



# TASK FORCE ON AMERICAN INNOVATION

November 19, 2020

Chairman Richard Shelby  
Senate Committee on Appropriations  
S-128 The Capitol  
Washington, D.C. 20510

Chairwoman Nita Lowey  
House Committee on Appropriations  
H-307 The Capitol  
Washington, DC 20515

Vice Chairman Patrick Leahy  
Senate Committee on Appropriations  
S-146A The Capitol  
Washington, D.C. 20510

Ranking Member Kay Granger  
House Committee on Appropriations  
1036 Longworth HOB  
Washington, D.C. 20515

Dear Chairman Shelby, Vice Chairman Leahy, Chairwoman Lowey and Ranking Member Granger:

The [Task Force on American Innovation \(TFAI\)](#)—an alliance of industry, professional academic societies, and university organizations supporting the federally-funded U.S. science and technology (S&T) research enterprise—strongly encourages you to pass fiscal year 2021 appropriations in the remaining weeks of the 116<sup>th</sup> Congress.

As you work toward finalizing a spending package for the current fiscal year, we urge you to include increased investments for S&T research and development (R&D) within the Department of Energy's Office of Science, the National Nuclear Security Administration RDT&E, the Advanced Research Projects Agency–Energy (ARPA-E), the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and the National Institute of Standards and Technology (NIST). We also urge you to robustly fund Department of Defense Science and Technology programs and the Defense Advanced Research Projects Agency (DARPA).

The American economy has been significantly disrupted by the global spread of the coronavirus disease (COVID-19) pandemic. The U.S. S&T research enterprise is no exception and is in dire need of both increased investment from the federal government and the certainty and stability of consistent and timely congressional appropriations. Moreover, the federal government's investment in its science and technology agencies is essential to our economic recovery, global economic competitiveness and national security.

Congress should consider the economic future of America inextricably linked to the health and robustness of our S&T enterprise – as well as to the private sector innovation that springs from federal research and brings technological advancements into every sector of the economy. Prior to the pandemic, America's advantage in S&T research investment and expenditure began eroding. Two years ago, TFAI released a report titled, "[Benchmarks 2019: Second Place America? Increasing Challenges to US Scientific Leadership.](#)" The report details America's waning advantage relative to other leading nations in five key areas: R&D investment, knowledge production, education, workforce and high-tech sectors of the economy.

Of these global competitors, the Information Technology and Innovation Foundation notes that from 2003-2017, the Chinese government increased its R&D funding by 330 percent, from \$23 billion to \$98 billion, while U.S. government R&D grew just 2 percent, from \$121 billion to \$124 billion. The

COVID-19 pandemic has further cut into America’s lead relative to these countries, increasing the urgency for substantial new investments in the U.S. S&T enterprise. S&T research funding levels in the current Senate and House FY2021 appropriations bills fall well short of the substantial new investments necessary to reverse this trend. As a result, we request that the final appropriations include the highest levels possible. To that end, we recommend the following funding levels under the current Senate and House proposals:

<b>U.S. S&amp;T ENTERPRISE ACCOUNT</b>	<b>PREFERRED FUNDING</b>
Department of Energy Office of Science	\$7.05 billion (House)
National Nuclear Security Administration RDT&E	\$2.798 billion (Senate)
Advanced Research Projects Agency–Energy (ARPA-E)	\$435 million (House)
National Science Foundation (NSF)	\$8.548 billion (House)
National Aeronautics and Space Administration (NASA)	\$23.495 billion (Senate)
National Institute of Standards and Technology (NIST)	\$1.05 billion (Senate)
Defense S&T Basic Research (6.1)	\$2.621 billion (House)
Defense S&T Basic Research (6.2)	\$5.998 billion (Senate)
Defense S&T Basic Research (6.3)	\$7.078 billion (House)
Defense Advanced Research Projects Agency (DARPA)	\$3.512 billion (House)

These requested levels do not reflect the full funding needs anticipated for the above agencies to recover from the pandemic. If Congress chooses to provide additional pandemic relief beyond the FY21 appropriations, it is critical that the relief also include funding to address the impacts of COVID-19 on the research enterprise.

Thank you for your leadership and continued support of federally funded research in the physical sciences and engineering. We urge you to commit to sustainable and robust funding for the agencies that strengthen America’s innovation ecosystem and America’s innovation leadership today and in the future.

Sincerely,

Task Force on American Innovation