Says Charles Schuster, the present director of NIDA: "As a parent I can understand their frustrations. Arcane and enigmatic research titles don't seem to answer the question: How do I stop my 11-year-old from taking drugs." Schuster adds that "we have said things and done things in the past that have alienated people." But he says NIDA's critics do not understand the slow and cautious nature of science and the role of a scientific institute.

Allies of NIDA point out that prevention programs such as those pushed by Gleaton and Moulton are not even funded by NIDA, but by the new Office of Substance Abuse Prevention (OSAP) in the Alcohol, Drug Abuse, and Mental Health Administration. Since its debut in 1986, OSAP has doled out about \$24 million to 131 grantees, of which half were local organizations, many doing the kind of early-intervention and community-wide programs that Gleaton and his colleagues support.

Critics of the White House report add that they find it ironic that the conference chose to trash NIDA for failing to prevent drug abuse when it was the Reagan Administration itself which yanked NIDA's control over drug prevention and treatment programs in 1982. "They shot themselves in the foot with that one," says Besteman.

Indeed, during the first year of the Reagan White House, NIDA's budget plummeted from \$243 million to \$57 million, as funds earmarked for prevention and treatment services went to the states in the form of block grants. Extramural research at NIDA also suffered. "Morale went into the ashcan and people said, 'Let's just hunker down and survive,' " says Besteman.

Don DesJarlais of the New York State Division of Substance Abuse Services notes that when funding was transferred from NIDA to the states, the grants were cut by about 25%. Most states spent the money not on prevention programs but on badly needed treatment services. DesJarlais points out that even today, supply doesn't meet demand. Waiting lists for methadone maintenance slots can be as long as 6 months. Equally bad, NIDA lost its leadership role and its ability to gather information about how well treatment and prevention schemes worked, says DesJarlais.

Says Schuster: "How many people are in treatment programs? We don't know. We don't have that kind of information. We don't get that data back from the states."

A lack of good information from the hinterlands and inner cities is proving especially troublesome during the AIDS epidemic, when NIDA is asked to provide a detailed portrait of intravenous drug abusers and to answer specific questions about needle sharing and sexual behavior.

To make up for lost time, NIDA is getting into AIDS in a big way. In Reagan's budget request for 1989, more than half of NIDA's \$241 million will be devoted to AIDS research, with a hefty \$93 million going exclusively to slow the spread of the AIDS virus among intravenous drug abusers in 30 cities. Unfortunately, like many programs at NIDA, manpower has not kept up with the surge in money. George Beschner of NIDA reports that he has three staff members to supervise \$45 million in AIDS grants and contracts this year.

With more than half of NIDA's budget next year devoted to AIDS research and with angry parents calling for audits, where is NIDA heading? Debates about the future of NIDA range from the petty to the profound, from quibbling among NIDA-supported researchers over the relative importance of behavioral pharmacology versus neuroscience to bigger questions over NIDA's continued existence in the federal health bureaucracy.

Is it enough, for example, for NIDA researchers to study the mechanisms and behavioral aspects of various mind-altering chemicals, or should the scientists roll up their sleeves and get involved in setting

policies to curb drug use?

Many researchers involved with NIDA point with pride to the discoveries supported by the agency, including the presence of endogenous opiates such as endorphin, reward centers in the brain, receptors for heroin and cocaine, as well as the development of new drugs to treat addiction and withdrawal. "I think NIDA is doing very well and progress is certainly being made," says William Dewey, chairman of the Committee on Problems of Drug Dependence. "I don't think anything's broke at NIDA."

There is some disagreement. Robert Dupont, a former director of NIDA now at The Institute for Behavior and Health in Rockville, Maryland, thinks NIDA has moved inexorably away from anything to do with policy and become solely a research shop and funding instrument for bench scientists. Says Dupont: "The game isn't to publish the next paper but to curb drug abuse in this country. That's where the money is coming from. And that's what the country wants NIDA to do. If it fails to get involved, NIDA borders on irrelevance."

During a time of 12-digit deficits, "irrelevance" is not a pretty word to toss around in Washington, even during the midst of war.

• WILLIAM BOOTH

Biologists Eschew Weapons Research

A pledge "not to engage knowingly in research and teaching that will further the development of chemical and biological warfare agents" has been signed by 560 researchers in the United States.

Exactly what the signatories were pledging to eschew is not entirely clear, however. As one of the sponsors, Richard Novick of the Public Health Research Institute, acknowledged at a press briefing last month, if taken literally the pledge could cover a broad array of research that might indirectly be turned to military purposes.

Novick, who spoke at the briefing along with Jonathan Beckwith of MIT, Christian Anfinsen of John Hopkins University, and Jane Koretz of Rensselaer Polytechnic Institute, said he personally would draw the line at accepting funds from the Department of Defense to conduct biological research.

Indeed, the pledge was sparked in part by concern over the recent expansion of the Department of Defense's biological defense program, a research effort designed to develop defenses against potential biological warfare agents. Funds for the program have risen from \$16 million in 1980 to about \$75 million this year, and almost 50 universities have grants from the program.

The United States is barred by law—the 1972 Biological Weapons Convention—from conducting research to develop biological weapons. The work sponsored by the biological defense program involves the development of vaccines against highly pathogenic organisms, and efforts to develop protective clothing and detectors that would signal the presence of specific biological warfare agents.

Asked why he is opposed to such work, King argued that it is impossible to separate some types of defensive work from activities that could be used for offensive purposes—especially the development of defenses against genetically engineered organisms, which may require the construction of the organisms themselves. Although he acknowledged that the program funds work that is important for disease control, he said "if it is really for civilian purposes, let's put the money into NIH."

The pledge, which has been circulating around U.S. campuses for the past year, appears to be an opening shot in a campaign against expansion of Department of Defense funding of academic biology. The Boston-based Committee for Responsible Genetics organized the effort.

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