Directors of NSF and NIST testify regarding progress on implementing the American Innovation and Competitiveness Act

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On January 30, the Senate Committee on Commerce, Science, and Transportation held a hearing entitled “One Year Later: The American Innovation and Competitiveness Act.” One of the last bills President Barack Obama signed into law before his term ended (Public Law 114-329), the American Innovation and Competitiveness Act (AICA) was the most comprehensive science and technology policy legislation to be enacted since the America COMPETES Acts of 2007 and 2010. The AICA reauthorized and updated policies at the National Science Foundation (NSF), the National Institute of Standards and Technology (NIST), the White House Office of Science and Technology Policy (OSTP), and other federal science agencies. At the hearing, co-sponsors of the bill, Senators Cory Gardner (R-CO), Gary Peters (D-MI), John Thune (R-SD), and Bill Nelson (D-FL), reflected upon the American scientific enterprise and questioned the Director of NSF, Dr. France Córdova, and the Director of NIST, Dr. Walter Copan, about progress made by the agencies to implement the AICA.

In her testimony, Dr. Córdova highlighted NSF’s efforts to carry out the provisions of AICA by increasing transparency and accountability in the merit review process, appointing the agency’s first Chief Officer for Research Facilities, determining community needs for mid-scale research infrastructure, establishing a STEM education advisory council, and expanding NSF’s Innovation Corps (I-Corps). On a similar note, Dr. Copan emphasized NIST’s commitment to improve cyber security, boost commercial and industrial applications, and increase effectiveness of the Hollings Manufacturing Extension Partnership. In regard to laboratory program improvements, NIST will focus on emerging technology, including the Internet of Things, artificial intelligence, and the future bioeconomy. The AICA also instructs the Director of OSTP to carry out provisions of the act including reduction of administrative and regulatory burdens of federally funded researchers. Senator Maggie Hassan (D-NH) expressed her displeasure that there was no OSTP witness to testify as President Trump has yet to appoint a Director or Associate Directors for OSTP.

Senators Gardner and Peters noted that these are the most fascinating times for science, considering the major scientific breakthroughs in recent years, while also acknowledging the fierce international competition that underscores the need for a robust increase in NSF and NIST funding. Dr. Córdova highlighted that NSF supported all of the eight American Nobel Prize winners in 2017, including work that led to the discovery of gravitational waves through NSF’s LIGO program, which has been supported by Congress for the past 40 years. While the U.S. continues to function as a global leader in many areas of science and engineering, lawmakers at the hearing expressed concern over China’s ambitious investment in research and development funding, which has reached 21 percent of global total in 2015, according to the recent National Science Board’s biennial Science and Engineering Indicators report. When asked how limited budgets and continuing resolutions affect science agencies, the directors stated that budget restraints provide more ways to leverage private and agency partnerships, while shutdowns cause major disruptions for agency planning, travel, review panels, and visiting research.

Sources: Library of Congress; National Science Foundation; U.S. Senate Committee on Commerce, Science, and Transportation