

May 19, 2014

Dear Members of the House Committee on Science, Space and Technology:

As your committee prepares to markup the FIRST Act, The Science Coalition urges you to bear in mind the tenets of the America COMPETES Act and commit to making strong and sustained funding for basic scientific research a national priority. The Science Coalition is an organization of more than 50 of the nation's leading public and private research universities dedicated to sustaining the federal government's investment in basic scientific research as a means to stimulate the economy, spur innovation and drive America's global competitiveness.

In its current form, the FIRST Act does not reflect the vision of the America COMPETES Act nor its commitment to funding the basic scientific research that will enhance and sustain America's scientific and technological leadership. Short-changing research funding today harms the nation's future economic health.

The original COMPETES legislation, passed with broad bipartisan support in 2007 and reauthorized in 2010, responded to what was widely viewed as a crisis in America's ability to maintain our competitive edge in the innovation economy. That crisis continues today. While other nations invest aggressively in research and innovation, sequestration and tight budget caps have prevented that from happening in the United States. As a result, America's [Innovation Deficit](#) – the difference between what we invest in research and higher education and what we need to invest to maintain our innovation leadership – grows.

The Science Coalition joined more than 100 business, scientific and higher education organizations last year to endorse guiding [principles](#) for the reauthorization of the America COMPETES Act. First among those principles was to make strong funding for basic scientific research – across all disciplines – a top national priority. The funding levels provided for the two science agencies covered by the FIRST Act, the National Science Foundation (NSF) and the National Institute of Standards and Technology (NIST), do not keep pace with inflation. Additionally, the bill proposes significant cuts to social, behavioral and economic research. As a result, the legislation does little to advance the U.S. research enterprise or America's future economic competitiveness.

In late 2013, The Science Coalition released a report that illustrates one way in which federal investment in basic scientific research helps to stimulate the economy. Our "[Sparking Economic Growth](#)" report identifies 100 companies that are here today because of federal research investments that occurred years, and in many cases decades, ago. These research-based

companies employ more than 7,200 people, contribute to their local economies and the U.S. tax base, and are bringing to market transformative innovations in energy, medicine, defense and technology. We urge you to read this report and make use of the database of companies created from federally funded research at [www.sciencecoalition.org/successstories-list](http://www.sciencecoalition.org/successstories-list).

While companies are a highly visible illustration of the return on investment of federal research funding, the products of federally funded research touch every aspect of life and the economy:

- Discoveries are made with profound implications for health, safety and quality of life. Life-saving vaccines, the laser, MRI, touchscreens, GPS and the Internet are just a few of the [products](#) of past federal investment in research.
- [Jobs](#) are created, directly – for the principal investigators, research teams, lab technicians, materials and equipment manufacturers and others who help support the work – and indirectly, through innovations that lead to new technologies, new companies and new industries.
- The next [generation](#) of scientists, engineers, doctors, teachers and entrepreneurs is trained at research universities across the country. Research is essential to building and maintaining a science and engineering workforce.
- Local communities benefit. Research universities are often at the center of the [local economy](#) serving as the area's major employer and the source of high-tech spin off companies. The presence of a highly educated workforce and a strong [innovation sector](#) attracts other business, contributing to a robust local economy.
- Our economy grows. Research accounts for a [tiny](#) percentage of the overall federal budget, yet science-driven innovation has fueled as much as [half](#) of all U.S. economic growth since World War II.

If America is to maintain its innovative edge, create meaningful jobs and realize economic growth, it must make funding for scientific research a higher national priority. It is essential that Congress find ways to address the nation's budget deficit without undermining investments in research and education that hold the key to our future.



**The 2014 members of The Science Coalition include:**

Auburn University	University of Alabama at Birmingham
Binghamton University	University of Alabama in Huntsville
Boston University	University of California
Brown University	University of Chicago
The City University of New York	University of Colorado Boulder
Columbia University	University of Delaware
Dartmouth College	University of Florida
Emory University	University of Georgia
George Washington University	University of Idaho
Harvard University	University of Illinois
Johns Hopkins University	University of Iowa
Kansas State University	University of Kansas
Massachusetts Institute of Technology	University of Kentucky
New York University	University of Maryland
North Carolina State University	University of Michigan
Northeastern University	University of Minnesota
Northwestern University	University of Missouri
Ohio State University	University of Nebraska
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