

# Mansfield Amendment Curb on Basic Research May Spread

Prominent scientists and congressional supporters of science are worried that many federal agencies have decided to abandon support of basic research that is not closely related to their primary missions. These scientists fear that the spirit of the so-called Mansfield amendment, which is intended to restrict the kind of research that the Defense Department can support, is now spreading to many civilian agencies as well. The widespread impact of that amendment, when added to the other budgetary constraints afflicting science, "has turned what was a serious situation into a crisis," according to Representative Emilio Q. Daddario (D-Conn.), chairman of the House Subcommittee on Science, Research and Development.

The Mansfield amendment, which was adopted as Section 203 of the military procurement and research authorization bill last November, prohibits the Defense Department from financing "any research project or study unless such project or study has a direct or apparent relationship to a specific military function or operation." As a result of the amendment, Daddario said at a press conference last week, the Defense Department will cancel some \$50 million in research support. He said this was far above some original estimates that only \$10 to \$15 million might be affected.

Some impact on military research has been expected, for that was the intent of the amendment. But Charles A. Mosher, ranking Republican on the science subcommittee, expressed fears that "Section 203 sets an example that is contagious—it's going to spread very quickly to other agencies." He thought this was an unfortunate result for an amendment that sprang from "Mike Mansfield's very special feeling about the military and the Vietnam War."

At an NSF budget authorization hearing before Daddario's subcommittee on 17 February, Philip Handler, president of the National Academy of Sciences and chairman of the National Science Board, claimed the Mansfield philosophy "has begun to rub off on other agencies."

Handler particularly singled out the National Institutes of Health (NIH). He said NIH "has quite deliberately narrowed down its own view of what areas of science are appropriate," with the "most dramatic changes" occurring in organic chemistry, a field in which NIH has traditionally been the major support. Handler claimed NIH is currently withdrawing from "any research which happens to have the name of a plant in the title of the application and certainly all research in the field of photosynthesis." Handler acknowledged that perhaps NIH should not be the main support of work on photosynthesis, but he warned that "such action should not be taken unilaterally—there should be a plan whereby some other agency would undertake such programs."

In his press conference last week, Daddario listed several other research areas that are being abandoned because of the Mansfield amendment and because of "our myopic preoccupation with budget figures." He said the Defense Department is likely to reduce sharply or terminate the Florida State tandem accelerator, the National Magnet Laboratory at M.I.T., the Haystack radio

telescope at M.I.T., and the theoretical research on many-body theory at the University of Illinois. He also said that the Defense Department and NASA have sharply cut research funds for ground-based astronomy, geochemistry, and seismology; the AEC is putting the Cambridge Electron Accelerator at Harvard "on the shelf" and is shutting other facilities; and NIH support for work in plant physiology, biochemistry and genetics, and non-pathogenic bacteria and viruses is "badly impaired." Daddario said that the National Science Foundation, the only agency whose primary mission is to support scientific research, is being pressed to take on more than 50 high-quality biological programs in the coming year that were formerly supported by NIH. He also said NSF has adopted or is expected to take on 25 astronomy programs dropped by other agencies since fiscal 1969.

Another manifestation of the Mansfield contagion, Daddario said, is that the General Accounting Office has recently raised the question of whether federal agencies should restrict the kinds of "independent research and development" that they will support by industrial contractors. Some big agencies have traditionally financed research that is not specifically related to a particular contract on the theory that such research is an acceptable "overhead cost." But the GAO, in a recent report discussing possible changes in the procedures, suggested as one alternative that agencies might restrict their support to "projects that have a direct and apparent relationship to the specific function of the agency."

The potential impact of the Mansfield amendment is causing increasing concern. William D. McElroy, director of NSF, said it would be a "national disaster" if the Defense Department abandoned basic research. And last week Daddario released a report by scientific advisers to his subcommittee which called for "a reaffirmation of our historic national policy that each mission department and agency which draws upon science in its operation should support its proper share of the country's basic research." The report's signers included, among others, James B. Fisk, president of Bell Labs; James M. Gavin, chairman of Arthur D. Little, Inc.; Samuel Lenher, vice president of DuPont; Jerome B. Wiesner, provost of M.I.T.; and Don Price, dean of the John F. Kennedy School of Government at Harvard.

What might be done to ease the impact of the Mansfield amendment remains unclear. Congressmen Daddario and Mosher said they have no plans to make a direct attack on the amendment in an effort to get it repealed. They said they hope primarily to ensure that the amendment is implemented cautiously and that a mechanism is set up to make certain that outstanding scientific projects are not junked precipitously. Meanwhile, NSF has budgeted some \$10 million to take care of some of the increased proposal pressure expected as other agencies drop research projects. McElroy said NSF has not yet seen "any great influx of applications" but added that it is too early to tell what the real effect of the Mansfield amendment will be. If young investigators start to get squeezed out, he said, NSF will earmark special funds for them.—PHILIP M. BOFFEY