

Donald J. Trump
President of the United States
The White House

February 25, 2025

The Honorable John Thune
Majority Leader
United States Senate

The Honorable Mike Johnson
Speaker
U.S. House of Representatives

Dear President Trump, Majority Leader Thune, and Speaker Johnson,

As national security leaders committed to the strength and prosperity of the United States, we write to express our strong support for an increase in funding for federal scientific research, and specifically, the National Science Foundation (NSF). The NSF plays a pivotal role in advancing our national security by supporting the research that leads to new discoveries. Despite the bipartisan vision passed into law in 2022 to double NSF funding by 2027, the Foundation encountered an 8% budget cut in the last fiscal year and continues to face significant funding shortfalls.

To protect our national security going forward, it is essential that we provide at least \$16 billion in FY 2025, as was authorized, and set it back on course for the intended 7% year-over-year increase. This includes fully supporting the NSF's Technology, Innovation, and Partnerships Directorate, which is crucial for transforming basic research into practical applications that are vital to national defense and economic security. This investment will fortify our military capabilities and bolster our economic strength, ensuring America remains the leader in critical areas of scientific research and technology.

We must confront the stark reality: The People's Republic of China (PRC) is aggressively pursuing global technological dominance, directly challenging the United States' position as the world's leading innovator. China's rapid technological progress echoes the competitive pressures of past rivalries that spurred us to unprecedented innovation – and this is a defining moment that calls for a renewed American commitment to excellence.

China increased its support for basic research by more than 10% in 2024 ([Economist](#)), a level the country has sustained year over year for the last seven years as confirmed by Chinese state media ([China Daily](#)). China is making significant strategic investments in basic and applied research and positioning the country to outpace us in critical areas that could determine the outcome of future conflicts. This is a race that we cannot afford to lose; to do so would risk ceding our leadership and endangering the long-term security and sovereignty of our nation.

According to the Australian Strategic Policy Institute, China led the world in just three of 64 critical technologies between 2003 and 2007. As of 2023, it leads in 57 of those technologies. This is not happenstance, but a calculated strategy to erode America's competitive edge, compromise our military superiority, and challenge our economic strength. This is a direct threat to our national security, one that requires an unequivocal and robust response.

Throughout our history, America has risen to global challenges through bold initiatives—be it the Manhattan Project during World War II or the Apollo Program during the Space Race. We now stand at a similar crossroads that demands decisive action. Just as these historic endeavors united our nation in the pursuit of groundbreaking achievements, we must now commit to a comprehensive effort to advance science and technology across multiple frontiers.

Investing in basic research is not optional; it is imperative. To win the technology race with China, we cannot afford to lag in fields that will define the future—artificial intelligence (AI), quantum computing, advanced materials, and biotechnology, to name a few. Basic research is the seed from which transformative technologies grow, often yielding applications unforeseen at the time of discovery. We cannot predict which lines of inquiry will lead to the next breakthrough; therefore, we must nurture a diverse array of basic research initiatives.

Consider the history of neural networks and concepts like reinforcement learning. During the 1980s and 1990s, these fields were largely dismissed as unpromising, and researchers were discouraged from pursuing them. At the time, the NSF, recognizing the value of basic research, funded pioneering work in both neural networks and reinforcement learning, which laid the groundwork for the AI revolution we witness today—a revolution with profound implications for defense applications such as autonomous weapons systems, intelligence analysis, and cybersecurity.

Similarly, sustained investments in basic research have enabled breakthroughs in space technology, leading to the development of reusable rockets by American champions. These advancements have revolutionized space exploration and satellite deployment, enhancing the United States' capabilities in both commercial and military space operations. These advancements are strategic assets that give our warfighters a decisive edge.

Scientific innovation is not an optional endeavor but the very backbone of our nation's security and economic vitality. It encompasses foundational research and innovation efforts essential for maintaining our superiority in an era of strategic competition. Yet, these programs remain desperately underfunded, undermining advancements that could fortify our nation's economic prowess and defense capabilities. Compounding these challenges, broader reductions in R&D initiatives and staff at key research agencies further strain our innovation ecosystem. The erosion of these critical programs weakens not only our ability to develop breakthrough technologies but also the workforce pipeline necessary to sustain long-term leadership in science and technology.

We urge decisive action to adequately fund American science. It is time to embark on a new national mission—a modern-day equivalent of the Manhattan Project or Apollo Program—to secure our future. The safety, prosperity, and future of the United States hinge on our willingness to invest in and protect the scientific endeavors that will shape the 21st century. We cannot lose this race. The stakes are too high, and the consequences of inaction too severe.

Norm Augustine
Former Under Secretary of the Army
Former Chairman and CEO of Lockheed Martin

Ambassador Eric Edelman
Former Under Secretary of Defense for Policy

RADM (Ret.) Doug Fears
*Former Assistant to the President for
Counterterrorism and Homeland Security*

Chuck Hagel
Former Secretary of Defense

Chris Miller
Former Acting Secretary of Defense

David Shedd
*Former Acting Director, Defense Intelligence Agency
Former Deputy Director of National Intelligence for Policy, Plans, and Requirements*