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 Education 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

Section was enacted as part of the America COM-PETES 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-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 COM-PETES 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 globalscale 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 opportunities 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—