Congress Considers Upgrading Labs

Amendment in NSF authorization would create new program for R&D facilities in universities and colleges; distribution of funds is in contention

THE general decline of research facilities at U.S. universities into a state ranging from shabby to unsafe is widely acknowledged. What the federal government should do about it is the subject of mounting debate.

For the first time in years, federal legislation to provide substantial federal funding for campus research facilities is given some chance of enactment. But the rapid escalation of the facilities issue in this session of Congress has caused divisions among representatives of various sectors of higher education in Washington and snagged the National Science Foundation authorization bill on its way through the legislative mill. The facilities debate could be "the NSF issue of the year," according to one congressional staff member.

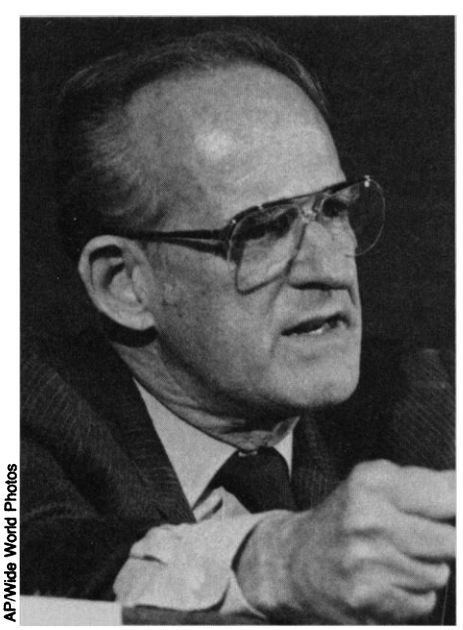
Two main questions dominate the discussion. Is the need for facilities serious enough to warrant substantial federal funding? Should any new program include specific measures to strengthen the capacity of institutions now on the short end of federal R&D funding to compete for research grants?

The rise of pork-barrel science—the bypassing by Congress of the peer-review system in funding R&D capital projects—is attributed in part to the conflict between haves and have-nots among universities and colleges. The prospect of significant federal support for facilities appears to be deepening the schism.

The legislative initiative viewed as having the best chance of early passage is an amendment sponsored by Senator Christopher J. Dodd (D–CT) to the NSF authorization bill currently working its way through the Senate. The Dodd amendment, installed under the heading University Research Facilities Revitalization, would establish a new program to carry out a "university laboratory modernization program." The measure would provide only $1 million in planning money for the coming year, but calls for $47 million in funding in 1989 and $95 million in 1990.

Dodd's amendment amounts to a scaled-down version of a House bill (H.R. 1905) introduced by Representative Robert A. Roe (D–NJ), chairman of the House Committee on Science, Space and Technology. Roe's bill, the University Research Facilities Revitalization Act, calls for expenditures of $2.5 billion in federal funds over 10 years for repair, renovation, or replacement of research facilities at universities and colleges.

The Dodd amendment emulates the Roe bill in several key respects. It requires institutions to raise matching funds from other sources at least equal to the federal money they receive. It mandates that all awards be subjected to a merit review system created for the program. And it requires that 15% of program funds each year be available only to institutions that received less than $10 million in federal research in the 2 years preceding award of the grant.



AP/Wide World Photos

Robert A. Roe. *Chairman of House science committee is author of facilities bill whose provisions are in spotlight.*

The requirement for peer review and the 10% set-aside reflects an effort to compromise the sensitive issues dividing the higher education community. Staff sources on the Hill say that Dodd introduced the amendment mainly at the urging of the Association of American Universities (AAU), which represents 54 top U.S. research universities.

Robert Rosenzweig, president of the AAU, confirms that the AAU "has a strong interest in seeing the program enacted," but says that the Council for Research and Technology, a new Washington university-industry organization formed to lobby on behalf of R&D issues, played a key role in gaining congressional support.

Staff sources on Capitol Hill say movement on research facilities in Congress apparently galvanized several higher-education constituencies into action to obtain special "set-asides" for themselves in the bill. These included 4-year colleges and predominantly black institutions as well as universities seeking to be more upwardly mobile in R&D.

Dodd is a member of the Senate Labor and Human Resources Committee that shares jurisdiction over NSF authorization matters with the Commerce, Science, and Transportation Committee. When the contending claims for special consideration mounted, labor committee chairman Senator Edward M. Kennedy (D–MA) directed the staff of his committee to work out a detailed position on the facilities question to be included in the labor committee report on the NSF bill. The committee has approved the bill, but it will not move to the commerce committee for consideration until a report is filed by the labor committee. Committee reports frequently elaborate on legislators' intentions in a particular bill and influence its interpretation. A member of Kennedy's staff says that the senator "is not backing away from the issue" and is "committed to having a revitalization program in the current bill."

Particularist lobbying on a facilities program is said to include pressure to make leading research universities ineligible. The staffer says that Kennedy will "listen to the concerns of the less well-off," but his intention is "not to exclude the major research universities."

The Roe bill, an updated version of a measure first put forward in 1985 by the former chairman of the committee, Don Fuqua, is itself apparently in for some renovation and repair as a result of hearings on 25 June. The bill will be examined in the light of the diverse opinions expressed at the hearing and possibly will undergo major revision. Observers doubt that the bill will

Pork Barrel Unbound?

Direct appropriations by Congress to support university research—so-called pork-barrel science—have so far been limited to funds for construction of research facilities. That could change if an item for $2.5 million for operating expenses included in the House of Representatives' version of the Department of Energy (DOE) appropriations bill survives in the final version of the bill passed by Congress.

Beneficiary of the funds is the Center for Molecular Medicine and Immunology at the University of Medicine and Dentistry in Newark, New Jersey. The funds were inserted during House Appropriations Committee consideration of the DOE funding measure. The bill was passed by the House on 24 June.

Prime mover in Congress for the action appears to be Representative Robert A. Roe (D–NJ), chairman of the House Committee on Science, Space and Technology, and principal sponsor of legislation creating a program of federal funding for campus research facilities (see p. 351), but the project has had strong backing from other members of the New Jersey delegation including Representative Peter W. Rodino, Jr. (D–N.J.), in whose district the state medical school is located, and New Jersey's two senators, Bill Bradley and Frank R. Lautenberg, both Democrats. The center is also named in the same bill to receive $7.5 million in construction funds by direct appropriation; $3 million for construction was provided by the same means last year.

David Goldenberg, director of the center, an independent nonprofit research and treatment institution affiliated with the state medical school, says he reluctantly sought congressional assistance because federal funds are unavailable for the kind of clinical research involved.

"I have mixed feelings," said Goldenberg. "I'm a supporter of peer review," but this kind of research "simply slipped through the cracks." The "classical" federal programs do not provide funding, he said. The $2.5 million would underwrite a clinical resarch program in the use of isotopically labeled antibodies for cancer therapies. In the absence of options, Goldenberg said he felt the request for operating funds was "justified if the work was credible." He noted that he was recognized as a pioneer in antibody imaging in cancer research and had received support for related work through the regular National Institutes of Health peer-review system.

NIH records show that Goldenberg is principal investigator on a $1.2-million National Cancer Institute grant for work on radioimmunodetection of cancer, now in its second year, and two other NIH grants totaling $100,000.

Whether the DOE grant for operating funds is a precedent-shattering first is hard to establish. Staff sources on the Hill suggest that construction funds voted in the past sans peer review have sometimes been bent to other purposes, but no examples are cited. One source says that the current item is a first at least in providing funds by direct appropriation to help operate a project which is also receiving construction money by the same method.

The Newark program was discussed in hearings on nuclear medicine on 23 April before the House science subcommittee on natural resources, agriculture, research and environment. The full science committee has not yet acted on the DOE bill which contains the funds for the Newark facility. Nevertheless, in a reversal of the usual order of authorization measures preceding appropriation measures, the items were included in the DOE money bill after approval by the appropriations energy subcommittee.

Science committee sources attribute the action to good relations between the leadership of the two committees that made possible a "good faith arrangement" on funding for the Newark center. The appropriations subcommittee chairman is Tom Bevill (D–AL).

The Newark center is by no means alone in benefiting from congressional initiative. Support for the Newark center is only a part of some $69 million in the DOE funding bill, primarily for construction of academic research facilities, for which there was no budget request from the Administration.

The presence of operating funds in a science support measure without benefit of peer review has gone relatively unremarked; what the reaction in the Senate will be is not evident. But the funds for the Newark center do seem to be an exception to the rule; the question now is what happens to the rule. ■ **J.W.**

emerge from the committee this year.

At hearings on the bill in late June, NSF director Erich Bloch put the foundation on record againsat the bill. Bloch acknowledged that "a need for facilities for research has developed." He noted that research facilities constructed under federal programs that tailed off in the 1960s, "have aged and become obsolete. Highly specialized facilities have become more necessary. And the cost of maintaining state-of-the-art laboratories has escalated." However, Bloch said that a preliminary survey of the status of academic facilities indicated, "there is a significant amount of construction and renovation going on. But that it is concentrated in the top 50 schools."

The surveys Bloch alluded to include the first of a series of biennial surveys of university research facilities mandated in 1985 by Congress. The legislators felt that the discussion of needs was hampered by inadequate information on the status of academic research facilities. A first report based on a quick sampling of universities was made available last October. It made the point that the 50 leading research institutions reported that their research facilities were in good or excellent condition. A third of research administrators in the sample said that research facilities posed the most serious research-related problem on their campus. A separate report by NSF's policy research and analysis office, "Infrastructure: The Capital Requirements for Academic Research," released this spring, carried the overall assessment that "recent private and state government increases in support for academic research facilities indicate that this part of the shortfall may soon be eliminated without new federal programs." This finding has been sharply disputed by spokesmen for higher education. A second more detailed survey in the series mandated by Congress is being conducted by NSF in collaboration with the National Institutes of Health. It is due for completion by the fall of 1988.

At the end of his prepared statement at the House hearings in June, Bloch said, "The federal government does have a role in supporting science and engineering research facilities," but that role needs to be explicitly defined. "The proper priorities for NSF remain people, equipment and facilities, in that order."

Bloch's remarks clearly reflected the Administration position on the issue and could foreshadow a veto if substantial funding for academic research facilities appears in the NSF bill. But in view of the long hiatus in federal funding for such facilities and the daunting federal deficit, support for the initiative has built up a surprising head of steam. ■ **JOHN WALSH**