



COMMITTEE ON

SCIENCE, SPACE, AND TECHNOLOGY

REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Ranking Member Frank Lucas

“Subcommittee on Research and Technology Hearing – “National Science Foundation: Advancing Research for the Future of U.S. Innovation Part II”

April 6, 2021

Thank you, Chairwoman Stevens and Ranking Member Waltz, for holding today’s hearing on the future of the National Science Foundation. And thank you to our witnesses for being here. The input of experts like you in this process is essential as we determine the future of the American research enterprise.

We are at a critical moment in our nation’s history. The world is facing a new technological revolution. Advances in artificial intelligence, quantum technology, biotechnology, and space exploration are quickly creating the industries and jobs of the future.

The United States led the way in technological development last century, but our continued global leadership is not assured. I believe that the nation that leads in science and technology will shape the world order for the next century. I’d like that nation to be ours, and I’d like for emerging technologies to be developed with our values of transparency and fairness.

The question we face is how we grow our nation’s research enterprise to meet these challenges. I would argue there is a right way and a wrong way to invest in American competitiveness. The Chinese Communist Party has been working to steal – literally and figuratively - the U.S. playbook for innovation for years. We don’t need to steal theirs. China has been dumping billions of dollars into applied R&D, but has not yet achieved the breakthrough innovations and commercial applications you would expect from all of that investment. Simply put, they’ve demonstrated that centralized, top-down technology spending does not work.

That’s why last year I first introduced the Securing American Leadership in Science and Technology Act, or SALSTA. SALSTA doubles down on what has proven to work over the last 40 years in making the U.S. the global leader in innovation. And it sets us up for success through a National S&T Strategy and improved technology transfer from federal labs to the commercial sector.

Each player in federal R&D, from the basic research funded by NSF to DOE and NIST's work with industry, has an important role in advancing innovation. SALSTA recognizes the strength of the U.S. innovation ecosystem and doesn't break it apart by creating something shiny and new like other proposals being considered in the Senate.

For the last year, our Committee has been working on a bipartisan basis to look at how we can grow and evolve NSF to meet the national and societal challenges of the 21st Century. After many discussions with stakeholders and experts, I was proud to join Chairwoman Johnson, Chairwoman Stevens, and Ranking Member Waltz in introducing the NSF for the Future Act.

Our bill doubles basic research funding at NSF over the next 5 years and preserves what makes NSF great, while also enhancing NSF's role in moving research from lab to market. Our bill takes a comprehensive approach to reauthorizing NSF, including building a domestic STEM workforce and investing in research infrastructure. The bill also creates a new directorate of NSF that will be focused on science and engineering solutions. The new directorate aims to take the fundamental research funded by NSF and help apply those discoveries to solving national challenges from cybersecurity to climate change.

The new proposed directorate does not duplicate or seek to replace the missions of other research agencies, but instead accelerates the development of NSF funded research for private sector development and commercialization.

As I have said before, we have a unique window of opportunity before us. There is broad, bipartisan agreement that we need to prioritize investment in American research. I believe that if House and Senate leadership give the Committees of jurisdiction the opportunity, we can seize this momentum and pass meaningful legislation that will meet the moment.

Some have called this a new Sputnik moment. As we consider legislation, we must consider the lessons of the space race. That period saw tremendous growth in science and technology and created a generation of scientists and engineers. But when the Cold War was over, research funding stagnated. We must avoid creating a situation of feast and famine for our research enterprise. Whatever shape our final legislative package takes, it should be comprehensive, strategic, and sustainable. I look forward to working with my colleagues through this process to ensure we achieve those goals.

Again, I want to thank our witnesses for their input today. I look forward to your testimony.