

greatly slowed growth in scientific manpower with an accompanying graying of academic faculty. "At the university level, where the vast majority of basic research is performed by senior faculty members, the U.S. is now confronted with a relatively static scientific employment picture," McGuire says. The resulting aging of scientific forces in basic research "is worth noting, since the most significant technological innovations in a number of disciplines have been accomplished by younger scientists."

Part of the trouble in basic research may be a decline during much of the 1970's in U.S. government support, on which most basic research rests. U.S. government funding of R&D has stepped up in the past four years with an average annual constant-dollar increase of 3.5%. But this modest rate follows a period from 1967 through 1975 when governmental investment in both basic and development research declined and when expendi-

tures for applied research remained virtually unchanged.

McGuire suggests that the long-reduced real-dollar government support for basic research may underlie a relative decline of U.S. science and technology activity compared with other countries. He cites an estimate by Yale University science historian Derek Price that the U.S. part of worldwide science and technology dropped from 33% in 1967 to less than 25% in 1980.

One result is the familiar figures showing the decline of U.S. R&D as a percentage of total economic activity. McGuire runs through these figures: U.S. investment in R&D as a percentage of gross national product fell from 2.64% in 1970 to 2.22% in 1979. The Soviet Union, by contrast, boosted its corresponding percentage from 3.23% in 1970 to 3.4% in 1977. The percentages for both West Germany and Japan also picked up a bit during the 1970's. □



Proxmire: research was meritorious

Naval Research for spending about \$500,000 to support research by Ronald R. Hutchinson, then director of research at Kalamazoo, Mich., State Mental Hospital, on human and animal aggression. The award was widely publicized in press releases, newsletters, and television appearances by the Senator. Hutchinson filed an \$8 million libel suit against the Senator.

Two lower courts dismissed the suit on grounds that Proxmire's actions were protected by the Constitution, which grants immunity to members of Congress for libelous statements made during speeches and debate. They also held that because Hutchinson received federal grants and published in scientific journals he was a public figure who would have to prove "actual malice" in any libel suit. However, last summer the Supreme Court rejected both findings, clearing the way for a trial of the suit.

In a statement on the Senate floor, Proxmire admitted that some of his statements concerning Hutchinson's research "may be subject to an interpretation different from the one I intended and I am happy to clarify them." Among other things, he said, "In my press release I stated that Dr. Hutchinson made a fortune from his monkeys. While the amount of federal expenditure was large and provided support for Dr. Hutchinson's research for a number of years, the fact is that Dr. Hutchinson did not make a personal fortune.

"It should also be clear that my conclusions about Dr. Hutchinson's research are my own and are not necessarily those of the people we contacted during our investigations. In fact, a number of people both within and outside the funding agencies state that Dr. Hutchinson's research was meritorious." □

National Coal Policy Project a mixed success

Though a few final reports remain to be written, the concluding plenary session of the National Coal Policy Project wound up in Washington, D.C., last week.

Under the auspices of Georgetown University's Center for Strategic & International Studies, the five-year project brought coal producers and environmentalists together to use reason and mutual respect to find areas of agreement on coal policy and present these to federal coal policy makers. The project was organized into task forces to consider specific areas of coal policy, such as air pollution or pricing. Each task force had both an industrial and an environmental segment.

The project went out with a moderate view of its own successes. Its major accomplishment, a compilation of more than 200 points of agreement between industry and environmentalists, was published in 1978 (C&EN, Feb. 27, 1978, page 23). This document has not had the impact on federal decisions affecting coal policy that many of the project participants had hoped for. Although some recent government decisions in areas such as energy pricing and transportation reflect the recommendations of the project, federal acceptance of the project's findings has been very slow. "It's disappointing that policy makers didn't beat a path to our door," acknowledges Macauley Whiting of Dow Chemical, industry chairman of the project.

There have been some areas, too, where the project participants have

not been able to come to agreement themselves. The air pollution task force, for instance, which has been trying to agree on how to improve the present air quality laws, bogged down over whether total loading of particular air pollutants in a region or the nation should be regulated. The environmental members generally want absolute ceilings on the amount of a contaminant allowed in a region's air, and the industry representatives want regulations based on the emissions of individual plants and stacks. "We haven't even had serious discussions between us on this issue," Bruce J. Terris, the environmental cochairman of the air pollution task force, admitted.

Nevertheless, most project participants seem pleased with their overall experience in the project. Their areas of agreement were felt to be considerable and their influence on national coal policy may grow. □

Proxmire recants on a Golden Fleece award

One of Sen. William Proxmire's (D.-Wis.) "Golden Fleece" awards has gone astray. He has agreed to pay \$10,000 in an out-of-court settlement to a researcher who was the target of one of the awards.

In April 1975 Proxmire presented that month's "Golden Fleece" award to the National Science Foundation, the National Aeronautics & Space Administration, and the Office of