

February 7, 2002

Fortifying and Strengthening the National Science Foundation

The National Science Foundation is one of the "true centers of excellence in this government ... where more than 95 percent of the funds you provide as taxpayers go out on a competitive basis directly to researchers pursuing the frontiers of science, a very low overhead cost. It has supported eight of the 12 most recent Nobel Prize awards earned by Americans at some point in their careers. ... Programs like these, and there are many, many others, that perform well, that are accountable to you as taxpayers for reaching for real results and measuring and attaining those results, deserve to be singled out, deserve to be fortified and strengthened."

-- Office of Management and Budget Director Mitchell Daniels, November 28, 2001

The National Science Foundation has won strong support from the executive branch and from Congress. It is the only federal agency whose mission is to support research and education across all fields of science and engineering.

The **Coalition for National Science Funding (CNSF)** believes that fortifying the National Science Foundation will strengthen our nation's economy and security. Studies have repeatedly shown that our nation's investment in science and technology is one of the best ways to ensure long-term growth in the U.S. economy. Science research supported by NSF also contributes to preventing and combating terrorism.

For the FY 2003 NSF budget, CNSF recommends **an increase of \$718 million (or 15 percent)** above the FY 2002 level of \$4.79 billion, bringing the agency's budget to \$5.508 billion. These additional funds, above the FY 2002 baseline, would be devoted to achieving the following objectives:

Increase by \$220 million the funding for core programs for research and education: Presently, 13 percent of highly rated proposals to NSF are not funded due to lack of funds. High quality NSF research, across all fields of science and engineering, contributes to the development of new knowledge and the preparation of the next generation of scientists and engineers. NSF education programs contribute to improved student learning at all levels in science, engineering, and mathematics. The proposed increase would provide \$220 million to enable more highly rated proposals to be funded, allowing NSF to meet unrealized opportunities in core research and education.

Increase funding by \$220 million to continue supporting key initiatives: Nanotechnology, biocomplexity, information technology research, workforce development (including mathematics and science partnerships), mathematics research, and social and behavioral sciences have all been identified as fields ripe for advances. An increase of \$220 million would continue progress in these critical areas.

Provide an additional \$130 million to increase grant size and duration: The average NSF grant in the year 2000 was for \$93,000 and lasted for just under three years. By comparison, the average NIH grant in 2000 was for \$283,000 and lasted for just over four years. Increasing the size and time period of grants will enable researchers to concentrate on discovery rather than paperwork. Of the proposed increase, \$130 million would be devoted to increasing grant size and duration.

Provide an additional \$100 million for Major Research Equipment and Facilities Construction and Major Research Instrumentation: Several proposals are pending for large-scale research resources that would provide benefits not only to the institution or region where the research project is located, but also to researchers throughout the United States and the world. An increase of \$50 million to the Major Research Equipment and Facilities Construction program would hasten progress on these important capital projects. In FY 2001, the NSF Major Research Instrumentation program awarded \$75 million, but many worthy applications could not be funded. NSF could easily and quickly award an additional \$50 million for needed research instrumentation in FY 2003. If additional funds were made available, this equipment (virtually all of which is supplied by American companies) could be purchased rapidly from American vendors. Not only would these purchases advance important science and engineering research goals, but they would also benefit the domestic economy.

Provide an increase of \$25 million to assist with homeland security and anti-terrorism efforts: The September 11 terrorist attacks have greatly increased recognition of the role of science and engineering in preventing and/or mitigating future disasters. Working closely with other federal agencies, NSF can enhance support for groundbreaking research in information security, detection of airborne hazards, structural studies to improve building safety, social and psychological effects of living with terrorism, wireless communications, and a broad range of other relevant issues. Of the proposed increase, \$25 million would support grants in critical areas related to the war on terrorism.

Provide \$23 million to increase graduate student stipends: Providing better compensation to graduate students will attract more qualified Americans to science and engineering careers, thereby addressing long-term workforce needs. With an additional \$23 million above the FY 2002 baseline, NSF can increase these stipends from \$21,500 per year in FY 2002 to \$25,000 in FY 2003.

CNSF FY2003 Statement - Endorsement List

American Association of State Colleges & Universities
American Astronomical Society
American Chemical Society
American Geological Institute
American Geophysical Union
American Institute of Biological Sciences
American Institute of Chemical Engineers
American Institute of Physics
American Mathematical Society
American Meteorological Society
American Physical Society
American Physiological Society
American Psychological Association
American Psychological Society
American Society for Biochemistry and Molecular Biology
American Society for Engineering Education
American Society for Engineering Education, Engineering Deans Council
American Society for Microbiology
American Society of Agronomy
American Society of Civil Engineers
American Society of Mechanical Engineers, Council on Education
American Society of Plant Biologists
American Sociological Association
Arctic Research Consortium of the U.S.
Association for Women in Mathematics
Association of American Universities
Association of Environmental Engineering and Science Professors
Association of Research Libraries
Battelle Memorial Institute
Biophysical Society
Coalition for Academic Scientific Computation
Columbia University
Computing Research Association
Consortium of Social Science Associations
Cornell University
Council for Chemical Research
Council on Undergraduate Research
Crop Science Society of America
Duke University
Ecological Society of America
EDUCAUSE
Federation of American Societies for Experimental Biology
Georgia Institute of Technology
Linguistic Society of America
Louisiana State University System
Massachusetts Institute of Technology
Mathematical Association of America
Michigan State University
National Association of State Universities and Land Grant Colleges
National Council for Science and the Environment
Northwestern University
Ohio State University
Oklahoma State University
Pennsylvania State University
Princeton University
Rutgers, The State University of New Jersey
Society for Industrial and Applied Mathematics
Society for Neuroscience
Soil Science Society of America
SPIE - The International Society for Optical Engineering
Stanford University
University Corporation for Atmospheric Research
University of California
University of Central Florida
University of Michigan
University of North Carolina
University of Oregon
University of Tennessee
University of Wisconsin
Vanderbilt University
Virginia Tech