NSF Maps Program in Science Education

A blueprint for a revived program to improve science and mathematics education in elementary and secondary schools has been developed by the National Science Foundation (NSF). The new plan, which was presented by NSF director Edward A. Knapp to the National Science Board on 20 October, consists primarily of a set of goals and guidelines to be followed by the foundation in spending funds appropriated by Congress.

For the current fiscal year, Congress voted \$54.7 million for precollege science and math education. An additional \$13.9 million for the same purposes was carried over from the last fiscal year, which ended on 1 October. Knapp had previously taken steps necessary to create a new directorate for science and engineering education and establish positions for personnel to staff it (Science, 14 October, p. 147).

NSF's precollege education program was effectively abolished at the beginning of the Reagan Administration through budget action and dismantling of the existing science education directorate. Concern about the state of science and math education in U.S. schools, however, kindled interest in the subject in both Congress and the Administration and led to a resumption of federal funding.

Heading the NSF effort as acting director for science and engineering education is Laura P. Bautz, director of the foundation's division of astronomical sciences, who is currently wearing two administrative hats. Commenting on the selection of Bautz, who has a reputation at NSF as an able administrator but has little experience in science education activities, Knapp said, "One of the troubles has been that we had plenty of people at home in the science education network, but we haven't had people who are also at home in the science network." Knapp indicated that criticism that university scientists now had little involvement with science education at the school level was a "reason to pick someone with good connections in the science community.'

NSF will follow instructions in the appropriations legislation in allocating this year's funds among activities. The largest portion, \$27.7 million, will go into educational materials and research. Some \$15 million will be earmarked for teacher development and incentives, and about \$12 million into a category called "special activities," which includes a variety of programs such as funding of educational television projects, museum programs, and dissemination of information about science and math to school-age aroups.

NSF officials emphasize that the agency does not want to impose its own preconceptions on the new program, but will respond to good quality proposals that fall within general guidelines. One criterion being stressed is that programs be designed for all students, not simply those headed for careers in science. Earlier NSF efforts have been criticized for such a tilt.

In a decision that has both practical and symbolic aspects, Knapp has agreed to a return of the science education staff to NSF's downtown Washington headquarters from a suburban office building to which it was transferred during its 1970's troubles. The move puts the staff back in direct touch with the research directorates and also marks a return from exile.

-JOHN WALSH

Kroc Foundation Dissolved

The Kroc Foundation, which for 12 years has supported research on diabetes, arthritis, and multiple sclerosis, will dissolve in April 1984. The foundation, which was funded by Ray Kroc, founder of MacDonald's Restaurants, has spent about \$42 million on research grants since 1969 and has sponsored 101 research conferences. It currently has \$50 million in assets, most of which will be assigned to a new foundation to support research on alcoholism and drug abuse.

Alcoholism and drug abuse are the special interests of Kroc's third wife, Joan, 56, who will head the new foundation. The Kroc Foundation was noted for its support of diseases that afflict the Kroc family. Ray Kroc, 81, has diabetes and arthritis and his 73year-old sister Lorraine has multiple sclerosis.

The dissolution of the Kroc Founda-

tion was announced on 19 September by Robert L. Kroc, Ray Kroc's brother and the president of the foundation. -GINA KOLATA

Apes and AIDS

In an effort to discover the cause of acquired immune deficiency syndrome (AIDS), the National Institute of Allergy and Infectious Diseases is awarding \$933,000 to the University of Texas at Bastrop for a 3-year research project involving 11 chimpanzees that will be innoculated with tissues and fluids from AIDS victims.

But some animal welfare groups have registered objections to the research. Shirley McGreal of the International Primate Protection League is circulating petitions to stop the project, which she claims will subject the chimps to the "mental torture" of "solitary confinement." The Humane Society, according to anatomist John McArdle, also opposes the experiment. He says this is another example of scientists "jumping to the animal model immediately" when the purposes of the experiment would be served by in vitro and epidemiological studies. He speculates that AIDS may be stress-related because immune function is susceptible to stress, and claims that putting chimps in stressful circumstances would therefore defeat the purpose of the project.

Officials at the National Institutes of Health (NIH), which is supporting a good deal of AIDS research, say there is good reason to think AIDS is caused by an infectious agent, particularly since researchers have recently been successful in transmitting simian AIDS in macagues in whom the disease has occurred spontaneously. The project follows in the footsteps of past exercises in isolating infectious agents such as the hepatitis B virus, in which animals have been used to obtain samples throughout the course of the disease from its inception. Veterinarian David Johnson of the Division of Research Services says the chimps will be kept in cages in one room, not in solitary confinement.

The protests of the animal welfare people are part of a larger goal, which is to close down all seven of the NIHfunded regional primate centers (Bastrop is not one of them). NIH is not