**Task Force on American Innovation** 



Securing the future through research in the physical sciences and engineering

October 27, 2022

The Honorable Sethuraman Panchanathan Director National Science Foundation (NSF) 2415 Eisenhower Avenue Alexandria, Virginia 22314 The Honorable Shalanda D. Young Director Office of Management and Budget 725 17th Street NW Washington, DC 20503

Dear Director Panchanathan and Director Young:

As you continue to develop the Administration's Fiscal Year (FY) 2024 budget for the National Science Foundation (NSF), the Task Force on American Innovation (TFAI)—an alliance of industry, professional and scientific societies, and university organizations—strongly urges you to include funding at the levels authorized in the bipartisan NSF for the Future Act, passed as part of the bicameral CHIPS and Science Act of 2022. This level of investment is necessary to expand and accelerate American research and development in key focus areas where U.S. leadership is critical.

The mission of NSF is to promote the progress of science, secure the national defense, and to advance the nation's health, prosperity, and welfare. It is also the only agency that supports fundamental research in important fields like computer science, economics, engineering, mathematics, and geosciences. One out of every four basic research projects at higher learning institutions across the United States is supported by the NSF. Congress has increasingly and with bipartisan support affirmed the growing role of the NSF in advancing America's global competitiveness including with the establishment of the Directorate for Technology, Innovation, and Partnerships (TIP) to position NSF to drive innovation in industries and technologies of the future, such as quantum science, artificial intelligence, high performance computing and semiconductors, advanced materials, and advanced manufacturing.

The recent National Science Board report, "The State of U.S. Science and Engineering 2022" found many of our global competitors are increasing rapidly their investments in R&D, while the proportion of total U.S. R&D funded by the U.S. government is getting smaller. As a result, the U.S. lead in scientific output is being challenged, while the U.S. has already lost the lead in technology-intensive manufacturing. As such, we strongly recommend that the Administration request full funding for these ambitious NSF programs and advance American research and development.

Unfortunately, when America last authorized such robust investments in the original COMPETES legislation the financial follow-through did not materialize. Now more than ever, the United States needs robust and sustained funding in these areas to further strengthen the American STEM workforce, advance innovation, promote economic growth, and maintain national security.

The passage of the CHIPS and Science Act was a necessary first step and must be now followed with the significant investments it authorized. Thank you for your thoughtful consideration of this recommendation.

Sincerely,

The Task Force on American Innovation