



ASSOCIATION OF AMERICAN UNIVERSITIES

March 28, 2014

The Honorable Lamar Smith
House Committee on Science, Space,
and Technology
2321 Rayburn Office Building
Washington, DC 20515

The Honorable Eddie Bernice Johnson
House Committee on Science, Space,
and Technology
2321 Rayburn Office Building
Washington, DC 20515

Dear Chairman Smith and Ranking Member Johnson:

On behalf of the 60 U.S. research universities represented by the Association of American Universities, we write to express our continued interest in working with you to pass legislation in this Congress to reauthorize the National Science Foundation and other federal science agencies included in the COMPETES Acts of 2007 and 2010. The Frontiers in Research, Science and Technology (FIRST) Act approved earlier this month by the Subcommittee on Research and Education marks the beginning of that process, and we hope the bill can be improved as the process moves forward.

We are very concerned about several provisions in the Subcommittee-approved bill. Despite some minor improvements made during subcommittee mark-up, this legislation continues to fall well short of the [guiding principles](#) for reauthorization of the America COMPETES Act endorsed last year by our association along with a number of other business, scientific, and higher education organizations. Among the most important of those principles is the need to set funding targets for federal agencies including the National Science Foundation (NSF), the National Institutes of Standards and Technology and the Department of Energy's Office of Science that permit sustained and real growth for these agencies to stimulate long-term economic prosperity. While the FIRST Act does not include funding for the DOE Office of Science, the authorized funding levels in the bill for NSF and NIST fail to keep pace with inflation, thus widening the nation's growing innovation deficit.

Moreover, the bill authorizes cuts in funding for certain NSF directorates, including Social, Behavioral, and Economic Sciences and Geosciences to levels below FY14 funding. The science supported by both of these directorates plays a vital role in this nation's research portfolio and is critical to advancing understanding of, and solutions for, some of our nation's most pressing economic, health, environmental, and security challenges. We strongly oppose the cuts proposed for these two NSF directorates and urge you to remove these proposed cuts.

We recognize that our nation must make difficult spending decisions as we seek to reduce the federal deficit; however, not all federal spending is the same. Federal spending on research – in all disciplines – is *investment spending* because it pays dividends in the form of discoveries and innovations that lead to new start-up companies, new industries, new jobs, and economic growth. The solution to our nation's budget deficit lies in entitlement and tax reform – not in cutting the federal investment in scientific research. Cuts to these investments would only aggravate our federal budget difficulties into the future. Authorization bills should establish key national priorities; they should not bear the burden of resolving our nation's broader budgetary challenges, particularly when the programs they authorize are not the source of those challenges.

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The Ohio State University
The Pennsylvania State University
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Rice University
Rutgers, The State University
of New Jersey
Stanford University
Stony Brook University –
State University of New York
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Chapel Hill
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University of Rochester
University of Southern California
The University of Texas at Austin
University of Toronto
University of Virginia
University of Washington
University of Wisconsin - Madison
Vanderbilt University
Washington University in St. Louis
Yale University

While the funding levels provided for in the bill cause us great concern, the FIRST Act also contains provisions which are duplicative and unnecessary, and will, in some instances, add federal requirements and other measures that will impede NSF's ability to perform its mission effectively. The most problematic of these other provisions are:

1. **Section 115** establishes new statutory requirements on scientific misconduct for NSF grantees with penalties that far exceed those imposed by other federal research agencies. NSF already has very strong scientific misconduct policies that align with the policies of other federal agencies. They were developed after an extensive interagency review by the National Science and Technology Council. These policies work. As we have stated in previous letters to committee staff, we do not understand the rationale for this provision. It is a solution in search of a problem. Ironically, this provision also directly contradicts language elsewhere in the bill which calls on the Office of Science and Technology Policy (OSTP) to harmonize regulation across federal research agencies.
2. **Section 117 (1)** requires NSF to establish procedures to ensure that a principal investigator is not receiving funding from NSF and other federal agencies for research with the "same scientific aims and scope." This provision is problematic for two reasons: (1) different federal agencies often fund different portions of an investigator's ongoing research efforts; and (2) as long as the principal investigator is not double-billing multiple federal agencies for the exact same work, then NSF should not be prohibited from funding a portion of the research. Important interagency collaborations are frequently funded in this manner. We believe that the current language is sufficiently vague that it could actually impede such work. We encourage you to rewrite section 117(1) as follows: "A research grant awarded by the Foundation to a principal investigator must be original and unique and support a scope of work not otherwise being directly funded by grants provided by other federal agencies."
3. **Section 117 (4)** states that principal investigators who have received more than five years of funding from NSF at any point in their careers may be awarded additional NSF grant funding only if they will be contributing "original, creative, and transformative research under the grant." We do not understand the objective of this provision but do believe it could create major problems for NSF centers and research projects to be funded in the future. Research often builds on previous research, and can take several years – sometimes more than five – to complete. It would be very difficult for NSF peer review panels to interpret and implement this new grant condition. If the purpose of this provision is to ensure that younger researchers are given a greater opportunity to compete successfully for grant funds, we would encourage an alternative and more direct approach that simply sets aside for young investigators a certain amount of NSF grant awards/funds within each NSF directorate.
4. **Section 120** requires the NSF to ensure that the cost of employing rotating personnel does not "exceed 110 percent of the cost of employing permanent personnel." Rotating personnel are invaluable members of the NSF staff, who offer fresh ideas and new approaches. They currently represent one-third of the NSF program staff. Most are university faculty and researchers who come to NSF through Intergovernmental Personnel Act (IPA) assignments. Placing a cap on their salaries and benefits would discourage talented researchers and faculty from participating in the IPA program, and thus would harm NSF's ability to have top notch scientists and engineers directing and overseeing its research programs. Instead of the proposed salary and benefits cap, we recommend alternative language requiring the National Science Board, working with NSF, to develop a plan to address concerns raised by the Inspector General concerning the costs associated with the NSF's use of rotating personnel.
5. **Section 303** on public access to research and data lengthens well beyond 12 months – to two years or more – the "embargo period" before a published research article resulting from federally funded research would be freely available to the public. This provision moves federal policy in the opposite

direction from the public interest in making federally funded research results broadly and freely available as soon as possible after their publication. It doubles the 12-month embargo period of the highly successful NIH PubMed Central. It undermines the thoughtful public access policy being implemented by OSTP, which stipulates a 12-month embargo period as a guideline for agency-specific public access policies. The OSTP policy was based upon an extensive consultative process that sought and incorporated stakeholder views from all perspectives on this issue. We support the OSTP process and policy and oppose any provision which would prolong the length of time that it would take for the public to be able to freely access information resulting from government-funded research efforts.

For these reasons, AAU opposes the FIRST bill in its current form. We are eager, however, to continue to work with you and other members of the Committee to improve the bill as it comes up for consideration by the full House Science, Space and Technology Committee. We hope that together we can resolve the concerns we have described so that we can be enthusiastic supporters of the final bill.

Sincerely,

A handwritten signature in black ink that reads "Hunter R. Rawlings III". The signature is written in a cursive style with a small flourish at the end.

Hunter R. Rawlings III
President
Association of American Universities

Cc: Members, House Committee on Science, Space, and Technology