part of the National Science Foundation  $\operatorname{Act}$  of 1950 which comprises this chapter.

Amendments

2017—Subsec. (c). Pub. L. 114–329 struck out subsec. (c) which related to reports to Congress.

#### DEFINITIONS

For definitions of terms used in this section, see section 7001 of Pub. L. 110-69, set out as a note under section 1862o of this title.

# §18620-5. Meeting critical national science needs

#### (a) In general

In addition to any other criteria, the Director shall include consideration of the degree to which awards and research activities that otherwise qualify for support by the Foundation may assist in meeting critical national needs in innovation, competitiveness, safety and security, the physical and natural sciences, technology, engineering, social sciences, and mathematics.

## (b) Priority treatment

The Director shall give priority in the selection of awards and the allocation of Foundation resources to proposed research activities, and grants funded under the Foundation's Research and Related Activities Account, that can be expected to make contributions in physical or natural science, technology, engineering, social sciences, or mathematics, or that enhance competitiveness, innovation, or safety and security in the United States.

## (c) Limitation

Nothing in this section shall be construed to restrict or bias the grant selection process against funding other areas of research deemed by the Foundation to be consistent with its mandate nor to change the core mission of the Foundation.

(Pub. L. 110-69, title VII, §7018, Aug. 9, 2007, 121 Stat. 684.)

### CODIFICATION

Section was enacted as part of the America COM-PETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science 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 7001 of Pub. L. 110-69, set out as a note under section 1862*o* of this title.

## §18620-6. Research on innovation and inventiveness

In carrying out its research programs on science policy and on the science of learning, the Foundation may support research on the process of innovation and the teaching of inventiveness.

(Pub. L. 110-69, title VII, §7019, Aug. 9, 2007, 121 Stat. 684.)

#### CODIFICATION

Section was enacted as part of the America COM-PETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science 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 7001 of Pub. L. 110-69, set out as a note under section 1862o of this title.

# §18620-7. Cyberinfrastructure

In order to continue and expand efforts to ensure that research institutions throughout the Nation can fully participate in research programs of the Foundation and collaborate with colleagues throughout the Nation, the Director, not later than 180 days after August 9, 2007, shall develop and publish a plan that—

(1) describes the current status of broadband access for scientific research purposes at institutions in EPSCoR-eligible States, at institutions in rural areas, and at minority serving institutions; and

(2) outlines actions that can be taken to ensure that such connections are available to enable participation in those Foundation programs that rely heavily on high-speed networking and collaborations across institutions and regions.

(Pub. L. 110-69, title VII, §7020, Aug. 9, 2007, 121 Stat. 685.)

### CODIFICATION

Section was enacted as part of the America COM-PETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science 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 7001 of Pub. L. 110-69, set out as a note under section 18620 of this title.

## §18620-8. Pilot program of grants for new investigators

### (a) In general

The Director shall carry out a pilot program to award 1-year grants to individuals to assist them in improving research proposals that were previously submitted to the Foundation but not selected for funding.

## (b) Eligibility

To be eligible to receive a grant under this section, an individual—

(1) may not have previously received funding as the principal investigator of a research grant from the Foundation; and

(2) shall have submitted a proposal to the Foundation, which may include a proposal submitted to the Research in Undergraduate Institutions program, that was rated excellent under the Foundation's competitive merit review process.

### (c) Selection process

The Director shall make awards under this section based on the advice of the program officers of the Foundation.

#### (d) Use of funds

Grants awarded under this section shall be used to enable an individual to resubmit an updated research proposal for review by the Foundation through the agency's competitive merit review process. Uses of funds made available under this section may include the generation of new data and the performance of additional analysis.

## (e) Program administration

The Director shall carry out this section through the Small Grants for Exploratory Research program.

# (f) National Science Board review

The Board shall conduct a review and assessment of the pilot program under this section, including the number of new investigators funded, the distribution of awards by type of institution of higher education, and the success rate upon resubmittal of proposals by new investigators funded through such pilot program. Not later than 3 years after August 9, 2007, the Board shall summarize its findings and any recommendations regarding changes to, the termination of, or the continuation of the pilot program in a report to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation and the Committee on Health, Education, Labor, and Pensions of the Senate.

(Pub. L. 110-69, title VII, §7021, Aug. 9, 2007, 121 Stat. 685.)

### CODIFICATION

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

#### CHANGE OF NAME

Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

## DEFINITIONS

For definitions of terms used in this section, see section 7001 of Pub. L. 110-69, set out as a note under section 18620 of this title.

## §18620-9. Broader impacts merit review criterion

# (a) In general

Among the types of activities that the Foundation shall consider as appropriate for meeting the requirements of its broader impacts criterion for the evaluation of research proposals are partnerships between academic researchers and industrial scientists and engineers that address research areas identified as having high importance for future national economic competitiveness, such as nanotechnology.

## (b) Report on broader impacts criterion

Not later than 1 year after August 9, 2007, the Director shall transmit to Congress a report on the impact of the broader impacts grant criterion used by the Foundation. The report shall—

(1) identify the criteria that each division and directorate of the Foundation uses to evaluate the broader impacts aspects of research proposals;

(2) provide a breakdown of the types of activities by division that awardees have proposed to carry out to meet the broader impacts criterion;

(3) provide any evaluations performed by the Foundation to assess the degree to which the broader impacts aspects of research proposals were carried out and how effective they have been at meeting the goals described in the research proposals;

(4) describe what national goals, such as improving undergraduate science, technology, engineering, and mathematics education, improving kindergarten through grade 12 science and mathematics education, promoting university-industry collaboration, and broadening participation of underrepresented groups, the broader impacts criterion is best suited to promote; and

(5) describe what steps the Foundation is taking and should take to use the broader impacts criterion to improve undergraduate science, technology, engineering, and mathematics education.

(Pub. L. 110-69, title VII, §7022, Aug. 9, 2007, 121 Stat. 686.)

#### CODIFICATION

Section was enacted as part of the America COM-PETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science 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 7001 of Pub. L. 110-69, set out as a note under section 18620 of this title.

## §1862o-10. Advanced information and communications technology research

## (1) In general

As part of the Program described in title I of the High-Performance Computing Act of 1991 (15 U.S.C. 5511 et seq.), the Foundation shall support basic research related to advanced information and communications technologies that will contribute to enhancing or facilitating the availability and affordability of advanced communications services for all people of the United States. Areas of research to be supported may include research on—

(A) affordable broadband access, including wireless technologies;

- (B) network security and reliability;
- (C) communications interoperability;
- (D) networking protocols and architectures,
- including resilience to outages or attacks;
  - (E) trusted software;
  - (F) privacy;

(G) nanoelectronics for communications applications;

(H) low-power communications electronics;

(I) implementation of equitable access to national advanced fiber optic research and educational networks in noncontiguous States; and

(J) such other related areas as the Director finds appropriate.