FASEB News

"Quality Life Through Research"

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FASEB President Presents 2001-2002 Advocacy, Science Policy Priorities

Robert R. Rich, who on July 1 assumed presidency of FASEB, announced his 2001-2002 advocacy and science policy priorities for the Federation at a press breakfast July 11 at the National Press Club in Washington, D.C. He also discussed such current issues as stem cell research, conflicts of interest, informed consent and the cloning of humans.

Robert R. Rich
Photo by Kay Hinton

Foremost on his agenda, he said, will be advocating for the completion of the goal of doubling the budget of the National Institutes of Health (NIH). He offered several facts pointing to the need for such a continued investment. In recent years, he said, advances in understanding the molecular basis of diseases predict the development of "designer" drugs that effectively target disease-associated molecules; progress in understanding of the immune system holds new promise for patients with autoimmune diseases such as juvenile diabetes; genetically engineered mice have dramatically improved our understanding of disease; and, the completion during the past year of the sequencing of the human genome is an unprecedented scientific achievement.

These advances mean "that we are not approaching a limit on research opportunities to ameliorate human disease, but are instead at a new threshold," he said. "Despite these opportunities, however, the immediate challenges remain formidable."

For instance, he said, "cancer continues to strike American families with frightening frequency. Most of us now have been touched in some way by one of the serious mortal or neurodegenerative diseases such as Alzheimer's and Parkinson's. The agony of sickle cell disease is faced every day by thousands of courageous African American children."

Dr. Rich said that a successful response to these challenges would require broad basic and clinical research programs and the expansion of investigators who can bridge the gap between these types of research. However, he added, the physician-scientists, who are needed for translation of promising fundamental discoveries to novel modalities of patient care, are not being trained in sufficient numbers.

"Without question, the American people have generously funded medical research," he said. "Thus today, with finite resources, do we still feel that we need to continue on the path toward doubling the NIH in five years? FASEB answers unequivocally: *Yes*!"

However, he said, this objective is accompanied by recognition of the dependence of biological and medical research on comparable advances in engineering and in the basic sciences of chemistry, physics and mathematics. "Support for these sciences is not keeping pace," Dr. Rich said. "Designer drugs would not be coming to the marketplace were it not for remarkable advances in our understanding of chemical structures and molecular interactions. Advanced imaging technologies such as CT and MRI scans, have depended upon underlying progress in physics, computer science and engineering. Advances in information technology will be essential if we are to exploit fully the data now becoming available from gene sequencing."

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Former FASEB President Urges Lawmakers to Support Stem-Cell Research

At a July 18 Senate hearing, Mary J. C Hendrix, the past president of FASEB, urged lawmakers to allow for federal funding of research involving stem cells.

"The public has every right to know exactly what type of human embryonic stem cell research is being performed in our country," she said. "For that to happen, the government must provide funding and the appropriate oversight for these new research opportunities. In the absence of federal support and oversight, this exciting line of research will occur only behind closed doors."

To ban federal support for such research, she said, "Is to delay the prospect of life enhancing biomedical breakthroughs."

Dr. Hendrix made these comments before the Senate Appropriations Subcommittee on Labor, Health and Human Services and Education – which establishes funding for the National Institutes of Health.

Her testimony came as the debate over stem cell research reached a feverish pitch. As they awaited a decision from President Bush on the matter, lawmakers and advocates on both sides took up the fight.

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Highlights

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Increasing the Influence of Scientists on the Federal Budget

By John W. Suttie

The National Science Board (NSB) Committee on Strategic Science and Engineering Policy Issues has undertaken a two-year study of methodologies for coordination and priority setting in the development of the Federal budget for research.

John W. Suttie

In preparation for a May symposium on the topic, the committee prepared a draft document, *The Scientific Allocation of Scientific Resources*, which summarized the Committee's preliminary findings and recommendations for enhanced expert advice and data to inform Federal budget allocation decisions for S&T. That document can be found on the Internet at http://www.nsf.gov/nsb/documents/2001/nsb0139/.

I was asked to comment on the NSB paper. My perspectives on the allocation of scientific resources come from my experience as a bench scientist, department chair, and president of the Federation of American Societies for Experimental Biology (FASEB).

I am in strong agreement with four basic themes that have been articulated in the NSB draft report:

- Investment in science is vital for our nation's prosperity and the quality of life of our people; we must maintain our position of world leadership
- Funding in a broad range of areas is essential; this funding must be sustained and sufficient to meet our objectives
- Better planning, more data and thoughtful analysis will help inform the public and policy makers; we need to do a better job communicating the benefits of research
- Scientists have a vital role to play in advising our nation's leaders on issues related to research policy.

In its draft paper, the NSB makes the assumption that we need a rational mechanism to increase our investment in science. As a scientist, I would like to believe that public policy decisions can be guided by the same rigorous methods that direct our research in the laboratory, but this is unlikely. Historically, it appears that major investments in research have come not from a generic appreciation of the scientific method but rather from a desire to obtain the benefits that will ultimately be achieved. Our major buildups of R&D have come from national needs and goals, such as winning World War II, beating the Soviets in the "space race," winning the war on cancer, and keeping ahead of the Eastern Bloc in the cold war. We may not like it, but we need to accept that the final decision on research investment is often political and not scientific.

A consolidated budget for science isolates R&D from the missions of the federal agencies: defense, agriculture, health, education, environmental protection and energy, etc. I am not optimistic that an abstract -argument for science and a consolidated budget will be more compelling to the public and its elected leaders than arguments showing how research will support the goals of these agencies. While an elegant model of research funding priorities would be intellectually pleasing to many scientists, and certainly helpful to policy makers in Washington, it may not be possible to build one that improves upon the current process. Realistically, the goals we are seeking to achieve cannot be removed from the realm of broader public policy. It will be more effective for us to argue that, within the programs of each of these agencies, expenditures for research are far too low.

Better information on research activities and research outcomes will be valuable, and I support the NSB emphasis on this point. But at the same time, I

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***Stem Cell**, from page 1*

Fueling the debate were two news reports: that the Jones Institute for Reproductive Medicine in Norfolk, Va., had created human embryos to use in researching stem cells; and, that scientists at Advanced Cell Technology of Worcester, Mass., have started a series of experiments aimed at creating cloned human embryos or embryo-like entities from which embryonic stem cells could be derived.

"There is great promise in human embryonic stem cell research, because we might learn how to grow specialized cells for therapeutic purposes," Dr. Hendrix told Senators. "This is possible because of two unique attributes of these cells:

- First, human embryonic stem cells are self-renewing. So far, the cell lines derived from the pioneering work of Dr. James Thomson of the University of Wisconsin have undergone more than 300 population doublings and appear to have virtually unlimited replication capacity based on the expression of certain cellular and genetic markers.
- Secondly, human embryonic stem cells are pluripotent, that is, they can differentiate into many of the diverse cell types that comprise the human body. This capacity for replication, coupled with the property of pluripotency provides researchers an extraordinary opportunity. Understanding how these particular cells develop may allow us to learn how to direct their differentiation into specific cell types or tissues.

"Embryonic stem cells might also provide part of the answer to the fundamental mystery of human biology: how does an early blastocyst develop into the multitude of cells that become the tissues, organs and limbs of an adult?" Dr. Hendrix said.

"We know now that this development is governed by the intricately choreographed interactions of dozens, even hundreds of genes. Stem cell research is allowing scientists to understand how genes interact during human development. With this research, we can realize the true potential of the fully-sequenced human genome."

Dr. Hendrix pointed out that stem cell research holds great promise in her own field of cancer biology. "That special intrinsic property of stem cells, their ability to renew themselves indefinitely, may shed light on the similar, although uncontrolled growth of cancer cells," she said. "By understanding how embryonic stem cells are able to replicate themselves, we might be able to understand the cellular mechanisms by which tumor cells become immortal and grow out of control until they kill the patient."

During the hearing, she explained the limitations of using adult stem cells in research.

"First, it is difficult to identify and isolate adult pluripotent stem cells. Secondly, adult stem cells appear to be much more restricted in their ability to differentiate into different cell types in the body, and it remains to be proven whether adult stem cells can truly give rise to all cell types in the body. Finally, the ability of adult stem cells to replicate is not as robust as embryonic stem cells."

During the hearing, the National Institutes of Health (NIH) released a report on stem cell research. The 200-page report, requested by Health and Human Services Secretary Tommy G. Thompson, is the result of an exhaustive review of the scientific literature on the subject and represents the most authoritative assessment to date of the therapeutic potential and uncertainties surrounding the field.

According to the report, stem cells from adults and embryos both show enormous promise for treating an array of diseases but at this early stage, cells from days-old embryos appear to offer certain key advantages. Embryonic stem cells are more plentiful and therefore easier to extract, can be grown and made to multiply in the laboratory more easily and appear to have the uncanny ability to develop into a much wider array of tissues, the report concludes.

Mary Hendrix, FASEB past President, talks to Senate appropriators about the promise of research involving human embryonic stem cells.

The report cautions that the work is very preliminary, but the only way to address the uncertainties is to conduct more research on both embryonic and adult stem cells.

During the hearing, Dr. Hendrix reaffirmed FASEB's support of the National Institutes of Health's (NIH) Guidelines for Research Using Human Pluripotent Stem Cells. "Federal funding means medical progress under federal oversight," she said. "Scientists working under the NIH Guidelines and with federal oversight will be allowed to conduct the research and provide the cures and therapies that we are all seeking."

On June 26, Dr. Hendrix sent a letter to President Bush requesting a meeting with him and his scientific advisors to discuss the implications of cloning (see FASEB statement in "What We've Been Doing") and stem cell research. "The citizens of this nation have expressed strong support for medical research and look to scientific research for solutions," she wrote. "As a community of scientists, we are willing to work with your administration to find ways to advance medicine and promote health, while at the same time respecting the ethical values of the American public."

The NIH report on stem cell research can be found at www.nih.gov. The full text of Dr. Hendrix's testimony can be found on the web at www.faseb.org/opar/cloning.pi.page.html.

***FASEB Agenda**, from page 1*

Consequently, he said, recognizing their importance to our goal of improving human health, FASEB believes that a doubling of NIH should be accompanied by a doubling of the annual budget of the National Science Foundation (NSF)."

Also on his Dr. Rich's agenda for the coming year:

Debt Forgiveness: FASEB will continue to work toward implementation of a loan forgiveness plan for physician-scientists. We will advocate extension of this program from loan forgiveness for individuals engaged in patient-oriented research to those engaged in either clinical or basic biomedical research. We will also advocate changes in the Medical Scientist Training Program to make it more accessible to individuals wishing to train for patient-oriented research—a plan for debt prevention rather than debt forgiveness.

Post Docs: We will strive to enhance support and to improve opportunities for research trainees. This includes advocacy for significant increases in trainee stipends and benefits, enhancement of the training experience of post-doctoral fellows and a clearer definition of the range of career opportunities following completion of training.

Grants Administration: We will explore with NIH possible changes to interpretations in regulations for the administration of grants. We would like to make it possible for investigators supported by RO1 grants to use their direct grant funds for such laboratory infrastructure needs as hiring a secretary or purchasing a computer. The unintended consequences of the current regulations – which generally do not allow such expenditures – largely is that too often principal investigators are required to serve as their own secretaries. This is foolishly wasteful of both investigator time and federal research dollars.

Regulatory Burdens: We will remain committed to the reduction of regulatory burdens on the execution of research. We will be particularly concerned with those research activities that are regulated by more than one government agency, often with conflicting requirements.

Peer Review: We will work with NIH administration and the Center for Scientific Review to maximize fairness and integrity in grant peer review and budgetary processes. These processes are critical to balancing scientific advances with available research support.

Research Ethics: In the area of research involving human subjects, we expect to address such issues as conflicts of interest, informed consent and the processes of protocol review and approval. We look to development of policies that balance concerns for patient privacy while assuring the continuing access to data that are critical to clinical research. We reassert our support of research with embryonic human stem cells as vital to potential advances in tissue replacement and repair. And we remain opposed to the creation of cloned human embryos for the purpose of uterine implantation and reproduction of cloned human beings.

Research Priorities, *from page 2*
think that we need to be realistic about what we can expect from these analyses.

Evaluation of the outcomes of prior investments will demonstrate the benefits to society that has been created. This is good and necessary, but these studies will not show where to make the next investment. They will not demonstrate how larger or smaller investments would have performed in the same situation.

Data on investments that worked in the past will not provide us with a guide for future decisions. Evaluation of outcomes needs to be done over a long period of time (especially in the case of basic research), but funding decisions are made annually. The current system used to fund federal programs does not consider science as a single investment. This may or may not be a good thing. But we are not the dominant players in the budget process, and we are not likely to change the budget process to fit our needs. It may be more efficient and effective for us to find ways to work better within the existing system.

We Need Stronger, Better Arguments

I am in full agreement with the view, expressed in the draft paper, that we need stronger and better arguments in support of research. But it is not clear to me that our efforts are best spent on creating a new budget process or a new set of organizational entities. Our efforts are best directed toward maximizing current opportunities.

"I would like to believe that public policy decisions can be guided by the same rigorous methods that direct our research in the laboratory, but this is unlikely."

To set the objectives of FASEB's public policy advocacy program, we have established a program of consensus conferences. Each year our member societies appoint representatives to FASEB's annual Federal Funding Consensus Conference. These scientists are assigned to committees, which are assigned a federal agency – NIH, NSF, USDA, DOE, VA, DOD, and NASA – to review. Committee members review agency budgets and accomplishments, prepare draft-funding recommendations, and share them with all society representatives. At an annual conference, the recommendations are discussed and formal votes are taken on each recommendation. The recommendations adopted by the conferees become the basis of a report presented to the FASEB Board of Directors. After action by the FASEB Board, they become official Federation policy. The report, which is available on our web site, is widely distributed and forms the basis of our testimony before congressional committees.

When I chaired the conference as president of FASEB, I invited the presidents of the American Physical Society, the American Chemical Society, and the American Mathematical Society to join us and speak about the perspectives of their members. I was very pleased that J. Robert Schrieffer of APS was able to join me, and since that time, representatives of all three organizations have become regular participants in these events.

Biomedical and life scientists are very appreciative of the contributions that their colleagues in the physical, chemical and mathematical sciences have made, not only to biomedical research, but also to the quality of life in the United States. Since 1997, we have emphasized the importance of funding increases for these and other fields in our recommendations to Congress and the federal agencies, and have been actively engaged in promoting coalitions with our colleagues in other disciplines. Each year, we testify jointly on the NSF budget before the VA-HUD Appropriations Subcommittee. We also actively support broad multi-disciplinary organizations such as the Coalition on Food and Agriculture Research Missions (CoFARM) and the Coalition for National Science Funding (CNSF).

Experts in the scientific disciplines are very skilled at prioritizing the work in their fields. Priority setting within fields is legitimate and worthwhile. Priority setting between fields is much more problematic, and I question its value. As scientists, we need to stand together and work for larger investments in research.

Our strongest supporters are citizens seeking better health, a more highly educated society, more security, improved products and better lives. Americans have great faith in science and in the future. We need to continue to engage them to inspire the increased investment in all fields of science that our future demands.

Dr. Suttie is a former FASEB President and currently professor of biochemistry at the University of Wisconsin. He holds membership in two FASEB Societies: the American Society for Biochemistry and Molecular Biology and the American Society for Nutritional Sciences. This essay was excerpted from remarks made in May at the National Science Board's Symposium on Allocation of Federal Resources for Science and Technology.

What We've Been Doing

FASEB Expresses Support for the National Research Initiative Competitive Grant Program

Proposed cuts in funding to the National Research Initiative Competitive Grants Program (NRICGP) will jeopardize the food and agricultural research projects it supports, said FASEB President Robert R. Rich in a July 17 letter to Marcy Kaptur (D-Ohio), the ranking Member, House of Representatives Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration and Related Agencies.

The NRICGP's "vital portfolio of investigator-initiated and peer-reviewed research has resulted in improvements to United States agricultural productivity, human nutrition, food safety and environmental quality," Dr. Rich wrote. "Research into maintaining a safe, nutritious, abundant and inexpensive food supply is also essential for securing the nation's global competitiveness and will help to insure future employment prospects for American farmers and ranchers."

Over the years, FASEB has consistently maintained that the NRICGP has been woefully under funded: appropriations have never exceeded $119.3 million, which is far below its authorized annual expenditure of $500 million. Dr. Rich said that "This limited investment has resulted in a low success rate for grant applications and therefore, only a small fraction of the outstanding food and agricultural research proposals can be funded. Furthermore, this low level of support has resulted in projects of smaller scope and shorter duration, which has negatively affected the continuity and expansion of the research enterprise. The low funding rate is causing investigators to look elsewhere for support, necessitating a shift in focus away from agricultural research."

In its Federal Funding for Biomedical and Related Life Sciences Research FY 2002 report, FASEB recommends that NRICGP funding be increased to $200 million.

FASEB Urges Senators to Extend Ban on USDA Funding of Rats, Mice and Birds Rulemaking

On July 16, FASEB President Robert Rich sent a letter to members of the Senate Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies urging them to continue to prohibit the United States Department of Agriculture (USDA) from funding a rulemaking process to regulate rats, mice and birds under the Animal Welfare Act. Last fall, a joint House/Senate committee – in response to an initiative led by Sen. Thad Cochran (R-Miss.) – added language to the FY 2001 Agricultural appropriations bill to prohibit the USDA from changing the regulatory definition of "animal" under the Animal Welfare Act regulations.

"A one-year extension of this spending limitation is necessary to allow for the time needed to thoughtfully address fundamental questions about animal research oversight," Dr. Rich wrote. "The current approach administered by the USDA, the Public Health Service and nonprofit accreditation groups has resulted in a compendium of complicated, redundant and confusing regulations. Instead, what is required now is clear information about the need for and feasibility of the USDA adding its coverage of rats, mice, and birds to the existing oversight system."

FASEB supports the humane treatment of laboratory research animals and remains dedicated to the humane treatment of animals in research and education. All government agencies and most major funding sources require research institutions to establish a local oversight structure through Institutional Animal Care and Use Committees, responsible for reviewing all research with vertebrate animals – including that involving rats, mice, and birds – to be certain that it is conducted in an ethical and humane fashion. "Our scientists strongly support this system of local control because they recognize that good science demands good animal care at their institutions," Dr. Rich wrote.

"Coverage of rats, mice and birds under the Animal Welfare Act regulations would increase the cost and complexity of regulatory activities without producing any measurable benefits to animals or research," Dr. Rich wrote. "Researchers favor fair regulations, which are reasonably enforced by knowledgeable people. This should be the starting point before the USDA undertakes rulemaking that would expand its animal welfare oversight responsibilities twenty-fold."

FASEB President Visits Lawmakers

On July 10, Dr. Rich met with Marv Cassman, the director of the National Institute for General Medical Sciences at the National Institutes of Health (NIH) to discuss physician-scientist loan repayment and scientist training issues.

The following day, on July 11, Dr. Rich met with Senator Thad Cochran (R-Miss.) in FASEB's role as a leader in the Campaign for Medical Research. Sen. Cochran, who is second in seniority behind Pennsylvania Republican Senator Arlen Specter on the Subcommittee that funds NIH, expressed his strong support for the five-year doubling of NIH's budget. Dr. Rich also had an opportunity to thank Sen. Cochran for his effort in blocking implementation of a proposed rulemaking under which USDA would extend coverage under the Animal Welfare Act to rats, mice and birds.

Dr. Rich then met with Representative Dan Miller (R-Fla.) to discuss regulatory burden issues and some of FASEB's policy priorities for the coming year. Dr. Rich also met with Craig Higgins and Carol Murphy of the House Labor/HHS Appropriations Subcommittee; Mike Stephens of the House VA/HUD Appropriations Subcommittee (to express thanks for generous House funding of National Science Foundation); and, Bettilou Taylor, Sen. Specter's top appropriations aide on the Senate Labor/HHS Appropriations Subcommittee. Taylor stated that NIH remains a top, bipartisan priority in the Senate.

FASEB Issues Statement on Human Cloning and Human Cloning Legislation

On July 3, the FASEB Public Affairs Executive Committee approved the following policy statement in regards to cloning humans and legislation designed to regulate and/or prohibit such actions:

As a community of scientists, we strongly oppose reproductive human cloning and view this as an irresponsible and misguided act. In animal species where cloning has been attempted, most clones do not survive to term or die at birth, and many that survive have abnormalities. For these reasons, and for

the many ethical and moral issues surrounding cloning human beings, FASEB adopted a five-year voluntary moratorium on reproductive human cloning in September 1997. In this statement, we define "cloning human beings" as "the duplication of an existing or previously existing human being by transferring the nucleus of a differentiated, somatic cell into an enucleated human oocyte, and implanting the resulting product for intrauterine gestation and subsequent birth."

It is critical to distinguish clearly between reproductive human cloning, which we denounce, and other uses of cloning technology that have enormous potential to treat human diseases and repair damaged tissues or organs. The technique of somatic cell nuclear transfer – where the nucleus of one cell is removed and replaced with the nucleus of a specialized cell – has the potential to produce large numbers of cells which can then differentiate into many different cell types, such as neurons, pancreatic islet cells, or cardiomyocytes. These techniques may also make it possible to reprogram an individual's mature cells into specific cell types needed to repair the individual's own damaged tissue. Thus, these cloning techniques would offer therapeutic benefits without the risk of immune rejection. The potential for treating human disease in this exciting area of regenerative medicine is enormous.

We believe that there should be severe penalties for anyone who attempts reproductive human cloning. However, we fear that broadly crafted legislation that attempts to ban human cloning will also prevent the use of cloning techniques. This will block important research and hinder the progress toward uses of this technology in the treatment of disease. We would support legislation that bans reproductive human cloning, specifically the implantation of cloned cells into a human uterus. However, we believe that such legislation must allow the use of human somatic cell nuclear transfer technology to produce molecules, cells, and tissues for research and therapeutic use. Research into the uses of these techniques must continue, both as a means to understand the complex biology of cellular cloning, and as a way to further therapeutic medicine. Thus, legislation should be carefully crafted to prevent the use of these techniques only for the purpose of creating a cloned human embryo destined for implantation, gestation and subsequent birth.

FASEB Urges Congress To Retain NIH Salary Cap At Higher Level

On June 26, FASEB, along with nearly 80 other scientific organizations and institutions, sent a letter to the chairs and ranking members of the House and Senate Labor, Health and Human Services and Education (L/HHS) Appropriations Subcommittees, urging them to keep the cap on NIH salaries at Executive Level I.

The cap, which has been inserted into every Labor-HHS appropriations bill since FY 1990, prohibits the use of NIH funds to pay the salary of an individual, through a grant or other extramural mechanism, at a rate in excess of amount of the cap. The FY 2001 Labor-HHS appropriations conference agreement raised the salary cap to Executive Level I ($161,200 in 2001). President Bush's FY 2002 budget proposes to reduce the salary cap to Executive Level II (currently $145,100).

The letter continues, "Since the Federal government imposed the salary cap on extramural researchers in 1990, medical schools, universities and other research institutions have been increasingly forced to bear more of the costs of physician-scientists' (and other investigators') salaries. Unfortunately, this comes at a time when discretionary funds from clinical revenues and other sources traditionally available to cover these costs continue to shrink. Retaining the extramural salary cap at Executive Level I will allow our institutions to continue to attract and retain the best investigators in our research programs."

FASEB Staff Meets with DeGette's Staff Regarding Human Subjects Protections

On June 19, Sidney H. Golub, FASEB Executive Director, joined Director of Legislative Affairs Pat White and Science Policy Analyst Heather Rieff in a meeting with Dawn Jackson, Health Policy Director/Senior Legislative Assistant for Congresswoman Diana DeGette (D-CO). Last year, the congresswoman introduced the "Human Research Subject Protections Act of 2000," and has plans to introduce a version of the bill this year.

Dr. Golub stressed that voluntary accreditation of institutions conducting human subjects research is preferable to mandatory accreditation, a requirement in last year's version of the bill.

He emphasized that voluntary accreditation programs encourage institutions to conduct self-assessment and to continuously improve human research subjects protections programs. As a result, voluntary accreditation is a better strategy to achieve excellence rather than an institution simply meeting minimum standards of mandatory accreditation. He recommended that accreditation focus on institution-wide efforts rather than on only IRB's and updated Ms. Jackson on the plans and progress for the Accreditation of Human Research Protection Programs. He also stressed that, in general, the level of regulation should be commensurate with the level of risk in all research.

Ms. Jackson seemed very receptive to FASEB's comments and suggestions, and mentioned that there are plans to schedule Congressional hearings on these issues in the near future. Dr. Golub emphasized that FASEB member societies have many experts in these areas.

FASEB VP-Science Policy to Serve on NIH Committee to Review Modular Grants Process

Bettie Sue Masters, FASEB's Vice President for Science Policy, has been asked to serve on a working group of the NIH's Peer Review Oversight Group, to initiate an evaluation of the modular application process. The first meeting of this ad hoc committee will be held in mid-September. At the June 7 meeting of the NIH Directors Advisory Committee, Dr. Masters – who is a member of that group – raised concerns about modular grants that she had collected from FASEB committees and others segments of the research community. At that meeting, Wendy Baldwin, NIH's director of extramural research, reviewed the status of modular grants. As part of her presentation, she presented new data on the average cost of the modular grants. Data similar to that which Dr. Baldwin presented is available on the web at http://silk.nih.gov/public/cbz2zoz.@www.awards.newchart.htm#g. The chart is in PDF format under the Research Projects subheading and is entitled, "Average R01 First-Year Direct Costs Requested and Awarded by Council Round and Linear Trends."

Society News

APS Provides Instant Access to Accepted Papers Online with Its "Articles in PresS"

The American Physiological Society (APS) will begin online publishing with its Articles in PresS, which will allow researchers all over the world to access new peer-reviewed articles within days of their acceptance, shaving almost three months off the publishing process. APS Articles in PresS are citable, searchable in PubMed and will establish publication priority.

Once a paper is published online in Articles in PresS, it proceeds through the established course of thorough copyediting and production, leading to its publication in the final print and online editions of the appropriate APS Journal. This final version will bear the date, volume and page numbers, as well as the Articles in PresS publication date and identifier, called the DOI. Since Articles in PresS will include only original research papers, Reviews, Editorials, Letters to Editors, Lectures, Commentaries and other invited materials will be published only in the print and online edition of the appropriate journals.

The *American Journal of Physiology-Renal Physiology* and *Physiological Genomics* will be the first of the Society's prestigious journals to be published as Articles in PresS with the remaining 10 APS journals to follow in the near future. Articles in PresS can be accessed through the journal homes pages: ajprenal.org and physiolgenomics.org.

APS Awards More Than $200,000 to Its 2001 Postdoctoral Fellowship Winners

The APS has announced the winners of its 2001 Postdoctoral Fellowships in Physiological Genomics. The two-year award will provide $69,000 to each of the three winning scientists including stipend and a mini research grant for each year. The aim of this program is to advance the study of physiological genomics by furthering understanding of the genome in the context of the organism. This program was established to provide training that would enable outstanding young scientists to combine the tools of cellular and molecular biology in the setting of the whole animal.

The 2001 award winners are: Ryan M. Fryer, Ph.D. (Medical College of Wisconsin/Brigham and Women's Hospital and Harvard Medical School); Jennifer C. Sullivan, Ph.D. (Medical College of Georgia); and Shereeni Veerasingham, M.D., Ph.D. (University of Florida).

AAI Presents 2001 Public Service Award to Senators Harkin, Specter

The American Association of Immunologists (AAI) presented its 2001 Public Service Award to Senator Tom Harkin (D-Iowa) and Senator Arlen Specter (R-Pa.) in recognition of each Senator's "outstanding leadership, achievements, and advocacy on behalf of biomedical research and the National Institutes of Health." At a Capitol Hill reception on June 12, AAI President Philippa Marrack, a Howard Hughes Medical Institute investigator and head of the Division of Basic Immunology at the National Jewish Medical and Research Center in Denver, Colo., presented the awards.

The event, held in the Dirksen Senate Office Building, included many senior officials from the National Institutes of Health (NIH), including NIH Acting Director Ruth Kirschstein

Dr. Marrack praised Senator Harkin, the new chairman of the Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education (L/HHS), for his visionary ... approach to research and its application to people's lives." Citing his strong leadership in many areas of concern to immunologists, including doubling the NIH budget, creating a reliable funding stream for biomedical research, and promoting research on women's health, as well as his understanding of the "critical importance to biomedical research of using animal models," Dr. Marrack thanked Senator Harkin for his "open door to scientists' concerns" and pledged AAI's support for his continuing efforts "to understand, prevent, and eradicate disease."

AAI award recipient Senator Tom Harkin (left) and AAI President Philippa Marrack (right).

Dr. Marrack also thanked AAI's 2001 award co-recipient, Senator Arlen Specter, the new ranking member of the Senate Appropriations Subcommittee on L/HHS, for serving as the Senate "champion" in the effort to double the NIH budget. In presenting AAI's award to Senator Specter, Dr. Marrack cited Specter's leadership "in the effort to separate science from politics", including providing federal funding for stem cell research, and his strong advocacy of "open, honest dialogue between scientists and Congress...." Noting his leadership in efforts to ensure accountability by scientists and the NIH of the taxpayer dollars directed to the research enterprise, Dr. Marrack expressed AAI's desire to work with Senator Specter "to ensure the accountability that taxpayers deserve while providing to them the full benefits of the research dollars Congress has worked so hard to provide."

Shown here, from left to right, are: Philippa Marrack, Sen. Arlen Specter (R-Pa.), NIH Acting Director Ruth Kirschstein and AAI Committee on Public Affairs Chair Jeffrey A. Frelinger.

The full text of Dr. Marrack's remarks can be accessed through AAI's website at www.aai.org.

AAA: Be Prepared to Invite Challenges, Minority Students Urged

"Last year, on the first day of Spring Break, I sat where you are sitting now," Brenda Salumbides said. "I went for the food, not the networking," she admitted, "but I got so much more than I expected." Addressing nearly 150 high school and college students at the American Association of Anatomist (AAA)-FASEB Minority Student Workshop, Salumbides described her academic and research experiences since she got brave enough to ask a question at last year's workshop in San Diego.

She told the students they were "in the right place at the right time" to practice her "Philosophy of ONE": Opportunity, Networking, and Experience. She urged her contemporaries to reach beyond their comfort zones, opening themselves up to new experiences. "It's all about having options," she said.

The students also heard from Clay E. Simpson, Jr., former Deputy Assistant Secretary for Minority Health with the U.S. Department of Health and Human Services. "One young man at my table wants to be an architect," Simpson said. "I don't know how he got in," he quipped, "but we're going to make a medical illustrator out of him today!"

Simpson cautioned that health professional schools typically are not nurturing. This means that "you have to come with what you need" and be highly motivated in order to succeed, Simpson counseled. He urged the group to do the necessary research early to be sure that they have the coursework needed to take the next step, whether it be college or medical school.

One important resource he recommended is 1-800-444-MHRC (6472), the National Institute of Health Office of Minority Health Resource Center. "Tell them Clay Simpson sent you," he advised.

James C. Story (Meharry Medical College School of Medicine), who chaired the program, led a lively after-lunch discussion, with students, advisors, and about 20 AAA members both asking questions and offering guidance. Among the members was past FASEB President Mary J. C. Hendrix, who shared a workshop success story from the 1999 AAA Annual Meeting.

This year's Minority Student Workshop was co-sponsored by AAA and FASEB, with NIH funding via the Minority Access to Research Careers (MARC) program.

AAA Grants Supports Programs From South Africa to South Texas

The second round of funding for AAA's Outreach Grant program will support a broad spectrum of scientists, scientists in training, and scientists to be—high school juniors and seniors, secondary school science teachers, undergraduate science students, and African anatomists learning more about how to teach. Recipients include:

- *Wojciech Pawlina, Mayo Clinic/Mayo Medical School Department of Anatomy* – $3,000 to support the International Symposium on Morphological Sciences to be held in South Africa from July 21-26. The grant will cover travel expenses for six African anatomists to attend a pre-meeting workshop on "Modern Techniques for Teaching Anatomy."
- *Margaret Cooper, Practical Anatomy of Saint Louis University* – $2,880 to support a summer workshop for secondary science teachers ("Basic Human Anatomy for Teachers," June 22) and a three-week medical science experience for incoming high school juniors and seniors (Adventures in Medicine and Science Summer Workshop for

High School Students," July 9-27).

- *Suzzette F. Chopin. and J. David Moury, Texas A&M University—Corpus Christi* –$1,620 to support the South Texas Undergraduate Research Symposium, scheduled for September 22.

AAA's Outreach Grant Program, still in its inaugural year, provides funding for workshops and symposia, either as stand-alone activities or under the umbrella of other national or international societies.

The next application deadline is August 1, with a decision on funding by October 30. For full details and an award application, go to www.anatomy.org/anatomy/outreach.htm.

ASBMR 23rd Annual Meeting Nears

The 23rd Annual Meeting of the American Society for Bone and Mineral Research (ASBMR) will be held Oct. 12-16 at the Phoenix Civic Plaza in Phoenix, Ariz. The pre-registration deadline is Tuesday, Aug. 21. For the latest information on the meeting, including registration and accommodation materials, please visit the ASBMR web site at www.asbmr.org.

Call for Nominations: ASBMR Council and Committees

The ASBMR Nominating Committee will soon begin its deliberations for renewal of ASBMR committee membership and preparation of the 2002 electoral ballot. This fall, new positions will become available on the Advocacy Committee, Education Committee, Membership Development Committee, Professional Practice Committee, and Publications Committee.

ASBMR members are encouraged to nominate themselves or other ASBMR members who may exhibit special talents for one of these openings. If appropriate, they should include a letter from the individual noting his or her willingness to serve and a curriculum vita and send to the ASBMR Business Office, 2025 M St. NW, Suite 800, Washington, D.C. 20036-3309, USA. Materials – which may also be e-mailed to asbmr@dc.sba.com – must be received by Wednesday, Aug. 15.

ASBMR Activities

The first ever ASBMR-sponsored meeting addressing ethics and ethical clinical trails was convened June 24-25 in Omaha, Nebraska. Experts in experimental design, clinical investigators and ethicists were invited to help address related issues. ASBMR held its Summer Council Meeting and Strategic Retreat June 28-29 in Sonoma, Calif. For condensed minutes of council meetings, and other updates, visit the ASBMR web site at www.asbmr.org.

The American Society for Clinical Investigation

The American Society for Clinical Investigation has consolidated membership and management services with the offices of its publication, the Journal of Clinical Investigation. New contact information for the society, along with a searchable database of members, is available at the society's website, www.asci-jci.org. In addition, a printed directory of new members elected in 2001 is available free upon request to asci@the-jci.org.

Endocrine Society

Nearly 7,000 scientists attended the Endocrine Society's 83rd Annual Meeting, ENDO 2001, held from June 20-23 in Denver, Colo. William F. Crowley is the society's new president; and John Baxter is its President-Elect. ENDO 2002 is scheduled for June 19-22, 2002 in San Francisco.

The American Society of Human Genetics

Joann A. Boughman has been named the new executive vice president (EVP) of the American Society of Human Genetics The appointment was made following a national search begun last year when the Society's Board of Directors approved the creation of this position.

Dr. Boughman received her Ph.D. in medical genetics from Indiana University and has served on the faculty in the Department of Human Genetics at the Medical College of Virginia and in the Division of Human Genetics at the University of Maryland. Her research focused on the genetic epidemiology of a number of disorders. From 1992 to 1994, she served as the Vice President for Research and Dean of the Graduate School at the University of Maryland and, since 1995, has been Vice President for Academic Affairs and Dean of the Graduate School at the University of Maryland. Dr. Boughman can be reached in the ASHG Bethesda, Md. offices at (301) 571-5734 or on e-mail at jboughman@ashg.org.

Joann A. Boughman