Congresswoman Jacky Rosen (NV-03)
Member Day Testimony
Commerce, Justice, Science, and Related Agencies Subcommittee
House Appropriations Committee
April 16, 2018

Chairman Culberson, Ranking Member Serrano, and Members of the Commerce, Justice, Science, and Related Agencies Subcommittee – thank you for the opportunity to submit written testimony for the record in support of STEM programs at the National Science Foundation (NSF).

As a former systems analyst, I know that STEM and computer science are central to our country's economic growth, employment, and commitment to innovation. In Nevada and across the country, we are continuing to see a huge demand for workers in STEM fields, with software developers, mathematicians, and health aides among the fastest growing occupations. Many Nevada businesses are facing a worker shortage, unable to find the talent they need to continue to grow the local economy.

That is why my top two requests in the Fiscal Year 2019 Commerce, Justice, Science, and Related Agencies Appropriations bill are:

1. Fully funding NSF's Computer and Information Science and Engineering (CISE) research directorate
2. Ensuring that NSF focuses on engaging our nation's children in STEM education as early as possible.

CISE supports research in computing, communications, information science, and engineering. Through their NSF-supported work, our nation's scientists have been able to develop innovative solutions in energy, advanced manufacturing, national security, healthcare, and personal communications.

CISE also provides advanced cyberinfrastructure for all areas of science and engineering, and it contributes to the education and training of computer engineers - ensuring our future generations are well-equipped with the skills they need in an increasingly competitive global market.

In order for our workforce to continue to push the boundaries, we must invest in research and training programs at NSF. CISE is particularly important because it provides funding for cutting-edge computing and information science research – which is critical to innovation in nearly all lines of work from business to government.

Another successful NSF program is the Discovery Research PreK-12 program, which seeks to enhance the learning and teaching of STEM and address the immediate challenges that are facing PreK-12 STEM education. However, the majority of its current research focuses on students in middle school and older.

Studies have found that children who engage in scientific activities from an early age develop positive attitudes toward science and are more likely to pursue STEM careers later on. In fact, interviews with current graduate students and scientists found that the majority of them reported that their interest in science began before middle school.

That is why I urge this subcommittee to include language in your appropriations bill to direct NSF to consider age distribution when awarding Discovery Research PreK-12 grants, in order to more equitably allocate funding for research on early childhood. Since having access to hands-on STEM experiences as early as possible is important for continued interest, including this language below will ensure that NSF focuses on engaging our nation's children in STEM education even younger.

Members already expressed their strong support for such a policy when similar language unanimously passed the House as part of my bipartisan Building Blocks of STEM Act (H.R. 3397), which is now awaiting action in the Senate.

Thank you for your consideration of these proposals to make greater investments in STEM and help us meet the demands of our 21st century economy.

Sincerely,

Jacky Rosen
Member of Congress