AAAS Protests More Cuts for NSF Science Education

Rumors of a further cut of \$40 million in science education funds for the National Science Foundation on top of the \$47 million reduction already scheduled has brought protests from the scientific community including a telegram to President Reagan from AAAS president D. Allan Bromley.

The new reductions would bring the total cuts proposed to \$87 million and leave only about \$25 million of science education funds in the budget. NSF staff have been instructed not to comment on proposed budget cuts, but sources on Capitol Hill confirm that the new \$40 million chop is in the Administration's agenda for action.

"I remind you that science education programs already have received disproportionate reductions," Bromlev's wire said. "To expect scientific and technological progress while abandoning efforts at improving science and engineering teaching in our schools is illogical and a disservice to the Nation's interests. The United States already lags dramatically behind the Soviet Union, the Eastern Bloc, Japan, and Germany in science and mathematics education. Industrial and military requirements must draw upon adequately educated manpower. I urge you in the strongest terms to recognize the strategic priority of science education in your budget. . . ."

Reagan in public statements has been saying he will work for enactment of his proposed cuts as a package.—*John Walsh*

First Course for Genetic Engineering Technicians

A first-of-its-kind program to train biochemical engineers for the burgeoning recombinant DNA industry will be established this fall at the University of Maryland Baltimore County (UMBC). The certificate program in applied molecular biology will be a supplement to an undergraduate major in biology and will probably be upgraded to a master's program as soon as permission can be obtained from the Maryland State Board of Higher Education. The program is being established in cooperation with Genex Corporation and Bethesda Research Laboratories, Inc. (BRL), two genetic engineering companies located near the UMBC campus.

The genesis of the new program, says its head, Richard Wolf, was the realization that most of the techniques for recombinant DNA research are already in place, so that specific projects can be carried out by technicians. The heart of the new program will be a four-afternoon-per-week laboratory to give the students "handson" experience with genetic engineering techniques. BRL will provide most of the reagents used in the laboratory, while Genex will help design the experiments and help solve any scientific problems that arise. Both companies will provide scholarships and seminar series to support the program, and several scientists from both companies will have adjunct appointments at the university. If the program does become one leading to a master's degree, internships at one of the two companies may take the place of a conventional thesis, but there is no requirement that graduates of the course accept employment at either company or that the companies offer employment. --- Thomas H. Maugh II

NSF Moving to Found Math Institute $\times 2$

Since 1976, the National Science Foundation (NSF) has been considering the idea of establishing a mathematics institute-a place where eminent senior mathematicians, younger faculty members, and postdoctoral fellows could go to concentrate on research for periods of several months to perhaps 11/2 years. It now seems extremely likely that the mathematics section of the NSF will ask the National Science Board to approve funds for not one but two mathematics institutes-one at the University of Minnesota and one at the University of California at Berkeley.

The idea of an institute has its supporters, but it also has drawn vociferous criticism from many members of the mathematics community who claim it would be elitist and would draw from the very limited funds now used to support mathematics research in universities (*Science*, 3 August 1979).

The mathematics section of the NSF has nonetheless decided to forge ahead with the institute proposals. The University of Minnesota institute, which will be directed by University of Minnesota mathematicians Hans Weinberger and George Sell, will emphasize applied mathematics. "Our proposal is to feed applications to pure mathematicians," says Weinberger. Six to ten mathematicians in pure and applied areas would work together in offices on a floor of the mathematics building at the university. The cost would be about \$800,000 for the first year. Says Weinberger, "If the National Science Board approves-and that's a big if-then Minnesota has an institute."

The second institute is likely to be at the University of California at Berkeley, where it will be directed by Shiina S. Chern and Calvin Moore, The Berkeley institute will be larger than the one at Minnesota-costing about \$1.5 million the first year and including nearly 50 scholars. According to Moore, the NSF said it was favorably impressed by Berkeley's plans to cover broad areas of mathematics, including applied mathematics. Berkeley, however, has a space problem. It is trying to find a facility close to the campus to house the institute. "If we can get the facility, then we have been told that the mathematics section [of the NSF] will go to the Science Board with our proposal," says Moore.

Alvin Thaler, acting program director for special projects at the NSF, will confirm only that "some institute proposals are being very seriously considered."—*Gina Bari Kolata*

Hard Times, Hard Choices for Michigan Universities

Public higher education in Michigan is bracing for bigger trouble financially. Budgets are already squeezed in a state whose economy depends on the ailing auto industry. Now state universities and colleges must look ahead to sharing the impact of expected reductions in federal funds going to the state. With contingency planning in progress, university officials are con-