The Honorable Charles Schumer Senate Majority Leader United States Senate Washington, DC 20510

The Mike Johnson Speaker of the House U.S. House of Representatives Washington, DC 20515

The Honorable Patricia Murray Chair Committee on Appropriations United States Senate Washington, DC 20510

The Honorable Tom Cole Chair Committee on Appropriations House of Representatives Washington, DC 20515 The Honorable Mitch McConnell Senate Republican Leader United States Senate Washington, DC 20510

The Honorable Hakeem Jeffries House Democratic Leader US House of Representatives Washington, DC 20515

The Honorable Susan Collins Vice Chair Committee on Appropriations United States Senate Washington, DC 20510

The Honorable Rosa DeLauro Ranking Member Committee on Appropriations House of Representatives Washington, DC 20515

Dear Leader Schumer, Speaker Johnson, Leader Jeffries, Leader McConnell, Chair Murray, Vice Chair Collins, Chair Cole, and Ranking Member DeLauro,

Our coalition writes today in support of full funding for the National Science Foundation (NSF). Since its inception, the NSF has made substantial investments in academic research and education which have led to transformative innovations that have fueled our nation's growth. In the face of rapidly evolving technologies and heightened geo-political risk, it is crucial, now more than ever, that our country make the necessary investments in basic and applied research to fuel the United States' economic competitiveness, strengthen our national security, and retain our position as a global leader in technology.

The NSF has played an integral role in America's innovation ecosystem, laying the groundwork for the development of a broad range of transformative technologies. A <u>study</u> published in 2019 in the journal *Science* shows that one-third of all U.S. patents since 1970 relied on government-funded research.¹ Yet the share of federally-funded research and development has been in steady decline since the 1960s.² According to the Information Technology and Innovation Foundation, ITIF, federal basic research has declined in 22 out of the past 28 years.³

³ *Id*.

¹ L. Fleming, H. Greene, G. Li, M. Marx, and D. Yao, Science *Government-Funded Research Increasingly Fuels Innovation*, Science Magazine (June 21, 2019), available at https://www.science.org/content/article/data-check-us-government-share-basic-research-funding-falls-below-50.

² Caleb Foote and Robert D. Atkinson, *Federal Support for R&D Continues its Ignominious Slide*, Information Technology and Innovation Foundation (Aug. 12, 2019), available at https://itif.org/publications/2019/08/12/federal-support-rd-continues-its-ignominious-slide/.

Additionally, the NSF plays a critical role in building a diverse and skilled workforce by providing support for underrepresented groups in science, technology, engineering, and mathematics (STEM) fields. The agency's investments in education and workforce development are essential to maintaining a highly skilled and diverse STEM workforce, which is critical to our nation's ability to compete in the global marketplace for the best talent.

As emerging technologies continue to evolve, the threat from malicious attacks continues to metastasize and global competition for technological supremacy grows. Underinvestment in basic research places the United States at risk of falling behind in critical areas of innovation and a declining share of intellectual property with potential long-term consequences for our economy, national security, and global standing. NSF programs like the Regional Innovation Engines, the National AI Research Resource (NAIRR), Secure and Trustworthy Cyberspace, Future of Artificial Intelligence and Emerging Frontiers in Research and Innovation fund the research needed to ensure our national security and protect our homeland, especially our nation's critical infrastructure.

To address these challenges, the CHIPs and Science Act doubled the NSF's budget, and we respectfully request that Congress meet this obligation. Increased funding for the NSF represents a strategic investment in America's future. By bolstering the resources available to the agency, we can drive innovation, create new industries and jobs, and maintain our nation's standing as a global leader in science and technology.

In FY 2024, Congress decreased NSF's budget by 9 percent. While the funding legislation made clear that Al-related programs would not be cut, Congress risks ceding US leadership in the next innovation wave, leaving our adversaries to export their technology and their values.

Congress made a decisive and clear statement when it passed the CHIPs and Science Act with broad bipartisan support. However, the potential that the Act represents threatens to go unrealized without the funding needed to fully implement your vision.















