ory. "The right and responsibility for publication rests with the university or the principal investigator," the statement says.

Current procedures, spelled out in a memorandum last September by DOD Under Secretary for Research and Engineering Richard DeLauer, require that all new DOD research contracts contain a clause requiring researchers to submit their papers to DOD when they submit them for publication.

In the past, the federal government has used the Export Administration Act to restrict communication of unclassified information that it deems sensitive. But it is an unwieldy instrument, carrying potential heavy criminal penalties, whose use can have an extremely chilling effect on scientific communication. Several groups have thus been lobbying Congress to exempt scientific research from the act. But such appeals have received little attention so far in the skirmishing over controls on commercial technology. "In the political scheme of things, this issue is like a stray cat or dog, nobody is paying it much attention," says Allan Adler, co-director of the Center for National Security Studies. On 18 May, however, the House Foreign Affairs Committee did agree to add a provision to the act stating simply that "It is the policy of the United States to sustain a vigorous scientific enterprise. To do so requires protecting the ability of scientists and other scholars to communicate freely their research findings by means of publication, teaching, conferences, and other forms of scholarly exchange." The committee's report is likely to be more explicit in stating that the Export Administration Act should not be used to restrict scientific communication.

Whatever controls are finally imposed, they are unlikely to gain universal acceptance. Stanford University president Donald Kennedy, who co-chairs the DOD–University Forum, says, for example, that "Our success [in keeping restrictions to a minimum] depends on whether a few hard-liners in the Administration get their way." Asked, however, whether Stanford would accept a research grant with restrictions on access by foreigners—as the forum suggested—Kennedy replied, "Probably not."

Nevertheless, Kennedy and others are looking forward to some coherent rules so that the universities can at least have a basis on which to decide whether or not to accept the government's money.

—COLIN NORMAN

Universities Find Funding Shortcut

Catholic U. and Columbia hired a public relations firm to help get a piece of DOE's budget for new facilities

The Speaker of the House, Thomas P. (Tip) O'Neill, Jr., received a call recently from his archbishop, Humberto Cardinal Medeiros of Boston. As a result, Catholic University in Washington, D.C., may soon get a new $13.9-million research facility, courtesy of the Department of Energy (DOE).

In a highly unusual move, the House voted on 12 May to remove $5 million from the budget of the National Center for Advanced Materials (NCAM) at the Lawrence Berkeley Laboratory and directed that the money be spent instead on a vitreous state research lab at Catholic U. The vote, which came as an amendment to a DOE authorization bill, was the result of an impressive lobbying campaign by some of the nation's bishops.

Catholic was not the only university to indulge in some successful pork barrel politics. Columbia University also raided DOE's authorization bill for a $5-million downpayment on a $32-million chemistry building. In this case, the House decreed that the funds be taken out of a variety of basic research programs in DOE.

What makes both these moves unusual is that neither facility has been reviewed by DOE or by the House Committee on Science and Technology, which authorizes DOE's budget. The proposals bypassed the usual peer review and authorization process and were sent straight to the House floor, where they arrived with a good deal of political momentum.

The proposals "came out of left field," says one DOE official, who complains that the department had no chance to determine whether they should have a high priority claim on the federal budget. "I would have no way of knowing whether these proposals are more meritorious than others," he said. "This could be a very bad precedent."

Although the proposals were not formally linked, both universities hired the same public relations firm, Schlossberg-Cassidy and Associates, to help lobby for their proposals. Schlossberg-Cassidy recently helped Tufts University snare a contract from the Department of Agriculture to house a new $32-million human nutrition research center.

The Catholic University proposal began to move on a fast track about 2 months ago. Although the university is not generally noted for its research prowess, its Vitreous State Laboratory, established in 1968, has a good national reputation. But it is spread out over three buildings and space is extremely limited. Theodore Litovitz, the lab's director, says he began discussing the need for a new facility with Catholic U.'s new president, Father William Byron, soon after Byron arrived last September. Byron apparently decided to seek funding for the facility when he read about the federal government's plans to spend $264 million to build NCAM. The NCAM proposal, which has been widely touted by George Keyworth II, President Reagan's science adviser, was added to DOE's budget request at the last moment, just before it went to Congress. According to Litovitz, the proposal and the publicity about how it was put together "certainly made Father Byron aware of the availability of DOE funds for materials science." Byron, who was in Europe last week and could not be reached for comment, went to Schlossberg-Cassidy.

Kenneth Schlossberg says a decision was made to seek funds in the DOE budget, but the authorization bill "came through committee before many people were aware of it." Help was then sought from Catholic U.'s board of trustees. Cardinal Medeiros, who recently left the board, contacted O'Neill, and Archbishop Philip Hannan of New Orleans contacted Representative Lindy Boggs (D–La.), who occupies a key spot on the appropriations subcommittee that deals with DOE's research budget.

O'Neill sent a letter, dated 28 April, to Science and Technology Committee chairman Don Fuqua (D–Fla.), saying he hoped Fuqua could find some money in

the authorization bill for the facility. Representative Norman Mineta (D–Calif.) agreed to sponsor an amendment on the floor diverting money from NCAM. When the vote came up, House Majority Leader James Wright, Jr. (D–Tex.), spoke in favor of the amendment, and, according to one aide, "Members were notifed it was the speaker's amendment." It was approved by 261 votes to 113. Opposition was led by Representative James Sensenbrenner (R–Wis.). According to an aide, he got a call shortly before the vote from Archbishop Rembert Weakland of Milwaukee.

Meanwhile, a House appropriations subcommittee approved a DOE bill in closed session on the same day. According to several sources, it contains money for both the Catholic and Columbia facilities.

The Columbia University proposal did not have any divine connections, but it was approved by the House almost as readily. According to Nicholas Turro, a chemistry professor at Columbia who drafted the proposal, the idea is to establish a National Chemical Research center that will interact with industry in the New York area. Like the Catholic U. proposal, the need stems from the fact that Columbia's existing chemistry research facilities are dilapidated and overcrowded. "In the 1960's," says Turro, "Columbia was asleep when everybody else was putting up new buildings." Columbia decided to seek $20 million from the federal government and raise the balance of $12 million privately.

Representative Charles Rangel (D–N.Y.), whose district included Columbia, was approached in late April and he agreed to sponsor an amendment to the DOE bill. Rangel, with backing from other members of the politically powerful New York congressional delegation, approached Fuqua and worked out an arrangement under which $5 million for the facility would come from DOE's budgets for instrumentation ($2 million), high-energy physics ($1 million), nuclear fusion ($1 million), and accelerator upgrading at Yale and Washington Universities ($1 million). Fuqua announced on the House floor that he supported the redistribution, and the amendment was passed by 215 votes to 150.

All this has left a lot of people surprised and somewhat miffed. Sensenbrenner warned stentoriously, for example, that the votes will "politicize scientific research . . . by encouraging every college and university in the country to contact their representative to obtain a facility, regardless of duplication or its value to the nation."—**COLIN NORMAN**

Texans Woo and Whelm MCC

With Texas-scale help from public- and private-sector backers, Austin, Texas, has landed the high-technology prize of the hour—the R & D cooperative formed to assure U.S. competitiveness with the Japanese in advanced electronics and computers. Austin won out in intense competition over an estimated 52 cities in 22 states to be the home of the Microelectronics and Computer Technology Company (MCC) sponsored by 12 leading high-tech companies.

What seems to have tipped the balance in Austin's favor was Texas's ability to muster broad-spectrum support for the MCC bid. According to MCC's chief, retired Admiral Bobby R. Inman, a decisive point was the commitment by the University of Texas (UT) at Austin and Texas A&M University a hundred miles away to enhance their capabilities in MCC's kind of science and technology. The universities plan a major expansion of faculty, including endowed professorships, in microelectronics and computer science.

A more direct incentive was an offer to lease at nominal cost 20 acres of land at UT's Balcones Research Center on the northern fringe of Austin, and to build and lease on favorable terms an office and research building worth up to $20 million on the site. Texas Governor Mark White took the lead in mobilizing academic, industrial, political and community leaders for the campaign. A key part was played by a special task force made up of influential citizens appointed by White especially to work on snaring MCC. The task force was the prime mover in developing the land and building offer which is based on a mix of public and private funding, with the latter expected to be provided on something like a 3 to 1 ratio.

To ease the transition for MCC immigrants, a number of things are planned, including home mortgage assistance at below market interest rates. In Austin, a relocation center will be set up to provide help ranging from assists in finding housing to arranging utility hookups.

Private funding also figures prominently in the university expansion plans that impressed the MCC board. Sources at both UT and A&M say that the plans for the buildup were for the most part already on the books. A UT official, however, said that the expansion at UT has been "fast-tracked" as part of the effort to attract MCC.

UT vice president for academic affairs Gerard Fonken says that the university expects to put $15 million into new endowed chairs and other faculty positions in the next few years. Some $5 million is already in hand and the rest is expected to be shortly. In all, about 30 new faculty slots in microelectronics and computer science will be created. Also scheduled is an additional $750,000 for support of graduate fellowships and an increase of $1 million a year in university funds for research in the two fields.

A&M officials are less specific but say their university has similar plans for expansion in the two fields. UT and A&M are viewed by some observers as having complementary programs, with A&M emphasizing integrated circuit design and chip manufacturing and UT computer science. The quest for MCC is seen as further promoting a spirit of cooperation in yet another sector between the two traditionally rivalrous institutions which have recently edged toward collaboration in marine science and geoscience (*Science*, 22 April, p. 390).

MCC is expected to begin operating in temporary quarters in Austin in September with a start-up staff of about 40, many on loan from companies belonging to the sponsoring consortium. MCC's budget in the future is expected to rise to as much as $150 million a year, which its Texas hosts hope will make it a catalyst for the growth of a Texas equivalent of the high-tech havens near San Francisco and Boston.

On the day the Texas coup was announced at a press conference in Austin, Inman gave a speech to a joint session of the Texas legislature. His remarks, largely an encomium on research, earned polite applause. As one observer who had been involved in the campaign to win MCC put it, Texas legislators are not known for their sophistication about R & D. "But they're learning."—**JOHN WALSH**