eration with the Soviet Union by individual American scientists as a means of helping their Russian counterparts: "As soon as people in the USSR, especially in the Academy of Sciences, start to feel what it means, perhaps it will help them to understand that it is impossible to be silent."

Scientists as such have played a prominent role in the human rights movement in the Soviet Union. The reason, Polikanov suggests, is that "People working in science are used to analyzing the facts as they are and trying to be objective. Now they are doing the same for problems of human relations." He believes that as internal freedom grows, people "are not worried about the official point of view." On the other hand he notes that although his colleagues were well aware of the human rights movement, they were afraid to discuss it with him: "After the Orlov trial, nobody asked me how it was."

Will the Soviet authorities manage to squash the human rights movement? "The dissident movements will not disappear until the authorities stop violating human rights," Polikanov says. "It is difficult to start a Big Terror again"— "Great Terror," his daughter gently corrects him—"Young people don't worry nowadays about losing their careers—it is only the people in high positions who are worried."

Polikanov has been fortunate in being able to resume his scientific career in the West. But that outcome was anything but certain when he first decided to make his stand against bureaucratic harrassment. Like all other members of the human rights movement, he faced the probability that his activities would end in arrest, trial, and years of hard labor. But the privileges which his fellow party members thought should have bought his loyalty to the system were not enough to buy his acquiescence in its abuses.

-NICHOLAS WADE

Changes in Ethics Act Benefit Scientists

Post employment conflict of interest provision is toned down but detailed financial disclosure remains a possible problem

For the past several months, top-level federal scientists have been frantic about a provision in the new Ethics in Government Act that could have forced them out of their jobs before the first of July, when the act takes effect.

Intended to slow the "revolving door" through which many federal officials pass on their way to influential and lucrative jobs in industry and law, the act's stringent provisions regarding "post employment conflict of interest" could have been strictly interpreted to preclude large numbers of scientists from taking a university post for a full 2 years after leaving government (Science, 9 March). Just what they could do during the 2-year cooling off period was not quite clear and, as a result, several prominent scientists, including National Science Foundation (NSF) director Richard C. Atkinson and Donald S. Fredrickson, director of the National Institutes of Health (NIH), threatened to resign. Furthermore, there was concern that the new policy would make it doubly hard to recruit scientists to government.

Although the financial disclosure provisions are likely to cause some persons significant discomfort, researchers' worst case analysis of how the law might be construed has not come to pass. As Mark Twain said of Wagner's music, it isn't as bad as it sounds. On the contrary, the Office of Government Ethics has drafted a detailed set of regulations governing implementation of the law that was written with a view to alleviating the scientists' fears about future employment. Bernhardt Wruble, an attorney who is director of the ethics office, told *Science* that the regulations are based on "common sense" and added that "Nobody in his right mind wants an ethics law that makes it impossible for scientists to serve the government."

In addition, the Senate has passed three amendments clarifying the language of the act, and the House is expected to follow suit within a couple of weeks. In early April, Representative George E. Danielson (D-Calif.) held hearings on the subject (*Science*, 30 March). The amendments were firmly endorsed by the Administration, which sent the secretaries of Health, Education, and Welfare, and the Department of Defense to testify.

The Ethics in Government Act, a product of post-Watergate morality, was passed by Congress last fall. Speaking before the Senate last month when the new amendments came up, Senator Abraham A. Ribicoff (D-Conn.) had this to say about passage of the act:

This act was carefully considered in the last session of Congress. It was pending in Congress for more than 15 months. It was considered by four House committees—Post Office and Civil Service, Judiciary, Armed Services, and Ethics. On 2 separate days, it was debated on the floor of the House, where a number of amendments were adopted to [retard] the "revolving door" [from government to the private sector]. The House-Senate conference lasted 2 days.

But still, Ribicoff had to admit, the law

plainly said things Congress had not intended, had consequences it did not foresee.

As originally written, the offending provision, which carried stiff criminal penalties for violation, said that if a toplevel official left government, he or she would have to observe a 2-year ban on having anything to do with his or her former agency. It said that one could not be an "agent or attorney" for someone in a dealing involving the former agency. Nor could one "otherwise represent" any subsequent employer "in any formal or informal appearance," or offer aid, advice, counsel, or assistance to anyone in any matter that could be considered part of one's "official responsibility."

It could be read any number of ways. What about having lunch with one's new colleagues and telling them things about the people who make decisions about grants at one's former agency? Does that constitute illegal, indeed criminal, advice and counsel? Common sense said "no," but the literal language of the law said "yes," and even if the Department of Justice never acted on a complaint, the possibility for harassment seemed clear. What about that term "official responsibility"? Broadly interpreted, it would mean that a person in Atkinson's or Fredrickson's position who might become a university president could have nothing to do with his university's dealings with NSF or NIH for 2 years. No sensible university would hire a president under such constraints. Hence, the

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scientists felt unemployable by the very people they would be most likely to go to work for. Furthermore, it was not just scientists who are agency chiefs who would be affected. The reach of the Ethics in Government Act is broad, taking in an estimated 15,000 federal employees in positions of "significant decision making" responsibility. Therefore, the law is of concern not only to persons likely to move from government to administrative jobs in industry or academe but also to working scientists who could end up wanting to be involved in a research project they had something to do with while in government.

The newly promulgated regulations, coupled with the amendments to the act, go a long way toward resolving the problems of a well-intentioned law run amok. If passage in the House is assumed, as it is, the act now limits its 2-year restrictions to matters in which a former official was "personally and substantially" involved while in office and confines its ban on "aiding and representing" to personal appearances before one's former agency. Giving counsel to new colleagues about how to ply the system back in Washington is okay. And, in deference to the First Amendment, the regulations state explicitly that, while one might be constrained from dealing with a former colleague in government, one is free to express one's views on any matter to the Congress, the public, or the press. The regulations also require federal agencies to be prepared to respond to former officials who may well wish to know in advance whether some proposed post government employment activity is within the law. Thus, no one need be caught unawares.

The regulations also speak in some detail to the question of former government scientists giving purely technical or scientific advice to their former agency. 'The making of communications solely for the purpose of furnishing scientific or technological information . . . is exempt from all prohibitions and restrictions," the regulations say and go on to deal with the case of the researcher who, upon leaving government, applies to his former agency as the principal scientist on a grant proposal. "The furnishing of meritorious or convincing scientific or technological proposals does not constitute an illegal intent to influence," the regulation states, meaning that a proposal of high quality will not be held against the researcher. In fact, there is no prohibition against working as a senior scientist on a grant or contract that is part of a program one formerly dealt with as long as one does not personally call upon a former colleague to intercede.

By and large, the changes and clarifications in the ethics act seem to have calmed for the moment what could have been a rush to resignation. But the problems with the act are by no means all solved. One major provision requiring federal officials and members of advisory boards who serve more than 60 days a year to disclose just about all there is to know about their financial status has yet to be tested by experience. Concern with post employment conflict of interest has been so intense that the sensitive question of financial disclosure has yet to be faced.

Disclosure applies to one's own finances as well as those of one's spouse, and provision is made for dissemination of this information by the press if it so wishes. The list of information that must be disclosed is long. Listable assets include: salary; honoraria adding up to more than \$100 a year, including the source and date received; income from dividends, rents on investment property, interest, and capital gains; the identity of the source and a brief description of all gifts of transportation, food, lodging, or entertainment adding up to \$250 from

NAS Elects New Members

At its 116th annual meeting last month, the National Academy of Sciences elected 60 new members and 15 foreign associates. The newly chosen are:

Perry L. Adkisson, Texas A & M University; Harold M. Agnew. Los Alamos Scientific Laboratory; Keiiti Aki, Massachusetts Institute of Technology: George G. Ashwell, National Institute of Arthritis, Metabolism, and Digestive Diseases; Robert Austrian. University of Pennsylvania School of Medicine: Valentine Bargmann, Princeton University; Frederic C. Bartter, Audie L. Murphy Memorial Veterans Hospital, and University of Texas, San Antonio; Fred Basolo, Northwestern University; Joseph Berkson, University of Minnesota; Karl H. Beyer, Jr., Pennsylvania State University; Olle Bjorkman, Carnegie Institution of Washington; Edward Boyse, Memorial Sloan-Kettering Cancer Center; Elias Burstein, University of Pennsylvania; Kwang-Chih Chang, Harvard University; Ray W. Clough, University of California, Berkeley; Stanley N. Cohen, Stanford University; Harmon Craig, Scripps Institution of Oceanography; Hector F. DeLuca, University of Wisconsin, Madison: Jared M. Diamond. University of California, Los Angeles.

Ronald W. Estabrook, University of Texas Health Center; Charles L. Fefferman, Princeton University; Edward C. Franklin, New York University; Salome Gluecksohn-Waelsch, Albert Einstein College of Medicine; Philip A. Griffiths, Harvard University; William A. Hagins, National Institute of Arthritis, Metabolism, and Digestive Diseases; Robert P. Hanson, University of Wisconsin, Madison; Gertrude Henle, University of Pennsylvania: Ernest M. Henley, University of Washington, Seattle; Ira J. Hirsch, Wash ington University; Gerhard P. Hochschild, University of California, Berkeley; Heinrich D. Holland, Harvard University; Harvey A. Itano, University of California, San Diego; Thomas S. Kuhn, Princeton University; Philip Leder, National Institute of Child Health and Human Development; Yuan T. Lee, University of California, Berkeley; Paul C. Martin, Harvard University; Manfred M. Mayer, Johns Hopkins University; John W. Miles, University of California, San Diego.

Daniel Nathans, Johns Hopkins University; Marc Nerlove, University of Chicago; Norman D. Newell, American Museum of Natural History; Douglas L. Oliver, University of Hawaii; Gordon H. Pettengill, Massachusetts Institute of Technology; Mark Ptashne, Harvard University; Norman C. Rasmussen, Massachusetts Institute of Technology; David M. Raup, Field Museum of Natural History; Alfred G. Redfield, Brandeis University; Bernard Roizman, University of Chicago; Irwin A. Rose, Institute for Cancer Research; Mark R. Rosenweig, University of California, Berkeley; Lloyd S. Shapley, Rand Corporation; Richard L. Sidman, Harvard Medical School; John H. Sinfelt, Exxon Research and Engineering Co.; Maxine F. Singer, National Cancer Institute; Gabor A. Somorjai, University of California, Berkeley; Eli Sternberg, California Institute of Technology; Evon Z. Vogt, Harvard University; Sidney Weinhouse, Temple University; Robert W. Wilson, Bell Telephone Laboratories, Inc.; George A. Zentmeyer, University of California, Riverside.

New foreign associates are: Neil Bartlett, England; Donald O. Hebb, Canada; John R. Hicks, England; Andrew F. Huxley, England; Pierre Joliot, France; Michael S. Longuet-Higgins, England; Mary Lyon, England; Digby J. McLaren, Canada; Gustav J. V. Nossal, Australia; Alan Robertson, Scotland; Abdus Salam, England; Jean-Pierre Serre, France; Roger Y. Stanier, France; Cornelis A. G. Wiersma, Netherlands; Yakov B. Zeldovich, U.S.S.R. anyone other than a relative; the identity of the source and brief description of any other kinds of gifts adding up to \$100 in value. Liabilities that must be made public include: one's home mortgage; loans for a car, furniture, or appliances; and debts on revolving charge accounts if you rack up bills of more than \$10,000. About the only thing you don't have to report is alimony.

Wruble says he expects some trouble once people actually have to make dis-

closure. And there are rumblings that some scientists may file suit, charging the government with invasion of privacy. Whether anyone will actually do so is anybody's guess.

-BARBARA J. CULLITON

Peer Review Comes to ADAMHA

The program staff will be isolated from decisions on extramural funding

Gerald Klerman, director of the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), this spring installed a new peer review system that will be used to screen applicants from outside who seek ADAMHA funding for their projects. It eliminates conflicts between the in-house staff and extramural researchers that have plagued the agency for several years. All the system lacks now is the approval of Health, Education, and Welfare (HEW) Secretary Joseph Califano. An aide to Califano said the new scheme is sitting in the Secretary's office, held up by a problem with a "minor procurement matter" contained in the same decision package. He predicted it would be signed within weeks.

A year ago this proposal stirred up a storm among ADAMHA's constituents and their friends in Congress (*Science*, 9 June 1978), a furor that culminated in Klerman's firing the director of the institute within ADAMHA most resistant to the change. Klerman, Califano, and several interested congressmen worked out the compromise that was put into effect on a tentative basis on 1 March 1979. The opposition seems to have died out.

In brief, the new system attempts to insulate the research funding offices within ADAMHA from the staff scientists and program managers. This is meant to prevent staff from manipulating the course of extramural research and protect the agency against charges that it engages in favoritism. Klerman's reforms seek to emulate the model of grant review used at the National Institutes of Health (NIH), where experts from outside are asked to rank proposals according to merit.

The impetus to move in this direction came from several sources. Klerman himself, after his appointment in 1976, announced that he believed that one of his most important tasks would be to im-

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prove the reputation of ADAMHA's work by installing a rigorous review process quite independent of the bureaucracy. Until recently, employees of the National Institute of ental Health (NIMH), the National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholismwhich constitute ADAMHA-were allowed to sit on the committees that approved extramural projects. A second push for reform came from the President's Biomedical Research Panel, which recommended in 1976 that ADAMHA's grant review and program staff be separated. The report of the President's mental health commission reiterated the suggestion in 1978. Third, a number of stories appeared in the popular press about this time, reporting conflicts of interest in ADAMHA and charging that spouses and friends of people in headquarters won some large research contracts. There were a couple of egregious cases of cronyism at NIDA.

Klerman at first intended to take the review authority away from the institutes and place it in his own office under his direct control. That idea did not sit well with the institutes or their grantees; the resulting compromise created an independent review staff within each agency responsible to each agency head. All the agency heads were then replaced with new ones more to Klerman's liking. Although he has been criticized from the outset for his brashness and insensitivity to government etiquette, Klerman now seems to have established himself and his scheme quite firmly at ADAMHA.

An amusing footnote to all this is the way that ADAMHA's committee reorganization became ensnarled in President Carter's drive to reduce the number of federal agencies, and the way it disentangled itself. During his campaign, Carter told audiences that he stood for efficient government, and that he would satisfy this compulsion by hacking down superfluous federal agencies, if given a chance. Once established in the White House, the new executive staff discov-



Gerald Klerman

ered it would be impossible to abolish as many agencies as had been promised, partly because there weren't enough of them to fill the quota. Someone made the astute decision to label advisory committees "agencies." It did not matter that they served to bring outside opinion to the bureaucracy; it did matter that there were lots of them to spare. ADAMHA, like other branches of HEW, offered up its share of victims. A senior aide at ADAMHA said that while the agency really needed about seven more committees to handle the 5000 grant applications it receives each year, it agreed under duress to cut back from 32 to 28 committees. NIMH made the largest sacrifice. The change will be largely cosmetic, however, for the new

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