

education, but other sources are uncertain. Currently, research falls under the jurisdiction of Robert W. Long, assistant secretary for conservation, research, and education, a banker who has drawn criticism from the research community. Another provision—that the Department appoint a senior scientist—was deleted entirely. Both actions represent a blow to those who hoped to put a scientific voice at the highest levels of the Department. Wittwer said he is “disappointed” about this aspect of the bill. However, the bill does call for a new staff (presumably with scientific expertise) to help the secretary coordinate research.

The dollar amounts authorized in the bill are substantially less than Wampler originally proposed, but Wampler acknowledged that his original numbers were “not very realistic in view of the fiscal situation and the budgetary situa-

tion.” He said that the \$150 million authorized for competitive grants over a 3-year period is “about what I thought realistically we could achieve.” Meanwhile, Wittwer suggested that the dollar amounts allocated for competitive grants are about as much as could be absorbed effectively.

Research administrators in the Agriculture Department seemed cautiously pleased with the bill. T. W. Edminster, head of the Agricultural Research Service, interpreted the bill to mean that “somebody’s beginning to recognize that agricultural research is an important national issue and should begin to have some higher priorities assigned to it than in the past.” House staffers report that, even though the Department formally opposed the bill, the agricultural research people in the Department were quietly for it.

Future prospects for the bill remain uncertain. The dollar amounts authorized are said to be approved by the Office of Management and Budget, partly because the boosts for research would probably be offset by cuts in other agriculture programs. The bill is given a good chance of passing the House, but it would then have to be considered by the Senate, which has not yet begun to grapple with the issue.

Moreover, this bill would simply *authorize* the new programs and set maximum spending levels for them. The money to operate them would then have to be appropriated in separate bills handled by the regular appropriations committees. So there will be much opportunity to change the shape or scope of a bill that at this point appears to offer the possibility of a significant change in agricultural research.—PHILIP M. BOFFEY

## Scientists’ Rights: Academy Adopts “Affirmation of Freedom”

The National Academy of Sciences (NAS), responding to a “ground swell” of concern about the rights of scientists living under repressive governments, voted at its annual meeting in late April to circulate an “affirmation of freedom of inquiry and expression” that it hopes will be adopted by individual scientists around the world. It is the first time that the Academy, which generally prefers private diplomacy to public proclamations on this subject, has issued such a general statement of principles. In addition, the Academy has issued a new set of guidelines which say it will no longer “eschew” public declarations.

The affirmation was conceived by NAS president Philip Handler and foreign secretary George Hammond as a means of enhancing the Academy’s effectiveness in speaking on behalf of scientists whose rights have been violated. It is hoped that the affirmation, which is to be signed by individuals and not by institutions or scientific societies, will encourage scientists from all nations to renew their commitment to principles of intellectual freedom. Just how the affirmation will be used, once signed copies are on file at the Academy, which will be the repository for them, is as yet uncertain.

One obvious gesture—publishing the names of the signatories—is probably ruled out by the fact that all copies of the affirmation that are circulated to scien-

tists abroad will contain a space for them to ask that their names never be released. It is, as one NAS member noted, a sad commentary on the state of the world that in many places the mere signing of a statement such as this could lead to recriminations.

One of the most difficult things to assess in the human rights battle is the value of public declarations. Inasmuch as the Academy has been particularly conservative on this score, some members believe the affirmation is significant. One member aptly characterized the affirma-

### An Affirmation of Freedom of Inquiry and Expression

I hereby affirm my dedication to the following principles:

... That the search for knowledge and understanding of the physical universe and of the living things that inhabit it should be conducted under conditions of intellectual freedom, without religious, political or ideological restriction.

... That all discoveries and ideas should be disseminated and may be challenged without such restriction.

... That freedom of inquiry and dissemination of ideas require that those so engaged be free to search where their inquiry leads, free to travel and free to publish their findings without political censorship and without fear of retribution in consequence of unpopularity of their conclusions. Those who challenge existing theory must be protected from retaliatory reactions.

... That freedom of inquiry and expression is fostered by personal freedom of those who inquire and challenge, seek and discover.

... That the preservation and extension of personal freedom are dependent on all of us, individually and collectively, supporting and working for application of the principles enunciated in the United Nations Universal Declaration of Human Rights and upholding a universal belief in the worth and dignity of each human being.

Date

Signed

\*Copies of the affirmation can be obtained from the Commission on International Relations, NAS, 2101 Constitution Avenue, NW, Washington, D.C. 20418.

tion as a "mother-lovish" statement that one can hardly oppose but added, "The Academy can be such an old lady on con-

troversial issues. For her, this statement of affirmation of rights is phenomenal." Columbia University mathematician

Lipman Bers, an NAS member who has long been active in the fight for human rights, endorses the affirmation, as far as it goes, but hopes signers will go one step further. "The affirmation," he says, "will be correctly interpreted as a sign that the Academy is taking more of an interest in these problems than it has until now, but it is important to remember that, by having signed it, we will not have fulfilled our duty. We must see our signing as a commitment to speak out publicly in concrete cases."

It is precisely this question of "speaking out" that has been the subject of disagreement among persons who want to do something to help repressed scientists. And it was over this question that Jeremy Stone, director of the Federation of American Scientists (FAS), last winter issued an attack on NAS president Handler (*Science*, 16 January), whom he accused of failing to act forcefully on behalf of Soviet dissident Benjamin Levich, and others, because he chose not to speak out publicly on their behalf during a trip to Moscow. Without discussing the situation personally with Handler, who says he spoke privately to Soviet officials about Levich's case, Stone circulated criticisms of what he perceived to be Handler's behavior, to members of the Academy, asking whether the FAS could rely on "your voice and your signature" in defense of Soviet scientists.

Many Academy members and officials deny that the acrimonious FAS episode is what prompted the statement of affirmation of freedom of inquiry—as one member commented, "We don't need the FAS to tell us that scientists are in trouble not only in Russia but in Chile and Uruguay and all over"—but it certainly was one circumstance in the chain of events that led to the writing of the statement.

Although Handler stands behind the affirmation, his support of it should not be taken as an indication that the Academy, as an institution, is going to abandon its policy of choosing the moment for public proclamations with restraint. Handler specifically addressed the question in his formal annual report to the members. He said:

The Academy has received diverse requests to remonstrate with Soviet officials concerning the plight of scientists who have lost their positions. . . . We have heard from physicist Andrei Sakharov on behalf of various colleagues, from Levich on behalf of Sakharov, and, most recently, from Levich in despair for his own future. . . .

We have heard from others concerning physical abuse of scientists and other in-

## NAS Elects 75 New Members

The National Academy of Sciences has elected 75 new members, bringing the total to 1190. The election of 15 foreign associates to the Academy brings that total to 157.

The new Academy members, with the 15 foreign associates at the end, are as follows:

**Robert H. Abeles**, Brandeis University; **Robert K. Adair**, Yale University; **Clarence R. Allen**, California Institute of Technology; **Theodore W. Anderson**, Stanford University; **John N. Bahcall**, Princeton University; **Charles P. Bean**, General Electric Research and Development Center; **Ernest Beutler**, City of Hope Medical Center; **Hubert M. Blacklock, Jr.**, University of Washington, Seattle; **John R. Borchert**, University of Minnesota; **Raj C. Bose**, Colorado State University; **John I. Brauman**, Stanford University; **Warren L. Butler**, University of California, San Diego; **Alastair G. W. Cameron**, Harvard University; **Julian D. Cole**, University of California, Los Angeles.

**Harold C. Conklin**, Yale University; **Ernest D. Courant**, Brookhaven National Laboratory; **Cassius C. Cutler**, Bell Telephone Laboratories, Inc.; **George K. Davis**, University of Florida; **Karl W. Deutsch**, Harvard University; **Russell L. De Valois**, University of California, Berkeley; **Zacharias Dische**, Columbia University; **John E. Dowling**, Harvard University; **Edward V. Evarts**, National Institutes of Health; **Ugo Fano**, University of Chicago; **Gary Felsenfeld**, National Institutes of Health; **George McC. Foster, Jr.**, University of California, Berkeley; **Charlotte Friend**, Mount Sinai School of Medicine; **Harold P. Furth**, Princeton University; **Stanley M. Garn**, University of Michigan; **Walter Gilbert**, Harvard University; **Harry Grundfest**, Columbia University; **Homer D. Hagstrum**, Bell Telephone Laboratories, Inc.; **Morris H. Hansen**, Westat, Inc., Maryland; **William F. Harrington**, Johns Hopkins University; **Philip M. Hauser**, University of Chicago.

**Wassily Hoeffding**, University of North Carolina, Chapel Hill; **David S. Hogness**, Stanford University School of Medicine; **John R. Huizenga**, University of Rochester; **Jerome Karle**, Naval Research Laboratory; **Arthur Kelman**, University of Wisconsin, Madison; **Hilary Koprowski**, Wistar Institute of Anatomy and Biology, Philadelphia; **Saul Krugman**, New York University School of Medicine; **Alvin M. Liberman**, University of Connecticut; **Joaquin M. Luttinger**, Columbia University; **Bruce H. Mahan**, University of California, Berkeley; **Arno G. Motulsky**, University of Washington School of Medicine, Seattle; **Kenneth G. McKay**, Bell Telephone Laboratories,

Inc.; **Peter C. Nowell**, University of Pennsylvania School of Medicine; **George A. Olah**, Case Western Reserve University; **Albert W. Overhauser**, Purdue University; **George E. Pake**, Xerox Corporation; **Norman A. Phillips**, National Oceanic and Atmospheric Administration; **George Pólya**, Stanford University; **Hans Popper**, Mount Sinai School of Medicine; **John R. Preer, Jr.**, Indiana University, Bloomington.

**Frank W. Putnam**, Indiana University, Bloomington; **Oscar D. Ratnoff**, Case Western Reserve School of Medicine; **Julia Robinson**, University of California, Berkeley; **Walter A. Rosenblith**, Massachusetts Institute of Technology; **John Ross**, Massachusetts Institute of Technology; **Frank H. Ruddle**, Yale University; **Herbert E. Scarf**, Yale University; **Robert T. SchMike**, Stanford University; **Gerhard Schmidt**, Tufts University School of Medicine; **Jacob T. Schwartz**, Courant Institute of Mathematics; **William H. Sewell**, University of Wisconsin, Madison; **Peter P. Sorokin**, IBM Thomas J. Watson Research Center, New York; **Franklin W. Stahl**, University of Oregon, Eugene; **Richard C. Starr**, Indiana University, Bloomington; **Harry Suhl**, University of California, San Diego; **Richard G. Swan**, University of Chicago; **David W. Talmage**, Webb-Waring Lung Institute, Colorado; **H. Edwin Umbarger**, Purdue University; **Richard N. Zare**, Columbia University; **E-An Zen**, U.S. Geological Survey.

### Foreign Associate Members

**Ludwig Biermann**, Max-Planck Institute, West Germany; **Leo Esaki** (Japan), IBM Thomas J. Watson Research Center; **Harry Harris** (United Kingdom), University of Pennsylvania; **Lars V. Hörmander**, University of Lund, Sweden; **Res Jost**, Eidgenössische Technische Hochschule, Switzerland; **Bernard Katz**, University College, England; **James Lighthill**, University of Cambridge, England; **Martin Lindauer**, University of Würzburg, West Germany; **Brenda Milner**, Montreal Neurological Institute, Canada; **Andrei Monin**, Academy of Sciences, U.S.S.R.; **Gerardo Reichel-Dolmatoff**, Universidad de los Andes, Colombia; **Stein Rokkan**, University of Bergen, Norway; **Michael Sela**, Weizmann Institute of Science, Israel; **Ralph Slatyer**, Australian National University; **Seiya Uyeda**, University of Tokyo, Japan.

tellectuals in Chile and Argentina and elsewhere in South America. We sadly watch the disappearance of democratic or almost democratic governments; we wonder at the soundlessness of the imposition of repression in India. . . .

We have been congratulated for our seemingly successful defense of Sakharov and we have been criticized for not having done much more for many others and been more publicly visible when we do so.

Patently, the Academy must learn its own mind in these matters, must decide whether it has a responsibility . . . to speak to violations . . . must determine whether our exchange programs with Communist countries or programs of technical assistance to developing countries are leverage in discussions with the officialdom of such nations.

Handler reaffirmed his belief that private protest is often the best action and warned that a "continuum of protest on behalf of every scientist whose rights have been violated can easily saturate the receptor mechanisms."

The Academy, as is indicated in a set of guidelines from the council to the foreign secretary, is going to continue along much the same path it has been following. It will emphasize private remonstrations, issue public protests only rarely, and do nothing to deliberately sever its relations with other nations. A particularly noteworthy provision, in some persons' view, is the guideline allowing for some greater measure of public activity. It says, in part, "we do not eschew entreaty by public vehicles; indeed, we anticipate that such actions will occasionally be appropriate." FAS director Stone, who says he "fails to see the political significance" of the affirmation, calls the guidelines a "distant improvement" in the Academy's position. He is, he says, "happy and hopeful" that the "logjam" over the private versus public route has been broken.

Another change in the Academy may be the creation of a new committee of its own members—probably those who are most activist—to advise the foreign secretary. A likely candidate for such a committee, were it to be created, is mathematician Bers who epitomizes the school that says the route of private versus public protest is not an either-or situation. Bers believes in having it both ways and insists the joint approach is the most effective.

"I see no conceivable situation in which I would sever scientific relations with a country with which we are at peace," says Bers, who adds that he has no reason to believe that public protest and interrupted relations necessarily go hand in hand. The Soviets, he cogently points out, did not hesitate to write to the United States government on behalf of

Angela Davis, and even sent a representative to her trial for alleged involvement in a courthouse shooting in California without damaging relations. The same approach, he maintains, applies to science.

By supporting the affirmation of freedom of inquiry, the Academy has

reached a compromise of sorts between the public and the private view. It is a decent gesture. But the tragedy is that it takes so much to do even a little good for a few scientists, and even the most optimistic cannot expect that the barriers to scientific freedom worldwide will come down soon.—BARBARA J. CULLITON

## "Fleece" Winner Sues Proxmire

The predilection of Senator William Proxmire (D-Wis.) for making sport of funny-sounding federal grants has raised quite a few hackles in the scientific community. Now one of the targets of the senator's derision, Michigan psychologist Roland R. Hutchinson, is striking back—in the form of a \$6 million lawsuit claiming that the senator's attacks have damaged his reputation and his career.

Hutchinson over the past decade has been involved in research using rats, mice, and squirrel monkeys to "determine the environmental causes of aggression." With the aid of numerous federal grants from the National Science Foundation, the National Aeronautics and Space Administration, and the Office of Naval Research, among others, Hutchinson has been devising techniques to measure manifestations of aggression by the animals when they are exposed to various drugs and external stimuli. The aim is to develop quantitative measurements that can also be used on human beings.

The senator's office got wind of Hutchinson's work last year and in April 1975 issued a press release announcing that the agencies supporting the work had won one of Proxmire's "Golden Fleece of the Month" awards designed to call attention to examples of foolish government spending, for "spending almost \$500,000 in the last seven years to determine under what conditions rats, monkeys and humans bite and clench their jaws." The release concluded that "the good doctor has made a fortune from his monkeys and in the process made a monkey out of the American taxpayer." It said that in view of the "transparent worthlessness" of the study "it's time we put a stop to the bite Hutchinson and the bureaucrats who fund him have been taking out of the taxpayer." Proxmire also pressed his attack during an appearance on the Mike Douglas television show.

Hutchinson filed suit on 18 April this year. In his complaint he claims the senator implied that he was making improper personal profits from his work. The complaint also says the psychologist suffered a loss of professional respect, public humiliation, mental and physical anguish, and a loss of income and ability to earn income in the future. It also says his contractual relationships suffered interference from a Proxmire staff member who called the agencies involved and pressured them to terminate his existing grants and contracts.

Hutchinson received the grants in question while working as director of research at the Kalamazoo State Mental Hospital. He now directs the Foundation for Behavioral Research, which he and a handful of colleagues set up in 1972. He currently has two government grants, totaling \$38,000, from NASA and the National Institute for Mental Health, but his lawyer says "at this point he's basically without funding." Hutchinson declined to elaborate on his sufferings, but told *Science* that "the central element [of his complaint] is a formal expression by me of wounding and displeasure because of false public statements."

Because of the constitutional issues involved, the Senate leadership has asked the Senate to pay the costs of Proxmire's defense. Members are supposed to be immune from legal action for any remarks made on the floor. A staff member of the Senate's Democratic Policy Committee explains that since Proxmire first made his comments about Hutchinson on the Senate floor, any subsequent publicizing of the remarks does not change their status.

—CONSTANCE HOLDEN