Congress Boosts NIH Budget 17.3%

NIH will have sufficient resources to support 6,200 new grants and more than 10,500 trainees—way up from the Administration's request

THE National Institutes of Health have fared well in the battle of the budget for fiscal year 1987, thanks to a supportive Congress, which has increased funds by more than $800 million over the amount available in FY 1986, an increase of 17.3%. Total funds for grants and training are up, as are budget figures for other mechanisms of research support, including the research centers program and NIH's intramural research. Funding for research and treatment of AIDS is increased substantially; new money is provided for clinical trials; and a modest amount has been appropriated for rehabilitation of animal facilities. And Congress has instructed the White House Office of Management and Budget (OMB) to cease and desist in its efforts to micromanage NIH by limiting the agency's flexibility in handling its own budget.

The total budget for fiscal year 1987 as reported out of the House and Senate is $6.2 billion, which is $1.1 billion above the President's request of $5.1 billion. NIH director James B. Wyngaarden says it has "been a very good year" for the institutes overall.

The one area that has yet to capture congressional attention is funding for facilities, which university administrators note are in need of major renovation or replacement on campuses nationwide.

The 6200 Grants. Both the House and Senate were sympathetic to pleas that NIH needed enough money to support in excess of 6000 new and competing grants, although there were differences of opinion as to whether an exact figure should be specified in the law. The House Appropriations Committee said "yes," reflecting among others the view of the Federation of American Societies for Experimental Biology (FASEB), whose 28,000 members are research scientists. The Senate Appropriations Committee opted against legislating a specific number, a position consonant with the views of the Association of American Universities (AAU), which represents some 50 of the nation's larger research universities.

In House-Senate conference, the House prevailed on this point and the final bill specifies 6200 new grants exactly. Robert Krauss, executive director of FASEB, sees this as congressional affirmation of the importance of investigator-initiated grants, and argues that it is a necessary measure to prevent OMB from unilaterally cutting the number of grants through clever accounting maneuvers, as it did in FY 1985. Furthermore, Krauss says, the guarantee that there will be 6200 new grants, a substantial increase from the early 1980's when new grants hovered around the 5000 mark, "sends an important signal to young scientists" about opportunities for a career in research.

AAU thinks the need to attend to the physical infrastructure surpasses other priorities.

Arguing the issue of research support from a different stance, the AAU thinks that the need to attend to the physical infrastructure has reached the point that it surpasses other priorities. "It's fine to fund more grants but there has to be a program for facilities," according to an AAU official. "It's not as if there are empty labs waiting to be used, or a large number of state-of-the-art research buildings." AAU can be expected to mount a renewed effort on the facilities front in anticipation of the budget for FY 1988, which already has begun working its way through the bureaucratic pipeline in Washington.

Training. The budget for FY 1987 is a repudiation of the Administration's request that no more that 9258 trainees be funded, and restores cuts in training made in FY 1986 in the name of Gramm-Rudman that reduced the number of trainees to 9948. According to NIH officials, the final tally for FY 1987 will be 10,736, which includes 162 training slots in the new National Center for Nursing Research which Congress attached to NIH about a year ago. Among the institutes, the National Institute of General Medical Sciences has the largest number of training positions at 3387. The heart institute will have resources for 1649 trainees and the cancer institute will support 1313. Congress's willingness to support training is seen as another encouraging signal to younger scientists.

Indirect Costs. For the past year and more, the Administration has attempted to save money by reducing the indirect cost allowance that is paid to universities to cover certain administrative costs of a grant, as well as basic services such as heat and light. University officials lobbied long and hard to save these funds and were successful for FY 1987. Indirect costs will be paid at the full rate.

Facilities. At present, only three institutes have any construction funds, and they are modest: $5 million in the cancer institute's budget, and $2.25 million each for the heart and eye institutes.

Animal Facilities. Separate funds are appropriated for upgrading animal facilities, as universities work to comply with new federal guidelines. But with only $10 million for the improvement of general animal facilities and an additional $3.5 million for primate centers, it is not likely that all needs will be met this year.

Instruments. In recent years, Congress has supported the need for new instruments with funds for a "shared instruments" program that provided money for labs that could share use of major pieces of equipment that cost $75,000 or more. A highlight of the FY 1987 budget is provision of $16 million for the purchase of less expensive but no less vital instruments by NIH-funded labs. The inclusion of money for instruments in the $5,000 to $60,000 range comes in response to the findings of a recent survey that was sponsored jointly by the NIH and the National Academy of Sciences.

AIDS. Funding for AIDS, which comes in at $248 million for FY 1987, was clearly a high priority with both the House and Senate. The money, which exceeds last year's funds by $100 million, is dispersed among a number of institutes. The National Institute of Allergy and Infectious Diseases gets the lion's share at nearly $99 million. The cancer institute, where most of the work on the AIDS virus has been done, will receive more than $62 million, and the heart institute is allocated $17 million. Other institutes in-

cluded in AIDS research work are the dental, child health, eye, and neurology institutes. In addition, $10 million has been assigned to the office of the NIH director to allow flexibility in meeting special research needs.

Other Items of Note. The House and Senate Appropriations Committees' budget actions are traditionally elaborated in committee reports that reveal items of special interest to members of the legislature. One, that the House suggests might be supported by AIDS money in the NIH director's office, is a "coordinated program in development of new antiviral agents based on a structural biological approach," which would include participation by physical chemists, molecular biologists, and biophysicists.

Also among items cited by Congress this year are provisions for establishing "centers of excellence" for the study of Alzheimer's disease; and funding through the National Institute of Diabetes, Digestive, and Kidney Diseases of six "kidney-urology" centers whose focus will include study of benign prostatic hyperplasia, which affects large numbers of men over 50. Congress instructs that the centers be named in honor of the late Representative George O'Brien of Illinois.

The new National Institute of Arthritis and Musculoskeletal and Skin Diseases will direct special attention to research in exercise physiology and low back pain, which the Senate report says "affects the majority of adults in the United States." "The Institute plans to bring together multidisciplinary research teams with expertise in bones, nerves, disks, and muscles to suggest research plans for studying low back pain," it says.

Micromanagement. The NIH is acutely sensitive to attempts at micromanagement by either the Administration or the Congress; this past year or so the OMB has been criticized as being most aggressive in this regard by spelling out how NIH is to spend its money by funding mechanism. That is, it has said that in a given quarter of the budget year, only so many grants could be awarded, at a specified dollar total, and only so much could be spent on research centers. Institute directors complain that this amounts to an intrusion by the Administration's budget office that merely reduces needed flexibility in distributing funds.

Congress took up the NIH cause through language in the appropriations reports that, while not binding, it hopes will influence OMB. In FY 1986, the Senate actually directed NIH to "disregard OMB substantive directives." Regarding FY 1987, the committee says it "expects OMB to refrain" from micromanagement.

During a period of budgetary restraint, when researchers quite reasonably feared that resources for biomedical research would be severely curtailed, the NIH has fared remarkably well at the hands of Congress, and a threatened presidential veto of the money bill never materialized. Whether the Administration will later seek rescissions in FY 1987 spending is anybody's guess. ■

BARBARA J. CULLITON

Regrowing a Dry Tropical Forest

Dry tropical forest has all but vanished; now a Pennsylvania biologist is raising money to restore one from forest remnants in a corner of Costa Rica

Five hundred years ago, when the Spanish came to Central America, dry tropical forest extended the length of the Pacific coast from northern Mexico to Panama. A few patches of this ancient forest still remain on the coast of Costa Rica. Now a biologist from the University of Pennsylvania, Daniel Janzen, is engaged in an unprecedented attempt to regrow a tropical forest in what he hopes will become a "case study in self-supporting perpetual ecological and biocultural restoration."

Janzen, who has been doing research on plant-animal relationships in Costa Rica for the past 20 years, is spearheading the effort, aided by foreign money and local talent. His goal is to incorporate the existing Santa Rosa National Park into a much larger 700-square-kilometer Guanacaste National Park by purchasing adjacent and connecting land.

With the simplest of technology—primarily fire prevention—he says that in 100 years or so the entire area can be restored, with "all the plants and animals that were here when the Spaniards arrived."

Daniel Janzen *hopes a "user friendly" park will help restore biology to the local cultural repertoire.*

Time is short. Janzen says the forested area of Costa Rica has shrunk from 20 to 2% in the past two decades. Janzen launched his dream a year ago; now he has collected $1 million for government purchase of the land—including $500,000 from the MacArthur Foundation—and needs $5 million more by next spring. The whole project cost is estimated at $11.8 million, including a $3-million endowment for operations.

Tropical dry forest, which once accounted for over half of all tropical forest, has received little attention internationally amid the alarm over the demise of rain forests. One reason is that there is so little of it left. "In any tropical country, look where its major crop and pasturelands are," says Janzen, "that's the former dry forest." Most of the rice paddies of India were once tropical dry forest. Dry forest really exists in two separate climates: no rain falls from December until spring, and for the rest of the year it rains all the time. Janzen says there are 20% to 40% fewer plant and bird species in this type of forest than in a rain forest; the variety of insects and mammals is about the same. Dry forest is in some ways more complex because of the extreme weather changes and the topical as well as seasonal variability in rainfall, which make for a great variety of small habitats.

The Guanacaste park (named after the national tree) contains farmlands, savannas, deforested areas, and two volcanoes as well as tiny areas of pristine forest. In the manner