

What does all this mean for NIH? The short answer is that every institute will have a smaller budget this year than last, apart from the National Cancer Institute and the National Heart and Lung Institute, which will get modest increases. Moreover, there will be large cutbacks in health manpower education and training. In contrast, President Nixon's original budget request, made before the cutbacks in overall federal spending late last year, would have increased the budgets of all agencies, and the vetoed bills would have provided them with a veritable bonanza.

One effect of the financial stringencies in NIH is that the amount of money available for new grants will be particularly tight. According to an item in the newsletter *Science and Government Report*, many of the NIH non-competitive grants—those used to fund projects over several years—will be cut back to make more money available to support new projects. The result will be that researchers who have embarked on long-term projects with NIH funding will be given less money than originally promised.

President Nixon's budget request for next year entails even less expenditure for many HEW programmes—including most institutes in NIH—than his revised budget for this year. There is thus clearly going to be another protracted fight between Congress and the White House over funds for health and social programmes. If this year's fiasco is any guide, however, President Nixon is likely to get his way in the end.

## BUDGETS

### Light in the Gloom

by our Washington Correspondent

AMID the gloom and despondency in the scientific community following publication of the Administration's austere budget for 1974 and the dismantling of the White House science policy machinery, a report published by the Battelle Memorial Institute sticks out like a sore thumb. The institute reckons that total expenditures on science and technology in the United States will amount to about \$30,100 million in the calendar year 1973, which would represent an increase of 7.5 per cent compared with estimated outlays in 1972. The forecast predicts that the chief increase will come from industry, but it also suggests that "Federal support has begun what could be a sustained rise".

The institute's optimism will certainly be regarded with some surprise by those scientists who have had their budgets cut or their projects terminated as a result of cutbacks in spending by the Administration, but the report nevertheless suggests that federal spending

on science and technology will climb to about \$16,300 million this year, compared with \$15,200 million last year; spending by industry is predicted to increase from \$11,320 million last year to about \$12,200 million this year. The remainder will come from academic and non-profit institutions, which are expected to increase their expenditures on research and development slightly.

The forecast for federal spending is based on recent trends in budgets, which the report suggests is "somewhat safer than reliance on recently published figures". Nevertheless, the most recently published figures—the Administration's budget proposals—suggest that federal spending on science and technology in the 1973 fiscal year (which runs from July 1972 to June 1973) will be about \$15,900 million, an absolute decline of some \$200 million from the last fiscal year. Since the Battelle forecast is for the 1973 calendar year, this sharp but perhaps temporary cutback in overall federal spending in the 1973 fiscal year does not show up in the optimistic figures given in the report.

As for patterns of expenditure, the forecast notes that there has been a shift away from military, nuclear and space research towards civilian science and technology, but it also warns that "in longer term overall dollars, this shift is still not as significant as many believe". The predicted increase in industrially funded research and development follows partly from an expected increase in corporate sales.

A year ago, the Battelle Memorial Institute predicted that total expenditures on science and technology would begin to increase after a period of stagnation, but warned that the full impact of the upturn might be delayed. That, indeed, is what has happened—the institute predicted last year that spending on research and development would reach \$30,100 million in 1972, but it actually reached only about \$28,000 million, and the institute is now repeating for 1973 the prediction it made for 1972.

## SCIENCE POLICY

### Nixon Gets His Way

by our Washington Correspondent

PRESIDENT Nixon now seems almost certain to get away with his plans for scrapping the Office of Science and Technology without running into opposition from Congress. Hearings held independently by House and Senate Government Operations subcommittees last week brought out the fact that isolated outbreaks of sharp words and the general air of disquiet among many scientists over the plans do not give the committees sufficient reason to be difficult about them. Congress has until April 6 to pass a resolution disapproving

the plans, but so far, no disapproving resolution has been introduced.

The hearings last week were chiefly a formality, and provided a forum for Fred Malek, deputy director of the Office of Management and Budget, and Dr H. Guyford Stever, director of the National Science Foundation, to reiterate the Administration's thinking. The reorganisation plan (see *Nature*, 241, 234; 1973) involves scrapping the Office of Science and Technology and the post of Science Adviser to the President, and transferring to the Director of the National Science Foundation some of the responsibilities for advising the president on science policy.

Both Senator Abraham Ribicoff, chairman of the Senate Government Operations subcommittee, and Chet Hollifield, his counterpart in the House of Representatives, noted that the plan has been criticised as downgrading scientific advice in the Administration—Dr Stever, unlike previous Science Advisers to the President, will advise not the president, but Dr George Shultz, Secretary of the Treasury and Presidential Assistant for economic affairs. Malek replied that the National Science Foundation has more staff to perform science policy analyses than could possibly exist in the White House, and that "Dr Stever will have ready access to the President's closest advisers."

Apart from the question of downgrading advice, members of the House subcommittee were a little concerned that no increase in budget or staff has been given to the National Science Foundation to enable it to perform its new role, but Malek simply said that it is his feeling that "the new NSF budget, with the number of people and resources that they have, will be sufficient to absorb this added capacity". In other words, the foundation will have to carry out its new responsibilities with money and people originally required for other purposes.

The most outspoken criticism of the plans last week came from Mr John Davis, chairman of the House Subcommittee on Science, Research and Development. In a statement presented to the Government Operations subcommittee, Davis expressed alarm at the scrapping of OST and concern about the present state of US science and technology in general. He pointed out that the United States has a balance of payments deficit in high technology products, and that in terms of percentage of gross national product, the US spends about half as much on research and development as Japan and West Germany, the two chief exporters of high technology products to the United States. In such a situation, Davis suggests that "the abolition of OST and a downgrading of our scientific apparatus seems counterproductive".