Beckerle, Botstein Run for President

Mary Beckerle of the University of Utah and David Botstein of Princeton University will be on the ballot for ASCB President-elect this Spring. The elected candidate will serve on the Society’s Executive Committee as President-elect in 2005 and as ASCB President in 2006. Four candidates will be elected to the ASCB’s governing Council for three-year terms starting 2005.

An email with a link to the Society’s electronic ballot and candidate biographies will be sent to regular, post-doctoral and emeritus members this month. Printed biographies and ballots will be sent to members without email, and are available to any member upon request.

The results will be announced in the July issue of the ASCB Newsletter. 1999 ASCB President Randy Schekman of the University of California, Berkeley served as Nominating Committee Chair; also serving on the Committee were Don Cleveland, Sarah C.R. Elgin, Elizabeth Jones, Judith Kimble, Eric Olson, Joel Rosenbaum, Edward Salmon and Donella Wilson.

2005 Program Chair Announced

ASCB President-Elect Zena Werb has announced the appointment of Linda Hicke of Northwestern University to serve as Chair of the ASCB Program Committee for 2005. She is currently serving her first year on the ASCB Council.

Hicke will head the Committee charged with planning the scientific program for the 45th ASCB Annual Meeting, to be held in San Francisco from December 10-14, 2005. Members are encouraged to send suggestions to program@ascb.org.

New Feature

Dear Labby
See page 10

Blackburn Fallout
See Letters, page 18
Passionate Risk-Taking

Recently an undergraduate student came to talk to me because she was concerned about her performance in my cell biology class. I was surprised about this since she had scored well above class average on the first exam. But she was fuzzy about many basic concepts, especially in protein structure and function. It emerged that she was a freshman and had taken none of the prerequisites, which include a lab course and also genetics and biochemistry. When I asked why she was taking this advanced course, she responded that she was really excited by the material and was prepared to do whatever background reading was necessary. She also told me that she was not taking the standard freshman math sequence but rather was taking a math class at another institution because it involved differential geometry and she thought that was "cool."

I could have forced her to drop the course and told her so. But I admired her passion about science—not just about cell biology—and her eagerness to risk a comfortable undergraduate career by taking advanced courses simply because they excited her. This conversation reminded me that a willingness to take risks—both with one's education and research—is usually a characteristic of scientific leaders.

A willingness to take risks—both with one's education and research—is usually a characteristic of scientific leaders.

Unless a scientist can document every experimental step to convince the most uninformed reviewer that she can indeed carry out every step of the proposal—the grant will not be funded.

There is the occasional, exceptional, adventurous student or postdoc who deliberately declines a "safe" project to take a major risk with their career by tackling a very difficult yet extremely important problem. For example, Alan D’Andrea, then a postdoc in my lab, together with Gordon Wong, cloned the erythropoietin receptor using a then untested expression cloning scheme. It took him three years, and until we had the gene in hand there was nothing to show for his efforts. But he realized that cloning the Epo receptor would open up an entire field of research.
Many others have succeeded by taking major risks. Lenny Guarente’s early studies on aging in yeast, which was not productive for many years, is another example close to home. Bob Langer’s use of polymers for controlled protein release is another. In both cases, the “experts” were certain that such research was either impossible or not worthwhile or both.

It may not make sense for young scientists starting their own laboratories to start a totally new project in an area where they have little experience or that involves mastering a new technology. At the same time, one should not lose sight of the fact that quality and impact and not the quantity of papers is most important in faculty hiring and in tenure and promotion decisions. Young scientists might keep the existing main line of research going in order to be sure of a few “solid” papers. But they might also divert some funds into a new risky project and let their best student or fellow follow his or her dream, at least for awhile. One might study an old problem with a new technique and technology. The “side project” may end up becoming the central project.

Young researchers are well advised to pick their mentor carefully to ensure that she or he is willing to help them tackle a difficult problem. Then they should be passionate in their work and devote every intellectual and technical resource they can to solving it. Set a time limit – agree to change projects after some period of time unless certain milestones are reached. Finally, they should take to heart Ef Racker’s quote by Frank Westheimer in Racker’s 1976 book on Bioenergetics: “Progress is made by young scientists who carry out experiments that old scientists said wouldn’t work.”

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

One might study an old problem with a new technique and technology. The “side project” may end up becoming the central project.

“Progress is made by young scientists who carry out experiments that old scientists said wouldn’t work.”
Minisymposia will be scheduled eight each afternoon, Sunday through Wednesday of the Annual Meeting. Four additional speakers for each minisymposium will be selected by the co-chairs from among abstract submissions.

**Asymmetry in Development**
Juergen Knoblich, Institute of Molecular Biotechnology, Vienna, Austria
Geraldine Seydoux, The Johns Hopkins University

**Autophagy & Organelle Turnover**
Beth Levine, Columbia University
Yoshinori Ohsumi, National Institute for Basic Biology, Okazaki, Japan

**Cargo Selection & Vesicle Formation**
Bruno Antony, Institut de Pharmacologie Moléculaire & Cellulaire, Valbonne, France
Linton Traub, University of Pittsburgh School of Medicine

**Cell Biology of the Immune System**
Janice Blum, Indiana University
Daniel Davis, Imperial College London, UK

**Cell Biology of Intracellular Pathogens**
Michel Desjardins, University of Montréal, Canada
Julie Theriot, Stanford University

**Cell Biology of the Neuron**
Shelley Halpain, The Scripps Research Institute
Josh Kaplan, Massachusetts General Hospital

**Cell Cycle**
Susan Forsburg, The Salk Institute for Biological Studies
Thomas McCarrty, Northwestern University

**Cell Junctions & Polarity**
Andre Le Bivic, Developmental Biology Institute of Marseilles, France
Enrique Rodriguez-Boulan, Cornell University

**Cell Migration & Adhesion**
Margaret Frame, Beatson Institute for Cancer Research, Glasgow, UK
Yu-li Wang, University of Massachusetts Medical School

**Cell Regulation Through Extracellular Proteolysis**
Carl Blobel, Memorial Sloan-Kettering Cancer Center
Marcos Mills, University of Pennsylvania

**Chemical Biology**
Ben Cravatt, The Scripps Research Institute
Barbara Imperiali, Massachusetts Institute of Technology

**Chromatin Structure & Functional Organization of the Nucleus**
Shelley Berger, The Wistar Institute
Jan Ellenberg, European Molecular Biology Laboratory, Heidelberg, Germany

**Control of Gene Expression**
Ronald Breaker, Yale University
Stephen Buratowski, Harvard Medical School

**Cytokinesis & Cellularization**
Ahna Skop, University of Wisconsin, Madison
William Sullivan, University of California, Santa Cruz

**Diverse Cellular Functions for Ubiquitin & Related Proteins**
Erica Johnson, Thomas Jefferson University
Wes Sundquist, University of Utah

**Eukaryotic Gene Regulation**
Enid Neptune, The Johns Hopkins School of Medicine
Peter Yurchenco, LIMDDJ-RW Johnson Medical School

**Establishment & Maintenance of Membrane Subdomains**
Rob Parton, University of Queensland, Australia
Catherine Rabouille, UMC Utrecht, The Netherlands

**Intermediate Filaments**
Robert Goldman, Northwestern University
Harald Herrmann, German Cancer Research Center

**Intracellular Transport in Human Health**
Martina Brueckner, Yale University
Gregory Pazour, University of Massachusetts Medical School

**Microtubule-Based Motility**
David Burgess, Boston College
Sarah Rice, Northwestern University

**Molecular Microscopy in Living Cells**
Klaus Hahn, The Scripps Research Institute
John Heuser, Washington University in St. Louis

**Protein Translocation Across Membranes**
Arthur Johnson, Texas A&M University System Health Science Center
Carla Koehler, University of California, Los Angeles

**Secretory Organelles & Regulated Exocytosis**
Michael Marks, University of Pennsylvania
Aaron Turkevitz, University of Chicago

**Signaling in Cell Proliferation & Death**
Jian Wang, University of California, San Diego
Jeff Wrana, Samuel Lunenfeld Research Institute, Mt. Sinai Hospital, Toronto

**Signaling Networks**
Anton Bennett, Yale University
Margaret Chou, University of Pennsylvania

**Stem Cells**
Alejandro Sánchez Alvarado, University of Utah
Sean Morrison, University of Michigan

**Systems Biology: Theory & Practice**
Joseph Ecker, The Salk Institute for Biological Studies
Trey Ideker, University of California, San Diego

**Thermal & Mechanosensation**
Monica Driscoll, Rutgers University
Ardem Patapoutian, The Scripps Research Institute

To register, submit an abstract or for more information, contact the ASCB at (301) 347 9300. ascbinfo@ascb.org www.ascb.org
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Full page
Election to membership in the National Academy of Sciences is widely understood to recognize excellence in scientific research, but most scientists are not familiar with the process by which members are elected. This is certainly not intentional; no one gains by keeping the elections shrouded in mystery. The election’s successive ballots have become more complicated over time, however, in part reflecting the rapid expansion of scientific fields, and is most often now described as Byzantine. In this column, we attempt to shed some light on this poorly understood process and to highlight recent efforts to make it more welcoming, especially to women and to younger scientists.

Consideration of a candidate begins with his or her nomination. Although a formal nomination can only be submitted by an Academy member, the names of many potential members are suggested informally. A formal nomination form includes a brief C.V., a 250-word statement of the nominee’s scientific accomplishments — the basis for election — and a list of not more than twelve publications. Suggestions from nonmembers that include this information are more easily adopted as formal nominations.

Once a nomination has been prepared, it is sent to the chair of one of the Academy’s thirty-one discipline-based Sections, e.g., biochemistry, cellular and developmental biology, mathematics. Each Section has its own procedures, both for identifying potential candidates and for winnowing the list through successive ballots of Section members. Some of these procedures are simple and straightforward; others, lengthy and complex. Slight variations occur when candidates are nominated by two (or more) Sections. But, as illustrated in the figure, all Sections’ procedures culminate in two mandatory ballots—named, for reasons lost in history, the “Informal” and “Formal” ballots. Successful candidates then go forward as nominees for consideration by increasingly broad segments of the membership, beginning with the six discipline-based Classes into which Sections are grouped.

Candidates can also be nominated by a group of members by petition (a “Voluntary Nominating Group” or VNG) or by a special group appointed by the NAS Council to search for candidates in a specific field or set of fields (a “Temporary Nominating Group” or TNG). Last year, on the recommendation of the ad hoc Committee on Nomination and Election in the 21st Century, the Council appointed six of these TNGs—one for each of the six Classes: Physical and Mathematical Science; Biological Sciences; Engineering and Applied Sciences; Biomedical Sciences; Behavioral and Social Sciences; and Applied Biological, Agricultural, and Environmental Sciences. These TNGs were charged with identifying and nominating younger candidates, both men and women.

The Academy’s bylaws specify the maximum number of members who can be elected annually (currently 72), and each year the NAS Council determines the number of members that can be elected from each Class. In allocating these Class quotas, the Council currently takes into account not only the relative size of the pool of scientists in the fields cov-
ered by each Class, but also the Class’s success in nominating and electing younger members and women—especially those brought into the process by the “21st Century” Temporary Nominating Groups.

In early February, each of the six Class Membership Committees—composed of representatives of all Sections in that Class—meets to discuss the relative merits of all of the nominees who have survived voting in its Sections. As illustrated in the figure, nominees of VNGs and TNGs are also placed in the mix. The end product from each committee is a rank-ordered list of nominees, composed of 150% of the total number of members that the Class is permitted to elect. Nominees who cannot be placed on this list because of this upper limit will be automatically considered again by the appropriate Section the next year.

The rank-ordered lists of nominees for the six Classes comprise the “Preference Ballot,” which is sent to all Academy members in early March, along with nominees’ biographical material and information about their standing in preliminary ballots. Members are required to vote in all six Classes for their ballot to be valid, and the results are tabulated for presentation during the business session at the Academy’s annual meeting in late April. Members attending the annual meeting vote on the “Final Ballot” which contains the names of the 72 nominees who received the highest number of votes on the preference ballot, up to the maximum number permitted in each Class. The remaining nominees appear on a second list and—like those not ranked by the membership committees earlier in the process—are automatically reconsidered the following year.

Although it is customary to vote on the final list as a group, any member at the meeting may request that a name be removed for discussion and a subsequent separate vote. Such “challenges” are very rare and they may or may not prevent a nominee from being elected that year, depending on the outcome of the vote. Procedures also exist (though they are virtually never invoked) for exchanging nominees between the first and second lists. The new members elected each year are introduced and welcomed to the Academy by their colleagues at the annual meeting the following April.

A question that might be raised is whether the end result is worth the large amount of time and effort that is devoted to the election process at the National Academy of Sciences. Why does it matter that the 2,000 members of the Academy are so carefully chosen?

There are at least two answers to this important question. First, in principle, each member should serve as a role model for defining excellence in science for the next generation of scientists in his or her field. In addition, it is this Academy—along with its sisters the National Academy of Engineering and the Institute of Medicine—that supports the enormous public service efforts of the National Research Council, our “operating arm.” Known as The National Academies, this four-part organization is chartered to provide extensive policy advice to our national and state governments. The issues addressed cover a vast range—from the organization of the National Institutes of Health and the status of postdoctoral fellows and young investigators in the biological sciences to the dangers of arsenic in drinking water and of future climate change.

By producing an average of more than one report every working day, the Academies have greatly increased the wisdom of public policymaking.1

—Bruce Alberts and Ken Fulton

1 All recent work at the Academies, some 3,000 books, can be accessed for free at www.national-academies.org.
2004 Summer Meeting

Cytokinesis

July 22 - July 25
The University of Vermont

Organizer
Yu-li Wang, University of Massachusetts Medical School

Thursday, July 22
Keynote Speaker: Raymond Rappaport
Mount Desert Island Biological Laboratory

Friday, July 23
Contractile Ring Assembly & Constriction
Thomas D. Pollard, Yale University
Speakers: Issei Mabuchi, University of Texas
John Pringle, University of North Carolina

Membrane Dynamics in Cytokinesis
David R. Burgess, Boston College
Speakers: Fred Chang, Columbia University College of Physicians & Surgeons
John White, University of Wisconsin

Saturday, July 24
The Mitotic Spindle and Cytokinesis
Bruce Bowerman, University of Oregon
Speakers: Michael Glotzer, Research Institute of Molecular Pathology
Edward Salmon, University of North Carolina

Novel Aspects of Cytokinesis
Yu-li Wang, University of Massachusetts Medical School
Speakers: Dannel McCollum, University of Massachusetts Medical School
Douglas Robinson, Johns Hopkins University School of Medicine

Sunday, July 25
Functional Genomic and Non-Genomic Approaches
Christine M. Field, Harvard Medical School
Speakers: Kathy Gould, Vanderbilt University
Patrick Hussey, University of Durham, UK
James Spudich, Stanford University

Additional speakers will be selected from submitted abstracts.

Poster sessions are scheduled for Friday afternoon.

For more information, see www.ascb.org.
POSTDOC MATTERS

A Ticking Clock

When I became a postdoc two years ago, I discovered, as do most postdocs, that there were few healthcare benefits, and very little security. To help to address these deficits, I got involved on my campus, and helped start a postdoctoral association. The main reason benefits became an important issue to postdocs is because the length of time a person can serve as a postdoctoral fellow has increased. Similarly, this is a central issue we confront on the ASCB Subcommittee on Postdoctoral Training (SCOFT).

The pitfalls of being a postdoc have long been obvious. The first postdoc I ever met had been in one position for nine years, and couldn’t find a job. At the time, this was unusual. Since then, longer postdoc stays have become alarmingly common. The number of postdocs in the U.S. doubled from 1975 to 1995\(^1\). But more detailed statistics on postdocs are hard to find, largely because no one has kept track. Until recently, most campuses had no formal accounting system for postdocs, since they are not students and not faculty—we weren’t even on the radar.

What are the consequences of time limits? Postdoctoral fellowships have time limits, as is true for all grants. Some campuses cap postdoc stays at five years, requiring promotion or re-categorization after that time. However, adding a time limit now can punish postdocs who have already gotten stuck. Time limits also make it harder for people who want to switch fields. Furthermore, longer-duration postdocs are becoming so accepted that they’re expected. On the job market, it can be difficult to compete with someone who has several years of publications after serving as a postdoc five years or more.

On the other hand, time limits can be very useful. For new postdocs, a limit provides a built-in timetable to complete a project. Importantly, it gives the advisor a timetable to help the postdoc get a job, and it sends the message that it’s not acceptable to expect postdocs to stay forever. Staying too long can look bad, since it suggests a lack of direction, and perhaps even a lack of ambition. In most cases, it’s really not advantageous to the postdoc to stay for eight or nine years in a single lab.

There are other problems with time limits. It’s common to take consecutive postdoc positions. At UCSD, for example, it was determined that the total time a person spends in postdoc positions anywhere should not exceed five years, with exceptions for parenthood, switching fields, or other mitigating circumstances.

The ASCB is now challenged to decide if it wishes to add its voice to the national debate on postdoc time limits, and, if so, what it should advocate. My opinion is that, ideally, three years should be long enough. We just have to hope it’s not too late to stop the trend. ■

—Samantha Zeitlin, Chair ASCB Subcommittee on Postdoctoral Training

Comments are welcome and should be directed to postdoc@ascb.org.

\(^1\)http://www.aau.edu/reports/PostdocRpt.html.
Dear Labby,

I have started seeing a post-doc from a lab in another department at the large medical school where I work. The problem is that our labs are in similar fields and our PIs are fierce rivals. I feel like I’m sneaking around as if I were having an extramarital affair. We’re not so serious yet but I resent feeling like I’m doing something naughty when I’m not. I need advice about how best to handle this with my PI, without making too big a deal of the whole thing.

—New York Post-Doc

Dear Big Apple,

Attack this one head-on. Say to your PI, “I want you to know from me before you hear it through the grapevine that I have become friendly with a post-doc in Joe Bozo’s lab. I mention this so I can reassure you that the relationship is purely social and I will not compromise my loyalty to your lab.” If later things heat up and you feel the inevitable pillow talk may compromise your loyalty to the lab, look for another position.

—Labby

Dear Labby,

I am an assistant professor at a research-intensive university. My work has been going well and I’ve had some recent visible successes. This has inevitably resulted in a flurry of invitations to speak at other universities. This is welcome, of course, and an honor. However, I have two small children at home and my wife is also a professional so there’s a personal cost to each trip. This raises the following questions. First, should I be selective about which places I visit? I hesitate to do this because I do not have tenure and know that national exposure is important for promotion. Also, if I do raise my threshold for acceptance, what factors are most important? Finally, I would rather meet intensively with people while I’m there and get back home as quickly as possible. Is it rude to suggest this, and if not, how and when does one do it?

—Victim of My Own Success in California

Dear Victim:

Congratulations on this fortunate but real problem. Giving seminars at other universities is important for several reasons. Senior scientists asked to write in support of your promotion can write stronger letters if they have heard you speak and had a chance to meet with you, one-on-one. Graduate students often identify faculty as potential post-doctoral mentors after hearing an inspiring lecture. And few scientists have time to read the literature broadly, and lectures are an important way to disseminate your latest exciting findings. I advise young faculty to focus on institutions where there are talented graduate students (potential post-doc recruits) and also where potential reference-writing colleagues are located to enhance national exposure. In addition, seminars provide a great opportunity to get feedback about your research.

Everyone understands if you have young children and travel is difficult. Where you decide not to visit, tell them why and tell them that you would like to come in a year or two when your children are older. As for efficiency of a planned visit, you can say to your host, “the only problem is that my Spring [Fall/Summer/Winter] is busy, and I have small children at home, so I hope that it will be possible to enjoy an intensive visit without staying over more than one night. But please feel free to schedule me well into the evening so I can benefit as much as possible from interaction with your students and faculty.” Your hosts will appreciate your honesty, your dedication as a parent, and perhaps even not having to prolong their hosting responsibilities.

Caution: don’t wait until they send you a schedule, because 1) sometimes it comes at the last minute; 2) airline reservations that are hard to change may have already been made, and 3) it will inevitably appear to be a reaction to the proposed schedule itself, offending everyone on it.

In exchange for their accommodation, arrive (if possible for a parent of small children) well-rested and focused on your hosts and their work. Communication with the lab can wait a day.

—Labby

Direct your questions to labby@ascb.org. Authors of questions chosen for publication may indicate whether or not they wish to be identified. Submissions may be edited for space and style.
Bush Stem Cell Policy Under Fire

Pressure continues to mount on the Bush Administration to expand its current policy on the use of Federal funds for research using human embryonic stem cells. Under current policy, only stem cell lines derived before August 9, 2001 qualify for funding by the Federal government.

Initially, the Administration claimed that 60 embryonic stem cell lines around the world qualified for Federal research money. That estimate was later increased to 78 cell lines. However, as the ASCB noted shortly after the policy was enacted, the number of stem cell lines actually available and usable by researchers falls short of either estimate considerably. A 2002 survey by the ASCB of owners of cell lines identified by the President as eligible for research with Federal funds determined that only 16 lines were actually viable and available.

A report by The Washington Post indicates that of the 78 lines identified as meeting the qualifications established by President Bush, 17 are currently available to researchers as recently as January, 2004. The NIH Stem Cell Task Force listed 12 lines as of last month.

Disappearing Stem Cells
President Bush said on August 9, 2001, that "more than 60" colonies of stem cells would be eligible for Federal research funds under his policy, a number that ultimately increased to 78. But subsequently it became clear that most lines will never become available to scientists.

<table>
<thead>
<tr>
<th>Total eligible colonies announced</th>
<th>78</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determined to be duplicates</td>
<td>-7</td>
</tr>
<tr>
<td>Failed to grow or withdrawn</td>
<td>-17</td>
</tr>
<tr>
<td>Held at foreign labs unwilling to ship to U.S. researchers</td>
<td>-31</td>
</tr>
<tr>
<td>Not available to researchers today but may become available in the future</td>
<td>-8</td>
</tr>
<tr>
<td>Cell colonies actually available to researchers today</td>
<td>15</td>
</tr>
</tbody>
</table>

Sources: Washington Post; unpublished NIH analysis circulating on Capitol Hill.

This information was revealed in the same week that Harvard researcher and ASCB member Doug Melton announced the development of 17 human embryonic stem cell lines with non-Federal funds that will be made easily available to researchers.

These developments have renewed interest in Federal funding of stem cell research on Capitol Hill, including by Members of Congress who had previously supported the President’s policy on stem cells. A bipartisan group in the House of Representatives, led by Rep. Mike Castle (R-DE) and the Main Street Partnership, a group of moderate Republican Members of Congress, Senators and Governors, are currently gathering signatures from fellow Members on a letter to President Bush, urging him to expand current policy.

Federal Biosecurity Board Created

The U.S. Department of Health and Human Services (HHS) will lead the Federal government’s effort to implement improved biosecurity regulations for “dual-use” areas of biological research that could be misused.

HHS Secretary Tommy Thompson announced the formation of the National Science Advisory Board for Biosecurity (NSABB) at an NIH event last month. The Board will provide advice and make recommendations for the oversight of Federally-funded biological research. The Board will seek to balance national security concerns with the needs of the scientific research community.

The NSABB will provide advice to Federal agencies on strategies for oversight for Federally-funded life sciences research; the development of guidelines for oversight along with ongoing evaluation of these guidelines; strategies for Federal agencies to work with science journal editors to develop publication guidelines; guidelines for mandatory training programs in biosecurity for researchers and lab work-
ers at Federally-funded institutions and the development of a code of conduct for researchers, lab workers, professional organizations and institutions in the United States and around the world.

The NSABB will also work with the State Department to develop international biosecurity guidelines.

The Board will consist of 25 voting members and will be appointed by the HHS and other relevant Federal agencies. Members are expected to represent expertise in a range of life science fields, national security, law enforcement and scientific publishing.

Snails Closed Out of Classrooms

The U.S. Department of Agriculture has prohibited the interstate transport of \textit{Helix aspersa}, otherwise known as the common land snail. The ruling is based on fears of an expanded infestation of the fast-eating, fast-breeding snails, which have become a risk to agriculture.

The snail is considered an ideal animal for study by young students. The Smithsonian Institution and UC Berkeley have developed science curricula based on the snails, used in about one-third of the nation’s 17,000 school districts.

Attractions of the land snail for teaching are its relative activeness for a snail, its squish-resistance, its visible eyes and breathing tubes, and a digestive tract and heart which are visible through the shell.

The Agriculture Department has been working to locate teaching alternatives to \textit{Helix aspersa}.

For more information see www.aphis.usda.gov/ppq/permits/plantpest/snails_slugs.html.

"Pets’ Rights" Intensify

Woodstock, New York has become the eighth city in the United States to adopt pet guardianship legislation. Under the new city ordinance, people with pets are now known as pet “guardians” instead of pet “owners.” Woodstock joins Sherwood, Arizona; Boulder, Colorado; San Francisco, West Hollywood and Berkeley, California; Amherst, Massachusetts and Menomonee Falls, Wisconsin in this convention. The State of Rhode Island has also changed its laws.

The movement to change local ordinances is being organized by In Defense of Creationism Monitor

Oklahoma—The Oklaho-

ma State House passed, 96 – 0, legisla-
tion that includes a re-
quirement that all school text-
books that discuss evolution must in-
clude a disclaimer that describes evolution as
"a controversial theory which some scientists present as scientific explanation for the origin of living things."

Ohio—The Ohio State School Board voted 10 - 7 to approve a new 10th grade biology curricu-
um that includes the teaching of "creation science."

Alabama—The Education Committee passed a bill that would allow teachers to teach alternatives to evolution. A similar bill is also being considered in the Alabama State Senate.

For more information, go to www.ascb.org/publicpolicy/creationism.html.
Correction

In the February 2004 ASCB Newsletter, the chart showing the President’s 2005 Budget request for the NIH (page 9) incorrectly transposed the budget number for the National Center on Minority and Health Disparities. The correct figure is $196,780,000.

Animals. The group believes that pets are more than property and as long as they are referred to as property, they will be treated as such.

The implication to biomedical research is suggested in a bill introduced in the Rhode Island General Assembly last year which prohibits the sale or transfer of animals to research or education institutions within the state.

French Scientists Resign Over Funding Cuts

Over 2,000 French scientists resigned their administrative positions to protest a decision by the French government to reduce spending for research and eliminate over 500 full time research positions. In addition, more than 5,000 other scientists marched through Paris in protest, while thousands of others protested in other French cities.

Among the concerns leading to the walk-out and demonstrations is a 10% reduction in science funding in 2003 following a funding freeze in 2002. Additionally, the government announced a reduction in the number of positions available to young scientists. Alain Fischer, Research Director of INSERM, said that cutting the number of positions amounted to “breaking a moral contract between the state and research.”

CLC Members Advocate for Science

On March 17, the Joint Steering Committee held the first of five Capitol Hill Days for 2004. The event attracted twenty-three scientists from around the country who participated in thirty-seven congressional meetings. Increasing Federal funding for the National Institutes of Health and the National Science Foundation are difficult tasks this year due to current Federal budgetary constraints. The scientists reinforced the importance of basic research to the health, economy and security of the Nation.

A highlight of the day was the briefing by Nobel Laureate and ASCB member Stanley Prusiner, who addressed the Con-

More Caucus Speakers Announced

April 28
Steven Block
Stanford University
Dealing with the Threat of Bioterrorism

July 21
Louis Kunkel
Harvard Medical School/HHMI
Muscular Dystrophy

The briefings of the Congressional Biomedical Research Caucus are sponsored by the Joint Steering Committee for Public Policy, a coalition of the American Society for Cell Biology, the Genetics Society of America and the Society for Neuroscience.
The ASCB Newsletter, Vol 27, No 4

Congressional Biomedical Research Caucus on Mad Cow Disease. Prusiner addressed a standing room only crowd of Congressional and agency staffers on why the disease is a threat and provided recommendations on how to protect the country’s food supply. ■


Hill Day participants start the day with a briefing on Capitol Hill.

The JSC will host Capitol Hill Days this year on May 19, June 23, September 15 and October 6. For additional information on these events or to register at no cost, contact Matt Zonarich at 301-347-9309 or mzonarich@jscpp.org.

CONGRESSIONAL BIOMEDICAL RESEARCH CAUCUS

Nobel Laureate Stanley Prusiner of the University of California, San Francisco, addresses the Congressional Biomedical Research Caucus on Mad Cow Disease: Dealing with the Threat on March 17.

ASCB Executive Director Elizabeth Marincola and Caucus speaker Stanley Prusiner.

Congressional staff, press, and staff from the EPA, FDA, USDA and other agencies attend the Mad Cow Disease Caucus briefing.

Stanley Prusiner and JSC Congressional Education Liaison Peter Kyros.
Gary Ward

Gary E. Ward was finishing a postdoc in 1989 on a hot topic in a hot lab. The lab was Marc Kirschner’s at the University of California, San Francisco, and the topic was the cell cycle. “Connections in cell cycle regulation were being made between yeast and sea urchins and frogs,” Ward recalls. “All of a sudden, it was clear that we were all seeing the same thing. It was an amazing time.” So it was hardly expected when Ward jumped from the cell cycle to a narrow and entirely different field about which he knew little—parasitology—to study the cell biology of Plasmodium, the malaria parasite.

“In some respects, I had to start over,” Ward says about his decision to join Lou Miller’s malaria research lab at the NIH in 1989. “There was very little being done then on the fundamental cell biology of Plasmodium and the related Apicomplexa parasites like Toxoplasma.” But Ward’s motivation and the source of his determination were clear: “The cell biology is fascinating, and these are diseases that really matter,” Ward says simply. “All of us in basic research argue in our grant applications that what we’re doing has medical relevance; but malaria is one of the truly Big Ones. More than 40 percent of the world’s population is at risk, 300 million people suffer from the disease, and over a million die annually, mostly young children.” After his initial interview with Miller, Ward called home to ask his wife, Zail Berry, who was finishing her medical residency at UCSF, if she could move to Bethesda while he figured out how to become a molecular parasitologist. They stayed seven years.

Says his former UCSF colleague Tim Mitchison, now at Harvard Medical School, “After a successful postdoc in the Kirschner lab, Gary could have gotten a good job anywhere in cell biology, but he wanted to work on malaria and do something important. You’ve got to feel good about somebody who’s working on an organism like Toxoplasma that’s a difficult to treat human disease, especially in AIDS patients, and still quite relevant to malaria.”

Today Ward’s only regret about going into molecular parasitology is that the work has not gone fast enough or far enough. First, he had to come up to speed on the “Byzantine life cycles” of the Apicomplexa parasites. Culturing and manipulating the invasive stages of Plasmodium turned out to be excruciatingly difficult. Eventually, Ward turned to Toxoplasma for a lab model of parasite-host cell invasion that could still be applied to malaria. The human disease burden from Toxoplasma is real if more insidious, says Ward. It is an important cause of congenital birth defects worldwide. Additionally, 20 percent of Americans and as much as 95 percent of the population in other parts of the world are chronically infected, leaving them vulnerable under the immunological strain of AIDS, cancer chemotherapy or an organ transplant to the sudden re-emergence of a life-threatening Toxoplasma infection. “That’s the downside when you go into a field where not a lot has been done,” says Ward. “There wasn’t a large community of researchers when I started where I could turn to for reagents or methodologies, the way I could in cell cycle. We didn’t have the genomes and the knockouts, so we’ve all had to spend a significant portion of our time...”
developing some of the tools that every yeast biologist takes for granted.”

His peers think Ward has already brought the field a long way. “Gary’s been instrumental in changing how we think about parasite invasion and in developing new technologies to apply to these complex biological problems,” says David Roos of the University of Pennsylvania. “Gary was the first to apply electrophysical approaches to the process of cell invasion. He gave us our first indication that when the parasite invades and sets up its specialized vacuole, it uses the host cell’s own lipids to form the parasilophorius vacuole. That was a critical discovery.”

Roos continues, “Gary’s development of novel cell biological screens for looking at interesting cell processes like motility or invasion using the kind of small molecule high-throughput analysis was typically limited to biochemical studies of a particular enzyme. Gary has done a fantastic job developing what are really whole organism screens.”

Like nearly everything else in molecular parasitology, small molecule screening presented both special difficulties and tremendous opportunities, says Ward. Previous studies of host cell invasion had been severely handicapped by the fact that, in a haploid obligate intracellular parasite such as Toxoplasma, disruption of a gene essential for invasion is lethal by definition. Ward explains, “In the absence of an inducible promoter or efficient conditional mutagenesis, both forward and reverse genetic approaches suffered from the same problem: the most interesting of the mutants one might generate were likely to be non-viable.”

Ward and his British collaborator, synthetic chemist Nick Westwood, wondered if they could use libraries of structurally diverse small molecules to screen for compounds that cause a particular biological effect and then to work backwards from “hits” to directly identify the molecular target that was disrupted.

“This new work by Gary goes beyond revealing some interesting compounds with drug potential,” says Tim Mitchison. “It reveals the whole idea of targeting the secretory pathway of the parasite. It’s a piece of physiology that no one has considered before as a suitable target. The importance here goes beyond the compounds themselves. The approach shows that the microneme secretion pathway is a plausible, drugable target.”

Today, Ward is a Burroughs Wellcome New Investigator in Molecular Parasitology and Associate Professor in the Department of Microbiology and Molecular Genetics at the University of Vermont. In addition to his research, Ward teaches cell biology and parasitology to undergraduates, graduate students and medical students. Zail Berry practices internal medicine in Burlington, specializing in palliative care. Their two children, Zina, 13, and Grady, 9, ski like true Vermonters—as does their Canadian dad—despite their Bethesda roots. Ward plays ice hockey twice a week, including on the Microbiology faculty’s intramural squad, “The Geezers.”

He loves Vermont’s mountains and Vermont politics, and has followed with passion “the rise and stall” of their former Governor Howard Dean.
Ward’s research interest makes him acutely aware of Third World health issues, and he is a strong advocate for open access publishing. He serves on the editorial board of the Public Library of Science Biology journal, and has been a major player in the ASCB’s contributions to this movement. He has also served the Society as its elected Treasurer since 2002.

Ward was born in Montreal, Canada, the third of four boys. His oldest brother, Bruce, is a dentist and his older brother, Brian, is a physician and tropical disease researcher at McGill. (Brian and Gary have collaborated and are hoping to publish together soon). His younger brother, Glen, is a pediatrician. Gary majored in Biology and Physics at the University of New Brunswick in eastern Canada and chose the Scripps Institute of Oceanography at UC San Diego for graduate school, thinking of a career in oceanography. But he fell under the spell of Vic Vacquier, who convinced him that cell biology was the way to answer almost any question. (Vacquier also convinced Ward that the ASCB was the society for almost everyone in biology.) For his doctoral thesis under Vacquier, Ward worked on sea urchin sperm, analyzing how they sensed and chemotaxed toward sea urchin eggs.

“Vic firmly planted in me the idea that the cell was ‘where it was at’ and that cell cycle regulation was going to be one of the next Big Things,” Ward says. He joined the Kirschner lab in 1985.

Says David Roos, “Many cell biologists are drawn by the world health implications [of parasitology], but some are still put off by the prospect of working in a small field which they feel lacks a critical mass of investigators. Gary took this as a challenge rather than an impediment. I think what Gary has been able to accomplish shows what an unusually innovative and ingenious cell biologist he is.” Says Tim Mitchison, “Gary’s the kind of scientist all of us should aspire to be. Plus,” Mitchison adds, “he’s a super nice guy.”
LETTERS TO THE EDITOR

Members Respond to Blackburn’s Dismissal

To the Editor:

The removal of Elizabeth Blackburn from the President’s Council on Bioethics (ASCB Newsletter, March 2004) brings home to the ASCB a taste of this White House’s disdain for open discussion of vital issues. Instead of making informed decisions based on a consideration of alternative points of view, President Bush prefers advisors who tell him what he wants to hear. If his Director of Central Intelligence gathers questionable data that he likes, he stands behind him. If his Secretary of the Treasury disagrees with irresponsible tax cuts, he finds himself a new one.

In the case of the Council on Bioethics, the deck was clearly stacked from the start in favor of a certain brand of advice. But, when it came to a debate about stem cells, the vote in favor of the President’s inclinations was too close for comfort. Rather than risking reports that might challenge his preconceptions, it seemed safer to fiddle a bit more with the deck. Hence the firing of Elizabeth Blackburn.

To those of us in biomedical science who live in a world of rigorous checks and balances, such blatant manipulation of the outcome of critical debates is hard to believe. Politicians are, of course, free to use advice as they wish, and to be held accountable for their decisions. They should also be held accountable for the cynical dismissal of Elizabeth Blackburn.

—Samuel Barondes
University of California, San Francisco

To the Editor:

BRAVA, BRAVA, BRAVA!! A THREE GUN SALUTE to Liz Blackburn for her willingness to expose the lack of credibility of the President’s Bioethics Council (ASCB Newsletter, March 2004). We all owe her a debt.

Even though serving on the Council may have had a few moments of interest, she deserves the Purple Heart and whatever they give for a civilian’s acts of valor.

—Paul Berg
Stanford University School of Medicine

To the Editor:

We should all be proud of Liz Blackburn’s willingness to expose the actions and motives of Leon Kass and President Bush when they unceremoniously released her from the President’s Council on Bioethics (ASCB Newsletter, March 2004). Her statements in the scientific and general press have been totally excellent, totally Blackburn: say what’s going on and sit down. Beautiful. It’s doubtless occurred to her, but of course the obvious response to Kass’s comment about “repugnance” to embryonic stem cell research is to compare it to one’s repugnance to the suffering of people who are afflicted with juvenile diabetes and quadriplegia.

—Ursula Goodenough
Washington University

To the Editor:

Elizabeth Blackburn is to be congratulated on her articulate defense of the importance and proper use of basic scientific research on aging and on stem cell applications as a member of the President’s Council on Bioethics (ASCB Newsletter, March 2004). It must concern all of us that the Council has issued reports that fail to acknowledge the strong dissent of the scientific community. It is equally alarming that this important panel has been stripped of its scientific expertise, leaving a Council whose members have strong religious and/or ideological positions and who apparently view responsible scientific research with suspicion. We all owe our colleague Liz Blackburn a debt of gratitude for her tireless work in representing the scientific research community with such dedication and eloquence.

—James Haber
Brandeis University

To the Editor:

Elizabeth Blackburn’s removal by the Administration represents the loss from the President’s Council of a well-reasoned voice supporting both scientific rigor and moral values (ASCB Newsletter, March 2004). She has emphasized the need for research with embryonic stem cells because of the great promise for tissue regeneration that they offer. We suspect that her views on this subject led to her dismissal.
The dismissal of Dr. Blackburn diminishes the scientific expertise necessary for a complete, rational debate on the critical issues about which the Council on Bioethics is charged to inform the President and the public. Furthermore, we feel that the explanation given by the Chairman of the Council was inadequate, and included no comment on why she was not replaced by a geneticist or other basic scientist of comparable stature.

—Mark Johnston, Washington University
—Thomas D. Petes, University of North Carolina
—Gerald R. Smith, Fred Hutchinson Cancer Research Center

To the Editor:

Liz Blackburn, who is a Non-resident Fellow of the Salk Institute, has done us all a service by providing government honest and sound scientifically based advice. Apparently, some in this Administration don’t want to hear it. I find this enormously troubling.

—Richard Murphy
The Salk Institute for Biological Studies

To the Editor:

Liz Blackburn should be honored to have been fired in such a blatantly political act by the Bush Administration (ASCB Newsletter, March 2004). The action is reminiscent of the Saturday night massacre when Richard Nixon fired Archibald Cox from the Watergate investigation. (Science Advisor to the President John) Marburger should be ashamed that he defended the Bush science policy. He should stand by Blackburn and resign as Advisor. Those of us in the ASCB should honor Liz Blackburn for her service in the defense of science!

—Randy Schekman
University of California, Berkeley

To the Editor:

All members of the ASCB should be proud of Liz Blackburn, former President of our Society, a distinguished cell biologist at UCSF (and my former colleague here at Berkeley), for her willingness to tell her side of the story in the national press of how and why she was fired from the President’s Bioethics Council (ASCB Newsletter, March 2004).

In my opinion, she is a hero for standing up for scientific objectivity. Basic science, medical practice, and the welfare of the US population will be severely jeopardized if government policies are set by close-minded ideologues who are unable to evaluate the available evidence impartially and dispassionately. Down through the ages, policies established on the precepts of religion alone have been a disastrous path to follow. Faith is a personal matter, not one that should be imposed on others by edicts from the highest levels of government, as the founders of our nation and the writers of the Bill of Rights in our Constitution so astutely realized. Indeed, the very first phrase of the very first Amendment states: “Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof...” Based on their own experience, the Founders knew that any government erected on, or that imposes on its people, any specific religious tenets is a bad one. When did our current leaders lose sight of this critically important lesson of history?

—Jeremy Thorner
University of California, Berkeley

To the Editor:

I gather that the President’s dismissal of Liz Blackburn from his Council on Bioethics (ASCB Newsletter, March 2004) means that she was not only doing something right, but she must also have been effective. Congratulations to her.

—Virginia Zakian
Princeton University

Teaching Enhances Research

To the Editor:

Harvey Lodish’s recent article (ASCB Newsletter, February 2004) on teaching made some interesting, albeit not original, points about the interplay between teaching and research....in both direc-
It may have been more useful, however, to confront the dichotomy of teaching VS research in today’s research universities. The fact is that when it comes to promotion (or, indeed, any fame or fortune in today’s research society) we get very little credit for teaching. Certainly, the young faculty at my university get little or no credit for outstanding teaching when it comes time for promotion to tenured. Indeed, the old adage that “you can get tenure by being a superb researcher and an average, or even poor, teacher, but you will never get it by being an excellent teacher and just an average researcher” is as true as ever.

So our young people quite rationally make research the priority, at least until they get tenure. The result is that we miss out on some excellent teaching. This is an issue that confronts all young scientists and it is especially difficult when they really like to teach, because they know they will not be advantaged by it...or very little.

Yes, there is a lot to be gained in our research programs from taking time to teach, but most of us in faculties of arts and sciences in research universities try pretty hard to keep our teaching duties to a minimum. Yale solves this problem in the sciences with light teaching loads and team-taught courses. This requires the expense of a large faculty, because few faculty if any are teaching courses alone. Team-teaching has some obvious disadvantages for students. And the faculty teach a few lectures in their own narrow research area, defeating some of the advantages articulated of teaching in the first place.

So, we may indeed benefit in our research activities from our teaching, but in the practical world, there is very little to be gained from it, unless or until research universities seriously value teaching.

—Joel Rosenbaum
Yale University

To the Editor:

It was nice to read the recent article on teaching in the ASCB Newsletter, (February 2004). It makes a lot of sense for researchers to teach. I have a faculty job in a research institute and volunteered to teach some undergraduate courses in the university where I hold a cross-appointment. I had two reasons to do so. One is that I regard myself deficient in general knowledge of biology (I was trained as an analytical chemist), and teaching is a good way to catch up. The second is to attract bright graduate students to my lab. However, I found that this point of view is not generally shared by many others around me. I have been advised to concentrate on research and to get more grants. I understand their concerns. Teaching inevitably takes away a lot of my research time. How does someone like me strike the right balance? —Xiaohui Zha
Ottawa Health Research Institute

Response from Harvey Lodish:

Xiaohui Zha and Joel Rosenbaum raise the important twin problems of the conflict between teaching and research, especially among young faculty at research universities, and universities appropriately rewarding strong teachers. Solutions are not easy and, in my view, can come only from the top—the President with the backing of the Board of Trustees.

First, the President must make it clear that all faculty are required to teach both undergraduates and graduates and that teaching responsibilities must be spread equitably across the institution. That is, faculty at medical schools, affiliated research institutes, and college “basic science” departments should have equal teaching loads. The only exception would be new faculty who should be given a year or two transition period with reduced teaching loads in order to establish his/her research program.

Second, the University must establish that a requirement of tenure is demonstrated competence (excellence is probably too high a criterion) in teaching undergraduate, graduate and/or professional lecture or laboratory courses.

Such changes will not transform the quality of teaching at our universities overnight. But they will bring a large group of talented teachers in contact with graduate and undergraduate students and at the same time make it possible for dedicated teachers to spend time on teaching and yet have reasonable time left for research.

To the Editor:

I completely agree with Harvey Lodish’s President’s column in the February issue of the ASCB Newsletter. It clearly enunciates the mutual benefits and value of everyone joining in a community effort to educate our students. My own research program has been enriched by the “homework” I’ve felt compelled to do before standing up in front of a bunch of students, but I also get a lot of satisfaction from doing a good job in this other important capacity of my position as a professor. I plan to share a copy of the article with colleagues in my department.

—Beverly Wendland
The Johns Hopkins University
GRANTS & OPPORTUNITIES


NIAID 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.


MEMBERS IN THE NEWS

George Daley, formerly of the Whitehead Institute for Biomedical Research, an ASCB member since 2004, has joined the Children’s Hospital of Boston.

Keith Gull of the University of Oxford, an ASCB member since 1980, has been awarded the honor of Commander of the British Empire.

Mary J.C. Hendrix of Northwestern University, an ASCB member since 1978, is the national lecturer of the Australian Society for Medical Research.

Ronald Luftig of Louisiana State University Health Science Center, an ASCB member since 1974, was re-elected to his sixth term as treasurer of the American Society for Microbiology.

Robert Palazzo of Rensselaer Polytechnic Institute, an ASCB member since 1988, was appointed Acting Director of the Center for Biotechnology and Interdisciplinary Studies.
ASCBCareer Books

The ASCB Women in Cell Biology Committee offer two highly-acclaimed career books: *Career Advice for Life Scientists* and *Life Sciences Research and Teaching: Strategies for the Successful Job Hunt*. They are available free upon request from the ASCB; postage is not included. Both are also accessible in PDF at www.ascb.org.

To order your copy, contact the ASCB at 301-347-9300; ascbinfo@ascb.org; www.ascb.org.

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ASCBJob Service
Free to Members

The American Society for Cell Biology Job Board invites ASCB members to post their CV free of charge. Individuals who post their CV may control access to identifying information. CVs are accessible and searchable without charge. Employers pay a nominal fee to list positions. Employers and job seekers contact each other directly; interviews may be scheduled by mutual convenience at any time throughout the year or at the ASCB Annual Meeting Career Center. For more information or to post your CV, go to www.ascb.org/careers.

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Graduate Students:
Work for Annual Meeting Registration, Social Ticket

Students who are interested in volunteering time (up to six hours) in exchange for free Annual Meeting registration and a free ticket to the ASCB Social may send an email to ascbinfo@ascb.org. Priority is given to students who are ASCB members or member applicants. Interested ASCB post-doc members may be selected after students are placed. Apply at https://www.ascb.org/ascbsec/volunteer.html.

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Update Your Directory Listing

Revisions received by May 7 will be included in the printed 2004 *ASCB Directory of Members* to be distributed this summer.

To check your entry:
Go to www.ascb.org and click “Online Member Directory”. Enter your name and click “search.” Click again on your last name when it appears.

To update your record:
Click on “Update Record” in the upper left-hand corner. Click on “Send in this Change” after entering your correction.

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**MEETINGS CALENDAR**

**June 6-11. Hong Kong, China.**

**June 10-13. Boston, MA.**

**June 14-18. York, PA.**

**June 16-18. Nashville, TN.**

**July 18-22. Glasgow, UK.**

**July 19-23. Innsbruck, Austria.**

**July 24-29. Tucson, AZ.**

**July 31-August 5. Tucson, AZ.**

**August 9-13. York, PA.**

**August 15-20. Andover, NH.**

**August 23-27. Gothenburg, Sweden.**
5th International Conference in Biological Physics. Abstract submission deadline: May 31. See http://fy.chalmers.se/icbp2004 or info@inspiroevent.se.

**September 8-11. Snowmass Village, CO.**

**September 16-19. Ames, IA.**

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