News & Comment

Pork Barrel Science: No End in Sight

Congress is unlikely to stop appropriating money for specific academic facilities, and universities are unlikely to stop asking for special treatment. Is a new review mechanism needed?

committee of senior university officials has concluded that the growing practice of pork barrel funding of academic facilities may be unstoppable. In fact, says the committee, the practice is likely to increase as universities become more strapped for cash and as members of Congress swallow the argument that providing research facilities for their local colleges will act like a pheromone to high-tech industry.

The only hope for dissuading universities from seeking deals for themselves from Congress will be to establish federal programs to which they can apply for building funds, says the committee. In the meantime, the committee offers the controversial suggestion that a review procedure be established to assess the merits of proposals submitted directly to Congress.

The recommendations are likely to spark a good deal of debate in the six higher education organizations that jointly sponsored the committee's study.* None of them has yet had a chance to discuss the report formally and officials are reluctant to comment on it in public. "This is the most controversial subject in academic science policy in recent years," says Robert Rosenzweig, president of the Association of American Universities (AAU), whose organization has twice condemned the practice although a few of its members have been among the offenders.

Concern over the intrusion of pork barrel politics into science was sparked 4 years ago when Catholic University and Columbia University were the beneficiaries of an amendment proposed on the floor of the House that steered \$5 million to each institution for new research facilities. Not only did this bypass the usual route for parceling out funds to universities but it also set a precedent because the funds were secured with the help of paid lobbyists, the firm of Schlossberg-Cassidy and Associates (now just Cassidy and Associates following the

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departure of founding partner Kenneth Schlossberg), who skillfully orchestrated congressional passage of the measure.

Virtually every higher education organization, including the National Academy of Sciences, decried the practice, but to no avail. In subsequent years, Congress has approved a growing list of university projects submitted directly to Capitol Hill. Last year set a record when Congress directed the

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Defense Department to spend \$56 million on nine specific university projects and instructed the Department of Energy to bankroll another nine projects to the tune of some \$40 million. Many of the recipients were clients of Cassidy and Associates.

At that point, the AAU and five other higher education organizations appointed a committee to look into the situation. Chaired by Donald Langenberg, chancellor of the University of Illinois at Chicago, it concluded that increased use of "earmarking" (the polite term for pork barrel funding) for university facilities "has the potential to cause serious and lasting damage to the nation's research enterprise." However, because many universities have a dire need for construction funds and there are no federal programs to provide them, "university requests for earmarked appropriations seem likely to continue, probably to grow."

Given that prospect, the committee recommends that a mechanism be set up to review the merits of proposals submitted directly to Congress before the appropriations committees vote on them. "We urge that no arrangement... be entered into if it provides only the form of merit review without its substance," the committee states. The committee indicated that it is not entirely happy with this proposal, however, because it regards the whole notion of earmarking with some disdain.

The proposal prompted a dissenting statement from committee member Arthur Sussman, general counsel and vice president for administration at the University of Chicago, who wrote that it would legitimize "a system of political handouts for dispensing limited federal research monies," and "increase the rush to the same lobbyists who have engineered the present situation."

Sussman's dislike of the proposal seems to be shared by National Science Foundation director Erich Bloch. Last year, a panel established by the National Science Board recommended that a mechanism be established to review pork barrel proposals, but Bloch summarily rejected the idea. Bloch said in a statement when he accepted the panel's report that "The Foundation does not agree . . . that additional review mechanisms are needed or would be efficacious in addressing the problem of bypassing merit review."

So far, Congress has restricted the use of earmarking mostly to fund buildings rather than research. Sussman told *Science*, however, that he is concerned that if the academic community softens its opposition to the whole notion of earmarking, the practice will inevitably be applied to the funding of research projects.

The chief driving force behind the recent spate of pork barrel episodes (aside from the fact that direct appeals to Congress are demonstrably successful) is that the federal government has virtually stopped providing funds for academic construction projects. Universities that have gone straight to Congress therefore say they have little alternative and they point out that they are not bypassing merit review processes because there are no competitive programs to which they can apply.

There is, however, another element in the debate over pork barreling. Many of the universities that have benefited from the practice are not in the front ranks of the nation's research universities and their con-

^{*}The study was sponsored by the Association of American Universities, the American Council on Education, the American Association of State Colleges and Universities, the National Association of Independent Colleges and Universities, the National Association of State Universities and Land-Grant Colleges, and the Council of Graduate Schools in the United States.

gressional sponsors have argued that the peer review system is stacked against them. Unless these universities get some political help to construct modern labs, the rich universities will continue to carry off the lion's share of research funds, the argument goes.

Thus the debate over earmarking has often come down to the "haves" against the "have-nots," and the involvement of organizations such as the AAU, which represents most of the leading research universities in North America, has not helped. Rosenzweig himself says that the AAU's public opposition to congressional earmarking may have been counterproductive in debates in the House and Senate last year, when both bodies voted explicitly to fund individual university projects.

The Langenberg committee argues that the pork barrel problem will wane only if the universities' facilities problem is taken care of. And it suggests that tensions within the higher education community will diminish only if a mechanism is established that provides some preferential treatment for universities that have not traditionally been in the front ranks.

It therefore recommends that federal programs be established to which universities can apply for funds to build new facilities or refurbish old ones. These programs should be two-tiered. One subprogram should be designed to meet the needs of established research universities and a second subprogram should focus on research-oriented, developing institutions. "Separate award criteria should be developed appropriate to each group and separate competitions should be held," the committee says.

The higher education associations are urged to embark on a campaign for a federal program to finance academic facilities, but first they will have to resolve a key question: should they insist that the new funds be added to existing budgets? If so, that would be "tantamount to an assertion that *all* research projects and programs of the sort currently funded are more important than *any* research facility candidate," the committee notes. "If that is the message the universities choose to carry to Congress, then they will need to be prepared for congressional skepticism about their seriousness."

In the meantime, the committee urges higher education organizations to continue to oppose individual pork barrel funds that threaten to take money away from regularly authorized and appropriated competitive research programs. It also says the academic community should continue to insist that merit be the central factor in distributing funds for both research and facilities.

COLIN NORMAN

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AIDS Patent Dispute Settled

The long-standing legal dispute between the Pasteur Institute in Paris and the U.S. Department of Health and Human Services (HHS) about patent rights for an antibody test for AIDS is over. Under a legal agreement dated 30 March 1987, HHS and the Pasteur will share rights to the patent, and Robert Gallo of the National Cancer Institute (NCI) and his colleagues and Luc Montagnier of the Pasteur and his colleagues will be recognized as joint inventors of the AIDS antibody test-kit assay. President Ronald Reagan and French Prime Minister Jacques Chirac announced the settlement on 31 March. The announcement coincided with Chirac's visit to Washington.

A key part of the settlement is the establishment of an AIDS foundation, initially with six trustees who will include Montagnier, Gallo, Raymond Dedonder, director of the Pasteur Institute, and James Wyngaarden, director of NIH. HHS and the Pasteur are to contribute to the foundation 80% of the antibody test royalties they receive from 1 January 1987 to 27 May 2002. The foundation money is to be used for research on AIDS and other human retroviruses.

"I'm very happy. I've been seeking something like this for a couple of years," said Gallo in an interview with *Science*. Gallo and Montagnier are credited as being codiscoverers of the virus that causes AIDS. The antibody test procedure is now used routinely to indicate whether a person is infected with the AIDS virus.

The history of the patent dispute includes a series of legal actions. On 5 December 1983, the Pasteur filed for a U.S. patent, which was never awarded, for a testkit assay to detect blood serum antibodies to the AIDS virus. Five months later, on 23 April 1984, HHS filed a patent application for an antibody test and processes for growing the AIDS virus in permanent cell lines. The U.S. Patent and Trademark Office issued this patent on 28 May 1985, but the Pasteur Institute challenged the award.

In a separate legal action, the Pasteur Institute filed suit against the U.S. government on 12 December 1985 for breach of contract, claiming that NCI scientists had used materials, sent by the French for research purposes only, to develop an antibody test-kit assay. The U.S. Claims Court granted a government motion to dismiss this suit on 7 July 1986, but the Federal Circuit Court reversed the Claims Court decision on 9 March 1987.*

The Pasteur Institute also filed a tort claim against HHS and, in addition, Pasteur attorney James Swire filed suit against HHS and the Department of Commerce, alleging that they withheld information he had demanded under the Freedom of Information Act. Last fall, the two parties seemed close to a resolution, but the negotiations stalled. All of the legal issues have now been settled.

The French and U.S. teams shared biological materials between 1982 and 1984, making it difficult to sort out whether subsequent discoveries reported by one group would have been possible without materials supplied by the other group. As part of the settlement, Gallo and Montagnier signed a chronology that highlights important findings in AIDS research. "The chronology is fair and substantive," said Gallo. "We didn't have any real disagreements about it." Jonas Salk, of the Salk Institute in La Jolla, California, and discoverer of a polio vaccine, played a key role in constructing the chronology. "He really helped to catalyze the effort," Gallo said.

The terminology used to describe the AIDS virus was an initial source of contention and it became more complex as the research field expanded and more isolates were found. In May 1986, an international committee recommended that the AIDS virus be termed human immunodeficiency virus, or HIV. Part of the new agreement is to use the HIV terminology when the virus is described in general terms, but to use specific notation for individual viral isolates in scientific reports, as suggested by an earlier 1983 nomenclature committee.

Three other HHS patents for growing the virus in particular cell lines have also been approved and the royalties will be shared between the Pasteur and the U.S. government. The settlement pertains only to materials covered in patent applications filed before 28 May 1985. **DEBORAH M. BARNES**

^{*}For details of the background to these issues, see *Science*, 16 December 1983, p. 1178; 1 November 1985, p. 518; 8 November 1985, p. 640; 3 January 1986, p. 11; 9 May 1986, pp. 697 and 699; 25 July 1986, p. 414.