

Ranking Member Zoe Lofgren (D-CA)

Subcommittee on Research and Technology Hearing: Oversight and Examination of the National Science Foundation's Priorities for 2025 and Beyond

May 16, 2024

Thank you, Chairman Collins, for holding today's hearing. Thank you Dr. Panchanathan and Dr. Reed for being here, and thank you for your service in helping to lead our country's scientific enterprise.

The National Science Foundation has a nearly 75-year history of scientific discovery and training that fuels our entire technology and innovation enterprise. NSF's sustained support of foundational research over decades is what has led to today's critical and emerging technologies, including artificial intelligence, biotechnology, quantum sciences, and fusion energy. Scientific innovations take time, and that's why the decisions we make here in this room are decisions made for our children and for future generations.

The National Science Board's recent report on The State of U.S. Science and Engineering 2024 is sobering and frank about our country's status relative to the rest of the world. America's global lead in R&D is rapidly shrinking. We need to be thoughtful and decisive about science funding, science education, and research security so that we continue to nurture a scientific ecosystem that trains, attracts, and retains the best talent. The funding environment for our nation's science agencies has been difficult for years. The fiscal year 2024 funding for NSF was an especially difficult blow. We must do better.

I will highlight just a few specific issues for this hearing. The CHIPS and Science Act —drafted and debated in this very room—created the historic Directorate for Technology, Innovations, and Partnerships, or TIP. Our goal was to catalyze use-inspired and translational research and partnerships. TIP can play a key role in NSF's mission to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. It is important the TIP Directorate be provided the resources to fulfill its potential to transform American innovation, rather than be kneecapped by Congress just a few years in. However, funding TIP must not come at the expense of the rest of NSF. I'd like to hear from the agency leadership how they are dealing with the cuts in FY 2024.

And since this week is Infrastructure Week, so I'd be remiss not to mention that, on top of the historic investments Congress has made in transportation, clean water, connectivity, and green energy, we must also be champions for our nation's scientific infrastructure. Earlier this month, the National Science and Technology Council's report on federal R&D infrastructure painted a

grim picture of 21st century R&D conducted in 1950's-era facilities. The same is true for our nation's universities. As scientific research questions get bigger and more complicated, so do the equipment and facilities needs. Budget cuts that lead to the delay or cancellation of large-scale projects can set back an entire generation of scientists within a discipline, and cede U.S. leadership in key fields. I would like to hear today about long-term strategic planning for NSF's slate of major and mid-scale infrastructure projects.

Finally, I applaud the work that the NSF has done in advancing artificial intelligence - in both fundamental research and as applied to other scientific disciplines, such as through the AI Research Institutes and the new National AI Research Resource Pilot. I also applaud the work NSF does in STEM education and inclusivity so that every American may have access to STEM opportunities and careers. Dr. Panchanathan and Dr. Reed, I look forward to hearing about your plans to continue these goals, and more broadly, I look forward to hearing about your vision for the future of American science. Thank you and I yield back.