

United States Senate

WASHINGTON, DC 20510

July 30, 2026

The Honorable Donald Trump
President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear President Trump,

I write to express my deep concern regarding your administration's continued attacks on science and research funding. Federal investments in science are critical to new discoveries across sectors, from life-saving drug research and development to space exploration. This innovation brings a tremendous return on taxpayer investment, bolstering the American economy and solidifying our nation's long-held position as a leader in STEM. Without robust federal funding and prioritization of our scientific workforce, we are at grave risk of ceding influence and power to our competitors abroad.

The U.S. is a global scientific leader, driving innovations that fuel economic growth and directly improve the lives of all Americans. In 2023, three U.S.-based scientists won the Nobel Prize in chemistry for their discovery of quantum dots, research used to identify cancer cells, detect radiation during military operations, and improve energy efficiency.¹ U.S.-led discoveries like this are only made possible through federal support for research activities in medicine, national security, and technology. The Congressional Budget Office (CBO) recently concluded that every dollar of federal non-defense research and development investment creates as much as \$12.50 in economic growth over the following 30 years by encouraging capital expenditures and job creation.² These investments have been estimated to account for at least one-fifth of the growth in U.S. total factor productivity, a measure of technological innovation and scientific discoveries, since World War II.³

¹ David Keyton & Mike Corder, *U.S.-Based Trio Share Chemistry Nobel for Quantum Dots, Used in Electronics and Medical Imaging*, L.A. Times (Oct. 4, 2023), <https://www.latimes.com/science/story/2023-10-04/nobel-prize-chemistry-2023-quantum-dots>.

² Congressional Budget Office, *Preliminary Analysis of How Federal Investment in Nondefense Research and Development Affects the Economy and the Federal Budget*, Congressional Budget Office (Jul. 30, 2025), <https://www.cbo.gov/system/files/2025-07/61375-Research-Development.pdf?inline=1>.

³ Douglas Elmendorf, Glenn Hubbard, Heidi Williams, *Dynamic Scoring: A Progress Report on Why, When, and How*, Brookings Papers on Economic Activity (2024), https://www.brookings.edu/wp-content/uploads/2024/09/17160-BPEA-BPEA-FA24_WEB_Elmendorf_Hubbard_Williams.pdf?inline=1.

Unfortunately, your administration has sought deep cuts to scientific funding and laid off thousands of federally employed scientists, despite public outcry and strong urging from the public, universities, and industries to preserve support for science across the American scientific community.⁴ Notably, the National Science Foundation (NSF) terminated about \$1 billion in grants and fired 10 percent of its workforce.⁵ Further, the total number of new NSF grants in 2025 fell by 25 percent relative to the average of the previous 10 years.⁶ At the National Institutes of Health (NIH), your administration canceled grants amounting to more than \$1.8 billion.⁷ In your proposed FY2026 budget, you recommended a 35 percent cut for non-defense research and development.⁸ Recent projections estimate that your administration's FY2027 budget proposal will translate to 150,000 NIH and NSF jobs lost.⁹ These decisions run counter to Congress's historical support for public funding of scientific research, and Congress has been persistent in demanding your administration halt preemptive cuts to federal programs and abide by Congress' set funding levels for the current and future fiscal years to prevent irrevocable harm to America's economy and workforce.

The economic impact of these cuts for all Americans will be sweeping, leading to higher prices and greater job insecurity across industries. Researchers across U.S. research universities estimate \$2.8 billion in overall economic losses from disrupted NIH and NSF grants.¹⁰ After you released your FY2026 Budget Request, the CBO similarly suggested that your administration's requested 22 percent cut to science funding would amount to half a trillion dollars in lost economic activity.¹¹ This defunding would have catastrophic effects. Current projections suggest that a 25 percent cut to federal R&D spending would lower GDP by a rate comparable to that witnessed during the Great Recession.¹² American families simply cannot afford to take such a devastating step backwards.

⁴ Laura Dattaro, 'A Huge Rupture in Everything': US Science Faced Major Upheaval in 2025, Chem. & Eng'g News (Dec. 9, 2025), <https://cen.acs.org/policy/nih-nsf-ostp-science-research-funding-cuts/103/web/2025/12>.

⁵ Sarah Scoles, *Dozens of countries are trying to lure U.S. scientists abroad—and it's working*, Scientific American (Jun. 16, 2026), <https://www.scientificamerican.com/article/u-s-scientists-are-being-lured-abroad-and-they-arent-looking-back/>.

⁶ Smriti Mallapaty et al., *US Science After a Year of Trump: What Has Been Lost and What Remains*, Nature (Jan. 28, 2026), <https://www.nature.com/immersive/d41586-026-00088-9/index.html>.

⁷ Sarah Scoles, *Dozens of countries are trying to lure U.S. scientists abroad—and it's working*, Scientific American (Jun. 16, 2026), <https://www.scientificamerican.com/article/u-s-scientists-are-being-lured-abroad-and-they-arent-looking-back/>.

⁸ Off. of Mgmt. & Budget, Exec. Off. of the President, *The President's Fiscal Year 2026 Discretionary Budget Request* (May 2, 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/05/Fiscal-Year-2026-Discretionary-Budget-Request.pdf>.

⁹ University of Maryland, College of Computer, Mathematical, and Natural Sciences, *Mapping the Impacts of Science Funding Cuts*, SCIMaP (2026), <https://scienceimpacts.org/>.

¹⁰ *Id.*

¹¹ Mark Krass & Ames Grawert, *The Cost of the Trump Administration's Attacks on Research Funding*, Brennan Ctr. for Just. (May 14, 2026), <https://www.brennancenter.org/our-work/research-reports/cost-trump-administrations-attacks-research-funding>.

¹² Ignacio González, Juan Montecino & Vasudeva Ramaswamy, *Preliminary Estimates of the Macroeconomic Costs of Cutting Federal Funding for Scientific Research* (Inst. for Macroeconomic & Pol'y Analysis, Am. Univ., Apr. 30, 2025), https://impa.american.edu/wp-content/uploads/2025/04/Costs_of_Cutting_Funding_Scientific_Research.pdf.

With this growing uncertainty, our country's STEM programs and scientific workforce are shrinking rapidly, impacting not only our economy but also the U.S.'s ability to lead in scientific innovation at a global scale. At the beginning of 2026, over 10,000 people with STEM PhDs had lost or left their jobs due to federal workforce cuts.¹³ Students across the nation report the loss of federal grants, such as the NASA Space Technology Graduate Research Opportunities and the NSF Graduate Research Fellowship Program, as the primary reason why they and many of their colleagues have been forced to leave research and academia, constituting a significant loss for the country in institutional knowledge and expertise.¹⁴ On top of this, roughly 60 percent of colleges and universities reported decreases in international student enrollment.¹⁵ This decrease is in line with recent reports that doctoral and postdoctoral students are losing hope in pursuing their careers in the U.S. One survey indicates that there has been a 21 percent decline in the number of doctoral and postdoctoral students likely to continue their careers in the U.S.¹⁶ These early-career scientists, referred to by some as "the canary in the coal mine," are just the first signal of a long-term threat to America's scientific leadership, which could take a generation to rebuild.

As research funding runs out in the U.S., other nations are capitalizing on this tenuous moment in our history by actively recruiting our country's best and brightest. China and countries in Europe, for example, are offering hundreds of millions of dollars in research funding to leading American academics and scientists, promising them stable and consistent funding streams.¹⁷ These offers provide a lifeline to those who have been hit with sudden grant freezes and award denials. Researchers who the United States has invested in for years are now taking their expertise abroad. Funding interruptions will continue to seriously impair our ability to compete on an international stage, especially as China surpassed the U.S. in R&D expenditures and in scientific publications in 2024.¹⁸ Without a robust pipeline of researchers and scientists, our economic stability as well as our status as a world leader in scientific discovery will undoubtedly decline.

¹³ Jeffrey Mervis, *U.S. Government Has Lost More Than 10,000 STEM Ph.D.s Since Trump Took Office*, *Science* (Jan. 27, 2026), <https://www.science.org/content/article/u-s-government-has-lost-more-10-000-stem-ph-d-s-trump-took-office>.

¹⁴ Sara Schapiro, *Science Cuts Threaten the Next Generation of Innovators*, *Forbes* (May 7, 2025), <https://www.forbes.com/sites/saraschapiro/2025/05/07/science-cuts-threaten-the-next-generation-of-innovators/>.

¹⁵ Max Kozlov, Jeff Tollefson, and Dan Garisto, *US science after a year of Trump*, *Nature* (Jan. 20, 2026), <https://www.nature.com/immersive/d41586-026-00088-9/index.html>.

¹⁶ Pierre Azoulay, Raffaella Sadun & Daniela Scur, *Before the Exodus? Young Scientists and the Future of U.S. Science*, NBER Working Paper No. 35330 (Jun. 2026), <https://www.nber.org/papers/w35330>.

¹⁷ Kate Zernike, *As the Trump Administration Slashes Federal Spending, Scientists Consider Leaving the U.S.*, *N.Y. Times* (Jun. 3, 2025), <https://www.nytimes.com/2025/06/03/us/trump-federal-spending-grants-scientists-leaving.html>.

¹⁸ Caroline Wagner, *China Surpasses US in Research Spending*, John Glenn College of Public Affairs (May 14, 2026), <https://glenn.osu.edu/news/china-surpasses-us-research-spending>; Organisation for Economic Co-operation and Development, *OECD overall R&D growth stable; government R&D budgets decline and reorient towards defence*, OCED (Mar. 31, 2026), <https://www.oecd.org/en/data/insights/statistical-releases/2026/03/oecd-overall-rd-growth-stable-government-rd-budgets-decline-and-reorient-towards-defence.html>.

As President of the United States, it is your responsibility to ensure that our economy and our workforce continue to flourish, and that our nation retains its competitive edge. Without significant investments in higher education institutions and in the students and faculty members who make these institutions great, the United States will backslide behind our competitors – a risk we cannot afford to take.

Sincerely,

A handwritten signature in blue ink, appearing to read 'A.B. Schiff', is written over a horizontal line.

Adam B. Schiff
United States Senator