



Honorable Lamar Smith Chairman Committee on Science, Space, and Technology U.S. House of Representatives Washington, D.C. 20515

Honorable Barbara Comstock Chair Subcommittee on Research and Technology Committee on Science, Space and Technology U.S. House of Representatives Washington, D.C. 20515



Honorable Eddie Bernice Johnson Ranking Minority Member Committee on Science, Space, and Technology U.S. House of Representatives Washington, D.C. 20515

Honorable Dan Lipinski Ranking Minority Member Subcommittee on Research and Technology Committee on Science, Space and Technology U.S. House of Representatives Washington, D.C. 20515

April 21, 2015

Dear Chairman Smith, Ranking Member Johnson, Chair Comstock, and Ranking Member Lipinski:

Representing the nation's leading geoscience-related research and education institutions (academic, corporate, and aquaria), we are writing to express our significant concerns regarding provisions in the America COMPETES Reauthorization Act of 2015 (HR 1806).The House Science, Space, and Technology Committee has historically been a bipartisan champion for the development and support of our nation's science enterprise by working in tandem with the science community toward shared goals and supporting the resources necessary to achieve those goals. We greatly appreciate the Committee's leadership in supporting federal research over the years and share the desire to ensure that public funds are invested wisely so that research can improve the quality of life of Americans for generations to come. The United States has led the world in innovation for the past 60 years through the academic-federal partnership based on competitive peer-review processes. However, we believe the bill in its current draft form falls short of the intended target and would do more harm than good to the nation's competitive research community

## Authorization of Appropriations

First, we believe that setting directorate level funding unnecessarily inserts politics into the scientific process. Unlike many other countries our historical approach has insulated research from political pressures, which is why we lead the world in science across disciplines. Consequently, we urge the Committee to maintain a strong foundation for basic research across all scientific disciplines. With the Geosciences Directorate (GEO) supporting 64 percent of the federal funding for basic research at academic institutions in the geosciences, the proposed 8 percent cut from the Fiscal Year 2015 funding level will have significant and enduring consequences on the economic and environmental health of the nation and its citizens. GEO supports scientists seeking knowledge on and the ability to predict natural disasters and severe weather – tsunamis, hurricanes, tornadoes, volcanoes, floods, earthquakes, drought – allowing lives to be saved and billions of dollars from our coastal economies to be protected. Weather and ocean-atmosphere research on a variety of time and spatial scales continue to improve the forecasting, tracking, and early-warning for extreme events. Research from GEO investigates ways to sustainably utilize living and non-living marine resources in support of increasing demands for food, energy, recreation and safety. This is particularly important in the context of future opportunities from a changing Arctic, where GEO provides research on polar and ocean areas, arming the U.S. with the information critical to making thoughtful, forward-looking decisions.

Additional to GEO, continued support of the research within the Social, Behavioral and Economic Sciences Directorate (SBE) is integral to the nation's overall scientific and research enterprise, as social and behavioral research by NSF and other agencies (e.g., NOAA) can be particularly beneficial in maximizing the effective communication and use of scientific findings to both public and private decision-makers. As storms intensify, species migrate, ecosystems change, and fresh water becomes less available, the need to better understand and

help guide human decision making and policy formulation is increasingly important. SBE provides this research and should not be slashed by 45 percent.

Lastly, the proposed \$55 million cut to Integrative Activities endangers the successful National Graduate Research Fellowship Program. Ensuring our continued science primacy in the world rests squarely on the backs of the nation's next generation of scientists. Therefore, it is crucial to match the calls for increased support of STEM with the resources necessary to cultivate these young scientists.

## Accountability in Federal Funding for Research

We feel that the provisions in Section 106 to assure that grants are in the national interest and worthy of funding would increase the administrative burden on researchers (who already spend roughly 42 percent of their time on pre-and post- award administrative activities), and are unnecessary given current policies in place to ensure that research grants are of the highest quality and merit funding. Additionally, how "worthy of Federal funding" and "the national interest" is defined reduces support for basic research and stifles high-risk/high-reward research – both of which are the foundation to moving our nation's science enterprise forward.

## **Misrepresentation of Research Results**

Publicly announcing the findings and identity of the principal investigator (PI) in charge of research misconduct could severely undermine the credibility of scientists. Professionals from every discipline make mistakes, including physicians. In contrary to scientists, these professionals are protected by law and do not have to undergo public shame as Foundation PIs would be subjected to, under Section 116, if research misconduct was to occur. Most importantly, subjecting early-career PIs to public shame is unwarranted as these scientists have relatively little experience in conducting research and remain under the guidance of their postgraduate, postdoctoral, or senior faculty mentors. It is therefore unjust to hold such scientists accountable for mistakes that were unintentionally made while still engaged in the education phase of their career. Section 116 should explicitly exclude early-career scientists from public shame in the eventuality of misrepresentation of research results.

## **Regulatory Efficiency**

When considering administrative burdens, we'd like to commend the Committee for proposing the establishment of a working group to examine regulations of federally supported research (Section 302). The inclusion of stakeholder feedback and recommendations, including from researchers and institutions of higher learning, non-profits research institutions, scientific associations, and industry, will enable the robust review and discussion of administrative burden allowing for the substantive changes necessary to return our scientists to their research.

We welcome the opportunity to work with the Committee in building the strong science framework necessary to facilitate discovery and innovation while nurturing and training the next generation of scientists and supporting our nation's economic and national security. These efforts are crucial to keeping America competitive.

Regards,

Sherri W. Goodman

President and CEO Consortium for Ocean Leadership

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President National Association of Marine Laboratories

Robert S. Detrick President Incorporated Institutions for Seismology

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