

American Physical Society

One Physics Ellipse College Park, MD 20740-3844

Tel: (301) 209-3269 Fax: (301) 209-0867

www.aps.org

President Homer A. Neal University of Michigan

President-Elect Laura H. Greene Florida State University

Vice President Roger W. Falcone University of California, Berkeley

Past President Samuel H. Aronson Brookhaven National Laboratory

Chief Executive Officer American Physical Society Kate P. Kirby December 20, 2016

President-Elect Donald Trump Presidential Transition Headquarters 1800 F Street NW Washington, DC 20270

Dear President-Elect Trump:

I write on behalf of the American Physical Society (APS) – the largest membership organization of physicists in the United States with more than 53,000 members – asking you to implement policies and make decisions aimed at improving America's science enterprise from the onset of your Administration.

Scientific research spawns innovation, fosters economic growth and creates jobs. Economists have determined that more than 50 percent of U.S. economic growth since the end of World War II is attributable to scientific discoveries and the innovations they have generated. Moreover, today science is an international endeavor, offering opportunities for diplomacy through cooperation and collaboration with our partners around the globe.

For more than three quarters of a century, APS members have participated in the federal government. We have served in both Republican and Democratic Administrations, including positions as Secretary of Defense, Secretary of Energy, Science Advisor to the President, Director of the Central Intelligence Agency and as Members of Congress. APS can continue to serve as a resource as you select individuals to serve in your Administration.

During this time of transition, APS is pleased to support the recommendations in the transition documents provided by several broad-based coalitions – the Coalition for National Science Funding, the Energy Sciences Coalition, and the Task Force on American Innovation. These include:

- Assistant to the President for Science and Technology: Selecting a Science Advisor early in the transition period will help ensure science and technology is responsibly and effectively represented in policymaking in the White House.
- Robust, predictable and sustainable federal funding for science: Maintaining U.S. competitiveness in science, technology and innovation requires strong and stable funding across all of the federal science agencies.
- World-class facilities: Continuing to have access to domestic and international state-of-the-art scientific facilities enables researchers across our scientific enterprise to make breakthrough discoveries.

- **Next generation workforce:** Preparing our students of today for the demands of tomorrow's STEM-focused jobs requires support for STEM education and training programs at all levels.
- **International collaborations:** With science becoming an increasingly global venture, the U.S. must continue to be a reliable partner and honor existing agreements while protecting its national interests.

In addition to these recommendations, we ask that your team consider two policy proposals that will help ensure our nation has a vibrant scientific infrastructure, enabling a future of U.S. innovation and global economic competitiveness. Both proposals are addressable within your first 100 days, as part of your initial budget request to Congress.

1. Include science infrastructure in your infrastructure stimulus:

Roads, bridges and airports are not the only part of our country's infrastructure in desperate need of repair. For the U.S. to remain globally competitive, our science infrastructure, which includes obsolete research equipment and laboratories in disrepair, must be updated or replaced. We can begin rebuilding America's science infrastructure immediately by funding shovel-ready projects through federal science agencies and their offices, such as the Department of Energy's Office of Science and the National Science Foundation. Doing so would not only provide jobs for factory and construction workers today, but it would also help keep our nation competitive for decades to come. APS would be happy to work with your transition team to identify projects for your infrastructure stimulus.

2. Establish multiyear appropriations for the federal science agencies:

Science requires stable and reliable funding. A more predictable funding schedule for science would allow agencies to better manage their grant portfolios and facility construction projects, minimize the costs associated with the current inability to plan for long-term projects, and enhance research productivity. As a cost-saving and efficient-planning measure, we ask that you adopt multiyear appropriations for the federal science agencies, as suggested by numerous reports, including the American Academy of Arts and Sciences' *Restoring the Foundation*.

Please do not hesitate to contact APS through Francis Slakey (slakey@aps.org) at our Office of Public Affairs if you have any questions, require additional information or would like to further discuss our recommendations.

Thank you for your time and consideration.

Sincerely,

Homer A. Neal

cc: Vice President-Elect Mike Pence

Homen A. Neal