BUDGET '97

NIH Up, for Now; Fusion Down

Congress cut the budget for fusion research by $11 million last week, but the program's advocates are not complaining too loudly. "We are grateful—it could have been much worse," says Anne Davies, who heads the Department of Energy (DOE) effort. On the same day fusion took a hit, a Senate panel approved a 4.1% boost for the National Institutes of Health (NIH). But NIH's supporters are not making much noise, either. That is because disagreements over education spending could leave the legislation in limbo and wipe out any increase for NIH.

These muted reactions came as lawmakers scrambled to complete as many spending bills as possible by 27 September so they can return home to campaign for re-election. The money for fusion was part of the DOE budget passed by both the House and Senate. This week legislators were expected to hammer out a common bill for funding NASA, the Environmental Protection Agency, and the National Science Foundation. But some agencies may wind up having their current budgets extended if Congress and the White House cannot reconcile differences before the current fiscal year ends on 30 September.

Fusion was among the hardest hit science programs in 1996, when Congress cut its budget by one-third, to $244 million. This year its budget was chopped again, to $233 million—below the $250 million minimum amount recommended by an advisory panel this spring (*Science*, 22 March, p. 1660) and the $256 million Administration request. The figure is a compromise between a House-passed level of $225 million and the $240 million approved by the Senate. Congress rejected a DOE request to count $16 million in program direction and computer work separately, however, meaning the core fusion budget is actually about $216 million.

Davies was relieved that the House level did not prevail as she feared. But she says "it will be a challenge to hold the program and the community together" at that figure. An advisory team will meet next week to devise a strategy.

As expected, the 1997 budget marks the last year of funding for Princeton's Tokamak Fusion Test Reactor. Deputy Director Rush Holt says he expects the final shutdown to occur next summer, although Davies said it could happen sooner. At the same time, lawmakers urged DOE to continue working with Europe and Japan on the International Thermonuclear Experimental Reactor project, an effort to demonstrate the viability of fusion energy. About $55 million—slightly less than this year—will be allocated, Davies added.

Solar energy R&D also fared poorly in the 1997 DOE budget, dropping 9%, while nuclear energy fell almost 17%. Biological and environmental research, however, won a $10 million boost above its $379 million budget, and funding for hydrogen remained stable. In contrast, water projects and defense programs in the bill won far more support than DOE civilian R&D. "It's clear who has the political muscle," says one DOE manager.

In DOE's defense area, lawmakers boosted funding for nuclear stockpile stewardship by $8 million, bringing it to $1.66 billion. Most of that additional money was set aside for the core science program, which accounts for just over $1 billion and does not include the cost of new facilities. The proposed $1.1 billion National Ignition Facility, the centerpiece of U.S. efforts to test nuclear weapons through computer modeling, received the full $132 million request.

The 1997 appropriations for NIH, part of a separate bill moving through the Senate, would mean a $487 million increase over 1996. It falls between the Administration's request for a 3.6% increase and the 6.9% approved in July by the House. But the final level is still up in the air. The bill funding the Departments of Labor and Health and Human Services, of which NIH is part, is caught in election-season crossfire. The White House threatens to veto the entire bill, arguing that it provides $6 billion less than the president wants for education and social programs. The bill also violates a spending limit imposed by Senate Majority Leader Trent Lott (R–MS).

The worst outcome would freeze appropriations included in the bill at current levels until next year, appropriations staffers say. A freeze would send a chill through programs pegged for rapid growth, such as the human genome program. Francis Collins, director of the National Center for Human Genome Research, says that a flat budget would delay plans to expand genome sequencing and have "a significant impact" overall on the center, the fastest growing unit at NIH.

–Andrew Lawler and Eliot Marshall

EAST ASIA

13 Universities Seek Common Ground

TOKYO—Divided by centuries of national enmity but connected by a common desire to improve their scientific capabilities, 13 universities in East Asia have joined together to foster academic cooperation. Last week the presidents and senior officials of these elite institutions met in Japan to take the first steps down what representatives hope will be a long road of joint research activities, faculty exchanges, and a shared pool of students and postdocs. "Most Asian universities have been oriented toward cooperation with Western institutions," says Jungho Sonu, president of Seoul National University. "We need to know East Asian universities better."

D. NORMILE

Small steps. Hong Kong's Woo hatched plan 3 years ago.

The new organization, called the Association of East Asian Research Universities, includes schools in China, Hong Kong, Japan, Korea, and Taiwan.* Although many of the universities already have one-to-one exchange programs, says University of Tokyo President Hiroyuki Yoshikawa, a regionwide association "opens a new age of collaboration." The first chair of the association, Hong Kong University of Science and Technology President Chia-Wei Woo, says he began discussing the benefits of such an association 3 years ago. Last January he hosted a "summit" of presidents, who then agreed to form the organization.

Leo Esaki, president of the University of Tsukuba, says that the drive for greater cooperation reflects increased confidence in academic and research standards. "Many universities here are really on the level of first-rate [U.S.] state universities," he says. Mingzhi Xu, vice president of Fudan University, says that being "from the same region and having a common cultural background" should smooth cooperative efforts. And Yoon-Jae Yang, director of international affairs at Seoul National University, hopes that the group will make Asian research "more visible in the Occidental society."

While hopes are high, initial goals are modest. "What we want are small successes," says Woo. "These 13 universities are very much alike in terms of quality of research and research capabilities, and there is a cultural affinity, too." He says that Kyoto University

* From Japan: Osaka U., U. of Tokyo, U. of Tsukuba, and Tokyo Institute of Technology; from China: Fudan U., Peking U., Tsinghua U. (Beijing), and the U. of Science and Technology of China; from Korea: Korea Advanced Institute of Science and Technology, Pohang U. of Science and Technology, and Seoul National U.; from Taiwan: Tsing Hua U. (Hsinchu); from Hong Kong: Hong Kong U. of Science and Technology.