

## Chairwoman Haley Stevens (D-MI) of the Subcommittee on Research and Technology

Research and Technology Subcommittee Hearing: National Science Foundation: Advancing Research for the Future of U.S. Innovation

## April 28, 2021

Good Morning. The hearing will come to order. Thank you all for joining our virtual hearing on examining the advancement of scientific research for the Future of U.S Innovation through the National Science Foundation. I am speaking to you today from the Oakland County Commission Chambers, a few short miles from Oakland University home of the School of Engineering and Computer Science and a proud recipient of over \$9 million NSF dollars that they are using for active projects for stem cell biology, cybersecurity capacity, and STEM education. It's just one snapshot of the incredible impact of the NSF through their \$8.5 billion budget.

Thank you Dr. Panchanathan and Dr. Ochoa for testifying today and for bringing your passion, expertise and dedication to the leading scientific research agency for the United States of America. And welcome virtually to all of today's participants to Oakland County, where we also proudly boast the world's largest robot at Fanuc a few short miles from my destination, where I sit in the hub of innovators and makers many that have benefitted or been connected to the work of NSF at one time or another.

I also welcome my colleagues – particularly Mike Waltz as the new Ranking Member of the Research and Technology Subcommittee. Mr. Waltz represents a corner of Florida and while most Michiganders are indeed familiar with Florida and the offerings of Daytona Beach, I'll still bet Mr. Waltz that we'll out innovate him nearly any day of the week.

Now – we have an enormous topic before us today and are preparing a rigorous effort to determine the course of how we will exercise the full weight of our scientific research agenda and continue to lead the world in terms of emerging technologies and economies of scale. We are here to examine, but also determine a course and a vision for a rapidly advancing future of the United States in the 21st century. We are of course awaiting the President's full budget, but his priorities are apparent: the proposed 20% increase to NSF's budget has the potential to unleash scientists and their students to study the changing climate and advance our nation's efforts in artificial intelligence, quantum computing, and so much more. Our hearing kicks off a series of

endeavors as we advocate and explore additional resources for the National Science Foundation and the U.S scientific enterprise.

We are also here to evaluate and move forward the NSF for the Future Act, which I am proud to cosponsor with Chairwoman Johnson, Ranking Member Lucas, Ranking Member Waltz, and several more of my Committee colleagues. This bill was developed over more than a year with close bipartisan collaboration and input from dozens of stakeholders, policy experts, and thought leaders. The NSF for the Future Act is a comprehensive reauthorization that prioritizes leveraging NSF's strengths and protecting its core mission. The legislation seeks to advance and scale up innovations in PreK-12 STEM education, ensure STEM students are prepared to enter the workforce, and train the next generation of researchers and innovators. A major focus of this bill is also accountability to the public. New requirements in the bill would address threats to research security and ensure researchers are thinking through the societal impacts of their work, while continuing to dominate on open source platforms and meet supply chain needs.

The NSF for the Future Act proposes a new Directorate for Science and Engineering Solutions. While technology plays a key role in the directorate, it is not the singular focus. Instead, the NSF for the Future Act charges NSF with engaging broadly with both traditional and nontraditional partners in academia, industry, civic organizations, and local communities and governments to identify myriad societal challenges that are ripe for research-driven solutions and form partnerships to pursue that research.

The reason we are pursuing this is that we have a need and opportunity to increase funding for basic and fundamental research. NSF is the only Federal science agency that supports fundamental research across all fields of science and engineering. Seventy years of investments in NSF have enabled the United States to lead the world in science and innovation, compete in the global economy, and protect the health and security of its citizens.

Our foreign competitors are on our mind, but they do not motivate and certainly they do not dictate our work. Our ingenuity, risk-adverse, freedom-touting market economy with checks for equal opportunity and buy-in for all has and will continue to lead a compelling and desirable economic prowess.