

Federal Research Funding: Robust Investments Essential to US Competitiveness

ACTION

To help ensure US competitiveness, Congress should complete FY 2022 appropriations by the current Feb. 18 deadline and prioritize appropriating these legislatively approved amounts for key federal science agencies:

- \$9,634M for the National Science Foundation
- \$7,490M for the Department of Energy Office of Science
- \$3,005M and \$6,532M for DOD 6.1 Basic Research and 6.2 Applied Research
- \$938M for NIST Scientific and Technical Research and Services

Federal Investments in Science Spur Discovery and Drive Economic Growth

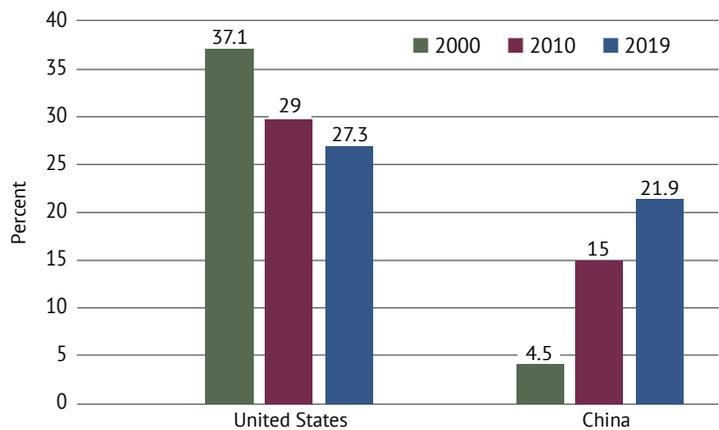
- Nearly **one-third of all US patents** are linked to federally funded research despite representing approximately **one-fifth of the United States' total R&D investment**.
- More than **85% of the long-term growth** of the US economy is attributed to advances in science and technology.

US Not Keeping Pace with Competitors

TOP 10 COUNTRIES BY R&D SPENDING AS A PERCENTAGE OF GDP IN 2019

Rank	Country
1	Israel
2	Korea
3	Taiwan
4	Sweden
5	Japan
6	Germany
7	Belgium
8	Austria
9	United States
10	Denmark

SHARES OF WORLDWIDE R&D EXPENDITURES



Source: <https://nces.nsf.gov/pubs/nsb20221/u-s-and-global-research-and-development>

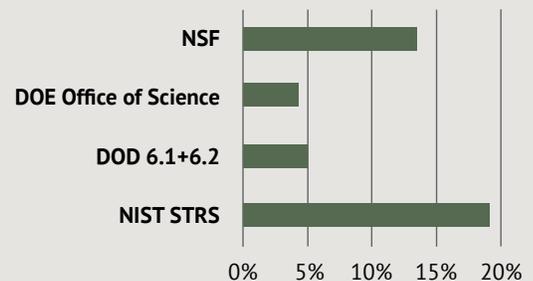
Inaction leads to delays and missed opportunities

Continuing resolutions prevent new, critical programs and initiatives from starting. In FY 2022, these include:

- The new NSF Directorate for Technology, Innovation, and Partnerships that builds upon and consolidates existing NSF programs to advance research leading to breakthrough technologies, to find solutions to national and societal challenges, to strengthen US global competitiveness, and to provide training opportunities for the development of a diverse STEM workforce.
- The new Regional Innovation Accelerators program at NSF which will benefit many communities across the country, especially those within EPSCoR states.
- Critical funds needed to address the \$834 million backlog in deferred maintenance of repairs of NIST infrastructure.

Lost Opportunities

Difference in appropriated funds for FY22 compared to a year long CR



The 117th Congress demonstrated its commitment to strengthening the US R&D enterprise by passing significant bipartisan science and innovation bills in both chambers. Providing robust funding through the annual appropriations process is essential to realizing the potential of these bills.