



FASEB

Federation of American Societies
for Experimental Biology

Representing Over 120,000 Researchers

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May 5, 2015

The Honorable Lamar Smith
Chairman
Committee on Science, Space, and Technology
2321 Rayburn House Office Building
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

The Federation of American Societies for Experimental Biology (FASEB) represents 27 research organizations and more than 120,000 scientists and engineers. Our members understand the importance of investment in research and education, and we appreciate the attention that the House Committee on Science, Space, and Technology has devoted to these topics in the “America COMPETES Reauthorization Act of 2015.” We agree with the committee’s findings that “the economic strength and national security of the United States, and the quality of life for all Americans, are grounded in the Nation’s scientific and technological capabilities”; “support for basic research is an investment in our Nation’s future security and economic prosperity”; and that “other nations are increasing their public investments in basic research in the physical sciences.”

Several of FASEB’s concerns with reauthorization bills approved by the committee last year have been addressed, and we thank you for responding to our community’s comments. An important improvement is the addition of Section 106 (b) (2) (G), which includes “promotion of the progress of science in the United States” as part of the definition of research in the national interest.

This is an important bill, and it covers a broad range of agencies and programs. We hope that you will allow sufficient time for agencies and research communities to review the proposed legislation in detail. At this time, we confine our comments to the sections of the bill that concern the research programs of the National Science Foundation (NSF), the area in which our membership has the most expertise. In Title I—National Science Foundation, Section 101 Authorization of Appropriations, we strongly urge you to provide longer term, more ambitious goals for investment in research and allow the agency greater budget flexibility so that it can fund the most promising areas of research.

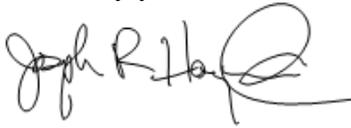
We appreciate the Committee's recognition of the need for the United States to remain the global leader in science and technology. In order for this to happen, we need to keep pace with the growing investments made by our competitors. U.S. government spending on R&D has not grown since 2003. China, on the other hand, has been accelerating its investment in R&D with expenditures rising at a rate of 20 percent annually (Organization for Economic Co-Operation and Development StatExtracts). If these patterns remain unchanged, China's funding for R&D will surpass that of the U.S. in the year 2020. This would cede world leadership in science and innovation to one of our competitors, a situation that most Americans would find unacceptable. While the COMPETES bill authorizes appropriations for both FY 2016 and FY 2017, increases in funding are only proposed in FY 2016. This is in contrast to Section 105 of the bill which states, "sustained, predictable funding is essential to United States leadership in science and technology." We urge you to provide a longer-term vision for investment in research and to include plans for robust growth that will ensure our continued global leadership. FASEB recommends that Congress commit to providing increases of at least five percent annually for R&D for the next five years, beginning in FY 2016.

NSF is the only federal agency supporting research in all fields of science and engineering. This gives the agency a broad perspective and helps it serve an extremely useful role as a catalyst of new ideas, methodologies, and approaches. This breadth also allows NSF to play a valuable coordinating role in science education and statistics. Therefore we were perplexed by the charge in Section 102 (12) (F) for the Foundation to "evaluate the research programs undertaken by agencies of the Federal Government, and to correlate the Foundation's scientific research with that undertaken by individuals and by public and private research groups." This broad, unfunded mandate would lead to a bureaucratic and top-down approach that would drain resources and stifle the creativity that is a driving force in research. As the bill moves forward, we urge you to clarify the meaning of "evaluate and correlate" to eliminate any implied oversight roles and emphasize the goal of flexibility and collaboration with other efforts.

We support the Committee's desire to see that U.S. investment in R&D is used most productively. NSF can effectively contribute to this goal if it has the flexibility to target its resources to the areas with the greatest scientific opportunity, i.e., those identified by experts as underfunded and ripe for investment. Unfortunately, this goal is hampered by the section of COMPETES that specifically targets funding to individual divisions. Flexibility in the allocation of resources enables NSF to capitalize on its strengths, target its investments, and facilitate the Foundation's ability to support the interdisciplinary research that the COMPETES Act identifies as a policy objective in Section 103 (1) (A). We therefore recommend that you remove the specific allocations to divisions in Section 101.

Our nation's commitment to research and education in science is essential for our future prosperity and security. Prior COMPETES bills established a roadmap for future progress, and the 2015 reauthorization has the potential to provide a similar vision. We strongly urge the Committee to allow more time for broader input from the scientific community and agencies reauthorized in the bill. The bill should include a bolder, longer vision for sustainable, predictable increases in funding. Greater flexibility in the allocation of resources would enable NSF to capitalize on its strengths, target its investments, and stimulate more interdisciplinary research.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Joseph R. Haywood". The signature is fluid and cursive, with a large, stylized initial "J" and "H".

Joseph R. Haywood, PhD
FASEB President