SCIENCE FUNDING

Gasping from a one-two punch

Scientists, paradoxically, sometimes find reality difficult to face when restrictions on their budgets are concerned. Reality in this form has been striking harder and harder in recent years, yet each year comes as a new surprise.

In the years after Sputnik, Federal support of science jumped drastically. Even then there were warnings from budgetary advisers that the growth curves could not continue indefinitely—in not too many decades, it was pointed out, the entire gross national product

ACS

Harris: Breast-beating won't help.

would have to be devoted to science if growth rates were to go unchecked.

Yet last week again, as the American Chemical Society and the New York Academy of Sciences both met in New York, the message of a new cutback caused outcries of agony.

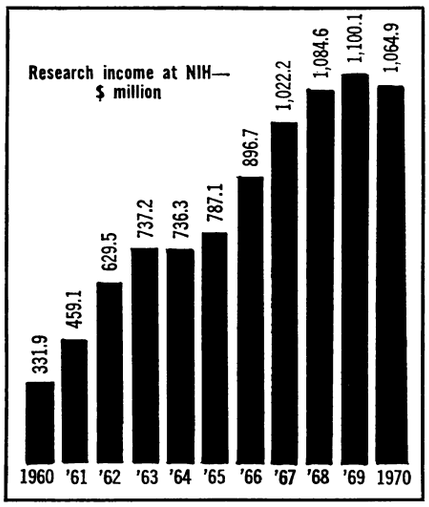
Dr. Philip A. Handler, president of the National Academy of Sciences, predicted panic in the medical schools all over the country as a result of a sharp cutback in National Institutes of Health grants up for renewal.

But there were others, like chemist Dr. Milton Harris, who tried to nudge their colleagues into a realization that perhaps American researchers had become a bit spoiled during these scientifically affluent post-Sputnik years.

One proposal, at an ACS symposium on science and society, was that several of the main scientific organizations open public relations offices in Washington from which to spread the word about the virtues of scientific research.

At the same time, Dr. Harris was telling his colleagues, "All the breast-beating in the world won't help us now—not this time.

"I don't really believe we are in a crisis," he said. "Science has indigestion but is not sick."



NIH funds: Beginning the downturn.

What may have added to the impression that scientific illness was near was a one-two punch of bad news delivered that week to the biomedical researchers.

The National Institutes of Health warned 19 of its 93 medical research clinics that they may face a shutdown next year because financial support may be cut off. The announcement results from an anticipated $3.5 billion cut in Federal funds to NIH before the end of the year, coupled with a shifting of Health, Education and Welfare and NIH funds from research to medical training and experiments in medical care delivery (SN: 1/25, p. 90).

Then word came that all research grants up for renewal by NIH since Sept. 1 were being cut by 20 percent.

Dr. Roger O. Egeberg, assistant secretary of HEW for health and scientific affairs, hurriedly called a press conference at the end of the week to assure scientists that the action wasn't quite that bad. The reports, he said, came from a temporary step taken on NIH's continuation grants up for renewal Sept. 1. Final action had not yet taken place. "It's still too early to make any firm and final plans on our expenditures for this fiscal year."

The cuts, he and Dr. Robert Q. Marston, director of NIH, said, would actually amount to a 10 percent reduction in funds for competing grants, those for new projects or those up for renewal, and a 5 percent cut in the funds for continuation projects and those to which moral commitments had been made.

The cuts in research grants were attributed to inflation, not to any long-range change in medical research or planning. Egeberg pledged, "We must put all possible money into health research . . . don't feel that we aren't going to support research strongly."

According to Dr. Marston, the overall research budget for NIH will be $1.06 billion; it was $1.10 billion in 1969.

As for the medical research clinics, Dr. Marston explained, reducing the budgets of all 93 research centers would create general inefficiency in all of them; by cutting off funds to 19, the excellence of the remaining ones would be unimpaired.

RULISON

Going deep for gas

After six days of delays due to unfavorable winds, a 40-kiloton nuclear device was successfully exploded 8,400 feet beneath the western Colorado mesa country last week in the second U.S. experiment to release natural gas by nuclear explosion.

From an observation point six miles away, the ground shook, dust from small rock slides down a mesa rose into the air, and muffled thunder echoed through the valley. The blast registered 5.5 on the Richter scale on a seismograph 180 miles to the east in Golden, Colo.

Protestors had waged an unsuccessful legal battle to halt the test on grounds that such explosions are potential environmental hazards.

Officials emphasize that it will be about six months before evaluation of the test, known as Project Rulison (SN: 4/19, p. 376), can begin. Until then the blast site will remain sealed to allow the heat to dissipate.

Rulison is a successor to Project Gasbuggy, in which a 26-kiloton device was exploded 4,240 feet underground near Farmington, N.M., in late 1967 (SN: 12/23/67, p. 610).

The production results of Gasbuggy have been encouraging. In a 15-month period after the blast the created reservoir produced 214 million cubic feet of gas, compared with the 80 million produced in 10 years by a nearby conventional well.

There has been a contamination problem, however. The radioisotopes krypton and tritium were produced in the cavern's chimney. But the concentrations have been steadily decreasing, until now about 10 percent and 6.5 percent, respectively, remain, according to the Atomic Energy Commission.

Rulison and Gasbuggy are the first industry-Government experiments to test the feasibility of producing an underground natural gas reservoir. One of the questions to be settled by the experiments is how much of a problem the radioactivity creates. Rulison was carried out jointly by the AEC and the Austral Oil Co. of Houston. ◇