ing. From this year hence, for example, grants from the Italian National Research Council (CNR) must be targeted for specific research projects. CNR has adopted the NIH model. The aim apparently is to pry some research funds from the control of the professors for the use of able junior people. A side effect in the case of the *stazione*, however, will be to reduce funds available for the support of "free research."

At Naples there is obviously no choice between clear alternatives. Almost everyone wants the same thing—to maintain the station as an international facility, to put it on a sound financial footing, and to provide the staff with more security and more satisfactory working conditions. The differences are over how to accomplish these aims.

After a meeting in March, the administrative council replied to the Ministry's letter by forwarding minutes that dealt with some of the relevant issues. The council emphasized the necessity of guaranteeing the "internationality" of the station and also stressed the need for increased regular income of some $500,000 a year. In addition, the council affirmed a readiness to recognize the right of scientific personnel to perform their own research according to a program "limited only by the need to fit into the scientific framework of the station." The council also noted its view that a different structure of the board of directors is necessary. The response was couched in general terms which seemed to indicate a receptivity to change, but it hardly afforded a basis for settlement.

International interest remains high. A meeting of the IUBS advisory committee has been called for this week in Naples by Professor C. H. Waddington of Edinburgh, now president of IUBS, when the committee is expected to review the situation. The Italian government seeks to know what the biologists in countries which support the station want, and this group is likely to influence whatever action is taken.

Germany and the United States, which have been the heaviest foreign contributors to the station, are following developments at Naples closely, but have taken the view that this is an Italian matter and are keeping mum at least officially.

The appointment of a government official to a post of highest authority at the station relieves the suspense and obviously moves the discussion into a new phase. It is a serious step, but such appointments are not uncommon in Italy when a public institution is in difficulty. Details of the commissioner's brief are not yet clear. The commissioner, understood to be an official called out of retirement to take the post, will be advised by three senior professors who are familiar with the station.

The decision itself is the responsibility of the Ministry, although the CNR and Italian biologists will no doubt be consulted. Because the Italians presumably wish to preserve the international character of the station, and also because of the relevance of the whole matter to the vexed question of university reform, the decision on the Naples station is a matter of real consequence for Italian science policy.

—JOHN WALSH

NIH Budget: House Committee Sticks to Administration Figure

The President's budget for the National Institutes of Health emerged virtually unchanged this week from the House Appropriations Committee, but whether this should inspire joy or gloom in the biomedical research community is an uncertain matter.

In the handling of the budget, this was the first time out for Representative Daniel J. Flood (D–Pa.) as successor to the late John E. Fogarty in the chairmanship of the Labor-HEW appropriations subcommittee. And along with Flood, as a consequence of Republican victories and one retirement last fall, was an altogether new and relatively conservative Democratic lineup on the subcommittee. This new cast did not emulate Fogarty's well-established practice of adding substantial funds to the administration's medical research budget. But, considering the political complexion of the House, the financial drain of Vietnam, and an impending deficit that may crack all records, NIH did quite well to come out in one piece. Nevertheless, there is no arguing that, relatively speaking, it did not ask for very much in the first place.

This is how the numbers break down: Last year Congress appropriated for NIH $1,123,162,000. Because of the uncertain budget situation this year, NIH prepared "high" and "low" budgets for submission to its administrative parent, HEW. These were for $1,517,955,000 and for $1,158,622,000. After examination by HEW, these were modified to $1,409,111,000 and $1,202,078,000. The Bureau of the Budget took these figures and finally came out with $1,187,250,000—the figure that was submitted to Congress. Flood's subcommittee voted to apropriate all but $13.3 million of the amount requested. The cuts were from the Regional Medical Programs and the environmental health sciences, but these amounts wer said, in effect, to be available for expenditure next year because of delays in spending funds appropriated earlier.

Redoubtable as Fogarty was in promoting federal support of medical research, there is little reason to believe that he would have fared much better. At the time of his death, considerable chilliness prevailed between him and the President (Fogarty regularly referred to him as "a Kennedy man," and would jokingly point out that, while he had several portraits of the late President on the walls of his office, his pictorial acknowledgment of the Johnson Presidency was a snapshot-size photo atop a bookcase). The President paid no more than lip service to Fogarty's insistence that medical research be supported to the limits of its financial appetite. But, even if he had urged it, it is doubtful that the House membership that was voted in by the last election would have gone along with a major increase for NIH.

AAUP Report on 1966–67 Salary Survey

Private institutions of higher education continue to lead their public counterparts in levels of faculty pay in the current academic year, but they are fast losing ground because of greater percentage increases at the public institutions, the American Association of University Professors (AAUP) reported.

The average top-level annual salary at the private universities exceeded that of the public institutions by more than $2000, according to the preliminary report of the 1966–67 AAUP salary survey. However, between academic years 1964–65 and 1966–67, compensation for professors at public universities had increased by 15.2 percent as compared with 12.1 percent at private independent universities.

At this rate, the AAUP predicted, the public universities would catch up with their private counterparts in about a decade. The report expressed concern over the "financial crisis" that threatens the private schools and said that the association intends to study it further.

In the salary survey, the institutions are graded on average and minimum compensation scales, a double-A rating being the highest. This year 28 schools received a rating of A or better on both scales, as compared with 22 last year.

Parsons College, Fairfield, Iowa, which recently lost its academic accreditation, was the only institution to rate a double A on both scales. Last year it received the double A on the minimum scale and a single A on the average scale.

Amherst College jumped from single A's on both scales last year to a double A on the minimum scale this year.

Six institutions moved up into the straight-A rank this year. The six (with last year's ratings in parenthesis) are: Brandeis (average scale, B; minimum scale, B); Brown (average, B; minimum, grade not authorized for publication last year); Cornell (average, A; minimum, B); State University of New York at Binghamton (average, B; minimum, A); Queens College (average, B; minimum, A); and Stanford (average, A, minimum, B).

Institutions that maintained the high rank they held last year are Lake Forest College, with ratings of A on the average scale and AA on the minimum, and 18 institutions with ratings of A on both scales: Brooklyn College, California Institute of Technology, University of Chicago, City College of New York, Columbia, Duke, Harvard, Johns Hopkins, Knox, Massachusetts Institute of Technology, State University of New York (at Buffalo and Stony Brook), University of Pennsylvania, Princeton, University of Rochester, Swarthmore, Wesleyan, and Yale.

Trailing closely were the University of Michigan and Northwestern University, with ratings of A on the average scale and B on the minimum.

New York was the only state whose public institutions ranked A on both scales.

The scales used in grading are shown in Table 1.

Table 1. Scale of average and minimum salaries corresponding to ranks of AA and A.

Position	Salary	
	AA	A
Average		
Professor	$24,510	$19,630
Assoc. professor	14,790	12,790
Asst. professor	11,210	9,890
Instructor	8,420	7,560
Minimum		
Professor	17,220	14,530
Assoc. professor	12,490	10,850
Asst. professor	9,370	8,290
Instructor	7,100	6,390

Copies of the survey will be available from the AAUP in August.

The results prompted a member of the University of California Board of Regents to ask that salaries there be increased. Edward Carter, former board chairman, pointed out that Stanford and Caltech were ahead of the University of California, which ranked 42nd in the nation for average salary of full-time faculty members.

Governor Reagan, commenting on Carter's remarks, said that faculty salaries were due for a 7-percent increase in the 1967–68 fiscal budget, and added, "We have to remember the fringe benefits, too."

Representative Daniel J. Flood

At the hearings, which were held in April and published last week,* Flood asked James B. Cardwell, HEW's budget chief, to discuss the guidelines that were used in preparing the budget. Replied Cardwell, ". . . we indicated to all our operating agencies and the National Institutes of Health that this would be a tough budget year and that they should be prepared to rank their requirements by priority."

"Did you ask them to read the election returns?" Flood asked.

"In effect we did, yes," Cardwell said.

Just how Flood would treat NIH if given free rein cannot be said with certainty, but at various points throughout the proceedings he demonstrated a Fogarty-like impatience with the tightness of the administration's budget. Noting that the Institute of General Medical Sciences would be cutting back on support of fellowships, he declared, "I have heard all these statements that we don't have doctors, we don't have dentists, we don't have technicians, . . . we don't have this and we don't have that; we can't do this because we can't get the faculty. But then all I have seen here, institute after institute, is cutbacks on training grants, cutbacks on fellowships. How in the world did you put this together?"

To which NIH director James A. Shannon replied, "We can only say that when the final decision had to be made, within a budget ceiling either to support already established scientists or to train, we elected to support those already trained."

* *Departments of Labor and Health, Education, and Welfare Appropriations for 1968, Hearings, Part 5,* and *Report,* available from the House Appropriations Committee, Washington, D.C.

At another point, Shannon warned that any cuts in the NIH budget "would have disastrous effects on the programs."

"Do you use that term advisedly?" Flood asked.

"I do, sir, yes," Shannon answered. "I think the number of trained scientists who are coming into the field who will not be supported with these appropriations is very substantial. I think this will have an effect on the plans of new young scientists just beginning their careers; it will divert some of them from careers in the biomedical sciences. . . . I consider this budget as less than a barebones budget."

Shannon explained that though NIH was requesting an increase in funds for training grants, from $134.5 million to $139.6 million, the latter figure, because of increased costs, would actually lead to reduction of 31 training grants. "We had the choice to make, under a lower ceiling, either to reduce research grants or to reduce training in order to encompass both activities under the ceiling. It was our feeling that, if this was a short period of reduced support, we should ride through a period of scarcity by curtailing the training of new scientists." The budgeted funds, he pointed out, would provide for an increase of 422 research grants. ". . . the budget before you reflects, to my mind," Shannon said, "not what is desirable but, within a given ceiling, the best distribution that we can make."

It can be expected that the NIH budget will fare at least as well in the Senate as it did in the House, and, if tradition holds, perhaps the Senate will even add to the House figures. But the President does not have to spend a dime more than he chooses to spend, and with the costs of the Vietnam war skyrocketing beyond the forecasts of just a few months ago, it is doubtful that the White House is hunting for new frontiers in basic biomedical research.—D. S. GREENBERG

Chemical and Biological Weapons: Once Over Lightly on Capitol Hill

Last February more than 5000 scientists signed a petition urging the administration to reexamine and publicly state the government's policies on chemical and biological weapons. So far, their action has drawn no response apart from a perfunctory acknowledgment from White House science adviser Donald Hornig. In a note sent to one of the progenitors of the petition, Hornig simply said in effect "thank you for your interest in national security."

If the administration does not intend to be pressed into debate by the scientific community, however, it has recently been drawn into discussions of CBW on Capitol Hill. The occasion was the appearance last February of Deputy Defense Secretary Cyrus Vance before the subcommittee on disarmament of the Senate Foreign Relations Committee during a general review of U.S. armament and disarmament problems.

Vance's testimony on CBW and the discussion that followed are both rather thin; the treatment is made even more superficial by the facts that the hearings took place in executive session and that the version just released to the public is heavily censored. Nevertheless the hearings did bring out two points worthy of note: First, the administration regards its CBW program chiefly as a "deterrent" to the initiation of CBW attacks by other nations; second, in the event of a nonproliferation treaty or other international agreement limiting the use of nuclear arms, CBW is apt to assume increased importance in U.S. defense programs. In addition, the fact of Congressional interest is itself significant. These hearings marked the first time the question of CBW has surfaced in Congress for many years, and the Foreign Relations Subcommittee was interested enough to commit itself to more extensive hearings in the future, though no date was set.

In the course of his prepared remarks, Vance said:

> I have indicated that we seek international understandings to limit chemical and biological warfare and that we have not used weapons of the sort condemned by the Geneva protocol. I should also point out that we have at the same time maintained an active chemical and biological program. In the last few years we have placed increasing emphasis on defensive concepts and materiel. As long as other nations, such as the Soviet Union, maintain large programs, we believe we must maintain our defensive and retaliatory capability. It is believed by many that President Roosevelt's statement in 1943 which promised "to any perpetrators full and swift retaliation in kind" played a significant role in preventing gas warfare in World War II. Until we achieve effective agreement to eliminate all stockpiles of these weapons, it may be necessary in the future to be in a position to make such statement again in the future.

It is evident from Vance's remarks that the Pentagon has simply incorporated CBW into its overall strategy of deterrence, and has dressed it with history by emphasizing the most "deterrent-like" aspect of Roosevelt's 1943 statement—the threat of retaliation. By those outside the Pentagon, the statement is generally remembered for its gentler side—its promise that the United States would not be the first to use chemical or biological weapons.

Critics have questioned the soundness of the deterrence strategy where CBW is concerned. They argue that the United States already has overwhelming retaliatory capacity in its nuclear arsenal, and they question the necessity of preparing to retaliate *in kind* for a chemical or biological attack.

In addition, the extent to which the Pentagon feels bound to use CBW only in retaliation is not wholly clear. Many critics regard the use of riot-control gases and defoliants in Vietnam as already constituting a first use of CBW although the administration regards it differently. Moreover, the Pentagon has in the past opposed a Congressional resolution restating Roosevelt's "no first use" position. When questioned about this resolution during the hearings by Claiborne Pell (D–R.I.), Vance was unable to recollect it.

The other point on which the hearings focused was the extent to which the budget and program for CBW could be affected by arms-limitation agreements in other areas. The discussion