Testimony of
Madeleine Jacobs, Ph.D., Chief Executive Officer, American Chemical Society

On
FY 2010 Appropriations for the National Science Foundation

Before the
House Committee on Appropriations
Subcommittee on Commerce, Justice, Science, and Related Agencies
Congressman Alan B. Mollohan, Chair
Congressman Frank R. Wolf, Ranking Member

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Chairman Mollohan, Ranking Member Wolf and members of the subcommittee, it is an honor to speak to you today. I would also like to thank you both and all members of the subcommittee for supporting the NSF throughout the years. I am Madeleine Jacobs, Chief Executive Officer of the American Chemical Society. Also testifying before this committee today are representatives from the American Mathematical Society, American Physical Society and Federation of American Societies for Experimental Biology. **These organizations together represent more than 300,000 scientists, engineers and mathematicians in a diversity of fields, and we are united in our request for an FY 2010 budget for the National Science Foundation (NSF) of $7 billion.**

Robust and sustained federal investments in NSF's basic scientific research will help bolster our country's capacity for innovative research global economic competitiveness. NSF funding has been instrumental in the work of 47 Nobel laureates in chemistry. NSF, for instance, funded the chemists who discovered that the old generation of propellants in aerosol spray cans was destroying Earth's protective ozone layer.

It is also clear that if we want our nation to remain competitive in the global economy and continue to be a world leader in scientific and technical breakthroughs, we must renew our commitment to NSF's educational mission.

We thank you for the historically significant increases provided for NSF's Education and Human Resources (EHR) Directorate, the Math and Science Partnership program, and the Robert Noyce Scholarship program in FY 2009 and the American Recovery and Reinvestment Act of 2009 (ARRA). For FY 2009, you provided $845 million for EHR, an amount that is close to the COMPETES FY 2009 authorization level of $895 million. We extend our sincere appreciation for this investment.

NSF's EHR Directorate seeks to advance discovery and innovation at the frontiers of STEM learning and teaching. NSF supports the conceptualization, design, testing, assessment, study and evaluation of highly innovative models of and approaches to learning in formal and informal settings. NSF programs advance equity and participation for all by building and strengthening participation in the scientific-technical enterprise. And most importantly, the EHR Directorate

fosters linkages between STEM education research and practice, serving as the intellectual nexus that unites education research and evaluation activities across the Foundation and with other federal agencies.

Thanks in part to NSF's innovative Math and Science Partnership program, student proficiency in math and science in many schools is increasing. A 2006 NSF analysis of schools participating in the MSP program showed that one large group of high school students who participated in the MSP program showed a 17 percent improvement in math proficiency in just two years. We urge you to continue to provide increased federal investment in this vital and broadly supported program.

The preparation of high quality teachers is essential to improving student performance in the STEM fields. Within NSF, one such teacher preparation program is the Noyce Scholarship Program which was expanded in the America COMPETES Act to encourage college STEM majors to pursue teaching careers in high-need schools. We urge you to increase the federal investment in this well regarded STEM initiative.

Finally, I urge the Subcommittee to provide funding for the Partnerships for Access to Laboratory Science Pilot Program that was authorized by the America COMPETES Act. This research program would permit NSF to explore the best models for improving science laboratory facilities at the highest-need high schools. By establishing a firm research basis through the PALS pilot program, we will be able to facilitate the improvement of high-school laboratories on a wide-scale basis that will be funded by the Department of Education, state education agencies, and other primary funding sources. Providing our children with high-quality hands-on science learning opportunities in a proper laboratory setting is an essential element of a well-rounded education. It is difficult to spark the imagination of the next generation of Einsteins if our students never have the hands-on experience gained in a lab.

Thank you for the opportunity to offer my support for NSF. I would be happy to answer any questions the committee has.