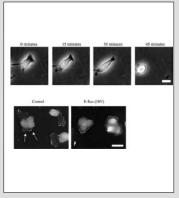
Textbooks lead us to believe that protein sorting between the cytosol and secretory compartments is highly efficient, yet there is an increasing number of e

result in cellular pathologies. An assay was developed that quantitatively measures the efficiency of the targeting of secretory and membrane proteins for translocation into the ER in vivo. Analysis of several different signal sequences reveals substrate-specific inefficiencies and interestingly cell-type and growth condition specific inefficiencies that may play a role in generating constitutive self antigens, in creating functional diversity for proteins, and/or in cellular pathology.

R-Ras Controls Membrane Protrusion and Cell Migration through the Spatial Regulation of Rac and Rho Michele A. Wozniak, Lina Kwong, David Chodniewicz, Richard Klemke, and Patricia J. Keely

Sustained cell migration requires the cyclical activation and inactivation of the Rho-family GTPases, rac and Rho, and their downstream effectors. This article demonstrates that R-ras, a neglected cousin of the Ras-family, is required for cell migration and functions to inactivate Rac and activate Rho in cell protrusions affecting the coordinate activity of these two GTPases. A clever subcellular fractionation scheme is used to isolate lamellipodia and to show that activated R-Ras is preferentially localized to these cell protrusions where it activates Rho and through the Rho effector, ROCK, inactivates rac. Future studies will be directed towards identifying how R-Ras is spatially and temporally regulated.

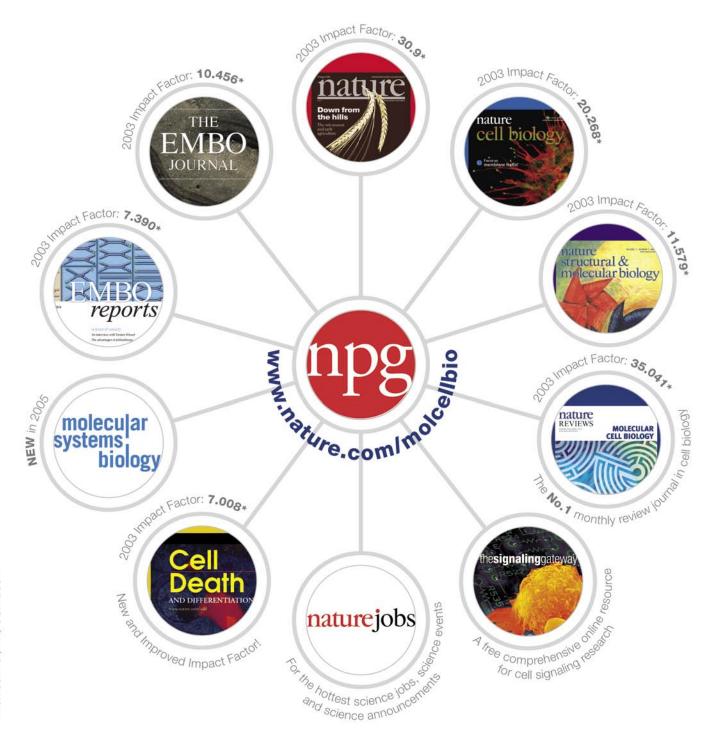




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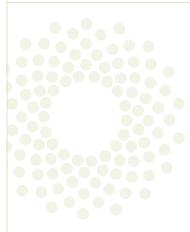








GRANTS & OPPORTUNITIES



BWF/HHMI Lab Management Guide. Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty is available at www.hhmi.org/labmanagement.

2005 NIH Director's Pioneer Award. A key component of the NIH Roadmap for Medical Research, the Award supports scientists of exceptional creativity who propose pioneering approaches to major challenges in biomedical research. Applications may be submitted between March 1 and April 1. See http://nihroadmap.nih.gov/pioneer.

NIH Virtual Career Center. The NIH Office of Education offers resources for exploring employment options and career development opportunities in health sciences. See www.training.nih.gov/careers/careercenter/index.html.

NIAID Biodefense Fellowships. The NIH National Institute of Allergy and Infectious Diseases solicits applications from biodefense training and development researchers of prevention, detection, diagnosis and treatment of diseases caused by potential bioterrorism agents. Grants, fellowships and career development awards. See www.niaid.nih. gov/biodefense/research/funding.htm.

NIH Re-entry Program. The NIH and Office of Research on Women's Health announce a continuing program for faculty who have taken time out for family responsibilities. See http://grants.nih.gov/grants/guide/pa-files/PA-04-126.html.

NIH Grants.

- Large-Scale Collaborative Project Awards, see http://grants2.nih.gov/grants/guide/pa-files/PAR-04-128.html. Dead-lines: September 20, 2006 and June 21, 2007.
- Predoctoral Research Training in Biostatistics, see http://grants2.nih.gov/grants/guide/pa-files/PAR-04-132.html. Deadline: October 12, 2007.
- Tools for Genetic and Genomic Studies in Emerging Model Organisms, see http://grants2.nih.gov/grants/guide/pa-files/PA-04-135.html. Deadline: November 2, 2007.
 National Technology Centers for Networks and Pathways, see http://grants2.nih.gov/grants/guide/rfa-files/RFA-RM-04-
 - National Technology Centers for Networks and Pathways, see http://grants2.nih.gov/grants/guide/rfa-files/RFA-RM-04-019.html. Deadline is February 22.

neuro-fibroma-tosis* THE NATIONAL NEUROFIBROMATOSIS FOUNDATION, INC.

MEETING ANNOUNCEMENT AND CALL FOR ABSTRACTS

The NNFF International Consortium for Molecular Biology of NF1, NF2 and Schwannomatosis

Sunday, June 5 - Wednesday, June 8- 2005 For Scientists Only Hotel Jerome Aspen, CO

Abstracts are invited to address the following topics as they relate to NF1, NF2, and Schwannomatosis:

Therapeutic Strategies and Clinical Results
Model Systems
Molecular and Cellular Biology
Tumorigenesis
Neural Crest Cells

For more information please visit: http://www.nf.org/goto/research/

Call for Proposals Summer Meeting Series

All ASCB members, individually or in teams, are invited to submit proposals to organize an ASCB Summer Meeting in 2006. The three-day meetings will host about 200 participants.

Topics should be novel (e.g., combining fields that don't traditionally meet together, or focusing on an emerging area) and include:

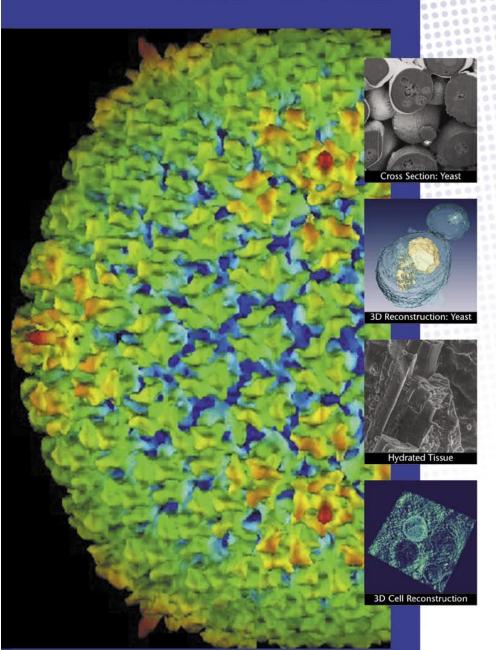
- a one-page summary of the scientific substance of the meeting;
- names of 3-10 potential speakers (confirmation need not be obtained in advance);
- CVs of proposed lead organizers.

Submit proposals to the American Society for Cell Biology, 8120 Woodmont Avenue, Suite 750, Bethesda, MD 20814 or ascbinfo@ascb.org.

Application deadline is **March 31.** Some participation in fundraising may be required of organizers. Meeting dates and sites are to be determined by the Society in consultation with the organizer(s).

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We wish to thank: Dr. Phoebe Stewart, Vanderbilt University Medical Center, TN, 3D reconstruction of adenovirus; Dr. Sriram Subramanian, NIH, Bethesda, MD, cross section: yeast; A.J. Verkleij, University Utrecht, The Netherlands, TEM prep: heart tissue; Roger Wepf, Research Brand, Beiersdorf AG, Hamburg, Germany, 3D cell reconstruction.

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CLASSIFIED Advertising

Postdoctoral Position

Position available to study the function and regulation of the actin cytoskeleton in membrane trafficking in mammalian cultured cells. The position will utilize most current molecular and cell biological techniques, including novel small molecule inhibitors (see Nat Struct Mol Biol (2004) 8:747) and state-of-the-art biochemical and fluorescence microscopy-based approaches. Candidates should be motivated, capable of independent research and excited by basic biological mechanisms. Send curriculum vitae, the names of three references, and a summary of past accomplishments to:

Dr. Jeff Peterson, c/o Human Resources, Fox Chase Cancer Center, 333 Cottman Avenue, Philadelphia PA 19111-2497. E-mail: employment@fccc.edu.

Fox Chase Cancer Center is an equal opportunity employer and was recently ranked among the best places to work for postdoctoral researchers by The Scientist.

Postdoctoral Position Molecular Biology

Postdoctoral Position Available: Molecular Biologist. The position is to study the effects of estrogen on protein kinase C and gap junctions in breast cancer cells. The ideal candidate will have experience in standard biochemical and molecular techniques, tissue culture, confocal microscopy, and working with mammalian cells. A Ph.D. is required. Applicants should send curriculum vitae and names and addresses of three references to: Annelise Nguyen, Ph.D., Department of Diagnostic Medicine/Pathobiology, Kansas State University, 1800 Denison Ave., Manhattan, KS 66506. Review of applicants will begin January 24, 2005 and will continue until the position has been filled. Kansas State University is an Affirmative Action / Equal Opportunity Employer. Women and minority candidates are encouraged to apply.



TENURE-TRACK FACULTY POSITIONS (ASSISTANT/ASSOCIATE/FULL PROFESSORS) IN THE DEPARTMENT OF MOLECULAR GENETICS AND MICROBIOLOGY, DUKE UNIVERSITY MEDICAL CENTER

Applications are invited for multiple tenure track positions in the Department of Molecular Genetics and Microbiology at Duke University. We are interested in individuals who will develop outstanding research programs in Genetics/Genomics. Microbiology or Virology. Some areas of particular interest include: (1) bacterial, fungal, and viral pathogenesis, (2) genome-wide genetic approaches to important biological problems, 3) the genetic bases of host-pathogen interactions, and 4) chromatin-mediated regulation of DNA transactions (transcription, recombination, DNA repair, and DNA replication).

The Department has 20 tenure-track faculty and a newly-appointed Chair (Tom Petes). Multiple interdisciplinary programs at Duke University, including the newly-formed Institute for Genome Sciences & Policy, afford a rich environment for scientific interactions. The facilities and start-up support provided by the Department and the University are excellent.

Applications should include a curriculum vitae, a brief description of research accomplishments, a short description of plans for future research, teaching experience, and the names and contact information for three individuals who can provide references. Applications will be reviewed as they arrive. Applications can be e-mailed to MGMFacultySearch@mc.duke.edu or sent to the MGM Search Committee, Department of Molecular Genetics and Microbiology, Duke University Medical Center, Box 3054, Durham, NC 27710. Women and minorities are encouraged to apply. Duke University is An Equal Opportunity/Affirmative Action Employer.

Duke University

Faculty Positions in Cell, Computational, and Structural Biology

The College of Science at Virginia Tech (http://www.cos.vt.edu), in cooperation with the Institute for Critical Technology and Applied Science (ICTAS, http://www.eng.vt.edu/ictas/) and the Institute for Biomedical and Public Health Sciences (IBPHS http://www.ibphs. vt.edu/), will strengthen research in Computational and Nanoscale Science through interdisciplinary faculty hires.

As part of this initiative, the Department of Biological Sciences is searching to fill tenure-track positions in CELL BIOLOGY, COMPUTATIONAL BIOLOGY, AND STRUCTURAL BIOLOGY at the junior and/or senior levels. The Department is seeking individuals with interest in working as part of an interdisciplinary team to address fundamental (e.g. cell signaling, motility, growth and division) or applied (e.g. cancer, nutrition) issues in cell biology. The successful applicant will be encouraged to developed active collaborations with cell biologists, chemists, physicists, computational biologists, and structural biologists in the Cell Regulation Group. Applicants must have an earned doctorate in a relevant field.

Applicants for CELL BIOLOGY must have demonstrated expertise in addressing fundamental or applied biomedical questions in eukaryotic molecular cell biology.

For additional information, contact Dr. Jill C. Sible at siblej@vt.edu. Applicants for COMPUTATIONAL BIOLOGY must have demonstrated expertise in theoretical and computational methods applied to problems in molecular cell biology, particular in deriving the physiological properties of cells from underlying regulatory networks. For additional information, contact Dr. John J. Tyson at tyson@vt.edu.

Applicants for STRUCTURAL BIOLOGY must have demonstrated expertise in macromo-lecular structure determination applied to fundamental problems in molecular cell biology. Ability to utilize and build on the facilities of the Virginia Tech X-Ray Crystallography Laboratory is desired. For additional information, contact Dr. Richard A. Walker at rawalker@vt.edu. Applications must be submitted online at https://jobs.vt.edu/. The application package should include a cover letter, resume, and statements of research interests and teaching philosophy. Applicants should arrange for three letters of recommendation to be submitted directly to: Cell, Computational and Structural Biology Search Committee, c/o Ms. Jackie Hamblin, Department of Biological Sciences, Virginia Tech, Blacksburg, VA 24061-0406. Review of applications will begin February 1, 2005, and continue until the positions are filled. Virginia Tech is an EO/AA university. Individuals with disabilities desiring accommodations in the application process should notify Melissa Simpkins, (540) 231-4033, or call TTY 800-828-1120.



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Nominations and inquires should be directed to: Dr. Donald O. Allen, School of Medicine, University of South Carolina, Columbia, SC 29208. Applicants should submit a curriculum vitae, statement of research interests, and professional plans. The University of South Carolina is an Equal Opportunity Employer.

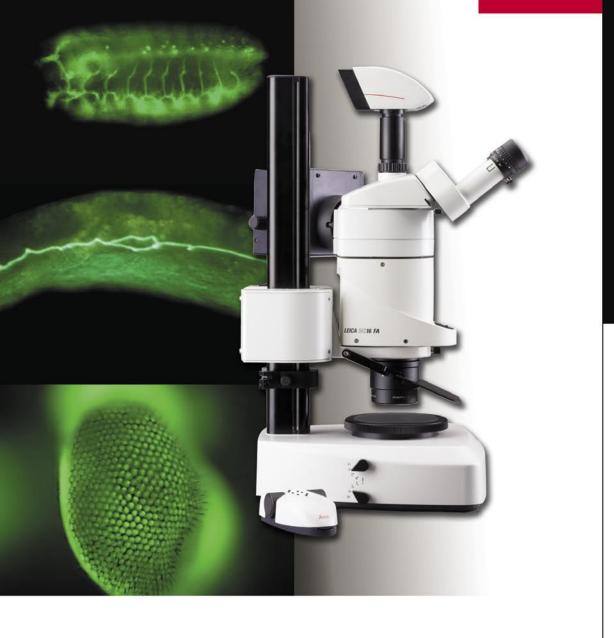
Postdoctoral Positions Stem Cell Biology

Two NIH-funded postdoctoral positions are available to study mesoderm and endoderm development from mouse or human embryonic stem (ES) cells. Strong background in molecular and cell biology required. Preference will be given to applicants who seek their first postdoctoral position and who have previous experience with mouse or human ES cells. Please email/Fax CV and names of three references to: Margaret H. Baron, MD, PhD, Mount Sinai School of Medicine, New York, NY. Fax: 212-849-2442. E-mail: margaret.baron@mssm.edu. EOE.



Postdoctoral Position Genetics Branch, National Cancer Institute National Institute of Health, Bethesda, MD

Research opportunity to characterize genes required for chromosome segregation, cell cycle, checkpoint control and chromatin structure/function in S. cerevisiae and to identify potential human homologs. These studies will expand our previous findings on evolutionarily conserved Spt4p, a component of centromeric and heterochromatic chromatin (EMBO J. 23: 1804-1813; Mol. Cell. Biol. 16: 2838-47 and 2848-56) and on understanding the function of checkpoint proteins Mad1p, Mad2p and Bub3p (Mol. Cell. Biol. 23: 6406-18) with particular emphasis on Mad1p, which we identified as a component of the nuclear pore complex (Genetics, 157:1543-1553; J. Cell. Biol. 159: 807-819). In collaboration with Jef Boeke (The Johns Hopkins University), Mike Snyder (Yale University) and Ron Davis (Stanford University), we are performing a systematic analysis of small previously non-annotated open reading frames (NORFs), some of which we originally identified using SAGE (Cell 88:243-251; Mol. Cell. Biol. 19:7041-49). We have excellent resources for genome-wide approaches, including whole genome arrays for expression and chromosome structure studies and a colonypicking robot for genetic analyses. The NIH and a local community of more than 30 yeast laboratories provide an excellent and stimulating scientific environment. Please send cover letter, CV and contact information for three references to: Munira A. Basrai, Genetics Branch, National Cancer Inst./NIH, Navy Med. Ctr., Bldg. 8, Rm. 5101, 8901 Wisconsin Avenue, Bethesda, MD 20889. Email: basraim@nih.gov. NIH is an Equal Employment Opportunity Employer.



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MEETINGS Calendar

ASCB

Annual Meetings

2005

San Francisco
December 10-14

2006

San Diego December 9-13

2007

Washington, DC December 1-5

2008

San Francisco
December 13-17

2009

San Diego December 5-9

April 30-May 4. Barcelona, Spain.

European Symposium of the Protein Society. See www.proteinsociety.org.

May 2-3. Bethesda, MD

Bone Quality: What Is It and Can We Measure It? See www. asbmr.org/bonequality.cfm.

May 16-17. Bethesda, MD.

Cellular Niches Workshop sponsored by NIDDK/NIH/DHHS. See http://cellularniche.niddk.nih.gov.

May 23 - 25. Charlottesville, VA.

Morphogenesis and Regenerative Medicine Symposium at the University of Virginia.

See www.morphogenesis.virginia.edu.

June 5-9. Atlanta, GA.

American Society for Microbiology General Meeting. See www.asm.org.

July 13-17. New York, NY.

Second International Symposium on Triglycerides, Metabolic Disorders and Cardiovascular Diseases. See www.lorenzinifoundation.org/.

September 1-5. Muensterschwarzach Abbey, Germany.

The Wilhelm Bernhard Workshop—19th International Workshop on the Cell Nucleus.

See www.zeb.biozentrum.uni-wuerzburg.de/.

September 3-7. Dresden, Germany.

European Life Scientist Organization Annual Meeting. See www.elso.org.

September 3-7. Sydney, Australia.

15th International Society of Developmental Biologists Congress (ISDB). See www.isdb2005.com.

September 7-11. Cambridge, England.

Strategies for Engineered Negligible Senescence (SENS), 2nd Conference. See www.gen.cam.ac.uk/sens2/.

September 23-23. Nashville, TN.

American Society for Bone and Mineral Research 27th Annual Meeting. Abstract Deadline: April 27. See www.asbmr.org.

September 25-29. Tomar, Portugal.

Second International Congress on Stress Responses in Biology and Medicine held by The Cell Stress Society International. See www.cellstress.uconn.edu.

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