Innovative

through Advancing Neurotechnologies Initiative.

(b) Sense of Congress

It is the sense of Congress that the Foundation should work in conjunction with the Interagency Working Group on Neuroscience established by the National Science and Technology Council, Committee on Science to determine how to use the data infrastructure of the Foundation and other applicable Federal science agencies to help neuroscientists collect, standardize, manage, and analyze the large amounts of data that result from research attempting to understand how the brain functions.

(Pub. L. 114-329, title I, §117, Jan. 6, 2017, 130 Stat. 2995.)

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 114-329, set out as a note under section 1862s of this title.

§1862s-5. Programs to expand STEM opportunities

(a) Findings

Congress makes the following findings:

(1) Economic projections by the Bureau of Labor Statistics indicate that by 2018, there could be 2,400,000 unfilled STEM jobs.

(2) Women represent slightly more than half the United States population, and projections indicate that 54 percent of the population will be a member of a racial or ethnic minority group by 2050.

(3) Despite representing half the population, women comprise only about 30 percent of STEM workers according to a 2015 report by the National Center for Science and Engineering Statistics.

(4) A 2014 National Center for Education Statistics study found that underrepresented populations leave the STEM fields at higher rates than their counterparts.

(5) The representation of women in STEM drops significantly at the faculty level. Overall, women hold only 25 percent of all tenured and tenure-track positions and 17 percent of full professor positions in STEM fields in our Nation's universities and 4-year colleges.

(6) Black and Hispanic faculty together hold about 6.5 percent of all tenured and tenuretrack positions and 5 percent of full professor positions.

(7) Many of the numbers in the American Indian or Alaskan Native and Native Hawaiian or Other Pacific Islander categories for different faculty ranks were too small for the Foundation to report publicly without potentially compromising confidential information about the individuals being surveyed.

(b) Sense of Congress

It is the sense of Congress that—

(1) it is critical to our Nation's economic leadership and global competitiveness that the

United States educate, train, and retain more scientists, engineers, and computer scientists;

(2) there is currently a disconnect between the availability of and growing demand for STEM-skilled workers;

(3) historically, underrepresented populations are the largest untapped STEM talent pools in the United States; and

(4) given the shifting demographic landscape, the United States should encourage full participation of individuals from underrepresented populations in STEM fields.

(c) Reaffirmation

The Director of the Foundation shall continue to support programs designed to broaden participation of underrepresented populations in STEM fields.

(d) Grants to broaden participation

(1) In general

The Director of the Foundation shall award grants on a competitive, merit-reviewed basis, to eligible entities to increase the participation of underrepresented populations in STEM fields, including individuals identified in section 1885a or section 1885b of this title.

(2) Center of excellence

(A) In general

Grants awarded under this subsection may include grants for the establishment of a Center of Excellence to collect, maintain, and disseminate information to increase participation of underrepresented populations in STEM fields.

(B) Purpose

The purpose of a Center of Excellence under this subsection is to promote diversity in STEM fields by building on the success of the INCLUDES programs, providing technical assistance, maintaining best practices, and providing related training at federally funded academic institutions.

(e) Accountability and dissemination

(1) Evaluation

(A) In general

Not later than 5 years after January 6, 2017, the Director of the Foundation shall evaluate the grants provided under this section.

(B) Requirements

In conducting the evaluation under subparagraph (A), the Director shall—

(i) use a common set of benchmarks and assessment tools to identify best practices and materials developed or demonstrated by the research; and

(ii) to the extent practicable, combine the research resulting from the grant activity under subsection (e) with the current research on serving underrepresented students in grades kindergarten through 8.

(2) Report on evaluations

Not later than 180 days after the completion of the evaluation under paragraph (1), the Director of the Foundation shall submit to the appropriate committees of Congress and make widely available to the public a report that includes—

(A) the results of the evaluation; and

(B) any recommendations for administrative and legislative action that could optimize the effectiveness of the program.

(f) Coordination

In carrying out this section, the Director of the Foundation shall consult and cooperate with the programs and policies of other relevant Federal agencies to avoid duplication with and enhance the effectiveness of the program under this section.

(Pub. L. 114-329, title III, §305, Jan. 6, 2017, 130 Stat. 3007.)

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 114-329, set out as a note under section 1862s of this title.

§1862s-6. Presidential awards for excellence in STEM mentoring

(a) In general

The Director of the Foundation shall continue to administer awards on behalf of the Office of Science and Technology Policy to recognize outstanding mentoring in STEM fields.

(b) Annual award recipients

The Director of the Foundation shall provide Congress with a list of award recipients, including the name, institution, and a brief synopsis of the impact of the mentoring efforts.

(Pub. L. 114-329, title III, §307, Jan. 6, 2017, 130 Stat. 3010.)

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 114-329, set out as a note under section 1862s of this title.

§1862s-7. Computer science education research

(a) Findings

Congress finds that as the lead Federal agency for building the research knowledge base for computer science education, the Foundation is well positioned to make investments that will accelerate ongoing efforts to enable rigorous and engaging computer science throughout the Nation as an integral part of STEM education.

(b) Grant program

(1) In general

The Director of the Foundation shall award grants to eligible entities to research computer science education and computational thinking.

(2) Research

The research described in paragraph (1) may include the development or adaptation, piloting or full implementation, and testing of—

(A) models of preservice preparation for teachers who will teach computer science and computational thinking;

(B) scalable and sustainable models of professional development and ongoing support for the teachers described in subparagraph (A);

(C) tools and models for teaching and learning aimed at supporting student success and inclusion in computing within and across diverse populations, particularly poor, rural, and tribal populations and other populations that have been historically underrepresented in computer science and STEM fields; and

(D) high-quality learning opportunities for teaching computer science and, especially in poor, rural, or tribal schools at the elementary school and middle school levels, for integrating computational thinking into STEM teaching and learning.

(c) Collaborations

In carrying out the grants established in subsection (b), eligible entities may collaborate and partner with local or remote schools to support the integration of computing and computational thinking within pre-kindergarten through grade 12 STEM curricula and instruction.

(d) Metrics

The Director of the Foundation shall develop metrics to measure the success of the grant program funded under this section in achieving program goals.

(e) Report

The Director of the Foundation shall report, in the annual budget submission to Congress, on the success of the program as measured by the metrics in subsection (d).

(f) Definition of eligible entity

In this section, the term "eligible entity" means an institution of higher education or a nonprofit research organization.

(Pub. L. 114-329, title III, §310, Jan. 6, 2017, 130 Stat. 3012.)

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 114-329, set out as a note under section 1862s of this title.

§1862s-8. Innovation Corps

(a) Findings

Congress makes the following findings:

(1) The National Science Foundation Innovation Corps (referred to in this section as the "I-Corps") was established to foster a national innovation ecosystem by encouraging institutions, scientists, engineers, and entrepreneurs