City-Sponsored Health Research Eludes New York Budget Ax

New York. The Health Research Council, New York City's unique program of municipal support for biomedical research, was nearly eliminated this year as a result of the intensive squeeze on the city's finances and growing demands from the city administration that the research produce immediate payoffs for New York residents.

Only vigorous lobbying by scientists and their allies, including hints of where affections might lie in a presidential campaign, stimulated the political wheeling and dealing between Mayor John Lindsay and Governor Nelson Rockefeller that was necessary to generate some $5 million for the council's current fiscal-year budget. The final reprieve, in the form of a decision from the governor's office, came just 3 weeks before all of the council's contracts were to have been canceled for lack of funds.

The immediate crisis for the Health Research Council* this year resulted from the New York State Legislature's severe cutback in its contribution to many city programs, including health. Yet the more significant problem for the council, the one that will continue to plague it as long as it exists, is the question that the Lindsay administration has raised every year since taking office in 1966—just how much, if any, research and of what variety is a sound investment when so many basic human needs are making demands on the city's tight budget?

Begun in 1958 during the administration of Mayor Robert F. Wagner, the council offers two forms of research support. The first, the Career Scientists Program, provides stipends to bright, young researchers, in the hope of attracting and keeping top talent in the city's medical schools. Last year, the council's 159 Career Scientist Awards accounted for nearly 10 percent of the salaries of the full-time faculty in the city's medical schools. The second form of support is a series of project grants intended, in the words of the council's bylaws, "to stimulate public and private research in those areas of health and medicine considered to be of particular relevance to New York City."

During its heyday, from 1962 to 1966, the council boasted a budget of $8 million, half of it, as with all city health programs, coming from state money. This conformed to Wagner's original goal of "$1 in health research per year for each citizen." At one time, an incredible 22 percent of the city's expenditure for health paid for research. With the election of Lindsay, the council's fortunes changed for the worse. In his first budget, he proposed to eliminate it altogether as "inappropriate for city support." But an outcry from the scientific and medical establishment caused him to reverse his position. Nevertheless, year after year, he whittled away at the council's budget, until it dropped last year to $5.2 million, or some 5 percent of the city's vastly expanded health budget.

To some proponents of the Health Research Council, Lindsay's budget cuts represent something of a personal vendetta. "Lindsay is a typical liberal arts major who flunked science in prep school, so now he doesn't like scientists," said Gerard Piel, publisher of *Scientific American*, who led the fight to save the council.

While some of the mayor's ideas about research do seem a bit bizarre—in July he testified before a House subcommittee that "with intensive research it should be feasible to develop an inoculation against heroin which would be administered to youngsters in the same way as vaccines against smallpox, polio, and measles . . . and only a Federal scientific task force approaching the scale proposed for cancer research can bring the sort of breakthrough we need"—Lindsay's prime motivation for cutting the council's budget seems to be the opinion of his health advisers that the council is not a priority item.

According to Lawrence Bergman, the city's deputy commissioner of health for research, the council failed to support sufficient research in such community problems as the distribution of health care. "There is nothing wrong with the work the council supported," said Bergman. "Each project and each investigator on their own merits are good. But if you look over the projects, most of them are in basic areas such as kidney physiology. And there are a lot of kidney physiologists."

Just what areas of health and medical research are particularly relevant to New Yorkers is not, of course, a clear-cut problem. In defense of the council, its supporters point to a number of important payoffs from work it supported, including the development of methadone maintenance therapy for heroin addiction, the vaccine for rubella, the vaccine to prevent Rh disease, as well as the discovery that asbestos causes cancer. Yet despite these successes, all of them the result of goal-directed projects, the research supported by the council has been, by and large, basic. Project titles such as "The Biophysical Chemistry of Ion Transport" and "The Metabolism of Nucleic Acids" abound, not just in the work of the career scientists, but also among the project grants.

The response of council supporters to City Hall's charges of the lack of relevance has been, to a large extent, "So what?" One of the original justifications for the council was that it would provide seed money to attract an increasing percentage of the then rapidly expanding funds from the National Institutes of Health. As supporters have continually pointed out, each dollar spent by the council attracts about $6 of outside research funds to the city. Moreover, the council operated with strong faith in the powers of unbridled research.

Addressing a meeting of the council on 7 July at the New York Academy of Medicine, Piel, who in addition to membership on the council chaired a special mayor's commission to study it, said that the council "had behind it a profound idea, which began with the understanding that you can't get good men to work on *your* idea. Good men are going to work on *their* ideas. And the history of our culture and the history of science show that most of the time they're right about the problems and the subjects they choose for their investigation." Because the scientists

*The Health Research Council itself consists of 64 scientific and civic leaders. It is administered by a 17-member executive committee.

would be working in New York City, Piel said, "they would inevitably become interested in the problems of the city."

Whatever the council actually offers to the city, Piel managed to assemble quite a powerful coalition to preserve it when it came to be threatened. After some give and take, Lindsay's budget for the current fiscal year allowed the council the same level of funding it had last year. But in June, the state legislature lowered the boom. It reduced the state's contribution to all city health programs from 50 to 37½ percent and made the cut retroactive to the beginning of the year. This left the Health Research Council in debt, even though the city's contribution to its budget remained unchanged. Because of his lack of enthusiasm for the program in the first place, and also because the state's action left the city's entire health budget some $12 million below what was thought to be a minimum level, Lindsay was more than willing to let the council go out of business—that is, until the pressure started.

Deans and trustees of medical schools, along with several influential scientists, all let Lindsay know that they wanted the council preserved and that his national image in the halls of academia would be tarnished if it weren't. The leaders of several city unions, including both hospital workers' unions, the teamsters, and the building trades union, all voiced sup-

NSF Official Resigns Protesting Science Education Cuts

The White House squeeze on science education precipitated the resignation last week of Lloyd G. Humphreys, assistant director for education of the National Science Foundation. Cutbacks in the NSF's education programs for the present fiscal year and the prospect of further reductions to come were cited by Humphreys as the chief reason for his departure.

In a letter of resignation read to his staff last week, Humphreys also complained that the Office of Management and Budget (OMB) had withheld $30 million of the $116 million appropriated by Congress for the NSF's education and institutional support programs, and that the Administration seemed to have plans to transfer the NSF's education programs to the Office of Education.

Humphreys announced his resignation last Friday at a 4:00 p.m. meeting held in the board room of the NSF. This Monday, he was back teaching classes at the University of Illinois, where he was professor of psychology before joining the NSF 15 months ago. Humphreys told *Science* he started making preparations to resign 2 weeks ago, when he heard that the OMB was going to order the director of the NSF to make further cuts in science education support for the fiscal 1973 budget now in preparation. When written orders to this effect arrived at the NSF last week, he proceeded to resign.

Humphreys said he had no definite knowledge that the NSF's education programs would be hived off to the Office of Education, but was sure that plans to do so existed: "The OMB is operating on some simple-minded organizational principles that the primary mission of NSF is to support research, not education." As for the Office of Science and Technology, Humphreys feels that "overall, OST was an ally—for the raise in the 1972 budget OST was very helpful—but I'm not sure how much support we had there for education." (The NSF's budget jumped by $116 million, to $612 million for fiscal 1972, despite which its education and institutional support programs suffered major reductions.)

The budget cutbacks have "torn the heart" out of the science education programs, Humphreys said this week. At the doctoral level, it was true that the supply of Ph.D.'s had begun to outpace the demand, and he fully supported the Administration's decision to reduce traineeship awards. The chief casualty of the reductions was the thrust for curriculum innovations, particularly at the secondary and lower levels. Humphreys also regretted his failure to have the funds for the canceled traineeships diverted to the development of new sorts of graduate education.

Lloyd G. Humphreys

During his 15 months with the NSF, there were "some satisfying moments, but a hell of a lot of frustration," Humphreys says. Colleagues describe Humphreys as a man who was "amazingly prolific in new ideas," but the continuing reductions in the NSF's education budget can have left few funds to spare for putting new ideas into practice.

The director of the NSF, William D. McElroy, himself due to leave the foundation in February, says that Humphreys was "a little disappointed" in the allocation of the NSF's budget, but points out that funds for three of the education programs cut in the 1972 budget have since been restored. McElroy confirms that the OMB is refusing to allow the NSF to spend $30 million of the extra funds voted by Congress for education programs, but he says there is no truth in Humphreys' supposition that the programs are to be transferred to the Office of Education.

McElroy cites as two of Humphreys' achievements in office a new system of year-round teacher training and his reform of high-technology training curricula. "I guess he was disappointed in losing the traineeships, but this is government policy and we have to go along with it," McElroy says.

Humphreys was one of the four men appointed in April last year to the new assistant directorships of the NSF. The directorships, created in 1968, were left vacant by the Nixon Administration for more than a year McElroy has let it be known that he will leave to his successor the job of finding a replacement for Humphreys.—NICHOLAS WADE

port for the council. Furthermore, Lindsay's switch to the Democratic Party became a key factor. Two of the most powerful Democrats on the city council, Thomas J. Cuite of Brooklyn and Mario Merola of the Bronx, called on Lindsay as "a fellow Democrat" to give additional funds to the council. Their action was widely regarded as the first test of Lindsay's loyalty to his newfound party.

Finally, Lindsay gave in. On 23 August, he announced that he would give the council another $1.2 million, but only if the state wou'd match the extra funds at the old 50-50 ratio, thereby granting him a minor concession in his running battle with Rockefeller. Under the pressure of a milder form of the same lobbying effort, the state agreed. So the council remains alive.

How alive is still open to question. Although exact amounts are not yet agreed to, it appears that the council's budget will support little more than existing contractual obligations.

If any additional funds do appear, they will go toward more applied projects, for, in exchange for the 11th-hour rescue, the city has demanded some changes in the council. The council's support for esoteric research projects will certainly be phased out. In an attempt to curry favor with City Hall before the budget crisis, the council's staff accepted project proposals for the current year only in such areas as lead poisoning, drug addiction, alcoholism, venereal disease, and the distribution of health care. Such topics will doubtless make up the bulk of the council's research in the future, even among the work of future Career Scientists.

In addition, the council's executive committee seems destined for a reorganization. In the past, the committee, which sets the council's policies, has been dominated by medical school people, an arrangement that results, according to one city health administrator, in "medical school deans getting together and scratching each others' backs." The city is demanding greater representation for a variety of community groups on the executive committee.

Despite the unique and mazy New York politics, the ordeals of the Health Research Council may well foreshadow similar troubles for a variety of funding institutions. Demands for value from research can be heard from many quarters these days. If, in shifting to a greater emphasis on research directed toward specific goals, the Health Research Council increases its output of obvious benefits for the citizens of New York, the case for similar changes elsewhere may become compelling.

—ROBERT J. BAZELL

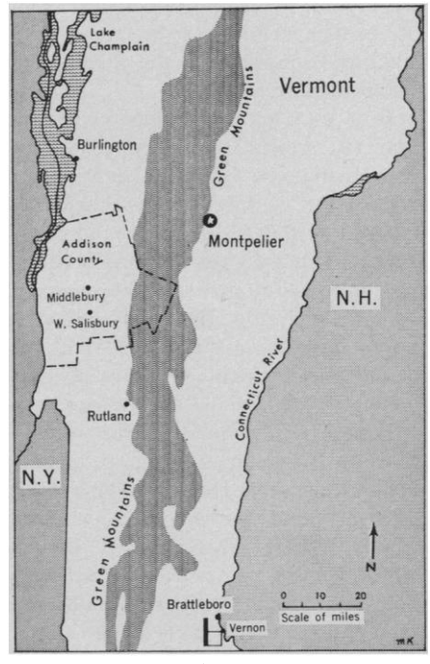
Vermont: A Power Deficit Raises Pressure for New Plants

Vermont's first nuclear power plant was scheduled to go into service this fall, but environmental actionists have caused licensing hearings to be recessed until mid-October and, now, announcement of new regulations by the Atomic Energy Commission requiring an environmental review (see page 1112) seem to have pushed the Vermont Yankee nuclear plant further into legal limbo.

Talk of a power shortage in Vermont this winter is increasing, and power has become a major public issue in the state. Even if the Vermont Yankee plant went on line schedule and the threat to ski tows and milking machines was banished, the power problem would still be far from solved. The state faces an imminent decision on the location of a 400-megawatt (Mw) fossil-fueled plant and at least two more major plants are projected for the state in the next decade.

Almost any proposal for a new power plant anywhere meets opposition these days, but the situation in Vermont has a special dimension. An agricultural state renowned for its scenery and ski slopes, Vermont, if not "unspoiled," has been relatively free from environmental problems afflicting the heavily industrialized and densely populated states of the Northeast. At a time when Vermont's consumption of electric power is increasing rapidly, however, the state's underdevelopment makes it particularly vulnerable in the power game now in progress in the region. The contest is being carried on at several levels—utilities versus environmentalists, private power companies versus consumer-owned companies, big power companies versus small ones. And some Vermont officials feel that delays caused by the drive to protect the environment could cause financial pressures forcing a loss of control over power decisions to outsiders.

In respect to electric power, Vermont has been living on borrowed time or, more exactly, on other people's generating capacity. In recent years the state has been importing about 80 percent of the power it uses. An unofficial but apparently accurate estimate put the peak load for the state in 1970 at 628 Mw, up from a peak of 536 Mw the year before. The state's annual rate of increase in the peak load has averaged 10.5 percent a year over the last 9 years and 13.8 percent over the last 3 years. Out-of-state suppliers have made it clear that they have their own problems and can't go on providing for Vermont's increasing consumption.



The new Vermont Yankee nuclear plant on the Connecticut River at Vernon is rated at 540 Mw. Of this, Vermont's share would be 297 Mw at peak power. (The plant is financed by a consortium of New England companies, with each company sharing power pro-