Statement by Chairman Lamar Smith (R-Texas)
An Overview of the National Science Foundation Budget Proposal for Fiscal Year 2019

Chairman Smith: Today we welcome Dr. France Córdova, the director of the National Science Foundation (NSF) and Dr. Maria Zuber, chair of the National Science Board, to testify about the administration’s budget request and funding priorities for the NSF in Fiscal Year 2019.

Since its creation in 1950, the National Science Foundation’s mission has been to promote fundamental scientific discovery. The NSF is the only federal agency that supports basic research across all scientific fields, including research in areas like national security, energy, quantum technology, biotechnology, STEM education and cybersecurity.

Through competitive grants, the NSF funds more than 360,000 scientists, engineers and students across the country, which help make the United States a world leader in knowledge and innovation.

The committee finished the last Congress by completing work on the American Innovation and Competitiveness Act, authorizing some of the NSF’s activities – including work on STEM education and high-performance computing.

The law made permanent transparency and accountability policies that require the NSF to describe the research projects it funds in non-technical terms.

The law also improved the NSF grant-making process, affirming that research funded through the merit-review selection process must be in the national interest.

I want to recognize Dr. Córdova for the steps the NSF has taken to improve accountability over the last three years, and acknowledge Dr. Zuber’s work on behalf of the National Science Board as well.

I have been critical of the NSF for funding too many projects that seem marginal or frivolous. When the NSF spent $700,000 on a Climate Change Musical or $1.5 million to study pasture management in Mongolia, it reduced investments in projects that could yield groundbreaking new knowledge and discoveries.
I believe there has been improvement but challenges remain. I am concerned that there are still too many projects being funded in the social, behavioral and economic sciences that are not worthy of taxpayers’ dollars.

In the past year the NSF has spent:

- $310,000 to study congressional “Dear Colleague” letters
- $450,000 to study why there is no single English word for “light blue”
- $330,000 to study cell phone use by Tanzanian women
- $138,000 to study monkey responses to “inequity and violated expectation”
- $217,000 to document a language spoken in two villages of northern Pakistan
- $75,000 to “produce a description of Maku,” an extinct Amazon language

Social-behavioral science can help solve some complex problems that touch several areas of science. For instance, protecting computers and computer networks from hackers requires research in both computer and behavioral science.

But when only one out of five requests for grants is being funded, there must be priorities. We cannot afford to misspend another dollar on low-priority or frivolous activities. Simply put, the NSF should fund useful research over the useless.

China now has the world’s fastest supercomputer and has just passed the U.S. for the first time to lead the world in the number and total performance of supercomputers.

China is also making rapid progress in artificial intelligence, quantum computing, human genome editing and other crucial areas of science and technology.

Unfortunately, as China leaps forward, the U.S. is slowing down investment in key areas of basic research like physics and computing. This will not change unless taxpayers’ money is better invested.

I am also concerned about whether or not the NSF is developing its STEM workforce programs to meet the needs of our economy.

The United States continues to lag significantly behind China and the European Union in science and engineering bachelor’s degrees, with China producing more than twice the number of STEM undergraduates. In the physical and biological sciences, China produces four times more undergraduates in those fields than the U.S.

The NSF plays a critical role in helping educate and train the next generation of STEM workers. We need to invest in young people who will go into fields where there is a national need and good paying jobs.

Now that there is a two-year budget agreement in place, we have an opportunity to reauthorize the science agencies under our committee’s jurisdiction, including the NSF, to rebalance priorities and ensure that our nation’s science agencies are on a trajectory to keep America at the forefront of scientific knowledge and discovery.
This committee has demonstrated there is broad support for basic and fundamental research and STEM education. Twenty of the 22 bills the Science, Space, and Technology Committee has brought to the House floor this Congress have been bipartisan pieces of legislation.

We are committed to maintaining America's leadership in science, thereby ensuring future economic prosperity.

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