## SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (STEM) EDUCATION COALITION

American Association of Physics Teachers American Chemical Society American Educational Research Association American Geological Institute American Institute of Biological Sciences American Institute of Physics Association of Science-Technology Centers American Society of Civil Engineers American Society of Mechanical Engineers Biological Sciences Curriculum Study (BSCS)

Center for Educational Outreach, Whiting School of Engineering, Johns Hopkins University

Center for Mathematics, Science, and Technology, Illinois State University Christa Corrigan McAuliffe Center for Education and Teaching Excellence Delta Education

Dr. Lawrence D. Woolf, Senior Staff Physicist, General Atomics

Dr. Richard Hake, Emeritus Professor of Physics, Indiana University

Education Development Center, Inc. Eisenhower National Clearinghouse Exploratorium

Institute of Food Technologists International Technology Education Association

Museum of Science, Boston National Association of Biology Teachers National Council of Teachers of Mathematics National Education Knowledge Industry Association

National Science Teachers Association Optical Society of America Project Lead the Way Teaching Institute for Essential Science Technology Student Association TERC

The Federation of Behavioral, Psychological, & Cognitive Sciences Triangle Coalition Waksman Foundation for Microbiology May 24, 2005

Dr. Warren Washington Chairman National Science Board 4201 Wilson Blvd. Arlington, VA 22230

Dear Dr. Washington:

As you know, the FY2006 budget request would fund the National Science Foundation (NSF) below FY2004 funding and substantially reduces funding for the Education and Human Resources Directorate (EHR) for the second year in a row. On behalf of the Science, Technology, Engineering, and Mathematics (STEM) Education Coalition, we are writing to ask for your assistance in protecting the future of the STEM education and research programs at NSF. In the near term, we urge the National Science Board to use its considerable influence and prestige by writing a letter to Congress and the President in support of the NSF Education and Human Resources Directorate.

For the longer term, we suggest the Board work with NSF Director Arden Bement to establish a establish a blue ribbon panel of business, research and STEM education experts to define and inform the Administration, Congress, and the nation of the state of STEM education programs and research and identify future needs and priorities.

We are grateful for the support expressed by the Board at recent Congressional hearings for NSF's STEM education programs and related research initiatives. We are deeply concerned about the EHR budget and believe that forthright action is needed to prevent further decline. We believe that funding of STEM education programs and research should be restored *without* diminishing essential support for the research directorates.

Now is not the time in our history, regardless of tight budget environments, to reduce investments in STEM precollege and higher education programs and essential research. Without this investment, the U.S. risks losing its competitive edge in the global economy to countries like China and India. The evidence is overwhelming: U.S. STEM education programs and the relevant knowledge base are not keeping pace with global competition; our international test scores remain weak; offshore outsourcing continues to grow; countries in Europe and Asia are heavily investing in their educational infrastructures and they are reaping the benefits. Their patents are on the rise, their graduation rates for science and engineering degrees continue to climb, and businesses continue to move overseas in search of high-tech talent.

The NSF is the only agency that supports the kind of research and development that brings advances in science, technology, engineering, and mathematics to the classroom. This is not the time to cut resources for innovative curricula, teacher support, and technological tools that can give our children the knowledge and skills they need to become the scientists, technologists, engineers, and mathematicians that the 21st Century demands. We need more programs to keep students and teachers engaged and motivated to learn STEM topics. Without support from the NSF, we will see more students opt out of STEM careers, putting their future success and our nation at risk.

If we can be of assistance in this endeavor, know that we are here to serve. Please contact either Patti Curtis at 571.237.6367 or Jodi Peterson at 703.243.7100.

CC: Dr. Arden Bement, Director