

REFERENCES IN TEXT

The National Science Foundation Act of 1950, referred to in subsec. (a)(1), is act May 10, 1950, ch. 171, 64 Stat. 149, which is classified generally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 1861 of this title and Tables.

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, 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 502 of Pub. L. 111–358, set out as a note under section 1862p of this title.

§ 1862p–10. Academic technology transfer and commercialization of university research

(a) In general

Any institution of higher education (as such term is defined in section 1001(a)¹ of title 20) that receives National Science Foundation research support and has received at least \$25,000,000 in total Federal research grants in the most recent fiscal year shall keep, maintain, and report annually to the National Science Foundation the universal record locator for a public website that contains information concerning its general approach to and mechanisms for transfer of technology and the commercialization of research results, including—

- (1) contact information for individuals and university offices responsible for technology transfer and commercialization;
- (2) information for both university researchers and industry on the institution's technology licensing and commercialization strategies;
- (3) success stories, statistics, and examples of how the university supports commercialization of research results;
- (4) technologies available for licensing by the university where appropriate; and
- (5) any other information deemed by the institution to be helpful to companies with the potential to commercialize university inventions.

(b) NSF website

The National Science Foundation shall create and maintain a website accessible to the public that links to each website mentioned under (a).

(c) Trade secret information

Notwithstanding subsection (a), an institution shall not be required to reveal confidential, trade secret, or proprietary information on its website.

(Pub. L. 111–358, title V, §520, Jan. 4, 2011, 124 Stat. 4016.)

REFERENCES IN TEXT

Section 1001(a) of title 20, referred to in subsec. (a), was in the original “section 101(A) of the Higher Edu-

¹ See References in Text note below.

cation Act of 1965 (20 U.S.C. 1001(a))”, and was translated as reading “section 101(a)” of that Act, to reflect the probable intent of Congress.

CODIFICATION

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§ 1862p–11. NSF grants in support of sponsored post-doctoral fellowship programs

The Director of the National Science Foundation may utilize funds appropriated to carry out grants to institutions of higher education (as such term is defined in section 1001(a) of title 20) to provide financial support for post-graduate research in fields with potential commercial applications to match, in whole or in part, any private sector grant of financial assistance to any post-doctoral program in such a field of study.

(Pub. L. 111–358, title V, §522, Jan. 4, 2011, 124 Stat. 4017.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

§ 1862p–12. Cloud computing research enhancement

(a) Research focus area

The Director may support a national research agenda in key areas affected by the increased use of public and private cloud computing, including—

- (1) new approaches, techniques, technologies, and tools for—
 - (A) optimizing the effectiveness and efficiency of cloud computing environments; and
 - (B) mitigating security, identity, privacy, reliability, and manageability risks in cloud-based environments, including as they differ from traditional data centers;

(2) new algorithms and technologies to define, assess, and establish large-scale, trustworthy, cloud-based infrastructures;

(3) models and advanced technologies to measure, assess, report, and understand the performance, reliability, energy consumption, and other characteristics of complex cloud environments; and

(4) advanced security technologies to protect sensitive or proprietary information in global-scale cloud environments.

(b) Establishment

(1) In general

Not later than 60 days after January 4, 2011, the Director shall initiate a review and assessment of cloud computing research opportuni-

ties and challenges, including research areas listed in subsection (a), as well as related issues such as—

(A) the management and assurance of data that are the subject of Federal laws and regulations in cloud computing environments, which laws and regulations exist on January 4, 2011;

(B) misappropriation of cloud services, piracy through cloud technologies, and other threats to the integrity of cloud services;

(C) areas of advanced technology needed to enable trusted communications, processing, and storage; and

(D) other areas of focus determined appropriate by the Director.

(2) Unsolicited proposals

The Director may accept unsolicited proposals that review and assess the issues described in paragraph (1). The proposals may be judged according to existing criteria of the National Science Foundation.

(c) Report

The Director shall provide an annual report for not less than 5 consecutive years to Congress on the outcomes of National Science Foundation investments in cloud computing research, recommendations for research focus and program improvements, or other related recommendations. The reports, including any interim findings or recommendations, shall be made publicly available on the website of the National Science Foundation.

(d) NIST support

The Director of the National Institute of Standards and Technology shall—

(1) collaborate with industry in the development of standards supporting trusted cloud computing infrastructures, metrics, interoperability, and assurance; and

(2) support standards development with the intent of supporting common goals.

(Pub. L. 111-358, title V, §524, Jan. 4, 2011, 124 Stat. 4018.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, 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 502 of Pub. L. 111-358, set out as a note under section 1862p of this title.

§ 1862p-13. Tribal colleges and universities program

(a) In general

The Director shall continue to support a program to award grants on a competitive, merit-reviewed basis to tribal colleges and universities (as defined in section 1059c of title 20, including institutions described in section 1059d of title 20), to enhance the quality of undergraduate

STEM education at such institutions and to increase the retention and graduation rates of Native American students pursuing associate's or baccalaureate degrees in STEM.

(b) Program components

Grants awarded under this section shall support—

(1) activities to improve courses and curriculum in STEM;

(2) faculty development;

(3) stipends for undergraduate students participating in research; and

(4) other activities consistent with subsection (a), as determined by the Director.

(c) Instrumentation

Funding provided under this section may be used for laboratory equipment and materials.

(Pub. L. 111-358, title V, §525, Jan. 4, 2011, 124 Stat. 4019.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, 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. 111-358, set out as a note under section 6621 of this title, and section 502 of Pub. L. 111-358, set out as a note under section 1862p of this title.

§ 1862p-14. Broader Impacts Review Criterion

(a) Goals

The Foundation shall apply a Broader Impacts Review Criterion to achieve the following goals:

(1) Increased economic competitiveness of the United States.

(2) Development of a globally competitive STEM workforce.

(3) Increased participation of women and underrepresented minorities in STEM.

(4) Increased partnerships between academia and industry.

(5) Improved pre-K-12 STEM education and teacher development.

(6) Improved undergraduate STEM education.

(7) Increased public scientific literacy.

(8) Increased national security.

(b) Policy

Not later than 6 months after January 4, 2011, the Director shall develop and implement a policy for the Broader Impacts Review Criterion that—

(1) provides for educating professional staff at the Foundation, merit review panels, and applicants for Foundation research grants on the policy developed under this subsection;

(2) clarifies that the activities of grant recipients undertaken to satisfy the Broader Impacts Review Criterion shall—

(A) to the extent practicable employ proven strategies and models and draw on existing programs and activities; and