

American  
Physical  
Society

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**President**  
**Homer A. Neal**  
*University of Michigan*

March 8, 2016

**President-Elect**  
**Laura H. Greene**  
*Florida State University*

The Honorable John Culberson  
House Appropriations Commerce, Justice, Science, and Related Activities Subcommittee  
2372 Rayburn HOB  
Washington, DC 20515

**Vice President**  
**Roger W. Falcone**  
*University of California,  
Berkeley*

The Honorable Mike Honda  
House Appropriations Commerce, Justice, Science, and Related Activities Subcommittee  
2301 Rayburn HOB  
Washington, DC 20515

**Past President**  
**Samuel H. Aronson**  
*Brookhaven National  
Laboratory*

**Chief Executive Officer**  
*American Physical Society*  
**Kate P. Kirby**

Dear Chairman Culberson and Ranking Member Honda:

As President of the American Physical Society (APS), representing more than 53,000 scientists in universities, industries and national laboratories, I want to express my concerns regarding the National Science Foundation (NSF)'s recent budgetary trend. NSF – established by Congress in 1950 with a mission “to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes” – has seen its federal support decline in real dollars from FY10 to FY15, not even keeping pace with inflation.

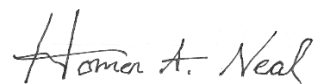
NSF is a cornerstone of our nation's scientific enterprise, supporting nearly one quarter of all federally funded fundamental research conducted at U.S. colleges and universities. Its research and education programs help to advance our scientific knowledge and understanding and to build the STEM workforce. However, austere budgets are hindering NSF's ability to fulfill its mission.

Navigating a budget that does not keep pace with inflated costs of research, NSF has made increasingly difficult decisions, resulting in a reduction of the number of awards funded per year by more than 2,000. This decline is particularly demoralizing for early career scientists, who often depend on the agency for support as they work to establish themselves in their respective fields. By limiting funding opportunities for early career researchers today, we place our position as a science and technology leader of tomorrow in jeopardy.

The U.S. continues to lose ground to our global competitors, who have increased their financial support for science and engineering research. Today, the U.S. ranks only fifth on the Global Innovation Index, compiled annually by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), and only tenth in the Innovation Technology and Innovation Foundation's report “Ranking Countries' Impact on Global Innovation.” The time to act is now – for the U.S. to remain competitive and our economy to continue to grow, we must increase our investments in fundamental research across all scientific disciplines and develop the next generation of scientists and engineers. Robust and sustained funding for NSF, even during times of constrained budgets and discretionary spending caps, is critical to this effort.

For these reasons APS strongly urges members of the 114<sup>th</sup> Congress to at least restore NSF's FY10 purchasing power – considering both standard inflation and higher research costs – and provide NSF with an appropriation increase of 2% above the FY16 enacted level. To recapture America's innovation leadership, APS also urges Congress to provide an additional 2% increase, boosting total NSF discretionary funding by 4%. That figure is consistent with the Department of Energy's Office of Science FY17 authorization in Senate Energy Bill S. 2012.

Sincerely,

A handwritten signature in cursive script that reads "Homer A. Neal". The signature is written in black ink and is positioned below the word "Sincerely,".

Homer A. Neal