NATIONAL ACADEMY OF SCIENCES

Members Seek More Active Role

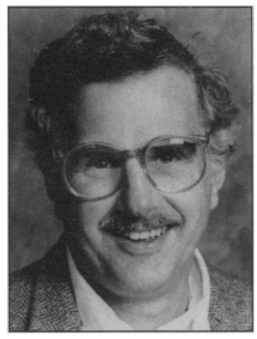
Each year, scientific organizations issue thousands of reports, most of which slip quietly into oblivion. But those from the National Research Council (NRC) are more likely to be noticed because they come with a stamp of approval from the country's most prestigious scientific bodies—the 1658-member National Academy of Sciences (NAS), the 1304-member National Academy of Engineering (NAE), and the 478-member Institute of Medicine (IOM). Some disgruntled NAS members complain, however, that NRC reports don't necessarily represent that august collection of scientists because only 14% of those serving on NRC panels are members of one of the three bodies. (Panel members are selected because of their expertise in the field under review.)

That underrepresentation prompted a minor uprising at NAS's annual meeting in Washington last spring. A small group of members, led by Massachusetts Institute of Technology (MIT) meteorologist Richard Lindzen, proposed changing the organization's bylaws to require as many as half the slots on the roughly 900 NRC committees that conduct most of the academy's business to be filled with NAS members. (Only 6% of those now on NRC panels are NAS members.) Incoming NAS president Bruce Alberts, who took office on 1 July, successfully convinced Lindzen and his allies that the requirement would "tie his hands," but he promised to look into the matter and take action before the next annual meeting in April.

Barely 6 months into his term, Alberts has decided that the issue is worthy of his attention, and he's moving ahead on several fronts. "We've been remiss in not going after more members," he says. "We need to connect better."

The most significant change is the designation of a liaison to the council from each of the NAS's 18 disciplinary sections. The liaisons will propose panelists for upcoming NRC reports, although NRC staff will retain responsibility for the composition of each panel. Alberts also plans to describe upcoming NRC activities in an existing NAS newsletter, and he's considering an in-house electronic bulletin board for members via Internet. In addition, all new inductees will be required to attend an orientation session on the NRC. That last move is intended to avoid the kind of embarrassing situation that resulted several years ago when Alberts, a NAS member since 1981, was first asked to serve on an NRC panel: He confessed he didn't know what the NRC was.

Those steps may not be enough for the 15 or so members most critical of the status quo, especially Lindzen and agricultural scientist Paul Waggoner of the Connecticut Agricultural Experiment Station. Their unhappiness also stems from personal experience with the NRC. Waggoner, for example, was chairman of a 1991 panel that concluded the U.S. could adapt fairly easily to gradual global warming, a position that generated a written dissent by a non-NAS member of the panel, and Lindzen has criticized NRC reports for overstating the potential impact of global warming.



Taking stock. Alberts wants greater participation.

The critics argue that the quality of the NRC reports would be improved with the addition of more academy members. "If it's called an academy committee, then the academy better have a lot to do with it," says Yale physicist Robert Adair, a prominent skeptic of the notion that low-level electromagnetic fields may pose health risks. Waggoner sees the NRC as a "Supreme Court" of science policy with members chosen for their wisdom and distinguished careers. "That's the way I think [President] Lincoln intended it to be," says Waggoner, referring to the 1863 act that created the NAS to advise the government on science.

Such ideas may sound reasonable in theory, responds Alberts, but they "don't work" in practice. About one-fourth of the 1600 members now serve on NRC panels, he says, and he estimates that 800 of the remaining 1200 "don't want to participate" or are too busy to serve. Moreover, he notes that reliance on NAS members—mostly older white males—would reduce opportunities for "rising young stars," women, and minorities. "We're never going to have half our committee memberships from the academy without scaling back what we do," he says.

But a smaller NRC would be fine with the critics. If there aren't enough qualified members to serve on a committee, says Adair, "then don't do the report."

Alberts says he has no plans to shrink the NRC, but he's looking for advice. Last month he sent out a 10-page survey to each member soliciting ideas on ways to improve the academy. In the meantime, those pushing for change say they'll hold their fire until the annual meeting in April.

–Robert Langreth

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REGULATION

German Geneticists Get Some Relief

BONN—German geneticists got a New Year's present this week, when the federal government enacted changes to the notorious gene technology law that has severely hampered genetic research in the country. The reams of forms and applications that researchers have had to fill out for even minimal-risk lab experiments with recombinant DNA have been dispensed with. Gone also are almost all the mandatory public hearings—often manipulated by environmental campaigners to create the maximum disruption—that were a prerequisite for any release of altered DNA into the environment. From now on, most researchers will simply have to submit written statements instead.

Research organizations and the pharmaceutical industry have bitterly complained about the gene technology law, which has been in force since 1990 (*Science*, 31 January 1992, p. 255), and they are delighted that the government has heard their pleas. Detlev Ganten, Head of the Max Delbrück Center for Molecular Medicine in Berlin, called the changes in the law "a big advantage" for his institution. The Association of the Chemical Industry welcomed them as an "important contribution to increasing Germany's attractiveness for research and production."

The gene technology law was originally supposed to protect people and the environment and to provide a legal framework for the advancement of the new technology. But pharmaceutical companies have claimed that the regulations have driven research out of the country. Indeed, industry spends close to 1 billion marks ($584 million) each year on research involving recombinant DNA technologies, but companies such as Hoechst and Bayer invest only 25% of that money inside Germany. Instead, they have opened new R&D facilities in the United States and Japan. Moreover, there have been only five experiments involving deliberate release carried out in Germany so far.

The new law dispenses with the need for formal approval for experiments involving organisms such as the bacterium *Escherichia coli* or yeast, which are classified as security level 1, or posing "no risk." In some cases over the past 3 years, such experiments required nearly 100 forms; now a simple notification will do. For experiments on class 2 organisms ("little risk"), such as fungi of the genus *Aspergillus* and the hepatitis B virus, official approval procedures have been reduced to 1 month; formerly it could take anywhere from 3 months to a year. Under the