

Leading Bone Researcher and Pathologist Assumes Leadership Mantle for Federation

On July 1st, Steven L. Teitelbaum, M.D. became President of the Federation of American Societies for Experimental Biology. Dr. Teitelbaum, the

Wilma and Roswell Messing Professor of Pathology at the Washington University School of Medicine in St. Louis, represents The American Society for Bone and Mineral Research on the Federation's Board of Directors. He is also a member of two other FASEB member societies: the American Society for Investigative Pathology and the American Society for Clinical Investigation.



Steven L. Teitelbaum, M.D.

"I am honored to have been elected President of FASEB for 2002-2003," said Dr. Teitelbaum. "FASEB is the nation's largest organization of biomedical researchers and has been a leader in the effort to promote policies that will advance science and improve our lives. Researchers in FASEB's 21 member societies are advancing the frontiers of knowledge in all areas of medicine and life sciences research."

Dr. Teitelbaum's primary goal as FASEB President is to promote the federal funding of biomedical and life sciences research. "This is an exciting era for biomedical research, and as biologists, we have an intimate knowledge of the investments needed. We also appreciate that advances in other fields of science are important to our progress in biomedicine and to our well being as a society.

Therefore, I am firmly committed to working with broad coalitions of scientists and others to ensure that our investment in research is sufficient to meet the challenges and opportunities before us."



Robert D. Wells, Ph.D.

As President-Elect, Teitelbaum was actively engaged in policy issues that are important to the advancement of medical research.

He had a leading role in the Federation's efforts to defend stem cell research and he has written editorials and convened public meetings to call attention to this important issue. In a recent editorial

Teitelbaum wrote, "A total ban on cloning would criminalize promising research ... Denying the hope of new therapies to the millions of Americans afflicted with devastating diseases would, in fact, be the most ethically troubling of all."

Dr. Teitelbaum, who also serves as a pathologist at Barnes-Jewish Hospital and St. Louis Shriners' Hospital for Children, is an expert on normal biology and pathology of bone. In the late 1970s, he developed a method of using structural changes in bone to diagnose bone disorders such as postmenopausal osteoporosis. He also showed that vitamin D therapy helps overcome defective bone formation that occurs with kidney failure. In the 1980s, Teitelbaum began studying bone cells called osteoclasts that cause localized destruction of bone during both normal remodeling

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FASEB News

Steven L. Teitelbaum, M.D., President
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Howard H. Garrison, Ph.D., Public Affairs Director
Bonnie Litch, Editor, *FASEB News*

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Federation of American Societies For Experimental Biology



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Training in Biological Sciences: What is the Status Quo?

A workshop entitled “*Training and New Investigators: What are the Issues, Where are the Facts*” was held in connection with the FASEB Board meeting May 6, 2002. Speakers considered recent trends and speculated about whether sufficient numbers of highly trained scientists will be available to meet future needs in the biomedical sciences. It is clear that the scientific workforce needs highly trained personnel to continue the pace of scientific discovery. The data indicate that non-tenure track scientists represent a growing portion of the workforce and that the U.S. remains reliant on foreign trainees. The age of the workforce is also increasing – the median age of Ph.D. recipients is 31 years old, and they finish post-docs later than their predecessors. This calls attention to the need for post-doctoral stipends and benefits commensurate with experience and age. Periodic examination of such trends is important for determining best training practices and making policy recommendations concerning future generations of scientists.

Expansion of Research Resources and Jobs

Recent growth in congressional appropriations for medical research is well-known, averaging 10.4% per year during the past five years. However, it is important to realize that the historical rate of growth has averaged 9% when considered over a 27-year period (1971-1998)¹. This parallels an estimated 8.6% year growth in company funded research and development in the life sciences in the period 1985-1997.

The costs associated with medical research may have increased, and growth in resources need not correspond to full time positions. However, in the period 1993-1999 there was a 3.4% annual expansion in non-postdoc academic jobs and a 3.7% increase in non-academic medical research jobs. The overall size of basic research faculties in medical schools is growing at only 1.4% per year, and faculty attrition rates are slightly declining. Thus, hiring corresponds to the approximately 8% replacement rate for faculty who retire.

A Relationship Between Money and Jobs?

The portion of the total NIH budget that is available for competitive, investigator-initiated grants is around 40%, as it has been since at least 1995. However, the growth in resources does not translate to parallel increases in either numbers of grants or investigators. Numbers of scientists who have at least one RO1 equivalent grant have increased 3.4% annually in the last five years (an average of 2.0% per year over the last 10 years). Numbers of grants awarded by some large NIH institutes have not changed at all in the last few years. However, total new and continuing grant awards now average over \$350,000, and grants have been increasing in size at a rate of 5.3% per year.

We do not know if this translates into an increased need for Ph.D. trained scientists. It is interesting that a small category of “not on tenure track” academic jobs increased by 6.3% annually, perhaps reflecting a change in employment patterns. A number of people have recognized the growing importance of highly trained investigators who do not necessarily write grants or join tenure track teaching faculty². Thus, an increasing number of personnel in research may be “staff scientists.”

Business as Usual for New Investigators?

There has been concern that young scientists might suffer from phase-out of the R29 new investigator award mechanism. Indeed, as success rates and numbers of awards for established investigators have increased in recent years, first time applicants did not fare as well. Success rates for new investigators

¹ Korn, D., et al. (2002) The NIH Budget in the “Postdoubling” Era. *Science* 296: 1401-1402.

² Garrison, H.H. and Kincade, P.W. (2001). Careers in Immunology: The New Reality. *Nature Immunology* 2: 5-7.

have remained around 22% since 1986 and there was no noticeable change during the transition from R29 to RO1 type NIH grants. Our analysis revealed that a substantial fraction (around 20%) of total grants go to first time applicants, but also that there is considerable variation between NIH institutes. One could speculate that differences in programmatic issues, or in the number and quality of first time applicants account for these trends. FASEB is encouraged that NIH has begun to examine these issues and is seriously evaluating the status of new investigators. We were pleased that a significant portion of the agenda of a recent NIH Advisory Committee to the Director (June 6, 2002) focused on this subject.

The Brightest and Best

One of the surprising trends presented at the FASEB meeting was that the quality of students in the biological sciences has not eroded, in contrast to the situation for many other fields of science. Using standardized test scores as a measure of the quality of students, Joyce Raveling from the University of Washington presented data on the “best and brightest” entering science. Between 1992 and 2000, there was about a 60% increase in the number of high scorers on the GRE Quantitative test who intended to enter a program of study in the biological sciences. This contrasts with a significant drop over the same time period in high scorers who intended to enter fields such as mathematical sciences and engineering. Indeed, the excitement of molecular biology, genetics and other fields of medical research appear to be attracting the very best of graduate students. In addition, the application of other scientific disciplines to biology – for example, the field of bioinformatics – may now attract students who historically would have chosen fields like computer science. It is also interesting to note that while admissions to medical schools are constant over time, there has been growth in health related professions as career choices.

Contribution of Foreign Born Scientists

Since 1996, holders of temporary resident visas stabilized at 20% of all graduate students in the biological sciences while over 50% of postdocs are non-U.S. citizens. Dr. Michael Finn, Senior Economist at the Oak Ridge Institute for Science and Education, explained that the number of foreign trainees who will have permanent scientific careers here depends partly on the country of origin. For example, while almost all Chinese trainees stay, only a small fraction of South Koreans do. Categories of foreign-born scientists include naturalized citizens, as well as workers with permanent and temporary visas. Political events can substantially impact classification as a substantial number of Chinese were granted permanent visa status in 1995. These data suggest that America continues to be attractive to the world’s most promising scientists and there is a need for foreign scientists in order to meet the growing needs of the scientific workforce.

Duration of Training and Future Success

Biological scientists average 31 years old at receipt of the Ph.D. and the average age of postdocs is now 35. It was interesting to learn that long postdoctoral fellowships (in excess of four years) did not adversely influence the ability of trainees to land tenured or tenure-track academic jobs.

According to one survey, 75% of 1990-1996 Ph.D. recipients originally desired some type of academic position and 28.6% were successful at the time of interview. Out of the initial group, an additional 38% were postdocs in 1997.

Health insurance and other benefits are important to students and postdocs, especially given the age of Ph.D. recipients and duration of training. Therefore, there was considerable discussion about how to provide benefits in a uniform manner regardless of mechanism of support. FASEB advocates a clear definition of postdocs that includes requirements for active and temporary training. Specific institutions differ, however, in how they define post-doctoral fellows and, as a result, in the benefits they provide to trainees. FASEB is working to determine how best to advocate for equitable benefits and has endorsed a career development plan to improve communication between mentors and trainees.

Changes in the scientific workforce

Large increases in funding for biomedical research have created more job opportunities for research scientists. However, this demand for highly trained personnel has not necessarily translated into significant growth in new, tenure-track faculty positions or in principal investigators. Overall growth of job opportunities is difficult to quantify, especially with regard to the biotech and pharmaceutical sectors, but what is clear is that opportunities for scientists have changed significantly over previous eras. Also, numbers of graduate students in training and numbers of Ph.D. recipients are not expanding and have in fact been stable for the last five years.

As the overall demand for highly trained personnel continues to increase, it is important that attractive opportunities remain available to young scientists. This may require a change in the traditional “career ladder” of scientists. Non-tenure track and “staff scientist” positions may, under the right conditions, represent appealing opportunities to many scientists, and it is likely that the contributions of such positions to the workforce will continue to grow. Equally important is insuring a flow of Ph.D.- trained scientists into the enterprise, but to do this, training opportunities need to be attractive options. To this end, post-doctoral fellows must be compensated, both in terms of salary and benefits, at a level commensurate with their experience. Supportive mentoring of students and post-docs will also enrich the training experience. An influx of bright young scientists into the workforce will only enhance an already prosperous scientific enterprise.

For more information:

- *Data on Funding, Training, and the Scientific Workforce:* <http://www.faseb.org/opar/ppp/educ/workforce.html>
- FASEB Board Symposium, May 6, 2002 - *Training and New Investigators: What are the Issues, Where are the Facts?* http://www.faseb.org/opa/ppp/educ/board_symp.pdf
- *NIH Research Funding Trends: FY 1995 - 2003* http://www.faseb.org/opa/ppp/educ/nih_funding_trends.pdf
- *Trends in Training and Workforce Data* http://www.faseb.org/opa/ppp/educ/tends_data.html

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FASEB's 2002-2003 PAEC and SPC Members Begin Terms

July 1st marks the beginning of the terms for the 2002-2003 membership of both FASEB's Public Affairs Executive Committee and Science Policy Committee. The Public Affairs Executive Committee, led by FASEB President Steven L. Teitelbaum, is made up of the senior member of the Board from each of the FASEB Member Societies and allows the Federation to react to policy issues that call for a rapid response. The PAEC is empowered to act for the Board on all actions adopted unanimously.

The Science Policy Committee, chaired by FASEB Vice President for Science Policy Alfred H. Merrill, serves as the Federation's "think tank," developing long term, proactive policy statements in support of biomedical science. The SPC made up of representatives appointed by the FASEB Member Societies for a three-year term. **FN**

PAEC Members:

Gerald DiBona	APS
Robert Wells	ASBMB
Jerry Mitchell	ASPET
Leo Furcht	ASIP
Roger Sunde	ASNS
Paul Kincade	AAI
Mary Barkley	Biophysical
Gary Schoenwolf	AAA
C. Robert Matthews	PS
Jane E. Aubin	ASBMR
Barbara E. Bierer	ASCI
Janet Hall	ENDO
Haig H. Kazazian	ASHG
Mary Lou King	SDB
John A. Smith	APepS
Lynda F. Bonewald	ABRF
Robert D. Koos	SSR
John DeSesso	Teratology
James B. Mitchell	RRS
James C. Rose	SGI
Peter Stambrook	EMS
Robert R. Rich	Past Pres.
Steven Teitelbaum	Chair/ASBMR

SPC Members:

William Talman	APS
Fred Grinnell	ASBMB
Henry Besch	ASPET
Carl G. Becker	ASIP
Roger Sunde	ASNS
Ellen Kraig	AAI
Stephen White	Biophysical
Joseph LaManna	AAA
S. Walter Englander	PS
Philip Osdoby	ASBMR
Margaret Baron	ASCI
Alan Schneyer	ENDO
Philip Reilly	ASHG
Kathryn Tosney	SDB
Fred Naider	APepS
David Speicher	ABRF
Rodney Geisert	SSR
Jeanne Manson	Teratology
J. Leslie Redpath	RRS
John H. Grossman	SGI
R. Julian Preston	EMS
Steven Teitelbaum	President
Alfred Merrill	Chair/ASBMB, ASNS

FASEB Comments on NIH Proposed Data Sharing Policy

In a June 5th letter, FASEB's President Robert R. Rich commented on NIH's proposed policy regarding the sharing of data. Addressed to Wendy Baldwin, the Deputy Director for Extramural Research in NIH's Office of Extramural Research, the letter notes the importance of sharing data while highlighting some concerns that the Federation has with the proposal.

"The sharing of research data is a paramount concern to researchers," states Rich in the letter. "The American people have been extraordinary generous in support of research, and we are privileged to pursue scientific opportunities at the behest of the public and for the benefit of the public. The sharing of data provides more effective use of public resources. Scientists, along with the public, are the principal beneficiaries of data sharing which lessens the duplication of expensive data collection activities and frees time and money for research into new areas of scientific inquiry."

The proposed policy would require investigators submitting an application to include a plan for data sharing or a statement within the application indicating why data sharing is not possible. While Rich agreed that it is important for scientists to share the information – and that an

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Washington Update:

FASEB's Activities on Cloning Issue

Over the past few months, FASEB has continued its efforts to educate lawmakers and the general public on the great promise that therapeutic cloning holds for the treatment and cure of many injuries and diseases that plague humankind. FASEB has also continued efforts to block legislation that would prohibit this important research from being conducted in an attempt to prevent reproductive cloning.



FASEB's President-Elect Organizes Press Conference Supporting Therapeutic Cloning

While still serving in his capacity as FASEB's President-Elect, Steven L. Teitelbaum organized a May 30th press conference at Washington University in St. Louis. Together with former Missouri Senators Jack Danforth and Thomas Eagleton, patients, and other researchers, Teitelbaum used this venue to explain the science behind the somatic cell nuclear transfer technique and to stress its potential to treat a host of diseases. "The promise of the research is that patients could use their own cells to ward off serious illnesses," he noted. "What we are doing is essentially giving the patient back his or her own cells."

Danforth and Eagleton expressed their concerns regarding legislation then pending in the Senate that would outlaw all forms of cloning – both reproductive and therapeutic. Danforth called the bill sponsored by Senator Brownback "ill-conceived legislation that could have unintended consequences." He felt that to ban therapeutic cloning in order to prevent the potential misuse of the technique (i.e. to clone a human being) to be akin to "stopping bank robbery by closing all banks."

FASEB Urges Senators to Oppose Therapeutic Cloning Moratorium

On June 13th, FASEB's President Robert R. Rich sent a letter to each member of the Senate, urging them to oppose a moratorium on nuclear transplantation to produce stem cells. The letter was written in response to an alternate proposal being considered by Senator Brownback that would place a two-year moratorium on therapeutic cloning, versus his current proposal calling for a permanent ban. In his letter, Rich called such a moratorium as harmful as a ban.

"We agree with the proponents of the moratorium that this issue is fundamentally a moral one – there is no scientific issue to be resolved that would constitute the basis of the moratorium. But, we believe that it is a moral imperative more than anything else that impels this research," stated

Rich. "Indeed, we believe that it would be immoral to delay vital research that promises to help so many people."

Rich continued, "[t]he United States must lead by setting appropriate moral and ethical guidelines that enable our best scientists to apply their talent and expertise to find potential treatments and cures for the diseases that plague millions at home and around the globe. A moratorium will do nothing but impede this progress." See FASEB's website at <http://www.faseb.org/opar/news/docs/moratorium.pdf> to view the full text of the letter. **FN**

FASEB Issues Statement Opposing Boycott of Israeli Scientists

The April 6th issue of the British journal, *The Guardian*, published a petition calling for European/academic boycott of research and cultural links with Israel until that country "abides by UN resolutions and opens serious peace negotiations with the Palestinians." FASEB released a strong statement, approved by the Public Affairs Executive Committee, in opposition to this effort.

In its June 5th statement, FASEB expressed its dismay that "some members of the scientific community are willing to compromise the distinguished tradition of open communication in science" by calling for this moratorium. Calling the petition a "dangerous precedent for the research community," the statement noted FASEB's strong opposition to efforts, by governments or other groups, to curtail or limit scientific communications.

"Efforts to politicize science are short sighted at best, and work against the best interest of peace and progress," the statement continued. "In recent years, international collaborations and exchanges among scientists have been driving forces in research progress and, at the same time, have promoted social and cultural understanding... We reject in principle the policy of boycotting individual scientists in reaction to policies of their governments. Regardless of the country or group involved, it is wrong and counterproductive to isolate scientists. We would, for example, oppose boycotts of Palestinian scientists in reaction to suicide bombings."

The statement concluded with a general call for others to resist the proposed boycott. "It undermines the cooperative activities of science in general, and of Middle Eastern scientists in particular, and thereby cuts off one of the most powerful channels for advancing prosperity, increasing tolerance, and ultimately promoting peace."

For the full text of the statement, see the FASEB website at <http://www.faseb.org/opar/news/docs/nr6x6x2.pdf>. **FN**

What We've Been Doing

FASEB's Leaders Meet with NIH Director Elias Zerhouni

On June 20th, FASEB's President Robert R. Rich and President-Elect Steven L. Teitelbaum met with NIH Director Elias Zerhouni to discuss ways to expand federal funding for biomedical research, improve the climate for research training, and ensure that the nation's research resources are efficiently and effectively deployed. Zerhouni shared many of the same concerns, and described recent trends in funding for new investigators. He also expressed a commitment to accelerate the pace of translational research.

Collins Thanks FASEB for Stand on Genetic Discrimination

In a May 23 letter to FASEB's President Robert R. Rich, Dr. Francis Collins thanked Rich and the leadership of the Federation for taking such a strong stand on the issue of genetic discrimination. Collins, the Director of NIH's National Human Genome Research Institute, noted that it was especially important for large scientific organizations such as FASEB to be weighing in on this issue as the Senate is actively working to pass a bill to prohibit genetic discrimination in health insurance and employment. He expressed his desire for such a measure to be enacted into law before "it has a major negative effect on the progress of biomedical research."

On May 8th, FASEB had sent a letter to members of the Senate urging them to pass legislation to assure all Americans a basic level of protection from genetic discrimination (see the June 2002 *FASEB News* for more information on the Senate letter.)

FASEB Leaders Co-Author Paper Analyzing NIH in Postdoubling Era

The May 24th issue of *Science* published a paper outlining ways that NIH and the research community might best sustain the huge momentum that the agency garnered during the five-year period that saw its budget doubled. This article – written by David Korn and Stephen J. Heinig of the Association of American Medical Colleges; Robert R. Rich, Howard H. Garrison, Sidney H. Golub, Mary J.C. Hendrix, and Bettie Sue Masters of FASEB; and Richard J. Turman of the Association of American Universities – highlights the some of the challenges and the opportunities facing NIH in the era following the doubling effort.

The authors developed six principles for prioritizing resources during the post-doubling period. These six principals include: preserving the integrity of the merit and peer-review processes; maintaining new investigators; sustaining commitments to continuing awards; preserving the capacity of awardee institutions; recognizing new needs

of contemporary biomedical science; and maintaining a robust intramural NIH research program.

The authors conclude that funding for NIH must still be made a priority. "Many policy-makers may feel that the federal government has done its part for NIH-funded research and that the agency can be allowed to coast...at static levels of funding. To the contrary, we emphasize that levels of growth below 6 to 8% will negate many of the advantages achieved by the doubling and will undo the benefits of the extraordinary and bold policy decision. They will also severely strain the relationship and trust between NIH and its awardees on which our nation's successes in biomedical research rest."

Rich Thanks Senator Harkin for Support on Rats, Mice, and Birds Measure

On June 19th, FASEB's President Robert R. Rich sent a letter to Senator Tom Harkin (D-IA) thanking him for his "invaluable" support on a provision to codify the administrative exclusion of rats, mice, and birds from the Animal Welfare Act enacted as part of the Farm Aid bill (see the April issue of the *FASEB News* for more details on this issue.)

"Your commitment to assist the research community on this issue is in keeping with your strong advocacy for medical research and the lifesaving therapies and cures that are its result...Laboratory animals are so helpful because they share important physiological characteristics with human beings. Scientists can reduce the need for human experimentation by acquiring important knowledge and insight from animal research."

FASEB's Rich Speaks Out Against Harassment of Ohio State Researcher

In response to the harassment of an Ohio State University veterinarian who was forced to abandon his AIDS research project after threats were made to his family, FASEB President Robert R. Rich issued a statement condemning the acts of violence. "The scientific research community is deeply alarmed at the precedent set by the abandonment of important, peer-reviewed research in the face of insufferable persecution," wrote Rich.

"The only group that triumphed from Dr. Michael Podell's decision to halt his valuable AIDS research project was a small, increasingly violent segment of the animal rights movement, whose harassment campaigns against researchers and their families often include death threats and relentless personal attacks."

Rich continued, "FASEB believes that the humane use of animals in research is critical to medical advances. It is disturbing to learn that the pace of research discovery can be dictated by the destructive tactics of a group of extremists, rather than by the scientific community or the federal agencies charged with overseeing the care of animal subjects. The discontinuation of Dr. Podell's research is not a

‘win’ at all, but rather a great loss in the effort to better understand and treat diseases affecting humans and animals alike.”

House Appropriators Anticipate Final Installment on NIH Doubling Effort

The Campaign for Medical Research (CMR) organized a series of meetings with key members of the House Labor, Health and Human Services, Education Appropriations Subcommittee to discuss the prospects of the final installment of the doubling of the NIH budget - a goal which research advocates have been pursuing over the past five years. FASEB staff member Jill Adleberg joined together with several other individuals - including former House Minority Leader Bob Michel and CMR Chairman former Representative Paul Rogers - in meetings with Reps. Patrick Kennedy (D-RI), Kay Granger (R-TX), Dan Miller (R-FL), Roger Wicker (R-MS), Randy “Duke” Cunningham (R-CA), John Peterson (R-PA), Jesse Jackson (D-IL), and Steny Hoyer (D-MD).

Every member expressed confidence that, absent an emergency, the final installment in the doubling campaign would be appropriated this year. The members reviewed the difficulty of getting the subcommittee bill out this year - as financial resources available to the subcommittee are extremely tight and differ from those available in the Senate.

Participants raised concerns about how NIH would fare in federal reorganization efforts on homeland security, voicing the need to preserve peer review and avoid duplication of effort. Post-doubling efforts were also discussed, with the general view expressed by CMR that increases of around 10% are necessary to sustain the momentum from the doubling campaign.

FASEB Leaders Meet with Key Lawmakers, Staff on Security and Appropriations Issues

FASEB President-elect Steven L. Teitelbaum and FASEB's Director of Legislative Relations Patrick White were invited by House Science Committee staff to present the Federation's views on the proposed Department of Homeland Security and the transfer of research funding and decision-making from NIH to the new department. Teitelbaum expressed the scientific community's strong support for homeland security but did question whether a peer-reviewed or “top-down” research model was most likely to produce the vaccines and therapies that our nation needs.

In addition, FASEB President Robert R. Rich met with Congressmen Johnny Isakson (R-GA) and Dan Miller (R-FL) to thank them for their continuing support of the doubling of the NIH budget, and for Miller's special interest in research policy issues such as regulatory burden. Rich also met with senior House and Senate appropriations staff members to discuss prospects for NIH funding and get their insights into the impact of the President's homeland security proposal on DHHS and NIH research. ^{FN}

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affirmation of that principle at the application process is appropriate – a more detailed dissemination plan would be impractical at that stage. “This would require a formal agreement prior to the creation of the data. Certainly, it would be feasible to include a statement in the grant application indicating an intention to share data through publication... Science, however, by its very nature stumbles onto unanticipated discoveries, and one cannot envision all of the possible outcomes of a series of planned experiments. While it is important to promote the obligation to share data, it is crucial that a workable data-sharing plan afford maximum flexibility to accommodate evolving science.” Rich recommends that the plan be limited to a checklist that accompanies the grant application.

Rich feels that the publication arena is a venue that already regulates the sharing of data. “If you don't publish, your grant renewal will not be ranked well by the Study Section. In addition, most journals require that types of data that are not published as part of a journal article... be deposited in data banks. This existing control leverage over the sharing of data is at the publication level and is applicable to the majority of the data generated with NIH funding.” The full text of this letter is available at http://www.faseb.org/opar/news/docs/baldwin_5x29.pdf. ^{FN}

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and disease. He served as the science advisor on *Bone Builders: Preventing and Treating Osteoporosis*, an article in FASEB's Breakthroughs in Bioscience series.


Teitelbaum received a medical degree from the Washington University School of Medicine in 1964. After a one-year internship in pathology at the medical school, he completed an internship and residency at New York University and returned to Washington University in 1968 as a clinical fellow in pathology. He served as chairman of Jewish Hospital's Institutional Review Board from 1977 to 1997 and was also Pathologist-in-Chief at Jewish Hospital from 1987 to 1996. The Washington University School of Medicine named a scholarship to honor him as a distinguished alumnus in 1997.

FASEB's incoming President-Elect is Dr. Robert D. Wells, Director of the Center for Genome Research at the Institute of Biosciences and Technology at Texas A&M University System Health Science Center. He was chosen by the FASEB Board of Directors to serve as the Federation's President-Elect for 2002-2003 and will assume the presidency in July of 2003. Wells is a member of two FASEB member societies: the American Society of Human Genetics (ASHG) and the American Society for Biochemistry and Molecular Biology (ASBMB). He represents the latter on the FASEB Board.

Currently, Wells serves as a Professor of the Department of Biochemistry and Biophysics at Texas A&M, where he was the founding Director for the Institute of Biosciences and Technology in 1990. In addition, he is the Robert A. Welch Endowed Professor of Chemistry at the Institute. He is also an Adjunct Professor at the University of Texas M.D. Anderson Cancer Center and holds a joint appointment as Professor in the Department of Chemistry at Texas A&M.

Dr. Wells brings experienced leadership to his new position, having recently served two years as President of ASBMB – the first individual to serve under a new policy for multi-year terms since that organization's inception in 1906. While in that role, Wells actively engaged in efforts to increase funding for the NIH and the NSF – most recently testifying on behalf of that agency before the House VA-HUD Appropriations Subcommittee. He initiated several changes to the public affairs program of ASBMB, including substantial enhancements to the society's publication of scientific information. Under his leadership, ASBMB added a new journal, *Molecular and Cellular Proteomics*; reformatted and expanded a current publication – *ASBMB News* – which is now known as *ASBMB Today*; and took over two other journals – *Journal of Lipid Research* and *BAMBED: Biochemical and Molecular Biology Education*.

"I am pleased and honored to serve as the President-Elect of FASEB," stated Wells, "and look forward to supporting the programs which have been carefully formulated and implemented by my predecessors, Robert Rich and Steven Teitelbaum. Having served as the President of the American Society for Biochemistry and Molecular Biology for the past two years and served on the Board of Directors of FASEB since 2000, I gained a sincere appreciation of the Federation's role in public affairs."

Wells intends to focus on federal funding for key research-related agencies. "Continued growth for the NIH budget is critical. Furthermore, as a long time grantee of the National Science Foundation, I am interested in continuing my efforts to substantially increase the budget of this important agency. FASEB is now recognized as the dominant and incisive voice of biomedical researchers in the U.S. and I intend to strongly support this mission." 

FASEB Construction Update

Parking at FASEB will be limited for the next several months. Guests are still very welcome at the Bethesda campus, and guest parking will be available in special limited areas. Construction of a new parking structure is scheduled to begin on August 5th.



FASEB President-Elect Wells Speaks to NAS Panel on NIH Organization

On July 30th, FASEB President Elect Robert D. Wells spoke before the National Academy of Sciences' Committee on the Organizational Structure of the National Institutes of Health. Former FASEB President Samuel C. Silverstein is a member of the NAS Committee.

At the onset of his statement, Wells made two general observations: "First, NIH is a spectacularly successful enterprise...[It] is the world leader in the support of biomedical research, and our nation's preeminence in this area is due to our investment in NIH. As a result of NIH funded research, we have made enormous progress in the battle against disease...The current system works extremely well. Can the NIH work better? Of course it can. And this is my second point. The continuing effort to improve the organizational effectiveness of NIH has been an important part of its illustrious history." An overview of his statement follows. His remarks in their entirety can be found on the FASEB website at <http://www.faseb.org/opar/news/docs/nas.pdf>.

Obstacles to innovation – A number of different criteria have been used to organize NIH. The 27 institutes and centers have been created on the basis of diseases, organ systems, scientific disciplines, research methods, study populations and professions. The current structure of the NIH is one of unplanned growth resulting in an overall system that is often duplicative, highly fragmented, occasionally inefficient and very difficult to change.

As you look closely at the organization of the NIH, I suggest that you entertain a series of more refined questions. First, are some of the programs unnecessarily duplicative? Does this duplication constrain progress in other areas? Administrative savings resulting from consolidation of redundant programs or offices could be put towards research grants.

Second, is the current structure too fragmented? Does the fragmentation prevent NIH from effectively mounting major initiatives and encourage the proliferation of smaller, less dramatic efforts? Does this result in slower progress and lost opportunities for major gains? Fragmentation means less flexibility for major initiatives, especially those outside the scope of a single institute.

Third, is the current structure too inefficient? Do too many institutes recreate the same administrative structures? Are these structures necessary, or are they redundant?

Fourth, does the complex structure of the NIH make it resistant to change of direction, either from policymakers or from constituents (patients and researchers)? Does the complexity of the NIH and the diversity of its institutes and centers make it more difficult for the public and the research community to identify opportunities, obtain information, and influence policy? Would other methods of organization allow a greater degree of public and scientific input?

What can be done to improve the organization of the NIH? Given its record of success, we should be cautious in our efforts to change the system. But, in the

context of experimentation, there are a number of ways that we can begin. Several observers have suggested a reduction in the number of institutes, and these proposals are worth serious consideration. But in addition, we should also consider changes within the current institute structure. It may be possible, even without eliminating any of the current institutes, to make some important improvements in the operation of the NIH. Can we reduce duplication and redundancy through consolidation, rather than elimination?

Growth in the number of NIH institutes has placed a constraint on the flexibility of the enterprise as a whole. Your efforts to identify a structure optimal for today's research priorities and tomorrow's scientific opportunities will be very valuable. But it will also be very difficult to implement, no matter how skillfully designed. Perhaps a stepwise consolidation of similar, existing programs would be an appropriate starting place.

A close look at institute consolidation is a must. However, given the political forces that led to the creation of the current structure, a major program of institute consolidation may be difficult to achieve. But at a minimum, this committee should emphasize the consequences of institute proliferation in the past, and urge Congress to adopt strict criteria for future expansion. A more rational structure, driven by science and medicine rather than politics, would enable more funding to be devoted for research and would lead to a more rapid resolution of health problems.

There are also smaller but important changes that can be made which will enhance the effectiveness of NIH. I would encourage the committee to examine the role of the NIH director in the management of the National Institutes. The NIH director currently has very limited ability to transfer funds from one institute to another. The ability to shift funds across institutes would enable a director to develop new initiatives that might be too large for any one institute to fund. You should look into the current transfer authority and determine if an expanded authority is desirable. FN

Society News

New ASBMB Journal to be Included in *Index Medicus* and MedLine

The newest ASBMB journal, *Molecular and Cellular Proteomics*, has been approved for inclusion in *Index Medicus* and MedLine. Since this is the first year of publication, all back issues, beginning with the January 2002 issue, will be indexed retrospectively. Such indexing is very important to a journal since MedLine searches are one of the primary ways interested investigators are pointed to new journals. *Molecular and Cellular Proteomics* publishes three types of original articles: research papers, database articles, and technology development articles. Mini-reviews and articles discussing important unresolved issues (perspective articles), as invited contributions, will also be published.

Kirschstein Receives AAI 2002 Public Service Award

Ruth L. Kirschstein, M.D., until recently the Acting Director of the National Institutes of Health, was awarded AAI's 2002 Public Service Award at a reception held in her honor at the Hyatt Regency Bethesda on June 18, 2002. Dr. Kirschstein, an AAI member since 1965, was recognized for "her outstanding scientific and administrative leadership at the National Institutes of Health and for extraordinary commitment to advancing public understanding of and support for biomedical research."

Approximately 100 people, including Assistant Secretary for Health Eve Slater, M.D. and eight NIH institute directors, joined AAI in honoring Dr. Kirschstein. Following brief remarks by AAI Committee on Public Affairs Chair Jeffrey A. Frelinger, Ph.D., the award was presented to Dr. Kirschstein by AAI President James P. Allison, Ph.D. AAI Director of Public Policy and Government Affairs Lauren Gross presented to Dr. Kirschstein a copy of a congratulatory statement inserted



Left-Right: AAI Director of Public Policy and Government Affairs Lauren Gross, J.D., AAI President James P. Allison, Ph.D., awardee Ruth L. Kirschstein, M.D., AAI Executive Director M. Michele Hogan, Ph.D., and AAI Committee on Public Affairs Chair Jeffrey A. Frelinger, Ph.D.

in the Congressional Record by Congresswoman Connie Morella (R-MD).

AAA Names Honorary Members

Three notable anatomists have been designated as AAA Honorary Members, a status accorded to selected individuals "who have distinguished themselves in anatomical or cognate research or in supporting the mission of the Association." Among the three individuals is Liberato John Allphonse Di Dio, M.D., D.Sc., Ph.D. of Brazil. He is Professor Emeritus, Department of Anatomy, at the Medical College of Ohio, where he was Founding Dean of the Graduate School. Also named is Mircea Ifrim, M.D., Ph.D., a member of the Romanian Parliament, who is president of the Romanian Commission for Health and Family and Dean of Medicine, Faculty of Aradea. The final individual named is Harumichi Seguchi, Professor and Head of the Department of Anatomy and Cell Biology at Cochi Medical School. He is past president of the Japanese Association of Anatomists.

AAA Honors Members for Distinguished Science and Service

This year, AAA's most prestigious honor, the Henry Gray Award, went to Peter Satir, Ph.D., in recognition of his contributions in elucidating the structural basis of ciliary movement. The Henry Gray Award is presented annually to an AAA member in recognition of unique and meritorious contributions to, and achievements in, the anatomical sciences. Since 1977, Satir has been professor and chair of the Department of Anatomy and Structural Biology at Albert Einstein College of Medicine.

Satir's ingenious use of structural analysis, combined with the identification of powerful model systems, provided a model for the sliding microtubule hypothesis of ciliary bending and led to the discovery that dynein is a minus-end-directed motor whose regulated activity underpins the bending motion of cilia.

This year's AAA/Wiley A.J. Ladman Exemplary Service Award was presented to Charles E. (Chuck) Slonecker, DDS, Ph.D., for his contributions both to anatomical sciences and to the American Association of Anatomists. The Ladman Award is presented annually to an AAA member in recognition of both scholarship and service to the society. Slonecker was involved in the formation and early activities of AAA's Educational Affairs Committee, served as Program Secretary for the Annual Meeting, as 2nd Vice President and as President in 1994. Recently, he chaired AAA's first Strategic Planning Committee. Slonecker chaired the Department of Anatomy at the University of British Columbia from 1981-1992; he is currently director for University Relations and Ceremonies.

ASBMR Meeting on Osteoporosis Trials Held

Issues of scientific design and ethical considerations in osteoporosis trials were addressed at an ASBMR-sponsored meeting held at the National Institutes of Health on June 14-15th. Approximately 160 attendees participated in the forum. Presenters from the Food and Drug Administration, Office for Human Research Protections, the NIH, and diverse academic institutions provided a comprehensive overview of current

guidelines, potential study designs, relevant research studies, industry viewpoints, and ethical considerations. The goal was to provide background material to guide investigators, the pharmaceutical industry, government agencies and institutional review boards in assessing the ethics of various study designs for testing new agents in osteoporosis. Presentations, with an introduction, will be submitted for publication.

Sessions at the ASBMR 24th Annual Meeting, September 20-24, 2002, in San Antonio, Texas, will further address placebo-controlled trials. For more information, contact the ASBMR at ASBMR@dc.sba.com or at 202-367-1161. Limited copies of the meeting program, with abstracts and biographical information from the presenters, are currently available.

Omaha Hosted ASBMR Summer Council Meeting and Strategic Retreat

From June 27-28th, the ASBMR Council, Committee Chairs, and staff convened in Omaha, Nebraska for a Council Meeting and Strategic Retreat. The Retreat focused on new ideas for membership and leadership recruitment and retention, education, science policy and advocacy pursuits. Small group discussions generated many ideas for the future that staff and Council will prioritize and explore through business plans.

SDB Elects Board of Directors for 2002-2003

The Society for Developmental Biology elected its Board of Directors for the 2002-2003 term. Serving as President will be Ruth Lehmann of the Skirball Institute of Biomolecular Medicine. Chosen as President-elect is Douglas Melton of Harvard University. Stepping down from his term as president is Sean Carroll, University of Wisconsin-Madison.

Other individuals elected to the board are: Secretary Gary Schoenwolf (University of Utah); Treasurer Judith Lengyel (UCLA); Junior Faculty Representative Cathy Krull (University of Missouri-Columbia); Northeast Representative Lee Niswander (Sloan-Kettering); Mid-Atlantic Representative Marnie Halpern (Carnegie Institution of Washington); Southeast Representative Terry Magnuson (University of North Carolina-Chapel Hill); Midwest Representative Karen Bennett (University of Missouri-Columbia); Southwest Representative Joseph Yost (University of Utah); Northwest Representative Judith Eisen (University of Oregon); West Coast Representative Didier Stainier (University of California-San Francisco); and Canadian Representative Howard Lipshitz (Hospital for Sick Children, Toronto)

Boston to Host SDB's 62nd Annual Meeting:

The Society for Developmental Biology will hold its 62nd Annual Meeting on July 30-Aug 3, 2003 in Boston, Massachusetts. This event will be sponsored jointly by SDB and the International Society of Developmental Biologists. For more information, contact program chair Ruth Lehmann at www.sdbonline.org.

SDB to Hold its 2002 Southwest & Gulf Regional Meeting

The Society for Developmental Biology will hold its 2002 Southwest and Gulf Regional meeting on Sept 20-22, 2002 in New Orleans, Louisiana. For more information, contact organizers Mark Alliegro and Judith Venuti at <http://nodbc.lsuhs.edu/southwest/gulf2002.htm>.

SDB Names Its 2002 Award Recipients

Dr. Gail Martin from the University of California, San Francisco was awarded SDB's Edwin G. Conklin Medal. This award is given to a developmental biologist who has made and continues to make outstanding contribution in research in the field, and is an excellent mentor who has helped train the next generation of outstanding scientists.

Dr. David S. Hogness of Stanford University was given SDB's Lifetime Achievement Award. This honor recognizes a developmental biologist (who may have retired from active research) for excellence in research and/or education in the field, and for having been an excellent mentor who helped train the next generation of prominent scientists. Receiving SDB's Viktor Hamburger Outstanding Educator Prize was Scott F. Gilbert of Swarthmore College. This award – bestowed for the first time this year – is given in recognition of an outstanding contribution to teaching of developmental biology and/or to science education at any or all levels. **FN**