

Testimony of Research!America to the House Committee on Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies Concerning FY15 Appropriations for NSF
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Research!America, a public education and advocacy alliance committed to advancing medical and other scientific research and development, appreciates the House Committee on Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies' stewardship over such a critical subset of our nation's discretionary funding priorities. As the subcommittee begins the process of prioritizing FY15 funding, we urge you to consider the following thoughts on the National Science Foundation (NSF) which is entrusted with sustaining our nation's sophisticated research infrastructure, partnering with the private sector to accelerate innovation, and maintaining our global leadership. For fiscal year 2015, we request that the National Science Foundation receive at least \$7.6 billion in federal funding to allow its continued growth as a driver for basic research.

The National Science Foundation (NSF) plays a pivotal role in advancing basic and social sciences research. The funding, or lack of it, allocated to NSF will bear on our nation's ability to compete in key export markets within the global economy, foster business development that grows and maintains jobs across the country, utilize social sciences research for more efficient federal spending based on advanced understanding of the use of social services, devise evidence-based strategies for empowering Americans to overcome the need for such services, meet our solemn obligations to our troops, bolster national security, and ensure top-line education for scientists and medical researchers at our nation's colleges and universities. The stakes truly are that high.

NSF as an innovation incubator

In fiscal year 2015, we urge you to fund NSF with at least \$7.6 billion to continue the trajectory of increased basic research which is so critical to society. NSF supports research in fundamental sciences and engineering to keep the United States at the forefront of scientific discovery. The source of approximately 21 percent of all federally funded basic research, NSF funds over 300,000 scientists, engineers, educators, and basic researchers through more than 11,000 grants annually. The fruits of NSF basic research are integral to our nation's innovation cycle.

Countless innovations that Americans depend on every day, like laser technologies and internet search functions, are products of NSF-supported research. NSF has also supported the work of more than 200 Nobel Prize winners in the past sixty years.

NSF as a conduit to evidence-based, strategic use of government dollars

NSF's support of social sciences research is grossly underestimated in its value to taxpayers, the wellbeing of children and other vulnerable populations, and the prosperity of our nation.

Designing and executing social services programs without evidence-based foundations is akin to shooting in the dark, wasting resources, and comprising the mission. When you think of child welfare programs, the need for social sciences research is crystal clear. It would be tragic if programs inadvertently created disincentives for proper foster care, for example. Social sciences research enables a better understanding of international markets, boosting the ability of businesses to succeed in our globalized economy. It is a dangerous mistake to dismiss the importance of such research.

NSF as an educator

In an era when a capable scientific workforce is crucial, NSF funds the education and training of the future STEM staff and leaders through various K-12, undergraduate, and graduate education programs. The only agency with a federally-mandated mission requiring incorporation of science and engineering education in all funded research, NSF helps to develop skilled researchers who not only extend scientific innovations but also educate future generations. For more than 20 years, the Advanced Technological Education program (ATE) has offered scientific educational support and opportunities to more than 54,000 undergraduate and associate degree students via almost 300 active grants. Without sufficient federal funding, fundamental educational programs like ATE are at risk for cutbacks which will weaken the future scientific workforce of America and hinder our country's growth as a global innovator.

The threat of sequestration's return

The Ryan-Murray Bipartisan Budget Act provided America with two years of partial relief from sequestration after across the board budget cuts dramatically impacted the nation's research capability in March 2013. Unfortunately, sequestration will go back into full effect in 2016 unless Congress takes action, and it will be in effect for two years longer than originally established under the 2011 Budget Control Act. The return of sequestration's budget cuts to discretionary spending, including that for NSF, poses potentially devastating setbacks to our nation's research. Short-changing scientific innovation and basic research is not a solution to the federal deficit or debt. For example, neglecting medical research undercuts strategies to fight chronic disease and the multipronged federal costs that arise from it, while squandering

opportunities to increase private sector and federal revenues through new medical innovations.

Research! America appreciates the difficult task facing the subcommittee as it seeks to simultaneously confront the budget deficit, strengthen the United States, and promote the well-being of Americans. There are few federal investments that confer as many benefits as medical research – new cures, new businesses, new jobs, new solutions to health care cost inflation, and new fuel to drive U.S. leadership in a global economy shaped by the ability of countries to continuously innovate. We firmly believe that investing in NSF is a means of advancing our nation's innovative capacity in both the short- and long-term. Thank you for your leadership and consideration; we know that your task is extraordinarily difficult, and that our nation is fortunate to have such pragmatic, committed and gifted leaders at the helm.