Section 1857h-3, as added July 14, 1955, ch. 360, title III, §305, as added Dec. 31, 1970, Pub. L. 91-604, §12(a), 84 Stat. 1707, which related to legal representation of the Administrator and appearance by the Attorney General, was transferred to section 7605 of this title.

Section 1857h-4, as added July 14, 1955, ch. 360, title III, §306, as added Dec. 31, 1970, Pub. L. 91-604, §12(a), 84 Stat. 1705, which related to Federal procurement, was transferred to section 7606 of this title.


Section 1857h-6, as added July 4, 1955, ch. 360, title III, §308, as added Dec. 31, 1970, Pub. L. 91-604, §12(a), 84 Stat. 1708, which related to mandatory licensing, was transferred to section 7609 of this title.

Section 1857h-7, as added July 14, 1955, ch. 360, title III, §309, as added Dec. 31, 1970, Pub. L. 91-604, §12(a), 84 Stat. 1709, which related to policy review, was transferred to section 7609 of this title.


SUBCHAPTER IV—NOISE POLLUTION

§§ 1858, 1858a. Transferred

CHAPTER 16—NATIONAL SCIENCE FOUNDATION

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§ 1861. Establishment; composition

There is established in the executive branch of the Government an independent agency to be known as the National Science Foundation (hereinafter referred to as the "Foundation"). The Foundation shall consist of a National Science Board (hereinafter referred to as the "Board") and a Director.

(May 10, 1950, ch. 171, §2, 64 Stat. 149.)

SHORT TITLE OF 2011 AMENDMENT

Pub. L. 111–358, §1(a), Jan. 4, 2011, 124 Stat. 3962, provided that: "this [probably should be 'This'] Act [see Tables for classification] may be cited as the 'America COMPETES Reauthorization Act of 2010' or the 'America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010'."

SHORT TITLE OF 2002 AMENDMENT

Pub. L. 107–368, §1, Dec. 19, 2002, 116 Stat. 3034, provided that: "This Act [enacting sections 1862q to 1862t–10 of this title, amending sections 1862c, 1862f, 1863, 1865, and 1869a of this title, and enacting provisions set out as notes under sections 1862b, 1862d, 1862e, 1864, and 1868c of this title, and amending provisions set out as notes under sections 1862q and 1869 of this title] may be cited as the 'National Science Foundation Authorization Act of 2002'."

SHORT TITLE OF 1998 AMENDMENT


SHORT TITLE OF 1992 AMENDMENT


SHORT TITLE OF 1988 AMENDMENTS

Pub. L. 100–570, §1, Oct. 31, 1988, 102 Stat. 2865, provided that: "This Act [enacting sections 1862c to 1862r, 1864, and 1865 of this title, amending sections 1863, 1866, and 1867 of this title, and enacting provisions set out as notes under sections 1862q and 1868c of this title] may be cited as the 'National Science Foundation Authorization Act of 1988'."

Pub. L. 100–570, title II, §201, Oct. 31, 1988, 102 Stat. 2873, provided that: "This title [enacting sections 1862a to 1862d of this title, repealing former sections 1862a and 1862b of this title, and repealing provisions set out as notes under section 1861 of this title] may be cited as the 'Academic Research Facilities Modernization Act of 1988'."
of this title, was to be cited as the "National Science Foundation University Infrastructure Act of 1988", was repealed by Pub. L. 100–570, title II, §206, Oct. 31, 1988, 102 Stat. 2678.

**SHORT TITLE OF 1986 AMENDMENT**

Pub. L. 99–383, §1, Aug. 21, 1986, 100 Stat. 813, provided: "That this Act [amending sections 1862, 1864a, 1869, and 1870 of this title and section 5316 of Title 5, Government Organization and Employees, repealing sections 1876 to 1879 of this title, and enacting provisions set out as notes under sections 1885a and 6614 of this title] may be cited as the 'National Science Foundation Authorization Act for Fiscal Year 1987'."

**SHORT TITLE OF 1985 AMENDMENT**

Pub. L. 99–159, title I, §101, Nov. 22, 1985, 99 Stat. 887, provided: "That this Act [enacting section 1886 of this title, amending sections 1862, 1863, 1864, 1868 to 1872, 1873, 1874, 1881a, 1882, and 1885 to 1885d of this title, repealing sections 1873a and 1884 of this title, and amending provisions set out as notes under sections 1861 and 1862 of this title] may be cited as the 'National Science Foundation Authorization Act for Fiscal Year 1985'."

**SHORT TITLE OF 1980 AMENDMENT**


**SHORT TITLE OF 1977 AMENDMENT**

Pub. L. 95–99, §1, Aug. 15, 1977, 91 Stat. 831, provided: "That this Act [enacting sections 1869b, 1873a, and 1884 of this title, amending sections 1862, 1863, 1873, and 1882 of this title, and enacting provisions set out as notes under section 1862 of this title] may be cited as the 'National Science Foundation Authorization Act, Fiscal Year 1978'."

**SHORT TITLE OF 1976 AMENDMENT**

Pub. L. 94–471, §1, Oct. 11, 1976, 90 Stat. 2053, provided: "That this Act [enacting sections 1865 and 1883 of this title, amending section 1863 of this title, and enacting provisions set out as notes under sections 1862, 1864, 1873, and 5820 of this title] may be cited as the 'National Science Foundation Authorization Act, 1977'."

**SHORT TITLE**

Section 1 of act May 10, 1950, provided: "That this Act [enacting this chapter] may be cited as the 'National Science Foundation Act of 1950'."

**TRANSFER OF FUNCTIONS**

Office of Science and Technology, including offices of Director and Deputy Director, provided for by sections 1 and 2 of Reorg. Plan No. 2 of 1962, abolished and all functions vested by law in Office of Science and Technology or Director or Deputy Director of Office of Science and Technology transferred to Director of National Science Foundation by sections 2 and 3(a)(5) of Reorg. Plan No. 1 of 1973, eff. July 1, 1973, set out in the Appendix to Title 5, Government Organization and Employees.

**CONTINUATION OF EXISTING OFFICES, PROCEDURES, AND ORGANIZATION**

Amendments by Pub. L. 90–407, July 18, 1968, 82 Stat. 360, intended to continue in effect the existing offices, procedures, and organization of the Foundation as provided by this chapter, part II of Reorg. Plan No. 2 of 1962 [set out below], and Reorg. Plan. No. 5 of 1965 [set out in Appendix to Title 5, Government Organization and Employees], but on and after July 18, 1968, part II of Reorg. Plan No. 2 of 1962, and Reorg. Plan No. 5 of 1965, as being of no force or effect, and nothing in Pub. L. 90–407 as altering or affecting any transfers of functions made by part I of Reorg. Plan. No. 2 of 1962, see section 16 of Pub. L. 90–407, set out as Continuation of Existing Offices, Procedures, and Organization of the National Science Foundation note under section 1862 of this title.

**REORGANIZATION PLAN NO. 2 OF 1962**


Prepared by the President and transmitted to the Senate and the House of Representatives in Congress assembled, March 29, 1962, pursuant to the provisions of the Reorganization Act of 1949, 63 Stat. 203, as amended [see 5 U.S.C. 901 et seq.].

**CERTAIN SCIENCE AGENCIES AND FUNCTIONS**

**PART I—OFFICE OF SCIENCE AND TECHNOLOGY**


Sec. 3. [Repealed. Pub. L. 94–282, title V, §502, May 11, 1976, 90 Stat. 472. Section transferred to Director of the Office of Science and Technology, from National Science Foundation, certain functions formerly conferred upon the Foundation.]

Sec. 4. [Repealed. Pub. L. 94–282, title V, §502, May 11, 1976, 90 Stat. 472. Section authorized Director of the Office of Science and Technology to appoint employees necessary for work of the Office under classified civil service and to fix their compensation in accordance with the classification laws.]

**PART II—NATIONAL SCIENCE FOUNDATION**

**SECTION 21. EXECUTIVE COMMITTEE**

(a) There is hereby established the Executive Committee of the National Science Board, hereafter in this Part referred to as the Executive Committee, which shall be composed of five voting members. Four of members shall be elected as hereinafter provided. The Director provided for in section 22 of this reorganization plan, ex officio, shall be the fifth member and the chairman of the Executive Committee.

(b) At its annual meeting held in 1964 and at each of its succeeding annual meetings the National Science Board, hereafter in this Part referred to as the Board, shall elect two of its members as members of the Executive Committee, and the Executive Committee members so elected shall hold office for two years from the date of their election. Any person who has been a member of the Executive Committee (established by this reorganization plan) for six consecutive years shall thereafter be ineligible for service as a member thereof during the two-year period following the expiration of such sixth year. For the purposes of this subsection, the period between any two consecutive annual meetings of the Board shall be deemed to be one year.

(c) At its first meeting held after the effective date of this section the Board shall elect four of its members as members of the Executive Committee. As designated by the Board, two of the Executive Committee mem-
bers so elected shall hold office as such members until
the date of the annual meeting of the Board held in 1964
and the other two members so elected shall hold such office
until the annual meeting of the Board held in 1965.

(d) Any person elected as a member of the Executive Committee
to fill a vacancy occurring prior to the ex-
piration of the term for which his predecessor was
elected shall be elected for the remainder of such term.

(e) The functions conferred upon the Executive Com-
mittee now existing under the provisions of the Na-}

tional Science Foundation Act of 1950 (42 U.S.C. 1861 et
seq.), by the provisions of section 6 of the National Science
Foundation Act of 1950 (42 U.S.C. 1865) or other-
wise, are hereby transferred to the Executive Committee
established by the provisions of this Part; and the
authority of the National Science Board to assign its
powers and functions to the now-existing Executive
Committee, and statutory limitations upon such as-
signment, shall hereafter be applicable to the Execu-
tive Committee established by the provisions of this
Part.

SEC. 22. DIRECTOR

(a) There is hereby established in the National
Science Foundation a new office with the title of Direc-
tor of the National Science Foundation. The Director
of the National Science Foundation, hereafter in this
Part referred to as the Director, shall be appointed by
the President by and with the advice and consent of the
Senate. Before any person is appointed as Director the
President shall afford the Board an opportunity to
make recommendations to him with respect to such ap-
pointment. The Director shall serve for a term of six
years unless sooner removed by the President. The Di-
rector shall not engage in any business, vocation or
employment other than that of serving as such Direc-
tor, nor shall he, except with the approval of the Board,
hold any office in, or act in any capacity for, any orga-
nization, agency, or institution with which the Founda-
tion makes any contract or other arrangement under
the National Science Foundation Act of 1950 (42 U.S.C.
1861 et seq.).

(b) Except to the extent inconsistent with the provi-
sions of section 23(b)(2) of this reorganization plan, all
functions of the office of Director of the National
Science Foundation abolished by the provisions of 23(a)(2)
hereof are hereby transferred to the office of Di-
rector established by the provisions of subsection (a) of
this section.

(c) The Director, ex officio, shall be an additional
member of the Board and, except in respect of com-
ensation and tenure, shall be coordinate with other
members of the Board. He shall be a voting member
of the Board and shall be eligible for election by the
Board of Directors or vice chairman of the Board.

Amendments by Pub. L. 88–426, title III, § 305(41)(C), Aug. 14,

SEC. 23. ABOLITIONS

(a) The following agencies, now existing under the
National Science Foundation Act of 1950 (42 U.S.C. 1861
et seq.), are hereby abolished:

(1) The Executive Committee of the National Science
Board (section 6 of Act; 42 U.S.C. 1865).

(2) The office of Director of the National Science
Foundation (sections 2 and 5 of Act; 42 U.S.C. 1861,
1864).

(b) There are also hereby abolished:

(1) The functions conferred upon the National Science
Board by that part of section 6(a) of the National
Science Foundation Act of 1950 (42 U.S.C. 1863(a)) which
reads: "The Board is authorized to appoint from among
its members an Executive Committee”.

(2) The functions of the Director of the National
Science Foundation provided for in sections 4(a) and
5(a) of the National Science Foundation Act of 1950 (42
U.S.C. 1863(a), 1864(a)) with respect to serving as a non-
voting member of the Board and his functions with re-
spect to serving as a nonvoting member of the Execu-
tive Committee provided for in section 6(b) of that Act
(42 U.S.C. 1865(b)).

(3) So much of the functions conferred upon divi-
sional committees by the provisions of section 8(d)
of the National Science Foundation Act of 1950 (42 U.S.C.
1867(d)) as consists of making recommendations to, and
advising and consulting with, the Board.

(c) The provisions of sections 23(a)(1) and 23(b)(1)
hereof shall become effective on the date of the first
meeting of the Board held after the effective date of the
other provisions of this reorganization plan.

PART III. TRANSITIONAL PROVISIONS

SECTION 31. INCIDENTAL TRANSFERS

(a) So much of the personnel, property, records, and
unexpended balances of appropriations, allocations, and
other funds employed, held, used, available, or to be
made available, in connection with the functions trans-
ferred by the provisions of section 3 of this reorganiza-
tion plan as the Director of the Bureau of the Budget
shall determine shall be transferred to the Office of
Science and Technology at such time or times as the
said Director shall direct.

(b) Such further measures and dispositions as the Di-
rector of the Bureau of the Budget shall deem to be
necessary in order to effectuate the transfers provided
for in subsection (a) of this section shall be carried out
in such manner as he shall direct and by such agencies
as he shall designate.

SEC. 32. INTERIM OFFICERS

(a) The President may authorize any person who im-
mediately prior to the effective date of Part I of the re-
organization plan holds a position in the Executive Of-
cice of the President to act as Director of the Office of
Science and Technology until the office of Director is
for the first time filled pursuant to the provisions of
this reorganization plan or by recess appointment, as
the case may be.

(b) The President may authorize any person who im-
mediately prior to the effective date of section 22 of
this reorganization plan holds any office existing under
the provisions of the National Science Foundation Act
of 1950 (42 U.S.C. 1861 et seq.) to act as Director of the
National Science Foundation until the Office of Direc-
tor is for the first time filled pursuant to the provisions
of this reorganization plan or by recess appointment, as
the case may be.

(c) The President may authorize any person who
serves in an acting capacity under the foregoing provi-
sions of this section to receive the compensation at-
tached to the office in respect of which he so serves.
Such compensation, if authorized, shall be in lieu of,
but not in addition to, other compensation from the
United States to which such person may be entitled.

360, intended to continue in effect the existing offices,
procedures, and organization of the National Science
Foundation as provided by this chapter, part II of
Reorg. Plan No. 2 of 1962, and Reorg. Plan No. 5 of 1965,
but on and after July 18, 1968, part II of Reorg. Plan
No. 2 of 1962, and Reorg. Plan No. 5 of 1965, as being of no
force or effect, and nothing in Pub. L. 90–407 as altering
or affecting any transfers of functions made by part I
of Reorg. Plan No. 2 of 1962, see section 16 of Pub. L.
90–407, set out as Continuation of Existing Offices, Pro-
cedures, and Organization of the National Science
Foundation note under section 1862 of this title.]

MESSAGE OF THE PRESIDENT

To the Congress of the United States:

I transmit herewith Reorganization Plan No. 2 of 1962,
prepared in accordance with the provisions of the
Reorganization Act of 1949, as amended, and providing
for certain reorganizations in the field of science and
technology.

Part I of the reorganization plan establishes the Of-
cice of Science and Technology as a new unit within the
Executive Office of the President; places at the head thereof a Director appointed by the President by and with the advice and consent of the Senate and makes provision for a Deputy Director similarly appointed; and transfers to the Director certain functions of the National Science Foundation under sections 3(a)(1) and 3(a)(b) of the National Science Foundation Act of 1950.

The arrangements incorporated in part I of the reorganization plan will constitute an important development in executive branch organization for science and technology. Under those arrangements the President will have permanent staff resources capable of advising and assisting him on matters of national policy affected by or pertaining to science and technology. Considering the rapid growth and far-reaching scope of Federal activities in science and technology, it is imperative that the President have adequate staff support in developing policies and evaluating programs in order to assure that science and technology are used most effectively in the interests of national security and general welfare.

To this end it is contemplated that the Director will assist the President in discharging the responsibility of the President for the proper coordination of Federal science and technology functions. More particularly, it is expected that he will advise and assist the President as the President may request with respect to—

(1) Major policies, plans, and programs of science and technology of the various agencies of the Federal Government, giving appropriate emphasis to the relationship of science and technology to national security and foreign policy, and measures for furthering science and technology in the Nation.

(2) Assessment of selected scientific and technical developments and programs in relation to their impact on national policies.

(3) Review, integration, and coordination of major Federal activities in science and technology, giving due consideration to the effects of such activities on non-Federal resources and institutions.

(4) Assuring that good close relations exist with the Nation’s scientific and engineering communities so as to further in every appropriate way their participation in strengthening science and technology in the United States and the free world.

(5) Such other matters consonant with law as may be assigned by the President to the Office.

The ever-growing significance and complexity of Federal programs in science and technology have in recent years necessitated the taking of several steps for improving the organizational arrangements of the executive branch in relation to science and technology:

(1) The National Science Foundation was established in 1950. The Foundation was created to meet the widely recognized need for an organization to develop and encourage a national policy for the promotion of basic research and education in the sciences, to support basic research, to evaluate research programs undertaken by Federal agencies, and to perform related functions.

(2) The Office of the Special Assistant to the President for Science and Technology was established in 1957. The Special Assistant serves as Chairman of both the President’s Science Advisory Committee and the Federal Council for Science and Technology, mentioned below.

(3) At the same time, the Science Advisory Committee, composed of eminent non-Government scientists and engineers, and located within the Office of Defense Mobilization, was reconstituted in the White House Office as the President’s Science Advisory Committee.

(4) The Federal Council for Science and Technology, composed of policy officials of the principal agencies engaged in scientific and technical activities, was established in 1959.

The National Science Foundation has proved to be an effective instrument for administering sizable programs in support of basic research and education in the sciences and has set an example for other agencies through the administration of its own programs. However, the Foundation, being at the same organizational level as other agencies, cannot satisfactorily coordinate Federal science policies or evaluate programs of other agencies. Science policies, transcending agency lines, need to be coordinated and shaped at the level of the Executive Office of the President drawing upon new resources both within and outside of Government. Similarly, staff efforts at that higher level are required for the evaluation of Government programs in science and technology.

Thus the further steps contained in part I of the reorganization plan are now needed in order to meet most effectively new and expanding requirements brought about by the rapid and far-reaching growth of the Government’s research and development programs. These requirements call for the further strengthening of science organization at the Presidential level and for the adjustment of the Foundation to changed conditions. The Foundation will continue to originate policy proposals and recommendations concerning the support of basic research and education in the sciences, and the new Office will look to the Foundation to provide studies and information on which sound national policies in science and technology can be based.

Part I of the reorganization plan will permit some strengthening of the staff and consultant resources now available to the President in respect of scientific and technical factors affecting executive branch policies and will also facilitate communication with the Congress.

Part II of the reorganization plan provides for certain reorganizations within the National Science Foundation which will strengthen the capability of the Director of the Foundation to exert leadership and otherwise further the effectiveness of administration of the Foundation. Specifically:

(1) There is established a new office of Director of the National Science Foundation and that Director, ex officio, is made a member of the National Science Board on a basis coordinate with that of other Board members.

(2) There is substituted for the now-existing Executive Committee of the National Science Board a new Executive Committee composed of the Director of the National Science Foundation, ex officio, as a voting member and Chairman of the Committee, and of four other members elected by the National Science Board from among its appointive members.

(3) Committees advisory to each of the divisions of the Foundation will make their recommendations to the Director only rather than to both the Director and the National Science Board.

After investigation I have found and hereby declare that each reorganization included in Reorganization Plan No. 2 of 1962 is necessary to accomplish one or more of the purposes set forth in section 2(a) of the Reorganization Act of 1949, as amended.

I have found and hereby declare that it is necessary to include in the reorganization plan, by reason of reorganizations made thereby, provisions for the appointment and compensation of the Director and Deputy Director of the Office of Science and Technology and of the Director of the National Science Foundation. The rate of compensation fixed for each of these officers is the same that which I have found to prevail in respect of comparable officers in the executive branch of the Government.

The functions abolished by the provisions of section 28(b) of the reorganization plan are provided for in sections 4(a), 5(a), 6(a), 6(b), and 8(d) of the National Science Foundation Act of 1950.

The taking effect of the reorganizations included in the reorganization plan will provide sound organizational arrangements and will make possible more effective and efficient administration of Government programs in science and technology. It is, however, impossible to itemize at this time the reductions in expenditures which it is probable will be brought about by such taking effect.
I recommend that the Congress allow the reorganization plan to become effective.

JOHN F. KENNEDY.


§ 1862. Functions

(a) Initiation and support of studies and programs; scholarships; current register of scientific and engineering personnel

The Foundation is authorized and directed—

(1) to initiate and support basic scientific research and programs to strengthen scientific research potential and science education programs at all levels in the mathematical, physical, medical, biological, social, and other sciences, and to initiate and support research fundamental to the engineering process and programs to strengthen engineering research potential and engineering education programs at all levels in the various fields of engineering, by making contracts or other arrangements (including grants, loans, and other forms of assistance) to support such scientific, engineering, and educational activities and to appraise the impact of research upon industrial development and upon the general welfare;

(2) to award, as provided in section 1869 of this title, scholarships and graduate fellowships for study and research in the sciences or in engineering;

(3) to foster the interchange of scientific and engineering information among scientists and engineers in the United States and foreign countries;

(4) to foster and support the development and use of computer and other scientific and engineering methods and technologies, primarily for research and education in the sciences and engineering;

(5) to evaluate the status and needs of the various sciences and fields of engineering as evidenced by programs, projects, and studies undertaken by agencies of the Federal Government, by individuals, and by public and private research groups, employing by grant or contract such consulting services as it may deem necessary for the purpose of such evaluations; and to take into consideration the results of such evaluations in correlating the research and educational programs undertaken or supported by the Foundation with programs, projects, and studies undertaken by agencies of the Federal Government, by individuals, and by public and private research groups;

(6) to provide a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources and to provide a source of information for policy formulation by other agencies of the Federal Government;

(7) to initiate and maintain a program for the determination of the total amount of money for scientific and engineering research, including money allocated for the construction of the facilities wherein such research is conducted, received by each educational institution and appropriate nonprofit organization in the United States, by grant, contract, or other arrangement from agencies of the Federal Government, and to report annually thereon to the President and the Congress; and

(b) Contracts, grants, loans, etc., for scientific and engineering activities; financing of programs

The Foundation is authorized to initiate and support specific scientific and engineering activities in connection with matters relating to international cooperation, national security, and the effects of scientific and engineering applications upon society by making contracts or other arrangements (including grants, loans, and other forms of assistance) for the conduct of such activities. When initiated or supported pursuant to requests made by any other Federal department or agency, including the Office of Technology Assessment, such activities shall be financed whenever feasible from funds transferred to the Foundation by the requesting official as provided in section 1873(f) of this title, and any such activities shall be unclassified and shall be identified by the Foundation as being undertaken at the request of the appropriate official.

(c) Scientific and engineering research programs at academic and other nonprofit institutions; applied scientific and engineering research programs by Presidential directive; employment of consulting services; coordination of activities

In addition to the authority contained in subsections (a) and (b) of this section, the Foundation is authorized to initiate and support scientific and engineering research, including applied research, at academic and other nonprofit institutions. When so directed by the President, the Foundation is further authorized to support, through other appropriate organizations, applied scientific research and engineering research relevant to national problems involving the public interest. In exercising the authority contained in this subsection, the Foundation may employ by grant or contract such consulting services as it deems necessary, and shall coordinate and correlate its activities with respect to any such problem with other agencies of the Federal Government undertaking similar programs in that field.

(d) Promotion of research and education in science and engineering

The Board and the Director shall recommend and encourage the pursuit of national policies for the promotion of research and education in science and engineering.

(e) Balancing of research and educational activities in the sciences and engineering

In exercising the authority and discharging the functions referred to in the foregoing subsections, it shall be an objective of the Foundation to strengthen research and education in the sciences and engineering, including independent research by individuals, throughout the United States, and to avoid undue concentration of such research and education.
(f) Annual report to the President and Congress

The Foundation shall render an annual report to the President for submission on or before the 15th day of April of each year to the Congress summarizing the activities of the Foundation and making such recommendations as it may deem appropriate. Such report shall include information as to the acquisition and disposition by the Foundation of any patents and patent rights.

(g) Support of access to computer networks

In carrying out subsection (a)(4) of this section, the Foundation is authorized to foster and support access by the research and education communities to computer networks which may be used substantially for purposes in addition to research and education in the sciences and engineering, if the additional uses will tend to increase the overall capabilities of the networks to support such research and education activities.


AMENDMENTS

Subsec. (a)(6). Pub. L. 99–383 amended par. (6) generally. Prior to amendment, par. (6) read as follows: "to maintain a current register of scientific and engineering personnel, and in other ways to provide a central clearinghouse for the collection, interpretation, and analysis of data on the availability of, and the current and projected need for, scientific and engineering resources in the United States, and to provide a source of information for policy formulation by other agencies of the Federal Government; and"
Subsec. (a)(2). Pub. L. 99–159, §110(a)(2), substituted "for study and research in the sciences or in engineering" for "in the mathematical, physical, medical, biological, engineering, social, and other sciences".

Subsec. (b). Pub. L. 99–159, §§109(e)(2), 110(a)(8), inserted reference to engineering in two places and substituted "1876(f)" for "1876(g)".
Subsec. (d). Pub. L. 99–159, §110(a)(10), substituted "research and education in science and engineering" for "basic research and education in the sciences".
1977—Subsec. (e). Pub. L. 95–99 substituted an objective for "one of the objectives".
1972—Subsec. (a)(1). Pub. L. 92–572 inserted support of science education programs at all levels to the functions of the Foundation and substituted "scientific and educational activities" for "scientific activities".
Subsec. (b). Pub. L. 92–484 inserted provisions authorizing the Foundation to initiate and support specific scientific activities in connection with matters relating to the effects of scientific applications upon society, and substituted provisions relating to the initiation or support pursuant to requests of activities by any other Federal department or agency, including the Office of Technology Assessment, for provisions relating to the initiation or support pursuant to requests of activities by the Secretary of State or Secretary of Defense.
1968—Subsec. (a)(1). Pub. L. 90–407 redesignated par. (2) as (1) and added social sciences to the enumerated list of sciences. Former par. (1) redesignated subsec. (d).
Subsec. (a)(2). Pub. L. 90–407 redesignated par. (4) as (2) and added social sciences to the enumerated list of sciences. Former par. (2) redesignated (1).
Former par. (3) redesignated subsec. (b).
Subsec. (a)(5). Pub. L. 90–407 redesignated par. (6) as (5) and provided for the employment of consulting services, by grant or contract, to assist in the evaluation of the status and needs of the various sciences as evidenced by the programs and studies undertaken by agencies of the government, by individuals, and by public and private research groups, and provided for the consideration of the results of such evaluations in the correlation of the Foundation's programs with those undertaken by agencies of the government, as well as those undertaken by individuals and by public and private research groups. Former par. (5) redesignated (3).
Subsec. (a)(6). Pub. L. 90–407 redesignated par. (8) as (6) and provided that the register of scientific and technical personnel shall be current, and authorized the Foundation to analyze and interpret the collected data on the availability of, and the current and projected need for, scientific and technical resources in the United States and to make such information available to other agencies of the government for policy formulation. Former par. (6) redesignated (5).
Subsec. (a)(7). Pub. L. 90–407 added par. (7). Former par. (7), which provided for the establishment of such special commissions as the Board may from time to time deem necessary for the purposes of this chapter, was struck out.
Subsec. (a)(9). Pub. L. 90–407 struck out par. (9) which authorized the Foundation to initiate and support a program of study, research, and evaluation in the field of weather modification, with particular attention to areas experiencing floods, drought, etc., and to report annually to the President and the Congress thereon.
Subsec. (b). Pub. L. 90–407 redesignated former subsec. (a)(3) as (b) and substituted provisions authorizing the Foundation to initiate and support specific scientific activities in matters related to international coopera-
tion or national security for provisions authorizing the Foundation to initiate and support only scientific research activities, only in matters related to national defense and only when requested to do so by the Secretary of Defense, and inserted provisions specifying the manner of financing such scientific activities. Former subsec. (b) redesignated (e).


Subsec. (d). Pub. L. 90–407 redesignated former subsec. (a)(1) as (d) and substituted provisions authorizing the Board and the Director to recommend and encourage national policies promoting basic research and education in the sciences for provisions authorizing and directing the Foundation to develop and encourage such policies.

Subsec. (e). Pub. L. 90–407 redesignated former subsec. (a)(2), redesignated (b) as (e), substituted “the foregoing subsections” for “subsection (a) of this section”, “strengthen research” for “strengthen basic research”, and struck out reference to the territories and possessions of the United States.

Subsec. (f). Pub. L. 90–407 redesignated former subsec. (c) as (f) and struck out provision requiring the report to include the minority views and recommendations if any, of members of the Board.

1980—Subsec. (a)(2). Pub. L. 96–232 clarified the Foundation’s authority to support programs to strengthen scientific research potential.


TRANSFER OF NATIONAL SCIENCE FOUNDATION PROGRAMS

For transfer of all programs relating to science education of the National Science Foundation or the Director thereof under this chapter, with certain exceptions, to the Secretary of Education, see section 3444 of Title 20, Education.

NSF STUDY AND REPORT ON THE “DIGITAL DIVIDE”


“(a) Study.—The National Science Foundation shall conduct a study of the divergence in access to high technology (commonly referred to as the ‘digital divide’) in the United States.

“(b) Report.—Not later than 18 months after the date of enactment of this Act [Oct. 17, 2000], the Director of the National Science Foundation shall submit a report to Congress setting forth the findings of the study conducted under subsection (a).”

IMPROVING UNITED STATES UNDERSTANDING OF SCIENCE, ENGINEERING, AND TECHNOLOGY IN EAST ASIA


STATUS OF SCIENTIFIC INSTRUMENTATION; CURRENT AND PROJECTED NEEDS FOR SCIENTIFIC AND TECHNOLOGICAL INSTRUMENTATION; DEVELOPMENT OF INDICES, CORRELATES, OR OTHER SUITABLE MEASURES OR INDICATORS

Pub. L. 96–44, §7, Aug. 2, 1979, 93 Stat. 334, provided that: “In partial fulfillment of the established statutory requirement that the National Science Foundation evaluate the status of and current and projected need for scientific resources (section 3(a)(5) and (6) of Public Law 81–507, as amended [subsec. (a)(5) and (6) of this section]), the National Science Foundation shall develop indices, correlates, or other suitable measures or indicators of the status of scientific instrumentation in the United States and of the current and projected need for scientific and technological instrumentation.”

FLOOD HAZARD MITIGATION STUDY


AUTHORIZED USE OF FUNDS UNDER SCIENCE AND SOCIETY PROGRAM

Section 5 of Pub. L. 95–99 provided that:

“(a) From the funds authorized under the program ‘Science and Society’, the National Science Foundation is authorized to provide support which is designed to—

“(1) improve public understanding of public policy issues involving science and technology;

“(2) facilitate the participation of qualified scientists and engineers and of undergraduate and graduate students in public activities aimed at the resolution of public policy issues having significant scientific and technical aspects; and

“(3) assist nonprofit, citizens, and bona fide public interest groups to acquire necessary scientific and technical expertise in order to improve their comprehension of scientific and technical aspects of public policy issues.

“(b) Awards made pursuant to this section shall, to the extent feasible, include support for—

“(1) qualified scientists and engineers to work on public policy issues with significant scientific and technical components in conjunction with units of State and local government, nonprofit organizations, or bona fide public interest groups;

“(2) internship programs for science and engineering undergraduate or graduate students to work on public policy issues with significant scientific and technical components in conjunction with units of State and local government, nonprofit organizations, or bona fide public interest groups as part of their academic training;

“(3) forums, conferences, and workshops on public policy issues with significant scientific and technical components;

“(4) training in the presentation of scientific and technical studies in a manner which (A) improves public understanding of the ways in which science and technology influence contemporary life, (B) improves public access to the results of scientific and technical research, (C) encourages and facilitates interaction between laypersons and scientists on public issues with important scientific and technological components, and (D) increases public knowledge and understanding of the ethical and value implications of scientific and technological developments;

“(5) new and existing programs using radio or television to increase public understanding of public policy issues with significant scientific and technical components; and

“(6) bona fide public interest groups to acquire necessary scientific and technical expertise relating to the scientific and technical aspects of public policy issues and to enable such groups to bring together in appropriate forums experts whose research has been directed to the resolution of such issues.”

ESTABLISHMENT OF “SCIENCE FOR CITIZENS PROGRAM” CONDUCTED IN CONJUNCTION WITH “PUBLIC UNDERSTANDING OF SCIENCE PROGRAM”

Pub. L. 94–471, §5, Oct. 11, 1976, 90 Stat. 2054, provided that:

“(a) The National Science Foundation is authorized and directed to conduct an experimental ‘Science for Citizens Program’ and an augmented Public Understanding of Science Program under which funds will be available for pilot projects to:

“(1) improve public understanding of science, engineering and technology and their impact on public policies; and

“(2) facilitate the participation of experienced scientists and engineers as well as graduate and undergraduate students in helping the public understand science, engineering and technology and their impact on public policies; and
(3) assist nationally recognized professional societies and groups serving important public purposes in conducting a limited number of forums, conferences, and workshops to increase public understanding of science and technology, and of their impact on public policy issues, after consideration of the following eligibility factors:

(A) the extent to which the proposal of the society or group will contribute to the development of facts, issues, and arguments relevant to public policy issues having significant scientific and technical aspects, and

(B) the ability of the society or group, using its own resources, to conduct such forums, conferences, and workshops.

(b) One or more review panels shall be established for the purpose of evaluating applications for awards under this section. The membership of each review panel shall have balanced representation from the scientific and nonscientific communities and the public and private sectors.

(c) No contract, grant or other arrangement shall be made under this Section without the prior approval of the National Science Board.

(d) To assist the Congress in evaluating activities initiated pursuant to this Section, the Director of the National Science Foundation, in consultation with a review panel having a balanced representation from the scientific and nonscientific community and the public and private sectors, is directed to prepare and make available an independent, disciplinary proceeding pursuant to existing authority, practice, and law.

Development of Program Plan for Continuing Education in Science and Engineering

Section 6 of Pub. L. 94–471 required the National Science Foundation to develop a program plan for continuing education in science and engineering and, not later than Oct. 31, 1977, provide specific committees of the House of Representatives and Senate a report on the plan developed with recommendations for implementation in fiscal year 1978.

Denial of Financial Assistance to Campus Disrupters

Section 7 of Pub. L. 93–96, Aug. 16, 1973, 87 Stat. 316, provided that:

(a) If an institution of higher education determines, after affording notice and opportunity for hearing to an individual attending, or employed by, such institution, that such individual has willfully refused to obey a lawfully promulgated policy of the institution, the institution may refuse to continue, or extend any financial assistance under any of the programs specified in subsection (c).

(b) The programs referred to in subsections (a) and (b) are as follows:

(1) The programs authorized by the National Science Foundation Act of 1950 [this chapter]; and

(2) The programs authorized under title IX of the National Defense Education Act of 1958 [sections 1876 to 1879 of this title] relating to establishing the Science Information Service.

(d)(1) Nothing in this Act [Pub. L. 90–96], or any Act amended by this Act, shall be construed to prohibit any institution of higher education from refusing to award, continue, or extend any financial assistance under any such Act to any individual because of any misconduct which in its judgment bears adversely on his fitness for such assistance.

(2) Nothing in this section shall be construed as limiting or precluding the rights and prerogatives of any institution of higher education to institute and carry out an independent, disciplinary proceeding pursuant to existing authority, practice, and law.

(3) Nothing in this section shall be construed to limit the freedom of any person to verbal expression of individual views or opinions.

Similar provisions were contained in the following National Science Foundation Authorization Acts:


Continuation of Authorization for Weather Modification Programs; Repeal

Section 11(1) of Pub. L. 90–407 provided in part that the authorization for the programs initiated under former subsec. (a)(9) of this section shall continue in effect until Sept. 1, 1968 for the purposes of section 1872a of this title.

Continuation of Existence of Offices, Procedures, and Organization of the National Science Foundation

Section 16 of Pub. L. 90–407 provided that: "Except as otherwise specifically provided therein, the amendments made by this Act [enacting section 1864a of this title, amending sections 1862 to 1866, 1868 to 1870, 1872 to 1875, and 1877 of this title, sections 5313, 5314, and 5316 of Title 5, Government Organization and Employees, repealing sections 1867 and 1872a of this title, and enacting provisions set out as a note under section 5313 of Title 5] are intended to continue in effect under the National Science Foundation Act of 1950 [this chapter] the existing offices, procedures, and organization of the National Science Foundation as provided by such Act, [this chapter] part II of Reorganization Plan Number 2 of 1962, and Reorganization Plan Number 5 of 1965 [set out as a note under section 1861 of this title]. From and after the date of the enactment of this Act [July 18, 1968], part II of Reorganization Plan Number 2 of 1962, and Reorganization Plan Number 5 of 1965, shall be of no force or effect; but nothing in this Act shall alter or affect any transfers of functions made by part I of such Reorganization Plan Number 2 of 1962."

Investigation of Need for Geophysical Institute in Territory of Hawaii

Act Aug. 1, 1956, ch. 865, 70 Stat. 922, directed the National Science Foundation to conduct an investigation into the need for and the feasibility and usefulness of a geophysical institute located in the Territory [now State] of Hawaii. The Foundation was required to report the results of its investigations, together with its
recommendations based thereon, to the Congress not later than 9 months after Aug. 1, 1956.

EX. ORD. NO. 10521, ADMINISTRATION OF SCIENTIFIC RESEARCH


SECTION 1. The National Science Foundation (hereinafter referred to as the Foundation) shall from time to time recommend to the President policies for the promotion and support of basic research and education in the sciences, including policies with respect to furnishing guidance toward defining the responsibilities of the Federal Government in the conduct and support of basic scientific research.

SECTION 2. The Foundation shall continue to make comprehensive studies and recommendations regarding the National Science Foundation’s research effort and its resources for scientific activities, including facilities and scientific personnel, and its foreseeable scientific needs, with particular attention to the extent of the Federal Government’s activities and the resulting effects upon trained scientific personnel. In making such studies, the Foundation shall make full use of existing sources of information and research facilities within the Federal Government.

SECTION 3. The Foundation, in concert with each Federal agency concerned, shall review the basic scientific research programs and activities of the Federal Government in order, among other purposes, to formulate methods for strengthening the administration of such programs and activities by the responsible agencies, and to study areas of basic research where gaps or undesirable overlapping of support may exist, and shall recommend to the head of agencies concerning the support given basic research.

SECTION 4. As now or hereafter authorized or permitted by law, the Foundation shall be increasingly responsible for providing support by the Federal Government for basic research and education in areas which are closely related to their missions is recognized as important and desirable, especially in response to current national needs, and shall continue.

SECTION 5. The Foundation, in consultation with educational institutions, the heads of Federal agencies, and the Commissioner of Education of the Department of Health, Education, and Welfare (now Secretary of Education), shall study the effects upon educational institutions of Federal policies and administration of contracts and grants for scientific research and development, and shall recommend policies and procedures which will promote the attainment of general national research objectives and realization of the research needs of Federal agencies while safeguarding the strength and independence of the Nation’s institutions of learning.

SECTION 6. The head of each Federal agency engaged in scientific research shall make certain that effective, executive, organizational, and fiscal practices exist to ensure (a) that the Foundation is consulted on policies concerning the support of basic research, (b) that approved scientific research programs conducted by the agency are reviewed continuously in order to preserve priorities in research efforts and to adjust programs to meet changing conditions without imposing unnecessary added burdens on budgetary and other resources, (c) that applied research and development shall be undertaken with sufficient consideration of the underlying basic research and other factors as relative urgency, project costs, and availability of manpower and facilities, and (d) that, subject to considerations of security and applicable statutes of applicable law, adequate dissemination shall be made within the Federal Government of reports on the nature and progress of research projects as an aid to the efficiency and economy of the overall Federal scientific research program.

SECTION 7. Federal agencies supporting or engaging in scientific research shall, with the assistance of the Foundation, cooperate in an effort to improve the methods of classification and reporting of scientific research projects and activities, subject to the requirements of security of information.

SECTION 8. To facilitate the efficient use of scientific research equipment and facilities held by Federal agencies:
(a) the head of each such agency engaged in scientific research shall, to the extent practicable, encourage and facilitate the sharing with other Federal agencies of major equipment and facilities; and
(b) a Federal agency shall procure new major equipment or facilities for scientific research purposes only after taking suitable steps to ascertain that the need cannot be met adequately from existing inventories or facilities of its own or of other agencies; and
(c) the Interdepartmental Committee on Scientific Research and Development shall take necessary steps to ensure that each Federal agency engaged directly in scientific research is kept informed of selected major equipment and facilities which could serve the needs of more than one agency. Each Federal agency possessing such equipment and facilities shall maintain appropriate records to assist other agencies in arranging for their joint use or exchange.

SECTION 9. The heads of the respective Federal agencies shall make such reports concerning activities within the purview of this order as may be required by the President.

SECTION 10. The National Science Foundation shall provide leadership in the effective coordination of the scientific information activities of the Federal Government with a view to improving the availability and dissemination of scientific information. Federal agencies shall cooperate with and assist the National Science Foundation in the performance of this function, to the extent permitted by law.

EXECUTIVE ORDER NO. 10807


ABOLITION OF FEDERAL COUNCIL FOR SCIENCE AND TECHNOLOGY


§ 1862a. Findings and purpose

(a) The Congress finds that—
(1) the fundamental research and related education program supported by the Federal Government and conducted by the Nation’s universities and colleges are essential to our national security, and to our health, economic welfare, and general well-being;
(2) many national research and related education programs conducted by universities and colleges are now hindered by obsolete research buildings and equipment, and many institutions lack sufficient resources to repair, renovate, or replace their laboratories;
(3) the Nation's capacity to conduct high quality research and education programs and to maintain its competitive position at the forefront of modern science, engineering, and technology is threatened by this research capital deficit, which poses serious and adverse consequences to our future national security, health, welfare, and ability to compete in the international marketplace;

(4) a national effort to spur reinvestment in research facilities is needed, and national, State, and local policies and cooperative programs are required that will yield maximum return on the investment of scarce national resources and sustain a commitment to excellence in research and education; and

(5) the Foundation, as part of its responsibility for maintaining the vitality of the Nation's academic research, and in partnership with the States, industry, and universities and colleges, must assist in enhancing the historic linkages between Federal investment in academic research and training and investment in the research capital base by reinvesting in the capital facilities which modern research and education programs require.

(b) It is the purpose of sections 1862a to 1862d of this title to assist in modernizing and revitalizing the Nation's research facilities at institutions of higher education, independent nonprofit research institutions and research museums, and consortia thereof, through capital investment.


REFERENCES IN TEXT
Sections 1862a to 1862d of this title, referred to in subsec. (b), was in the original “this title”, meaning title II of Pub. L. 100–570, Oct. 31, 1988, 102 Stat. 2873, known as the Academic Research Facilities Modernization Act of 1988, which enacted sections 1862a to 1862d of this title, repealed former sections 1862a and 1862b of this title, and repealed provisions set out as a note under section 1861 of this title. For complete classification of this Act to the Code, see Short Title of 1988 Amendments note set out under section 1861 of this title and Tables.

CODIFICATION
Section was enacted as part of the Academic Research Facilities Modernization Act of 1988, and also as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

PRIOR PROVISIONS

§ 1862b. Establishment of Program

(a) Establishment; purpose

(1) To carry out sections 1862a to 1862d of this title, the Director shall establish and carry out a new Academic Research Facilities Modernization Program (hereafter in sections 1862a to 1862d of this title referred to as the “Program”), under which awards are made to institutions of higher education, independent nonprofit research institutions, and research museums, and consortia thereof, for the repair, renovation, or, in exceptional cases, replacement of obsolete science and engineering facilities primarily devoted to research.

(2) Such awards shall, consistent with the functions of the Foundation set forth in section 1862 of this title and through established Foundation selection procedures, serve to—

(A) promote the modernization of graduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and engineering disciplines;

(B) assist those academic institutions that historically have received relatively little Federal research and development funds to improve their academic science and engineering infrastructures and broaden and strengthen the Nation's science and engineering base; and

(C) promote the modernization of undergraduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and engineering disciplines.

(b) Improvement projects; maximum amounts

(1) The Program shall be carried out through projects which involve the repair, renovation, or, in exceptional cases, replacement of specific science and engineering facilities devoted primarily to research at eligible institutions, or consortia thereof, and for which funds are awarded in response to specific proposals submitted by such eligible institutions or consortia in accordance with procedures prescribed by the Director pursuant to section 1862c of this title.

(2) Awards made under the Program shall not exceed $7,000,000 to any institution or consortium over any period of 5 years for the repair, renovation, or, in exceptional cases, replacement of academic research facilities.

(3) The Director shall, in making awards under the Program, consider the extent to which that institution or consortium has received funds for the repair, renovation, construction, or replacement of academic facilities from any other Federal funding source within the 5-year period immediately preceding the application. The Director shall give priority to institutions or consortia that have not received such funds in the preceding 5 years.

(4) The Director shall, in awarding funds under sections 1862a to 1862d of this title, consider the distribution of funds among institutions of different sizes and geographical locations.

c) Criteria for award of funds

Criteria for the award of funds to any institution for a project under the Program shall include—

(1) the quality of the research and training to be carried out in the facility or facilities involved;

(2) the need for the proposed repair, renovation, or, in exceptional cases, replacement based on an analysis of the age and condition of existing research facilities and equipment;

(3) the congruence of the institution's research and training activities with the future research needs of the Nation and the research mission of the Foundation;
(4) the contribution that the project will make toward meeting national, regional, and institutional research and related training needs;

(5) in the case of an institution that historically has received relatively little Federal research and development funding, the contribution the proposed project will make to improving the institution’s academic scientific and engineering infrastructure and broadening the Nation’s science and engineering base; and

(6) the impact of the award on the overall geographic distribution of awards made under the Program, with the objective of avoiding undue concentration of awards.


CODIFICATION

Section was enacted as part of the Academic Research Facilities Modernization Act of 1988, and also as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

PRIOR PROVISIONS


MAJOR RESEARCH INSTRUMENTATION

Pub. L. 107–368, §13, Dec. 19, 2002, 116 Stat. 3055, required Director of the National Science Foundation to conduct a review and assessment of the major research instrumentation program and, not later than 1 year after Dec. 19, 2002, submit a report, including specified estimates, descriptions and analyses, of findings and recommendations to certain Congressional committees, and also required the Director to enter into an arrangement with the National Academy of Sciences to assess the need for an interagency program to establish and support fully equipped, state-of-the-art university-based centers for interdisciplinary research and advanced instrumentation development, and not later than 15 months after Dec. 19, 2002, to transmit to the committees the assessment conducted by the National Academy of Sciences together with the Foundation’s reaction to the assessment.

§ 1862c. Procedures, guidelines, and planning activities

(a) Procedures

(1) The Director shall, consistent with the objectives of the Program and the criteria set forth in section 1862b(c) of this title, set forth procedures for the Program.

(2) The procedures so prescribed shall contain such terms, conditions, and guidelines as may be necessary in the light of Program objectives, but shall in any event provide that—

(A) funds to carry out the Program will be awarded only on the basis of merit after a comprehensive review using established Foundation procedures;

(B) the membership of merit review panels that assess proposals will be broadly representative of eligible institutions, including research universities and predominantly undergraduate and minority institutions;

(C) the institution receiving an award shall provide at least 50 percent of the cost, in cash or in kind, fairly evaluated, of the repair, renovation, or replacement involved and shall provide this contribution from private or non-Federal public sources, except that the Director may accept a match of less than 50 percent, but at least 30 percent, for institutions which are not ranked among the top 100 of the institutions receiving Federal research and development funding, as documented in the latest annual report of the Foundation entitled “Federal Support to Universities, Colleges, and Selected Nonprofit Institutions”; and

(D) to the extent practicable, eligible institutions of a given type will compete against similar institutions for Program awards.

(b) Comprehensive planning activities

The Director shall conduct comprehensive planning activities, including surveys of research facility needs and other information-gathering activities, necessary to implement the Program and to develop the procedures called for under subsection (a) of this section.

(c) Guidelines

Prior to the issuance of the comprehensive plan required by subsection (d) of this section, and consistent with the Program criteria set forth in section 1862b(c) of this title, the Director shall publish in the Federal Register proposed Program guidelines for public review for a comment period of 30 days. Such guidelines shall provide detailed information on eligibility, criteria, terms, and conditions and shall include, but not be limited to—

(1) definitions for the terms “institutions of higher education”, “private non-profit research organizations”, “research museums”, “consortia”, “facilities”, “facilities primarily devoted to research”, “instrumentation”, “equipment”, “repair”, “renovation”, and “replacement”;

(2) selection criteria to be used by the Foundation in evaluating proposals from institutions and consortia thereof, including criteria for evaluating scientific merit and for evaluating the age and condition of existing research facilities; and

(3) requirements for matching a Program award with contributions from non-Federal sources.

(d) Comprehensive plan

The Director, after gathering appropriate information and after considering comments on the proposed Program guidelines published in the Federal Register pursuant to subsection (c) of this section, shall develop a comprehensive plan for the Program that—

(1) defines the appropriate roles and responsibilities of the Federal Government, institutions of higher education, State governments, private foundations, and other appropriate organizations;

(2) states what procedures will be used to ensure that predominantly undergraduate institutions and colleges and universities that historically have received little Federal research and development funding will receive substantial percentages of the funds awarded under sections 1862a to 1862d of this title;

(3) states the estimated percentage of Program funds available for each category of eli-
gible institutions, including predominantly undergraduate institutions and colleges and universities that historically have received little Federal research and development funding as well as research universities; and
(4) evaluates and addresses, to the maximum extent possible, a variety of factors which include—
(A) the unique circumstances and research facilities needs of research universities, undergraduate institutions, and other institutions whose enrollment includes substantial percentages of minority-underrepresented in science and engineering research;
(B) innovative approaches in the management of the Program that address both short-term and long-term aspects of the renovation, repair, and replacement of academic research facilities;
(C) programmatic approaches that recognize and support excellence, strengthen scientific and engineering research potential and, to the maximum extent possible and consistent with the purposes of this Act, assure an equitable distribution of resources with respect to institutions and geographical areas; and
(D) any recommendations necessary to improve the Program and further meet the purposes of sections 1862a to 1862d of this title.

(e) Report
The Director shall prepare and submit, not later than June 15, 1989, a report containing the comprehensive plan required by subsection (d) of this section to the Committee on Labor and Human Resources and the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives.

(f) Final guidelines
Final guidelines shall be published in the Federal Register not later than 45 days after the submission of the report required under subsection (e) of this section.

(g) Amount available for this section
The Director shall, from amounts available to the Foundation under section 101(b) of this Act for fiscal year 1989, make available an amount not to exceed $1,000,000, to carry out the provisions of this section. None of the funds authorized to be appropriated in section 101 of this Act, in each fiscal year, at least 12 percent shall be reserved for historically Black colleges or universities defined as “part B institutions” by section 1061(2) of title 20 and other institutions of higher education whose enrollment includes a substantial percentage of students who are Black Americans, Hispanic Americans, or Native Americans.


REFERENCES IN TEXT
Section 101 of this Act, referred to in text, is section 101 of Pub. L. 100–570, title I, Oct. 31, 1988, 102 Stat. 2865, which is not classified to the Code.

CODIFICATION
Section was enacted as part of the Academic Research Facilities Modernization Act of 1988, and also as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

§ 1862e. Evaluations of research centers
In carrying out performance reviews of research centers by the Foundation, the Director shall take such action as may be necessary, consistent with the merit review process of the Foundation, to ensure that—
(1) members of review panels are free from any conflict of interest; and
(2) the conditions of each award to such centers have been fulfilled.


CODIFICATION
Section was enacted as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

§ 1862f. Research center consortia
In Foundation programs making grants to research centers, the Director shall encourage the
§ 1862g. Experimental Program to Stimulate Competitive Research

(a) The Director shall operate an Experimental Program to Stimulate Competitive Research, the purpose of which is to assist those States that—

(1) historically have received relatively little Federal research and development funding; and

(2) have demonstrated a commitment to develop their research bases and improve science and engineering research and education programs at their universities and colleges.

(b) A State which has received an initial award under such Program, whether or not the award was received before or after October 31, 1988, shall be eligible for up to 5 years of additional support under the program if that State provides assurances of new matching funds and submits an acceptable new plan for using Program funds and matching funds to build the research capabilities of the State.

§ 1862i. Scientific and technical education

(a) National advanced scientific and technical education program

The Director of the National Science Foundation (hereafter in sections 1862h to 1862j of this title referred to as the “Director”) shall award grants to associate-degree-granting colleges, and consortia thereof, to assist them in providing education in advanced-technology fields, and to improve the quality of their core education courses in science and mathematics. The grant program shall place emphasis on the needs of students who have been in the workforce (including work in the home), and shall be designed to strengthen and expand the scientific and technical education and training capabilities of associate-degree-granting colleges through such methods as—

(1) the development of model instructional programs in advanced-technology fields and in core science and mathematics courses;

(2) have demonstrated a commitment to develop their research bases and improve science and engineering research and education programs at their universities and colleges.

(3) the National Science Foundation’s traditional role in developing model curricula, disseminating instructional materials, enhancing faculty development, and stimulating partnerships between educational institutions and industry, makes an enlarged role for the Foundation in scientific and technical education and training particularly appropriate.

(b) Purposes

It is the purpose of sections 1862h to 1862j of this title to—

(1) improve science and technical education at associate-degree-granting colleges;

(2) improve secondary school and post-secondary curricula in mathematics and science;

(3) improve the educational opportunities of postsecondary students by creating comprehensive articulation agreements and planning between 2-year and 4-year institutions; and

(4) promote outreach to secondary schools to improve mathematics and science instruction.

References in Text

(2) the professional development of faculty and instructors, both full- and part-time, who provide instruction in science, mathematics, and advanced-technology fields;

(3) the establishment of innovative partnerships arrangements that—

(A) involve associate-degree-granting colleges and other appropriate public and private sector entities;¹

(B) provide for private sector donations, faculty opportunities to have short-term assignments with industry, sharing of program costs, equipment loans, and the cooperative use of laboratories, plants, and other facilities, and provision for state-of-the-art work experience opportunities for students enrolled in such programs; and

(C) encourage participation of individuals identified in section 1885a or 1885b of this title;

(4) the acquisition of state-of-the-art instrumentation essential to programs designed to prepare and upgrade students in scientific and advanced-technology fields; and

(5) the development and dissemination of instructional materials in support of improving the advanced scientific and technical education and training capabilities of associate-degree-granting colleges, including programs for students for whom are not pursuing a science degree.

(b) National centers of scientific and technical education

The Director shall award grants for the establishment of centers of excellence, not to exceed 10 in number, among associate-degree-granting colleges. Centers shall meet one or both of the following criteria:

(1) Exceptional instructional programs in advanced-technology fields.

(2) Excellence in undergraduate education in mathematics and science.

The centers shall serve as national and regional clearinghouses and models for the benefit of both colleges and secondary schools, and shall provide seminars and programs to disseminate models curricula and model teaching methods and instructional materials to other associate-degree-granting colleges in the geographic region served by the center.

(c) Articulation partnerships

(1) Partnership grants

(A) The Director shall make grants to eligible partnerships to encourage students to pursue bachelor degrees in mathematics, science, engineering, or technology, and to assist students pursuing bachelor degrees in mathematics, science, engineering, or technology to make the transition from associate-degree-granting colleges to bachelor-degree-granting institutions, through such means as—

(i) examining curricula to ensure that academic credit earned at the associate-degree-granting college is transferable to bachelor-degree-granting institutions;

(ii) informing teachers from the associate-degree-granting college on the specific requirements of courses at the bachelor-degree-granting institution; and

(iii) providing summer educational programs for students from the associate-degree-granting college to encourage such students' subsequent matriculation at bachelor-degree-granting institutions.

(B) Each eligible partnership receiving a grant under this paragraph shall, at a minimum—

(i) counsel students, including students who have been in the workforce (including work in the home), about the requirements and course offerings of the bachelor-degree-granting institution;

(ii) conduct workshops and orientation sessions to ensure that students are familiar with programs, including laboratories and financial aid programs, at the bachelor-degree-granting institution;

(iii) provide students with research experiences at bachelor’s-degree-granting institutions participating in the partnership, including stipend support for students participating in summer programs; and

(iv) provide faculty mentors for students participating in activities under clause (iii), including summer salary support for faculty mentors.

Funds used by eligible partnerships to carry out clauses (i) and (ii) shall be from non-Federal sources. In-cash and in-kind resources used by eligible partnerships to carry out clauses (i) and (ii) shall not be considered to be contributions for purposes of applying subsection (i)(3) of this section.

(C) Any institution participating in a partnership that receives a grant under this paragraph shall be ineligible to receive assistance under part B of title I of the Higher Education Act of 1965 [20 U.S.C. 1011 et seq.] for the duration of the grant received under this paragraph.

(2) Outreach grants

The Director shall make grants to associate-degree-granting colleges with outstanding mathematics and science programs to strengthen relationships with secondary schools in the community served by the college by improving mathematics and science education and encouraging the interest and aptitude of secondary school students for careers in science and advanced-technology fields through such means as developing agreements with local educational agencies to enable students to satisfy entrance and course requirements at the associate-degree-granting college.

(3) Mentor training grants

The Director shall—

(A) establish a program to encourage and make grants available to institutions of higher education that award associate degrees to recruit and train individuals from the fields of science, technology, engineering, and mathematics to mentor students who are described in section 1885a or 1885b of this title in order to assist those students in identifying, qualifying for, and entering

¹So in original. The comma probably should be a semicolon.
higher-paying technical jobs in those fields; and
(B) make grants available to associate-degree-granting colleges to carry out the program identified in subsection 2(A).

(d) Coordination with other Federal departments
In carrying out this section, the Director shall cooperate, coordinate, to enhance program effectiveness and to avoid duplication, with the programs and policies of other relevant Federal agencies. In carrying out subsection (c) of this section, the Director shall coordinate activities with programs receiving assistance under part B of title I of the Higher Education Act of 1965 [20 U.S.C. 1011 et seq.].

(e) Limitation on funding
To qualify for a grant under this section, an associate-degree-granting college, or consortium thereof, shall provide assurances adequate to the Director that it will not decrease its level of spending of funds from non-Federal sources on advanced scientific and technical education and training programs.

(f) Functions of Director
In carrying out sections 1862h to 1862j of this title, the Director shall—
(1) award grants on a competitive, merit basis;
(2) ensure an equitable geographic distribution of grant awards;
(3) ensure that an applicant for a grant awarded under subsection (a), (b), or (c) of this section will make an in-cash or in-kind contribution in an amount equal to at least 25 percent of the cost of the program, and for a grant awarded under subsection (c) of this section will make an in-cash or in-kind contribution in an amount at least equal to the amount of the grant award;
(4) establish and maintain a readily accessible inventory of the programs assisted under sections 1862h to 1862j of this title; and
(5) designate an officer of the National Science Foundation to serve as a liaison with associate-degree-granting institutions for the purpose of enhancing the role of such institutions in the activities of the Foundation.

(g) Definitions
As used in this section—
(1) the term “advanced-technology” includes advanced technical activities such as the modernization, miniaturization, integration, and computerization of electronic, hydraulic, pneumatic, laser, nuclear, chemical, telecommunication, fiber optic, robotic, and other technological applications to enhance productivity improvements in manufacturing, communication, transportation, commercial, and similar economic and national security activities;
(2) the term “associate-degree-granting college” means an institution of higher education (as determined under section 101 of the Higher Education Act of 1965 [20 U.S.C. 1001]) that—
(A) is a nonprofit institution that offers a 2-year associate-degree program or a 2-year certificate program; or
(B) is a proprietary institution that offers a 2-year associate-degree program;
(3) the term “bachelor-degree-granting institution” means an institution of higher education (as determined under section 101 of the Higher Education Act of 1965 [20 U.S.C. 1001]) that offers a baccalaureate degree program;
(4) the term “eligible partnership” means one or more associate-degree-granting colleges in partnership with one or more separate bachelor-degree-granting institutions; and
(5) the term “local educational agency” has the meaning given such term in section 2891(12) of title 20.

REFERENCES IN TEXT
Sections 1862h to 1862j of this title, referred to in subsections (a) and (f), was in the original “this Act”, meaning Pub. L. 102–476, Oct. 23, 1992, 106 Stat. 2297.

Amendments
2007—Subsec. (a)(3)(A). Pub. L. 110–69, § 7031(a)(1)(A), which directed striking out “and” after the semicolon, was executed by striking out “and” after the comma, to reflect the probable intent of Congress.
Subsec. (a)(3)(B), (C). Pub. L. 110–69, § 7031(a)(1)(B), (C), substituted “; and” for semicolon in subpar. (B) and added subpar. (C).

3See References in Text note below.
§ 1862j. Authorization of appropriations

There are authorized to be appropriated, from sums otherwise authorized to be appropriated, to the Director for carrying out sections 1862h to 1862j of this title—

(1) $35,000,000 for fiscal year 1992; and

(2) $35,000,000 for fiscal year 1993.


References in Text

Sections 1862h to 1862j of this title, referred to in text, were enacted as part of the National Science and Advanced-Technology Act of 1992 which enacted this section and sections 1862h of this title and amended section 1862 of this title. For complete classification of this Act to the Code, see Short Title of 1992 Amendment note set out under section 1001 of Title 20, Education.

Codification

Section was enacted as part of the Scientific and Advanced-Technology Act of 1992, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

§ 1862k. Findings; core strategies

(a) Findings

Congress finds the following:

(1) The United States depends upon its scientific and technological capabilities to preserve the military and economic security of the United States.

(2) America’s leadership in the global marketplace is dependent upon a strong commitment to education, basic research, and development.

(3) A nation that is not technologically literate cannot compete in the emerging global economy.

(4) A coordinated commitment to mathematics and science instruction at all levels of education is a necessary component of successful efforts to produce technologically literate citizens.

(5) Professional development is a necessary component of efforts to produce system-wide improvements in mathematics, engineering, and science education in secondary, elementary, and postsecondary settings.

(6)(A) The mission of the National Science Foundation is to provide Federal support for basic scientific and engineering research, and to be a primary contributor to mathematics, science, and engineering education at academic institutions in the United States.

(B) In accordance with such mission, the long-term goals of the National Science Foundation include providing leadership to—

(i) enable the United States to maintain a position of world leadership in all aspects of science, mathematics, engineering, and technology;

(ii) promote the discovery, integration, dissemination, and application of new knowledge in service to society; and

(iii) achieve excellence in United States science, mathematics, engineering, and technology education at all levels.

(b) Core strategies

In carrying out activities designed to achieve the goals described in subsection (a) of this section, the Foundation shall use the following core strategies:

(1) Develop intellectual capital, both people and ideas, with particular emphasis on groups and regions that traditionally have not participated fully in science, mathematics, and engineering.

(2) Strengthen the scientific infrastructure by investing in facilities planning and modernization, instrument acquisition, instrument design and development, and shared-use research platforms.

(3) Integrate research and education through activities that emphasize and strengthen the natural connections between learning and inquiry.

(4) Promote partnerships with industry, elementary and secondary schools, community colleges, colleges and universities, other agencies, State and local governments, and other institutions involved in science, mathematics, and engineering to enhance the delivery of math and science education and improve the technological literacy of the citizens of the United States.


Codification

Section was enacted as part of the National Science Foundation Authorization Act of 1998, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Indirect Costs


"(a) Matching Funds.—Matching funds required pursuant to section 204(a)(2)(C) of the Academic Research Facilities Modernization Act of 1988 (42 U.S.C. 1862c(a)(2)(C)) shall not be considered facilities costs for purposes of determining indirect cost rates under Office of Management and Budget Circular A-21.

"(b) Report.—

"(1) In General.—The Director of the Office of Science and Technology Policy, in consultation with other Federal agencies the Director deems appropriate, shall prepare a report—

"(A) analyzing the Federal indirect cost reimbursement rates (as the term is defined in Office of Management and Budget Circular A-21) paid to universities in comparison with Federal indirect cost reimbursement rates paid to other entities, such as industry, government laboratories, research hospitals, and nonprofit institutions;

"(B)(i) analyzing the distribution of the Federal indirect cost reimbursement rates by category
(such as administration, facilities, utilities, and libraries), and by the type of entity; and

(ii) determining what factors, including the type of research, influence the distribution;

(C) analyzing the impact, if any, that changes in Office of Management and Budget Circular A-21 have had on—

(i) the Federal indirect cost reimbursement rates, the rate of change of the Federal indirect cost reimbursement rates, the distribution by category of the Federal indirect cost reimbursement rates, and the distribution by type of entity of the Federal indirect cost reimbursement rates; and

(ii) the Federal indirect cost reimbursement (as calculated in accordance with Office of Management and Budget Circular A-21), the rate of change of the Federal indirect cost reimbursement, the distribution by category of the Federal indirect cost reimbursement, and the distribution by type of entity of the Federal indirect cost reimbursement;

(D) analyzing the impact, if any, of Federal and State law on the Federal indirect cost reimbursement rates;

(E)(i) analyzing options to reduce or control the rate of growth of the Federal indirect cost reimbursement rates, including options such as benchmarking of facilities and equipment cost, elimination of cost studies, mandated percentage reductions in the Federal indirect cost reimbursement; and

(ii) assessing the benefits and burdens of the options to the Federal Government, research institutions, and researchers; and

(F) analyzing options for creating a database—

(i) for tracking the Federal indirect cost reimbursement rates and the Federal indirect cost reimbursement; and

(ii) for analyzing the impact that changes in policies with respect to Federal indirect cost reimbursement will have on the Federal Government, researchers, and research institutions.

(2) REPORT TO CONGRESS.—The report prepared under paragraph (1) shall be submitted to Congress not later than 1 year after the date of enactment of this Act [July 29, 1998]."

NOTICE; ENHANCEMENT OF SCIENCE AND MATHEMATICS PROGRAMS


SEC. 205. NOTICE.

(a) NOTIFICATION OF REPURPOSING.—If any funds appropriated pursuant to the amendments made by this Act [See Short Title of 1998 Amendment note set out under this section] are subject to a reprogramming action that requires notice to be provided to the Committees on Appropriations of the Senate and the House of Representatives, notice of that action shall concurrently be provided to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Labor and Human Resources [now Committee on Health, Education, Labor, and Pensions] of the Senate, and the Committee on Science [now Committee on Science and Technology] of the House of Representatives.

(b) NOTICE OF REORGANIZATION.—Not later than 15 days before any major reorganization of any program, project, or activity of the National Science Foundation, the Director of the National Science Foundation shall provide notice to the Committees on Science [now Science and Technology] and Appropriations of the House of Representatives and the Committees on Commerce, Science, and Transportation, Labor and Human Resources [now Committee on Health, Education, Labor, and Pensions] of the Senate, and Appropriations of the Senate.

SEC. 206. ENHANCEMENT OF SCIENCE AND MATHEMATICS PROGRAMS.

(a) DEFINITIONS.—In this section:

(1) EDUCATIONALLY USEFUL FEDERAL EQUIPMENT.—The term 'educationally useful Federal equipment' means computers and related peripheral tools and research equipment that is appropriate for use in schools.

(2) SCHOOL.—The term 'school' means a public or private educational institution that serves any of the grades of kindergarten through grade 12.

(3) FOUNDATION.—The term 'Foundation' means the National Science Foundation established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).

(4) BOARD.—The term 'Board' means the National Science Board established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).

(5) UNITED STATES.—The term 'United States' means the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other territory or possession of the United States.

(6) NATIONAL RESEARCH FACILITY.—The term 'national research facility' means a research facility funded by the Foundation which is available, subject to appropriate policies allocating access, for use by all scientists and engineers affiliated with research institutions located in the United States.

§ 1862f. National research facilities

(a) Facilities plan

(1) In general

The Director shall prepare, and include as part of the Foundation's annual budget request to Congress, a plan for the proposed construction of, and repair and upgrades to, national research facilities, including full life-cycle cost information.

(2) Contents of the plan

The plan shall include—
(A) estimates of the costs for the construction, repairs, and upgrades described in paragraph (1), including costs for instrumentation development;

(B) estimates of the costs for the operation and maintenance of existing and proposed new facilities;

(C) in the case of proposed new construction and for major upgrades to existing facilities, funding profiles, by fiscal year, and milestones for major phases of the construction;

(D) for each project funded under the major research equipment and facilities construction account and for major upgrades of facilities in support of Antarctic research programs—

(i) estimates of the total project cost (from planning to commissioning); and

(ii) the source of funds, including Federal funding identified by appropriations category and non-Federal funding;

(E) estimates of the full life-cycle cost of each national research facility;

(F) information on any plans to retire national research facilities; and

(G) estimates of funding levels for grants supporting research that will be conducted using each national research facility.

(3) Special rule

The plan shall include cost estimates in the categories of construction, repair, and upgrades—

(A) for the year in which the plan is submitted to Congress; and

(B) for not fewer than the succeeding 4 years.

(b) Status of facilities under construction

The plan required under subsection (a) of this section shall include a status report for each uncompleted construction project included in current and previous plans. The status report shall include data on cumulative construction costs by project compared with estimated costs, and shall compare the current and original schedules for achievement of milestones for the major phases of the construction.


CODIFICATION

Section was enacted as part of the National Science Foundation Authorization Act of 1998, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS


Subsec. (a)(2)(D) to (G). Pub. L. 107–368, § 14(b)(2)(B)–(D), added subpars. (D) to (G).

§ 1862m. Financial disclosure

Persons temporarily employed by or at the Foundation shall be subject to the same financial disclosure requirements and related sanctions under the Ethics in Government Act of 1978 (5 U.S.C. App.) as are permanent employees of the Foundation in equivalent positions.


REFERENCES IN TEXT


CODIFICATION

Section was enacted as part of the National Science Foundation Authorization Act of 1998, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

§ 1862n. Mathematics and science education partnerships

(a) Program authorized

(1) In general

(A) The Director shall carry out a program to award grants to institutions of higher education or eligible nonprofit organizations (or consortia of such institutions or organizations) to establish mathematics and science education partnerships programs to improve elementary and secondary mathematics and science instruction.

(B) Grants shall be awarded under this subsection on a competitive, merit-reviewed basis.

(2) Partnerships

(A) In order to be eligible to receive a grant under this subsection, an institution of higher education or eligible nonprofit organization (or consortium of such institutions or organizations) shall enter into a partnership with one or more local educational agencies that may also include the department, college, or program of education at an institution of higher education.

(B) A participating institution of higher education shall include mathematics, science, or engineering departments in the programs carried out through a partnership under this paragraph.

(3) Uses of funds

Grants awarded under this subsection shall be used for activities that draw upon the expertise of the partners to improve elementary or secondary education in mathematics or science and that are consistent with State mathematics and science student academic achievement standards, including—

(A) recruiting and preparing students for careers in elementary or secondary mathematics or science education;
(B) offering professional development programs, including—
   (i) teacher institutes for the 21st century, as described in paragraph (10); and
   (ii) academic year institutes or workshops that—
      (I) are designed to strengthen the capabilities of mathematics and science teachers; and
      (II) may include professional development activities to prepare mathematics and science teachers to teach challenging mathematics, science, and technology college-preparatory courses;
   (C) offering innovative preservice and in-service programs that instruct teachers on using technology and laboratory experiences more effectively in teaching mathematics and science, including programs that recruit and train undergraduate and graduate students to provide technical and laboratory support to teachers;
   (D) developing distance learning programs for teachers or students, including developing courses, curricular materials, and other resources for the in-service professional development of teachers that are made available to teachers through the Internet;
   (E) developing a cadre of master teachers who will promote reform and improvement in schools;
   (F) offering teacher preparation and certification programs for professional mathematicians, scientists, and engineers who wish to begin a career in teaching;
   (G) developing tools to evaluate activities conducted under this subsection;
   (H) developing or adapting elementary school and secondary school mathematics and science curricular materials that incorporate contemporary research on the science of learning;
   (I) developing initiatives to increase and sustain the number, quality, and diversity of prekindergarten through grade 12 teachers of mathematics and science, including the use of induction programs, as defined in section 9813(b) of title 20, for teachers in their first 2 years of teaching, especially in underserved areas;
   (J) using mathematicians, scientists, and engineers employed by private businesses to help recruit and train mathematics and science teachers;
   (K) developing science, technology, engineering, and mathematics educational programs and materials and conducting science, technology, engineering, and mathematics enrichment programs for students, including after-school programs and summer programs, with an emphasis on including and serving students described in subsection (b)(2)(G);
   (L) providing research opportunities in business or academia for students and teachers;
   (M) bringing mathematicians, scientists, and engineers from business and academia into elementary school and secondary school classrooms; and
   (N) any other activities the Director determines will accomplish the goals of this subsection.

(4) Master teachers

Activities carried out in accordance with paragraph (3)(E) shall—
   (A) emphasize the training of master teachers who will improve the instruction of mathematics or science in kindergarten through grade 12;
   (B) include training in both content and pedagogy; and
   (C) provide training only to teachers who will be granted sufficient nonclassroom time to serve as master teachers, as demonstrated by assurances their employing school has provided to the Director, in such time and such manner as the Director may require.

(5) Science enrichment programs for girls

Activities carried out in accordance with paragraph (3)(K) and (L) shall include elementary school and secondary school programs to encourage the ongoing interest of girls in science, mathematics, engineering, and technology, and to prepare girls to pursue undergraduate and graduate degrees and careers in science, mathematics, engineering, or technology. Funds made available through awards to partnerships for the purposes of this paragraph may support programs for—
   (A) encouraging girls to pursue studies in science, mathematics, engineering, and technology and to major in such fields in post-secondary education;
   (B) tutoring girls in science, mathematics, engineering, and technology;
   (C) providing mentors for girls in person and through the Internet to support such girls in pursuing studies in science, mathematics, engineering, and technology;
   (D) educating the parents of girls about the difficulties faced by girls to maintain an interest and desire to achieve in science, mathematics, engineering, and technology, and enlisting the help of parents in overcoming these difficulties; and
   (E) acquainting girls with careers in science, mathematics, engineering, and technology and encouraging girls to plan for careers in such fields.

(6) Research in secondary schools

Activities carried out in accordance with paragraph (3)(K) may include support for research projects performed by students at secondary schools. Uses of funds made available through awards to partnerships for purposes of this paragraph may include—
   (A) training secondary school mathematics and science teachers in the design of research projects for students;
   (B) establishing a system for students and teachers involved in research projects funded under this subsection to exchange information about their projects and research results; and
   (C) assessing the educational value of the student research projects by such means as tracking the academic performance and choice of academic majors of students conducting research.

(7) Stipends

Grants awarded under this subsection may be used to provide stipends for teachers or stu-
ments participating in training or research activities that would not be part of their typical classroom activities.

(8) Mentors for teachers and students of challenging courses

Partnerships carrying out activities to prepare mathematics and science teachers to teach challenging mathematics, science, and technology college-preparatory courses in accordance with paragraph (3)(B) shall encourage companies employing scientists, technologists, engineers, or mathematicians to provide mentors to teachers and students and provide for the coordination of such mentoring activities.

(9) Innovation

Activities carried out in accordance with paragraph (3)(H) may include the development and dissemination of curriculum tools that will help foster inventiveness and innovation.

(10) Teacher institutes for the 21st century

(A) In general

Teacher institutes for the 21st century carried out in accordance with paragraph (3)(B) shall—

(i) be carried out in conjunction with a school served by the local educational agency in the partnership;
(ii) be science, technology, engineering, and mathematics focused institutes that provide professional development to elementary school and secondary school teachers;
(iii) serve teachers who—
(I) are considered highly qualified (as defined in section 9101 of the Elementary and Secondary Education Act of 1965 [20 U.S.C. 7801]);
(II) teach high-need subjects in science, technology, engineering, or mathematics; and
(III) teach in high-need schools (as described in section 1114(a)(1) of the Elementary and Secondary Education Act of 1965 [20 U.S.C. 6314(a)(1)]);
(iv) focus on the priorities developed by the Director in consultation with a broad group of relevant educational organizations;
(v) be content-based and build on school year curricula that are experiment-oriented, content-based, and grounded in current research;
(vi) ensure that the pedagogy component is designed around specific strategies that are relevant to teaching the subject and content on which teachers are being trained, which may include training teachers in the essential components of reading instruction for adolescents in order to improve student reading skills within the subject areas of science, technology, engineering, and mathematics;
(vii) be a multiyear program that is conducted for a period of not less than 2 weeks per year;
(viii) provide for direct interaction between participants in and faculty of the teacher institute;
(ix) have a component that includes the use of the Internet;
(x) provide for followup training in the classroom during the academic year for a period of not less than 3 days, which may or may not be consecutive, for participants in the teacher institute, except that for teachers in rural local educational agencies, the followup training may be provided through the Internet;
(xi) provide teachers participating in the teacher institute with travel expense reimbursement and classroom materials related to the teacher institute, and may include providing stipends as necessary; and
(xii) establish a mechanism to provide supplemental support during the academic year for teacher institute participants to apply the knowledge and skills gained at the teacher institute.

(B) Optional members of the partnership

In addition to the partnership requirement under paragraph (2), an institution of higher education or eligible nonprofit organization (or consortium) desiring a grant for a teacher institute for the 21st century may also partner with a teacher organization, museum, or educational partnership organization.

(b) Selection process

(1) Application

An institution of higher education or an eligible nonprofit organization (or a consortium of such institutions or organizations) seeking funding under subsection (a) of this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum—

(A) a description of the partnership and the role that each member will play in implementing the proposal;
(B) a description of each of the activities to be carried out, including—
(i) how such activities will be aligned with State mathematics and science student academic achievement standards and with other activities that promote student achievement in mathematics and science;
(ii) how such activities will be based on a review of relevant research;
(iii) why such activities are expected to improve student performance and strengthen the quality of mathematics and science instruction; and
(iv) any activities that will encourage the interest of individuals identified in section 1885a or 1885b of this title in mathematics, science, engineering, and technology and will help prepare such individuals to pursue postsecondary studies in these fields;
(C) a description of the number, size, and nature of any stipends that will be provided to students or teachers and the reasons such stipends are needed;
(D) a description of how the partnership will serve as a catalyst for reform of mathematics and science education programs;
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At a minimum, such evaluation shall—

(1) Assessment required

(A) the ability of the partnership to carry out effectively the proposed programs;

(B) the extent to which the members of the partnership are committed to making the partnership a central organizational focus;

(C) the degree to which activities carried out by the partnership are based on relevant research and are likely to result in increased student achievement;

(D) the degree to which such activities are aligned with State mathematics and science student academic achievement standards;

(E) the extent to which the evaluation described in paragraph (1)(E) will be independent and based on objective measures;

(F) the likelihood that the partnership will demonstrate activities that can be widely implemented as part of larger scale reform efforts; and

(G) the extent to which the activities will encourage the interest of individuals identified in section 1885a or 1885b of this title in mathematics, science, engineering, and technology and will help prepare such individuals to pursue postsecondary studies in these fields.

(2) Review of applications

In evaluating the applications submitted under paragraph (1), the Director shall consider, at a minimum—

(A) give priority to applications in which the partnership includes a high-need local educational agency or a high-need local educational agency in which at least one school does not make adequate yearly progress, as determined pursuant to part A of title I of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6311 et seq.) of subchapter I of chapter 70 of Title 20, as amended. Part A of title I of the Act is classified generally to part A of chapter 2, subchapter III of title II of the Elementary and Secondary Education Act of 1965 [20 U.S.C. 6661 et seq.]. The report under this paragraph shall be submitted along with the President’s annual budget request.

(B) quality activities from funds received under section 1885a or 1885b of this title in mathematics, science, engineering, and technology and will help prepare such individuals to pursue postsecondary studies in these fields.

(3) Awards

In awarding grants under this section, the Director shall—

(A) give priority to applications in which the partnership includes a high-need local educational agency or a high-need local educational agency in which at least one school does not make adequate yearly progress, as determined pursuant to part A of title I of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6311 et seq.) and

(B) ensure that, to the extent practicable, a substantial number of the partnerships funded under this section include businesses.

(c) Accountability and dissemination

(1) Assessment required

The Director shall evaluate the program established under subsection (a) of this section. At a minimum, such evaluation shall—

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

(B) to the extent practicable, compare the effectiveness of practices and materials developed and demonstrated by the partnerships authorized under this section with those of partnerships funded by other State or Federal agencies.

(2) Report on evaluations

Not later than 4 years after August 9, 2007, the Director shall transmit a report summarizing the evaluations required under subsection (b)(1)(E) of grants received under this program and describing any changes to the program recommended as a result of these evaluations to the Committee on Science and Technology and the Committee on Education and Labor of the House of Representatives and to the Committee on Commerce, Science, and Transportation and the Committee on Health, Education, Labor, and Pensions of the Senate. Such report shall be made widely available to the public.

(3) Annual meeting

The Director, in consultation with the Secretary of Education, shall convene an annual meeting of the partnerships participating under this section to foster greater national collaboration.

(4) Report on coordination

The Director, in consultation with the Secretary of Education, shall provide an annual report to the Committee on Science of the House of Representatives, the Committee on Education and the Workforce of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate describing how the program authorized under this section has been and will be coordinated with the program authorized under part B of title II of the Elementary and Secondary Education Act of 1965 [20 U.S.C. 6661 et seq.]. The report under this paragraph shall be submitted along with the President’s annual budget request.

(5) Technical assistance

At the request of an eligible partnership or a State educational agency, the Director shall provide the partnership or agency with technical assistance in meeting any requirements of this section, including providing advice from experts on how to develop—

(A) a quality application for a grant; and

(B) quality activities from funds received from a grant under this section.

(d) Definitions

In this section—

(1) the term “mathematics and science teacher” means a science, technology, engineering, or mathematics teacher at the elementary school or secondary school level; and

(2) the term “science”, in the context of elementary and secondary education, includes technology and pre-engineering.

Education. Part B of title II of the Act is classified generally to part B (§661i et seq.) of subchapter II of chapter 70 of Title 20. For complete classification of this Act to the Code, see Short Title of 2002 Amendment note set out under section 6301 of Title 20 and Tables.

Codification

Section was enacted as part of the National Science Foundation Authorization Act of 2002, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Amendments

2007—Subsec. (a)(2)(A). Pub. L. 110–69, § 7028(1), substituted “the department, college, or program of education at an institution of higher education, a State educational agency,” for “a State educational agency”.
Subsec. (a)(3)(B). Pub. L. 110–69, § 7028(2), added subpar. (B) and struck out former subpar. (B) which read as follows: “(B) and (G), respectively.
Subsec. (a)(4). Pub. L. 110–69, § 7028(3), inserted “and laboratory experience” after “technology” and “and laboratory” after “provide technical”.
Subsec. (a)(5). Pub. L. 110–69, § 7028(4), inserted “including the use of induction programs, as defined in section 9813(h) of title 20, for teachers in their first 2 years of teaching,” after “and science”.
Subsec. (a)(6)(K). Pub. L. 110–69, § 7028(5), added subpar. (K) and struck out former subpar. (K) which read as follows: “developing and offering mathematics or science enrichment programs for students, including after-school and summer programs;”.
Subsec. (a)(8). Pub. L. 110–69, § 7028(6), added par. (8) and (9).
Subsec. (b)(2)(E) to (G). Pub. L. 110–69, § 7028(7), added subpar. (E) and redesignated former subpars. (E) and (F) as (F) and (G), respectively.
Subsec. (c)(2). Pub. L. 110–69, § 7028(8), added par. (2) and struck out former par. (2). Prior to amendment, text of par. (2) read as follows: “(A) The results of the evaluation required under paragraph (1) shall be made available to the public and shall be provided to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate.
“(B) Materials developed under the program established under subsection (a) of this section that are demonstrated to be effective shall be made widely available to the public.”

Change of Name

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.
Committee on Education and the Workforce of House of Representatives changed to Committee on Education and Labor of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

Findings

Pub. L. 107–368, § 2, Dec. 19, 2002, 116 Stat. 3034, provided that “Congress finds the following:
“(1) The National Science Foundation has made major contributions for more than 50 years to strengthen and sustain the Nation’s academic research enterprise that is the envy of the world.
“(2) The economic strength and national security of the United States and the quality of life of all Americans are grounded in the Nation’s scientific and technological capacities.
“(3) The National Science Foundation carries out important functions in supporting basic research in all science and engineering disciplines and in supporting science, mathematics, engineering, and technology education at all levels.
“(4) The research and education activities of the National Science Foundation promote the discovery, integration, dissemination, and application of new knowledge in service to society and prepare future generations of scientists, mathematicians, and engineers who will be necessary to ensure America’s leadership in the global marketplace.
“(5) The National Science Foundation must be provided with sufficient resources to enable it to carry out its responsibilities to develop intellectual capital, strengthen the scientific infrastructure, integrate research and education, enhance the delivery of mathematics and science education in the United States, and improve the technological literacy of all people in the United States.
“(6) The emerging global economic, scientific, and technical environment challenges long-standing assumptions about domestic and international policy, requiring the National Science Foundation to play a more proactive role in sustaining the competitive advantage of the United States through superior research capabilities.
“(7) Commercial application of the results of Federal investment in basic and computing science is consistent with longstanding United States technology transfer policy and is a critical national priority, particularly with regard to cybersecurity and other homeland security applications, because of the urgent needs of commercial, academic, and individual users as well as the Federal and State Governments.”

Report on Foundation Budgetary and Programmatic Expansion


Definitions

“(1) Academic unit—The term ‘academic unit’ means a department, division, institute, school, college, or other subcomponent of an institution of higher education.
“(2) Board—The term ‘Board’ means the National Science Board established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).
“(3) Community college—The term ‘community college’ has the meaning given such term in section 3301(3) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7011(3)).
“(4) Director—The term ‘Director’ means the Director of the National Science Foundation established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).
“(5) Elementary school—The term ‘elementary school’ has the meaning given that term by section 9101(18) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801(18)).
“(6) Eligible nonprofit organization—The term ‘eligible nonprofit organization’ means a nonprofit research institute, or a nonprofit professional association, with demonstrated experience and effectiveness in mathematics or science education as determined by the Director.
“(7) Foundation—The term ‘Foundation’ means the National Science Foundation established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).
“(8) High-need local educational agency—The term ‘high-need local educational agency’ means a
§ 1862n–1. Robert Noyce Teacher Scholarship Program

(a) Scholarship program

(1) In general

The Director shall carry out a program to award grants to eligible entities to recruit and train mathematics and science teachers and to provide scholarships and stipends to individuals participating in the program. Such program shall be known as the “Robert Noyce Teacher Scholarship Program”.

(2) Merit review

Grants shall be provided under this section on a competitive, merit-reviewed basis.

(3) Use of grants

A grant provided under this section shall be used by the eligible entity—

(A) to develop and implement a program to recruit and prepare undergraduate students majoring in science, technology, engineering, and mathematics at the eligible entity (and participating institutions of higher education of the consortium, if applicable) to become qualified as mathematics and science teachers, through—

(i) administering scholarships in accordance with subsection (c);

(ii) offering academic courses and early clinical teaching experiences designed to prepare students participating in the program to teach in elementary schools and secondary schools, including such preparation as is necessary to meet requirements for teacher certification or licensing;

(iii) offering programs to students participating in the program, both before and after the students receive their baccalaureate degree, to enable the students to become better mathematics and science teachers, to fulfill the service requirements of this section, and to exchange ideas with others in the students’ fields; and

(iv) providing summer internships for freshman and sophomore students participating in the program; or

(B) to develop and implement a program to recruit and prepare science, technology, engineering, or mathematics professionals to become qualified as mathematics and science teachers, through—

(i) administering stipends in accordance with subsection (d);

(ii) offering academic courses and clinical teaching experiences designed to prepare stipend recipients to teach in elementary schools and secondary schools served by a high need local educational agency, including such preparation as is necessary to meet requirements for teacher certification or licensing; and

(iii) offering programs to stipend recipients, both during and after matriculation in the program for which the stipend is received, to enable recipients to become better mathematics and science teachers, to fulfill the service requirements of this section, and to exchange ideas with others in the students’ fields.
(4) Eligibility requirement

(A) In general

To be eligible to receive a grant under this section, an eligible entity shall ensure that specific faculty members and staff from the science, technology, engineering, and mathematics departments and specific education faculty of the eligible entity (and participating institutions of higher education of the consortium, if applicable) are designated to carry out the development and implementation of the program.

(B) Inclusion of master teachers

An eligible entity (and participating institutions of higher education of the consortium, if applicable) receiving a grant under this section may also include master teachers in the development of the pedagogical content of the program and in the supervision of students participating in the program in their clinical teaching experiences.

(C) Active participants

No eligible entity (or participating institution of higher education of the consortium, if applicable) receiving a grant under this section unless faculty from the science, technology, engineering, and mathematics departments of the eligible entity (and participating institutions of higher education of the consortium, if applicable) are active participants in the program.

(5) Awards

In awarding grants under this section, the Director shall ensure that the eligible entities (and participating institutions of higher education of the consortia, if applicable) represent a variety of types of institutions of higher education. In support of this goal, the Director shall broadly disseminate information about when and how to apply for grants under this section, including by conducting outreach to—

(A) historically Black colleges and universities that are part B institutions, as defined in section 322(2) of the Higher Education Act of 1965 (20 U.S.C. 1061(2)); and

(B) minority institutions, as defined in section 365(3) of the Higher Education Act of 1965 (20 U.S.C. 1067k(3)).

(6) Supplement not supplant

Grant funds provided under this section shall be used to supplement, and not supplant, other Federal or State funds available for the type of activities supported by the grant.

(b) Selection process

(1) Application

An eligible entity seeking funding under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum—

(A) in the case of an applicant that is submitting an application on behalf of a consortium of institutions of higher education, a description of the participating institutions of higher education and the roles and responsibilities of each such institution;

(B) a description of the program that the applicant intends to operate, including the number of scholarships and summer internships or the size and number of stipends the applicant intends to award, the type of activities proposed for the recruitment of students to the program, and the selection process that will be used in awarding the scholarships or stipends;

(C) evidence that the applicant has the capability to administer the program in accordance with the provisions of this section, which may include a description of any existing programs at the applicant eligible entity (and participating institutions of higher education of the consortium, if applicable) that are targeted to the education of mathematics and science teachers and the number of teachers graduated annually from such programs;

(D) a description of the academic courses and clinical teaching experiences required under subparagraphs (A)(ii) and (B)(ii) of subsection (a)(3), as applicable, including—

(i) a description of the programs required under subsection (a)(3), including activities to assist new teachers in fulfilling the teachers’ service requirements under this section;

(ii) a description of the clinical teaching experiences required under subparagraphs (A)(ii) and (B)(ii) of subsection (a)(3), including activities to assist new teachers in fulfilling the teachers’ service requirements under this section;

(iii) evidence of agreements between the eligible entity’s science, technology, engineering, and mathematics faculty and its education faculty (and such faculty of participating institutions of higher education of the consortium, if applicable) who will carry out the development and implementation of the program as required under subsection (a)(4); and

(iv) a description of the process the applicant will use to fulfill the requirements of subsection (f).

(2) Review of applications

In evaluating the applications submitted under paragraph (1), the Director shall consider, at a minimum—

(A) the evidence of agreements between the eligible entity’s science, technology, engineering, and mathematics faculty and its education faculty (and such faculty of participating institutions of higher education of the consortium, if applicable) which may include a description of any existing programs at the applicant eligible entity (and participating institutions of higher education of the consortium, if applicable) that are targeted to the education of mathematics and science teachers and the number of teachers graduated annually from such programs;

(B) the extent to which the applicant’s science, technology, engineering, and mathematics faculty and its education faculty (and such faculty of participating institutions of higher education of the consortium, if applicable) have worked or will work collaboratively to design new or revised curricula that recognize the specialized pedagogy...
required to teach science, technology, engineering, and mathematics effectively in elementary schools and secondary schools;
(C) the extent to which the applicant (and the participating institutions of higher education of the consortium, if applicable) is committed to making the program a central organizational focus;
(D) the degree to which the proposed programming will enable scholarship or stipend recipients to become successful mathematics and science teachers;
(E) the number and academic qualifications of the students who will be served by the program; and
(F) the ability of the applicant (and the participating institutions of higher education of the consortium, if applicable) to recruit students who would otherwise not pursue a career in teaching in elementary schools or secondary schools and students who are individuals identified in section 1885a or 1885b of this title.
(c) Scholarship requirements
(1) In general
Scholarships under this section shall be available only to students who—
(A) are majoring in science, technology, engineering, or mathematics; and
(B) have attained at least junior status in a baccalaureate degree program.
(2) Selection
Individuals shall be selected to receive scholarships primarily on the basis of academic merit, with consideration given to financial need and to the goal of promoting the participation of individuals identified in section 1885a or 1885b of this title.
(3) Amount
The Director shall establish for each year the amount to be awarded for scholarships under this section for that year, which shall be not less than $10,000 per year, except that no individual shall receive for any year more than the cost of attendance at such individual’s institution.
Individuals may receive a maximum of 1 year of stipend support, except that if an individual is enrolled in a part-time program, such amount shall be prorated according to the length of the program.
(4) Service obligation
If an individual receives a stipend under this section, such individual shall be required to complete, within 4 years after graduation from the program for which the stipend was awarded, 2 years of service as a mathematics or science teacher. Service required under this paragraph shall be performed in a high need local educational agency.
(c) Stipends
(1) In general
Stipends under this section shall be available only to science, technology, engineering, or mathematics professionals who, while receiving the stipend, are enrolled in a program established under subsection (a)(3)(B).
(2) Selection
Individuals shall be selected to receive stipends under this section primarily on the basis of academic merit and professional achievement, with consideration given to financial need and to the goal of promoting the participation of individuals identified in section 1885a or 1885b of this title.
(3) Amount and duration
Stipends under this section shall not be less than $10,000 per year, except that no individual shall receive for any year more than the cost of attendance at such individual’s institution.
Individuals may receive a maximum of 3 years of stipend support, except that if an individual is enrolled in a part-time program, such amount shall be prorated according to the length of the program.
(4) Service obligation
If an individual receives a stipend under this section, each individual shall be required to complete, within 8 years after graduation from the baccalaureate degree program for which the stipend was awarded, a maximum service requirement of 6 years.
Part-time students may receive scholarships that are prorated according to such students’ enrollment status, not to exceed 6 years of scholarship support.
(f) Collection for noncompliance
(1) Monitoring compliance
An eligible entity receiving a grant under this section shall, as a condition of participating in the program, enter into an agreement with the Director to monitor the compliance of scholarship or stipend recipients with their respective service requirements.
(2) Collection of repayment
(A) In general
In the event that a scholarship or stipend recipient is required to repay the scholarship or stipend under subsection (g), the eligible entity shall—
(i) be responsible for determining the repayment amounts and for notifying the recipient and the Director of the amount owed; and
Failure to complete service obligation

(1) General rule
If an individual who has received a scholarship or stipend under this section—
(A) fails to maintain an acceptable level of academic standing in the educational institution in which the individual is enrolled, as determined by the Director;
(B) is dismissed from such educational institution for disciplinary reasons;
(C) withdraws from the program for which the award was made before the completion of such program;
(D) declares that the individual does not intend to fulfill the service obligation under this section; or
(E) fails to fulfill the service obligation of the individual under this section;

such individual shall be liable to the United States as provided in paragraph (2).

(2) Amount of repayment
(A) Less than one year of service
If a circumstance described in paragraph (1) occurs before the completion of 1 year of a service obligation under this section, the total amount of awards received by the individual under this section shall be repaid or such amount shall be treated as a loan to be repaid in accordance with subparagraph (C).

(B) More than one year of service
If a circumstance described in subparagraph (D) or (E) of paragraph (1) occurs after the completion of 1 year of a service obligation under this section—
(i) for a scholarship recipient, the total amount of scholarship awards received by the individual under this section, reduced by the ratio of the number of years of service completed by the number of years of service required, shall be repaid or such amount shall be treated as a loan to be repaid in accordance with subparagraph (C); and
(ii) for a stipend recipient, one-half of the total amount of stipends received by the individual under this section shall be repaid or such amount shall be treated as a loan to be repaid in accordance with subparagraph (C).

(C) Repayments
The loans described under subparagraphs (A) and (B) shall be payable to the Federal Government, consistent with the provisions of part B or D of title IV of the Higher Education Act of 1965 [20 U.S.C. 1071 et seq., 1087a et seq.], and shall be subject to repayment in accordance with terms and conditions specified by the Director (in consultation with the Secretary of Education) in regulations promulgated to carry out this paragraph.

(3) Exceptions
The Director may provide for the partial or total waiver or suspension of any service or payment obligation by an individual under this section whenever compliance by the individual with the obligation is impossible or would involve extreme hardship to the individual, or if enforcement of such obligation with respect to the individual would be unconscionable.

Data collection
An eligible entity receiving a grant under this section shall supply to the Director any relevant statistical and demographic data on scholarship and stipend recipients the Director may request, including information on employment required under this section.

Definitions
In this section—
(1) the term “cost of attendance” has the meaning given such term in section 472 of the Higher Education Act of 1965 (20 U.S.C. 1071l);
(2) the term “eligible entity” means—
(A) an institution of higher education; or
(B) an institution of higher education that receives grant funds on behalf of a consortium of institutions of higher education;
(3) the term “fellowship” means an award to an individual under section 1862n–1a of this title;
(4) the term “high need local educational agency” has the meaning given such term in section 201 of the Higher Education Act of 1965 (20 U.S.C. 1021);
(5) the term “mathematics and science teacher” means a science, technology, engineering, or mathematics teacher at the elementary school or secondary school level;
(6) the term “scholarship” means an award under subsection (c);
(7) the term “science, technology, engineering, or mathematics professional” means a person who holds a baccalaureate, master’s, or doctoral degree in science, technology, engineering, or mathematics, and is working in or had a career in such field or a related area; and
(8) the term “stipend” means an award under subsection (d).

Mathematics and science scholarship gift fund
In accordance with section 1870(f) of this title, the Director is authorized to accept donations from the private sector to supplement but not supplant scholarships, stipends, internships, or fellowships associated with programs under this section or section 1862n–1a of this title.

Assessment of teacher service and retention
Not later than 4 years after August 9, 2007, the Director shall transmit to the Committee on
§ 1862n–1a. National Science Foundation Teaching Fellowships and Master Teaching Fellowships

(a) In general

(1) Grants

(A) In general

As part of the Robert Noyce Teacher Scholarship Program established under section 1862n–1 of this title, the Director shall establish a separate program to award grants to eligible entities to enable such entities to administer fellowships in accordance with this section.

(B) Definitions

The terms used in this section have the meanings given the terms in section 1862n–1 of this title.

(2) Fellowships

Fellowships under this section shall be available only to—

(A) science, technology, engineering, or mathematics professionals, including retiring professionals in those fields, who shall be referred to as “National Science Foundation Teaching Fellows” and who, in the first year of the fellowship, are enrolled in a master’s degree program leading to teacher certification or licensing; and

(B) mathematics and science teachers, who shall be referred to as “National Science Foundation Master Teaching Fellows” and who possess a master’s degree in their field.

(b) Eligibility

In order to be eligible to receive a grant under this section, an eligible entity shall enter into a partnership that shall include—

(1) a department within an institution of higher education participating in the partnership that provides an advanced program of study in mathematics and science;

(2)(A) a school or department within an institution of higher education participating in the partnership that provides a teacher preparation program; or

(B) a 2-year institution of higher education

(3) not less than 1 high need local educational agency and whether mathematics and science teachers teaching in high need local educational agencies and whether there continue to exist significant shortages of such teachers in high need local educational agencies.

(4) 1 or more nonprofit organizations that have a demonstrated record of capacity to provide expertise or support to meet the purposes of this section.

(c) Use of grants

Grants awarded under this section shall be used by the eligible entity (and participating institutions of higher education of the consortium, if applicable) to develop and implement a program for National Science Foundation Teaching Fellows or National Science Foundation Master Teaching Fellows, through—

(1) administering fellowships in accordance with this section, including providing the

References in Text


The terms used in this section have the meanings given the terms in section 1862n–1 of this title.

Amendments

2007—Pub. L. 110–69 amended section generally, substituting provisions relating to the Robert Noyce Teacher Scholarship Program, consisting of subsections (a) to (l), for former provisions relating to the Robert Noyce Scholarship Program, consisting of subsections (a) to (l). See Codification note above.

Definitions

For definitions of terms used in this section, see section 4 of Pub. L. 107–368, set out as a note under section 1862n of this title.

Codification

Section 7030 of Pub. L. 110–69, which directed that “Section 10 of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n–1) is amended to read ‘follows’” and then set out the text of sections 10 and 10A, was executed by generally amending section 10 and adding a new section 10A (42 U.S.C. 1862n–1a) after section 10, to reflect the probable intent of Congress.

Section was enacted as part of the National Science Foundation Authorization Act of 2002, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Health, Education, Labor, and Pensions of the Senate and the Committee on Science and Technology of the House of Representatives a report on the effectiveness of the programs carried out under this section and section 1862n–1a of this title. The report shall include the proportion of individuals receiving scholarships, stipends, or fellowships under the program who—

(1) fulfill the individuals’ service obligation required under this section or section 1862n–1a of this title;

(2) remain in the teaching profession beyond the individuals’ service obligation; and

(3) remain in the teaching profession in a high need local educational agency beyond the individuals’ service obligation.

Evaluation

Not less than 2 years after August 9, 2007, the Director, in consultation with the Secretary of Education, shall conduct an evaluation to determine whether the scholarships, stipends, and fellowships authorized under this section and section 1862n–1a of this title have been effective in increasing the numbers of high-quality mathematics and science teachers teaching in high need local educational agencies and whether there continue to exist significant shortages of such teachers in high need local educational agencies.

References in Text


The terms used in this section have the meanings given the terms in section 1862n–1 of this title.

Amendments

2007—Pub. L. 110–69 amended section generally, substituting provisions relating to the Robert Noyce Teacher Scholarship Program, consisting of subsections (a) to (l), for former provisions relating to the Robert Noyce Scholarship Program, consisting of subsections (a) to (l). See Codification note above.

Definitions

For definitions of terms used in this section, see section 4 of Pub. L. 107–368, set out as a note under section 1862n of this title.
teaching fellowship salary supplements described in subsection (f); 
(2) in the case of National Science Foundation Teaching Fellowships—
(A) offering academic courses and clinical teaching experiences leading to a master’s degree and designed to prepare individuals to teach in elementary schools and secondary schools, including such preparation as is necessary to meet the requirements for certification or licensing; and 
(B) offering programs both during and after matriculation in the program for which the fellowship is received to enable fellows to become highly effective mathematics and science teachers, including mentoring, training, induction, and professional development activities, to fulfill the service requirements of this section, including the requirements of subsection (e), and to exchange ideas with others in their fields; and 
(3) in the case of National Science Foundation Master Teaching Fellowships—
(A) offering academic courses and leadership training to prepare individuals to become master teachers in elementary schools and secondary schools; and 
(B) offering programs both during and after matriculation in the program for which the fellowship is received to enable fellows to become highly effective mathematics and science teachers, including mentoring, training, induction, and professional development activities, to fulfill the service requirements of this section, including the requirements of subsection (e), and to exchange ideas with others in their fields.
(d) Selection process
(1) Merit review
Grants shall be awarded under this section on a competitive, merit-reviewed basis.
(2) Applications
An eligible entity desiring a grant under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum—
(A) in the case of an applicant that is submitting an application on behalf of a consortium of institutions of higher education, a description of the participating institutions of higher education and the roles and responsibilities of each such institution; 
(B) a description of the program that the applicant intends to operate, including the number of fellowships the applicant intends to award, the type of activities proposed for the recruitment of students to the program, and the amount of the teaching fellowship salary supplements to be provided in accordance with subsection (f); 
(C) evidence that the applicant has the capability to administer the program in accordance with the provisions of this section, which may include a description of any existing programs at the applicant eligible entity (and participating institutions of higher education of the consortium, if applicable) that are targeted to the education of mathematics and science teachers and the number of teachers graduated annually from such programs; 
(D) in the case of National Science Foundation Teaching Fellowships, a description of—
(i) the selection process that will be used in awarding fellowships, including a description of the rigorous measures to be used, including the rigorous, nationally recognized assessments to be used, in order to determine whether individuals applying for fellowships have advanced content knowledge of science, technology, engineering, or mathematics; 
(ii) the academic courses and clinical teaching experiences described in subsection (c)(2)(A), including—
(I) a description of an educational program that will enable a student to obtain a master’s degree and teacher certification or licensing within 1 year; and 
(II) evidence of agreements between the applicant and the schools or local educational agencies that are identified as the locations at which clinical teaching experiences will occur; 
(iii) a description of the programs described in subsection (c)(2)(B), including activities to assist individuals in fulfilling their service requirements under this section; 
(E) evidence that the eligible entity will provide the teaching supplements required under subsection (f); and 
(F) a description of the process the applicant will use to fulfill the requirements of section 1862n–1(f) of this title.
(3) Criteria
In evaluating the applications submitted under paragraph (2), the Director shall consider, at a minimum—
(A) the ability of the applicant (and participating institutions of higher education of the consortium, if applicable) to effectively carry out the program and to meet the requirements of subsection (f); 
(B) the extent to which the mathematics, science, or engineering faculty and the education faculty at the eligible entity (and participating institutions of higher education of the consortium, if applicable) have worked or will work collaboratively to design new or revised curricula that recognizes the specialized pedagogy required to teach science, technology, engineering, and mathematics effectively in elementary schools and secondary schools; 
(C) the extent to which the applicant (and participating institutions of higher education of the consortium, if applicable) is committed to making the program a central organizational focus; 
(D) the degree to which the proposed programming will enable participants to become highly effective mathematics and science teachers and prepare such participants to assume leadership roles in their
schools, in addition to their regular classroom duties, including serving as mentor or master teachers, developing curriculum, and assisting in the development and implementation of professional development activities:

(E) the number and quality of the individuals that will be served by the program; and

(F) in the case of the National Science Foundation Teaching Fellowship, the ability of the applicant (and participating institutions of higher education of the consortium, if applicable) to recruit individuals who would otherwise not pursue a career in teaching and individuals identified in section 1885a or 1885b of this title.

(4) Selection of fellows

(A) In general

Individuals shall be selected to receive fellowships under this section primarily on the basis of—

(i) professional achievement;

(ii) academic merit;

(iii) content knowledge of science, technology, engineering, or mathematics, as demonstrated by their performance on an assessment in accordance with paragraph (2)(D)(i); and

(iv) in the case of National Science Foundation Master Teaching Fellows, demonstrated success in improving student academic achievement in science, technology, engineering, or mathematics.

(B) Promoting participation of certain individuals

Among individuals demonstrating equivalent qualifications, consideration may be given to the goal of promoting the participation of individuals identified in section 1885a or 1885b of this title.

(e) Duties of National Science Foundation Teaching Fellows and Master Teaching Fellows

A National Science Foundation Teaching Fellow or a National Science Foundation Master Teaching Fellow, while fulfilling the service obligation under subsection (g) and in addition to regular classroom activities, shall take on a leadership role within the school or local educational agency in which the fellow is employed, as defined by the partnership according to such fellow’s expertise, including serving as a mentor or master teacher, developing curricula, and assisting in the development and implementation of professional development activities.

(f) Teaching fellowship salary supplements

(1) In general

An eligible entity receiving a grant under this section shall provide salary supplements to individuals who participate in the program under this section during the period of their service obligation under subsection (g). A local educational agency through which the service obligation is fulfilled shall agree not to reduce the base salary normally paid to an individual solely because such individual receives a salary supplement under this subsection.

(2) Amount and duration

(A) Amount

Salary supplements provided under paragraph (i) shall be not less than $10,000 per year, except that, in the case of a National Science Foundation Teaching Fellow, while enrolled in the master’s degree program as described in subsection (c)(2)(A), such fellow shall receive not more than the cost of attendance at such fellow’s institution.

(B) Support while enrolled in master’s degree program

A National Science Foundation Teaching Fellow may receive a maximum of 1 year of fellowship support while enrolled in a master’s degree program as described in subsection (c)(2)(A), except that if such fellow is enrolled in a part-time program, such amount shall be prorated according to the length of the program.

(C) Duration of support

An eligible entity receiving a grant under this section shall provide teaching fellowship salary supplements through the period of the fellow’s service obligation under subsection (g).

(g) Service obligation

An individual awarded a fellowship under this section shall serve as a mathematics or science teacher in an elementary school or secondary school served by a high need local educational agency for—

(1) in the case of a National Science Foundation Teaching Fellow, 4 years, to be fulfilled within 6 years of completing the master’s program described in subsection (c)(2)(A); and

(2) in the case of a National Science Foundation Master Teaching Fellow, 5 years, to be fulfilled within 7 years of the start of participation in the program under subsection (c)(3).

(h) Matching requirement

(1) In general

An eligible entity receiving a grant under this section shall provide, from non-Federal sources, to carry out the activities supported by the grant—

(A) in the case of grants in an amount of less than $1,500,000, an amount equal to at least 30 percent of the amount of the grant, at least one half of which shall be in cash; and

(B) in the case of grants in an amount of $1,500,000 or more, an amount equal to at least 50 percent of the amount of the grant, at least one half of which shall be in cash.

(2) Waiver

The Director may waive all or part of the matching requirement described in paragraph (1) for any fiscal year for an eligible entity receiving a grant under this section, if the Director determines that applying the matching requirement would result in serious hardship or inability to carry out the authorized activities described in this section.
(i) Conditions of support; collection for noncompliance; failure to complete service obligation; data collection

(1) In general

Except as provided in paragraph (2), subsections (e), (f), (g), and (h) of section 1862n–1 of this title shall apply to eligible entities and recipients of fellowships under this section, as applicable, in the same manner as such subsections apply to eligible entities and recipients of scholarships and stipends under section 1862n–1 of this title, as applicable.

(2) Amount of repayment

If a circumstance described in subparagraph (D) or (E) of section 1862n–1(g)(1) of this title occurs after the completion of 1 year of a service obligation under this section—

(A) for a National Science Foundation Teaching Fellow, the total amount of fellowship award received by the individual under this section while enrolled in the master's degree program, reduced by one-fourth of the total amount for each year of service completed, plus one-half of the total teaching fellowship salary supplements received by such individual under this section, shall be repaid or such amount shall be treated as a loan to be repaid in accordance with section 1862n–1(g)(1)(C) of this title; and

(B) for a National Science Foundation Master Teaching Fellow, the total amount of teaching fellowship salary supplements received by the individual under this section, reduced by one-half, shall be repaid or such amount shall be treated as a loan to be repaid in accordance with section 1862n–1(g)(1)(C) of this title.

(2) Purpose

The purpose of the Centers shall be to conduct and evaluate research in cognitive science, education, and related fields and to develop ways in which the results of such research can be applied in elementary school and secondary school classrooms to improve the teaching of mathematics and science.

(3) Focus

(A) Each Center shall be focused on a different challenge faced by elementary school or secondary school teachers of mathematics and science. In determining the research focus of the Centers, the Director shall consult with the National Academy of Sciences and the Secretary of Education and take into account the extent to which other Federal programs support research on similar questions.

(B) The proposal solicitation issued by the Director shall state the focus of each Center and applicants shall apply for designation as a specific Center.

(C) At least one Center shall focus on developing ways in which the results of research described in paragraph (2) can be applied, duplicated, and scaled up for use in low-performing elementary schools and secondary schools to improve the teaching and student achievement levels in mathematics and science.

(D) To the extent practicable and relevant to its focus, every Center shall include, as part of its research, work designed to quantitatively assess and improve the ways that information technology is used in the teaching of mathematics and science.

(b) Selection process

(1) Application

An institution of higher education or an eligible nonprofit organization (or a consortium thereof) seeking funding under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum, a description of—

(A) the initial research projects that will be undertaken by the Center and the process by which new projects will be identified;

(B) how the Center will work with other research institutions and schools to broaden the national research agenda on learning and teaching;

(C) how the Center will promote active collaboration among physical, biological, and social science researchers;
(D) how the Center will promote active participation by elementary and secondary mathematics and science teachers and administrators; and

(E) how the results of the Center’s research can be incorporated into educational practices, and how the Center will assess the success of those practices.

(2) Review of applications

In evaluating the applications submitted under paragraph (1), the Director shall consider, at a minimum—

(A) the ability of the applicant to effectively carry out the research program, including the activities described in paragraph (1)(E);

(B) the experience of the applicant in conducting research on the science of teaching and learning and the capacity of the applicant to foster new multidisciplinary collaborations;

(C) the capacity of the applicant to attract elementary school and secondary school teachers from a diverse array of schools, and with diverse professional experiences, for participation in Center activities; and

(D) the capacity of the applicant to attract and provide adequate support for graduate students to pursue research at the intersection of educational practice and basic research on human cognition and learning.

(3) Awards

The Director shall ensure, to the extent practicable, that the Centers funded under this section conduct research and develop educational practices designed to improve the educational performance of a broad range of students, including individuals identified in section 1865a or 1885b of this title.

(c) Annual conference

The Director shall convene an annual meeting of the Centers to foster collaboration among the Centers and to further disseminate the results of the Centers’ activities.

(d) Coordination

The Director shall coordinate with the Secretary of Education in—

(1) disseminating the results of the research conducted pursuant to grants awarded under this section to elementary school teachers and secondary school teachers; and

(2) providing programming, guidance, and support to ensure that such teachers—

(A) understand the implications of the research disseminated under paragraph (1) for classroom practice; and

(B) can use the research to improve such teachers’ performance in the classroom.

(AMENDMENTS


Subsec. (b)(1). Pub. L. 110–69, §7006(b)(2), (3), in introductory provisions, inserted “or an eligible nonprofit organization” after “institution of higher education” and substituted “thereof” for “of such institutions”.

FUNDING FOR CENTERS


DEFINITIONS

For definitions of terms used in this section, see section 4 of Pub. L. 107–368, set out as a note under section 1862n of this title.

§1862n–3. Duplication of programs

(a) In general

The Director shall review the education programs of the Foundation that are in operation as of December 19, 2002, to determine whether any of such programs duplicate the programs authorized under this Act.

(b) Implementation

As programs authorized under this Act are implemented, the Director shall—

(1) terminate any duplicative program being carried out by the Foundation or merge the duplicative program into a program authorized under this Act; and

(2) not establish any new program that duplicates a program that has been implemented pursuant to this Act.

(c) Report

(1) Review

The Director of the Office of Science and Technology Policy shall review the education programs of the Foundation to ensure compliance with the provisions of this section.

(2) Submission

Not later than 1 year after December 19, 2002, and annually thereafter as part of the annual Office of Science and Technology Policy’s budget submission to Congress, the Director of the Office of Science and Technology Policy shall complete a report on the review carried out under this subsection and shall submit the report to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Commerce, Science, and Transportation, the Committee on Health, Education, Labor, and Pensions, and the Committee on Appropriations of the Senate.

(REFERENCES IN TEXT


For complete classification of this Act to the Code, see Short Title of 2002 Amendment note set out under section 1861 of this title and Tables.)
§ 1862n–4. Major research equipment and facilities construction plan

(a) Prioritization of proposed major research equipment and facilities construction

(1) Development of priorities

(A) The Director shall—
   (i) develop a list indicating by number the relative priority for funding under the major research equipment and facilities construction account that the Director assigns to each project the Board has approved for inclusion in a future budget request; and
   (ii) submit the list described in clause (i) to the Board for approval.

(B) The Director shall update the list prepared under subparagraph (A) each time the Board approves a new project that would receive funding under the major research equipment and facilities construction account, as necessary to prepare reports under paragraph (2), and, from time to time, submit any updated list to the Board for approval.

(2) Annual report

Not later than 90 days after December 19, 2002, and not later than each June 15 thereafter, the Director shall transmit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate a report containing—

(A) the most recent Board-approved priority list developed under paragraph (1)(A);
   (B) a description of the criteria used to develop such list; and
   (C) a description of the major factors for each project that determined the ranking of such project on the list, based on the application of the criteria described pursuant to subparagraph (B).

(3) Criteria

The criteria described pursuant to paragraph (2)(B) shall include, at a minimum—

(A) scientific merit;
   (B) broad societal need and probable impact;
   (C) consideration of the results of formal prioritization efforts by the scientific community;
   (D) readiness of plans for construction and operation;
   (E) the applicant’s management and administrative capacity of large research facilities;
   (F) international and interagency commitments; and
   (G) the order in which projects were approved by the Board for inclusion in a future budget request.

(b) Omitted

(c) Project management

No national research facility project funded under the major research equipment and facilities construction account shall be managed by an individual whose appointment to the Foundation is temporary.

(d) Board approval of major research equipment and facilities projects

(1) In general

The Board shall explicitly approve any project to be funded out of the major research equipment and facilities construction account before any funds may be obligated from such account for such project.

(2) Report

Not later than September 15 of each fiscal year, the Board shall report to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Health, Education, Labor, and Pensions of the Senate, and the Committee on Science of the House of Representatives on the conditions of any delegation of authority under section 1863 of this title that relates to funds appropriated for any project in the major research equipment and facilities construction account.

(e) National Academy of Sciences study on major research equipment and facilities construction

(1) Study

Not later than 3 months after December 19, 2002, the Director shall enter into an arrangement with the National Academy of Sciences to perform a study on setting priorities for a diverse array of disciplinary and interdisciplinary Foundation-sponsored large research facility projects.

(2) Transmittal to Congress

Not later than 15 months after December 19, 2002, the Director shall transmit to the Committee on Science and the Committee on Appropriations of the House of Representatives, and to the Committee on Commerce, Science, and Transportation, the Committee on Health, Education, Labor, and Pensions, and the Committee on Appropriations of the Senate, the study conducted by the National Academy of Sciences together with the Foundation’s reaction to the study authorized under paragraph (1).

§ 1862n–5. Board meetings; audits; reports; scholarship eligibility

(a) Board meetings

(1) Omitted

(2) Open meetings

To ensure transparency of the Board’s entire decision-making process, including deliberations on Board business occurring within its various subdivisions, the Board and all of its committees, subcommittees, and task forces (and any other entity consisting of members of the Board and reporting to the Board) shall be subject to section 552b of title 5. The preceding requirement will apply to meetings of the full Board, whenever a quorum is present; and to meetings of its subdivisions, whenever a quorum of the subdivision is present.

(3) Compliance audit

The Inspector General of the Foundation shall conduct an audit every three years of the compliance by the Board with the requirements described in paragraph (2). The audit shall examine the proposed and actual content of closed meetings and determine whether the closure of the meetings was consistent with section 552b of title 5.

(4) Report

Not later than February 15 of every third year, the Inspector General of the Foundation shall transmit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate the audit required under paragraph (3) along with recommendations for corrective actions that need to be taken to achieve fuller compliance with the requirements described in paragraph (2), and recommendations on how to ensure public access to the Board’s deliberations.

(5) Materials relating to closed portions of meetings

To facilitate the audit required under paragraph (3) of this subsection, the Office of the National Science Board shall maintain the General Counsel’s certificate, the presiding officer’s statement, and a transcript or recording of any closed meeting, for at least 3 years after such meeting.

(b), (c) Omitted

(d) Scholarship eligibility

The Director shall not exclude part-time students from eligibility for scholarships under the Computer Science, Engineering, and Mathematics Scholarship program.
(4) expansion of undergraduate research opportunities beyond a particular laboratory, course, or academic unit to engage multiple academic units in providing multidisciplinary research opportunities for undergraduate students;  
(5) expansion of innovative tutoring or mentoring programs proven to enhance student recruitment or persistence to degree completion in science, mathematics, engineering, or technology;  
(6) improvement of undergraduate science, mathematics, engineering, and technology education for nonmajors, including education majors; and  
(7) implementation of technology-driven reform efforts, including the installation of technology to facilitate such reform, that directly impact undergraduate science, mathematics, engineering, or technology instruction or research experiences.

c) Selection process  
(1) Applications  
An institution of higher education seeking a grant under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum—  
(A) a description of the proposed reform effort;  
(B) a description of the previously implemented reform effort that will serve as the basis for the proposed reform effort and evidence of success of that previous effort, including data on student recruitment, persistence to degree completion, and academic achievement;  
(C) evidence of active participation in the proposed project by individuals who were central to the success of the previously implemented reform effort; and  
(D) evidence of institutional support for, and commitment to, the proposed reform effort, including a description of existing or planned institutional policies and practices regarding faculty hiring, promotion, tenure, and teaching assignment that reward faculty contributions to undergraduate education equal to, or greater than, scholarly scientific research.

(2) Review of applications  
In evaluating applications submitted under paragraph (1), the Director shall consider at a minimum—  
(A) the evidence of past success in implementing undergraduate education reform and the likelihood of success in undertaking the proposed expanded effort;  
(B) the extent to which the faculty, staff, and administrators of the institution are committed to making the proposed institutional reform a priority of the participating academic unit;  
(C) the degree to which the proposed reform will contribute to change in institutional culture and policy such that a greater value is placed on faculty engagement in undergraduate education, as evidenced through promotion and tenure policies; and  
(D) the likelihood that the institution will sustain or expand the reform beyond the period of the grant.

(3) Grant distribution  
The Director shall ensure, to the extent practicable, that grants awarded under this section are made to a variety of types of institutions of higher education.


Compilations  
Section was enacted as part of the National Science Foundation Authorization Act of 2002, 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 4 of Pub. L. 107–368, set out as a note under section 1862n of this title.

§ 1862n–7. Reports  
(a) Grant size and duration  
Not later than 6 months after December 19, 2002, the Director shall transmit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate a report describing the impact that increasing the average grant size and duration would have on minority-serving institutions and on institutions located in States where the Foundation’s Experimental Program to Stimulate Competitive Research (established under section 1862g of this title) is carrying out activities.

(b) Faculty  
Not later than 3 months after December 19, 2002, the Director shall enter into an arrangement with the National Academy of Sciences to assess gender differences in the careers of science and engineering faculty. This study shall build on the Academy’s work on gender differences in the careers of doctoral scientists and engineers and examine issues such as faculty hiring, promotion, tenure, and allocation of resources including laboratory space. Upon completion, the results of this study shall be transmitted to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate.

(c) Grant funding  
Not later than 3 months after December 19, 2002, the Director shall enter into an agreement with an appropriate party to assess gender differences in the distribution of external Federal research and development funding. This study shall examine differences in amounts requested and awarded, by gender, in major Federal external grant programs. Upon completion, the results of this study shall be transmitted to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate.
(d) Study of broadband network access for schools and libraries

(1) Report to Congress

The Director shall conduct a study of the issues described in paragraph (3), and not later than 1 year after December 19, 2002, transmit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate a report including recommendations to address those issues. Each such report shall be updated annually for 4 additional years.

(2) Consultation

In preparing the reports under paragraph (1), the Director shall consult with Federal agencies and educational entities as the Director considers appropriate.

(3) Issues to be addressed

The reports shall—

(A) identify the availability of high-speed, large bandwidth capacity access to different demographic groups served by elementary schools, secondary schools, and libraries in the United States;

(B) identify how the provision of high-speed, large bandwidth capacity access to the Internet to such schools and libraries can be effectively utilized within each school and library;

(C) consider the effect that specific or regional circumstances may have on the ability of such institutions to acquire high-speed, large bandwidth capacity access to achieve universal connectivity as an effective tool in the education process; and

(D) include options and recommendations to address the challenges and issues identified in the reports.

(e) Minority-serving institution funding

(1) Annual reporting required

The Director shall submit an annual report, along with the President’s annual budget request, to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate on the amount of funding awarded by the Foundation to minority-serving institutions, including funding received as members of consortia. The report shall include information on such funding to minority-serving institutions—

(A) expressed as a percentage of funding to all institutions of higher education for each appropriations account within the Foundation’s budget; and

(B) for the preceding 10 years.

(2) Report on ways to improve funding

Within one year after December 19, 2002, the Director shall submit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate a report on recommendations on how the Foundation can improve funding to minority-serving institutions.


Definition

Section was enacted as part of the National Science Foundation Authorization Act of 2002, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Change of Name

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

§ 1862n–8. Evaluations

(a) Education

(1) In general

The Director, through the Research, Evaluation and Communication Division of the Education and Human Resources Directorate of the Foundation, shall evaluate the effectiveness of all undergraduate science, mathematics, engineering, or technology education activities supported by the Foundation in increasing the number and quality of students, including individuals identified in section 1885a or 1885b of this title studying toward and completing associate’s or baccalaureate degrees in science, mathematics, engineering, and technology. In conducting the evaluation, the Director shall consider information on—

(A) the number of students enrolled in undergraduate science, mathematics, engineering, and technology programs;

(B) student academic achievement, including quantifiable measurements of students’ mastery of content and skills;

(C) persistence to degree completion, including students who transfer from science, mathematics, engineering, and technology programs to programs in other academic disciplines; and

(D) placement during the first year after degree completion in post-graduate education or career pathways.

(2) Assessment benchmarks and tools

The Director, through the Research, Evaluation and Communication Division of the Education and Human Resources Directorate of the Foundation, shall establish a common set of assessment benchmarks and tools, and shall enable every Foundation-sponsored project to incorporate the use of these benchmarks and tools in their project-based assessment activities.

(3) Reports to Congress

Not later than 3 years after December 19, 2002, and once every 3 years thereafter, the Director shall transmit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on
Health, Education, Labor, and Pensions of the Senate a report containing the results of evaluations under paragraph (1).

(b) **Awards**

Notwithstanding any other provision of this Act, the Director shall annually evaluate a random sample of grants, contracts, or other awards made pursuant to this Act.

(c) **Dissemination**

The Director shall—

1. provide for the dissemination of the results of the evaluations conducted pursuant to this section to the public; and
2. provide notice to the public that such evaluations are available.


**REFERENCES IN TEXT**


**CODEFICATION**

Section was enacted as part of the National Science Foundation Authorization Act of 2002, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

**CHANGE OF NAME**

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

**DEFINITIONS**

For definitions of terms used in this section, see section 4 of Pub. L. 107–368, set out as a note under section 1862n of this title.

§ 1862n–9. Astronomy and Astrophysics Advisory Committee

(a) **Establishment**

The Foundation, the National Aeronautics and Space Administration, and the Department of Energy shall jointly establish an Astronomy and Astrophysics Advisory Committee (in this section referred to as the “Advisory Committee”).

(b) **Duties**

The Advisory Committee shall—

1. assess, and make recommendations regarding, the coordination of astronomy and astrophysics programs of the Foundation, the National Aeronautics and Space Administration, and the Department of Energy;
2. assess, and make recommendations regarding, the status of the activities of the Foundation, the National Aeronautics and Space Administration, and the Department of Energy as they relate to the recommendations contained in the National Research Council’s 2001 report entitled “Astronomy and Astrophysics in the New Millennium”, and the recommendations contained in subsequent National Research Council reports of a similar nature; and
3. not later than March 15 of each year, transmit a report to the Director, the Administrator of the National Aeronautics and Space Administration, the Secretary of Energy, the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate on the Advisory Committee’s findings and recommendations under paragraphs (1) and (2).

(c) **Membership**

The Advisory Committee shall consist of 13 members, none of whom shall be a Federal employee, including—

1. 4 members selected by the Director;
2. 4 members selected by the Administrator of the National Aeronautics and Space Administration;
3. 3 members selected by the Secretary of Energy; and
4. 2 members selected by the Director of the Office of Science and Technology Policy.

(d) **Selection process**

Initial selections under subsection (c) of this section shall be made within 3 months after December 19, 2002. Vacancies shall be filled in the same manner as provided in subsection (c) of this section.

(e) **Chairperson**

The Advisory Committee shall select a chairperson from among its members.

(f) **Coordination**

The Advisory Committee shall coordinate with other Federal advisory committees that advise Federal agencies that engage in related research activities.

(g) **Compensation**

The members of the Advisory Committee shall serve without compensation, but shall receive travel expenses, including per diem in lieu of subsistence, in accordance with sections 5702 and 5703 of title 5.

(h) **Meetings**

The Advisory Committee shall convene, in person or by electronic means, at least 4 times a year.

(i) **Quorum**

A majority of the members serving on the Advisory Committee shall constitute a quorum for purposes of conducting the business of the Advisory Committee.

(j) **Duration**

Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee.


**REFERENCES IN TEXT**

Section 14 of the Federal Advisory Committee Act, referred to in subsec. (j), is section 14 of Pub. L. 92–463, which is set out in the Appendix to Title 5, Government Organization and Employees.

**CODEFICATION**

Section was enacted as part of the National Science Foundation Authorization Act of 2002, and not as part...
of the National Science Foundation Act of 1950 which comprises this chapter.

**AMENDMENTS**

2004—Subsecs. (a), (b)(1), (2). Pub. L. 108–423, § 5(a)(1), substituted “the National Aeronautics and Space Administration, and the Department of Energy” for “and the National Aeronautics and Space Administration”.

Subsec. (b)(3), Pub. L. 108–423, § 5(a)(2), substituted “Administration, the Secretary of Energy,” for “Administration, and”.


Subsec. (c)(3), (4). Pub. L. 108–423, § 5(a)(3)(B)–(D), added par. (3) and redesignated former par. (3) as (4) and substituted “2” for “3”.

Subsec. (f). Pub. L. 108–423, § 5(a)(4), substituted “other Federal advisory committees that advise Federal agencies that engage in related research activities” for “the advisory bodies of other Federal agencies, such as the Department of Energy, which may engage in related research activities”.

**CHANGE OF NAME**

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

**EFFECTIVE DATE OF 2004 AMENDMENT**


**DEFINITIONS**

For definitions of terms used in this section, see section 4 of Pub. L. 107–386, set out as a note under section 1862n of this title.

§ 1862n–10. Minority-serving institutions undergraduate program

(a) In general

The Director is authorized to establish a new program to award grants on a competitive, merit-reviewed basis to Hispanic-serving institutions, Alaska Native-serving institutions, Native Hawaiian-serving institutions, and other institutions of higher education serving a substantial number of minority students to enhance the quality of undergraduate science, mathematics, and engineering education at such institutions and to increase the retention and graduation rates of students pursuing associate’s or baccalaureate degrees in science, mathematics, engineering, or technology.

(b) Program components

Grants awarded under this section shall support—

1. activities to improve courses and curriculum in science, mathematics, and engineering;

2. faculty development;

3. stipends for undergraduate students participating in research; and

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

(c) Program coordination

This program shall be coordinated with and in addition to the ongoing Historically Black Colleges and Universities Undergraduate Program and the Tribal Colleges and Universities Program.

(d) Instrumentation

Funding for instrumentation is an allowed use of grants awarded under this section and under the ongoing Historically Black Colleges and Universities Undergraduate Program and the Tribal Colleges and Universities Program.


**CODIFICATION**

Section was enacted as part of the National Science Foundation Authorization Act of 2002, 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 4 of Pub. L. 107–386, set out as a note under section 1862n of this title.

§ 1862a. Postdoctoral research fellows

(a) Mentoring

The Director shall require that all grant applications that include funding to support postdoctoral researchers include a description of the mentoring activities that will be provided for such individuals, and shall ensure that this part of the application is evaluated under the Foundation’s broader impacts merit review criterion. Mentoring activities may include career counseling, training in preparing grant applications, guidance on ways to improve teaching skills, and training in research ethics.

(b) Reports

The Director shall require that annual reports and the final report for research grants that include funding to support postdoctoral researchers include a description of the mentoring activities provided to such researchers.


**CODIFICATION**

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

**REAFFIRMATION OF THE MERIT-REVIEW PROCESS OF THE NATIONAL SCIENCE FOUNDATION**

Pub. L. 110–69, title VII, § 7003, Aug. 9, 2007, 121 Stat. 679, provided that: “Nothing in this title [enacting this section and sections 1862n–1a and 1862o–1 to 1862o–15 of this title, amending sections 1862, 1862a, 1862n, 1862n–1, 1862n–2, 1862n–5, 1863, 1870, and 1881a of this title, sections 5503 and 5511 of Title 15, Commerce and Trade, and section 3801 of Title 31, Money and Finance, enacting provisions set out as notes under this section and section 1862n–2 of this title, and amending provisions set out as a note under section 1113 of Title 31 or title I [enacting sections 6603, 6619, and 6620 of this title and section 3718 of Title 15 and enacting section 3711 of Title 15], or the amendments made by this title or title I, shall be interpreted to require or recommend that the Foundation—

1. alter or modify its merit-review system or peer-review process; or

2. exclude the awarding of any proposal by means of the merit-review or peer-review process.”

**CURRICULA**

section and sections 1862n–1a and 1862o–1 to 1862o–15 of this title, amending sections 1862i, 1862l, 1862n, 1862n–1, 1862n–2, 1863n–5, 1863, 1870, and 1881a of this title, sections 5503 and 5511 of Title 15, Commerce and Trade, and section 3601 of Title 31, Money and Finance, enacting provisions set out as notes under this section and section 1862n–2 of this title, and amending provisions set out as a note under section 1113 of Title 31, or the amendments made by this title, shall be construed to limit the authority of State governments or local school boards to determine the curricula of their students.”

**Definitions**

Pub. L. 110–69, title VII, § 7001, Aug. 9, 2007, 121 Stat. 675, provided that: “In this title (enacting this section and sections 1862n–1a and 1862o–1 to 1862o–15 of this title, amending sections 1862i, 1862l, 1862n, 1862n–1, 1862n–2, 1863n–5, 1863, 1870, and 1881a of this title, sections 5503 and 5511 of Title 15, Commerce and Trade, and section 3601 of Title 31, Money and Finance, enacting provisions set out as notes under this section and section 1862n–2 of this title, and amending provisions set out as a note under section 1113 of Title 31):

“(1) **Basic Research.—** The term ‘basic research’ has the meaning given such term in the Office of Management and Budget Circular No. A–11.

“(2) **Board.—** The term ‘Board’ means the National Science Board established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).

“(3) **Director.—** The term ‘Director’ means the Director of the Foundation.

“(4) **Elementary School.—** The term ‘elementary school’ has the meaning given such term in section 9101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

“(5) **Foundation.—** The term ‘Foundation’ means the National Science Foundation.

“(6) **Institution of Higher Education.—** The term ‘institution of higher education’ has the meaning given such term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

“(7) **Secondary School.—** The term ‘secondary school’ has the meaning given such term in section 9101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).”

§ 1862o–1. Responsible conduct of research

The Director shall require that each institution that applies for financial assistance from the Foundation for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project.


**Codification**

Section was enacted as part of the America COMPETES 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.

§ 1862o–2. Reporting of research results

The Director shall ensure that all final project reports and citations of published research documents resulting from research funded, in whole or in part, by the Foundation, are made available to the public in a timely manner and in electronic form through the Foundation’s Web site.


**Codification**

Section was enacted as part of the America COMPETES 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.

§ 1862o–3. Sharing research results

An investigator supported under a Foundation award, whom the Director determines has failed to comply with the provisions of section 734 of the Foundation Grant Policy Manual, shall be ineligible for a future award under any Foundation supported program or activity. The Director may restore the eligibility of such an investigator on the basis of the investigator’s subsequent compliance with the provisions of section 734 of the Foundation Grant Policy Manual and with such other terms and conditions as the Director may impose.


**Codification**

Section was enacted as part of the America COMPETES 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.

§ 1862o–4. Funding for successful science, technology, engineering, and mathematics education programs

(a) Evaluation of programs

The Director shall, on an annual basis, evaluate all of the Foundation’s grants that are scheduled to expire within 1 year and—

(1) that have the primary purpose of meeting the objectives of the Science and Engineering Equal Opportunity Act (42 U.S.C. 1885 et seq.); or

(2) that have the primary purpose of providing teacher professional development.

(b) Continuation of funding

For grants that are identified under subsection (a) and that are determined by the Director to be successful in meeting the objectives of the initial grant solicitation, the Director may extend the duration of those grants for not more than 3 additional years beyond their
scheduled expiration without the requirement for a recompetition.

(c) Report to Congress

Not later than 1 year after August 9, 2007, and annually thereafter, the Director shall submit a report to the Committee on Science and Technology of the House of Representatives and to the Committee on Commerce, Science, and Transportation and the Committee on Health, Education, Labor, and Pensions of the Senate that—

(1) lists the grants that have been extended in duration by the authority provided under this section; and

(2) provides any recommendations the Director may have regarding the extension of the authority provided under this section to programs other than those specified in subsection (a).


REFERENCES IN TEXT


CODIFICATION

Section was enacted as part of the America COMPETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Science Education and Engineer 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 of this title.

§1862o–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.


CODIFICATION

Section was enacted as part of the America COMPETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Science Education and Engineer 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 of this title.

§1862o–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.


CODIFICATION

Section was enacted as part of the America COMPETES Act, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Science Education and Engineer 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 of this title.

§ 1862a–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.


CODIFICATION
Section was enacted as part of the America COMPETES 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 of this title.

§ 1862a–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.


CODIFICATION
Section was enacted as part of the America COMPETES 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 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.

(2) Centers

The Director shall award multiyear grants, subject to the availability of appropriations and on a merit-reviewed competitive basis, to institutions of higher education, nonprofit research institutions affiliated with institutions of higher education, or consortia of either type of institution to establish multidisciplinary Centers for Communications Research. The purpose of the Centers shall be to generate innovative approaches to problems in information and communications technology research, including the research areas described in paragraph (1). Institutions of higher education, nonprofit research institutions affiliated with institutions of higher education, or consortia receiving such grants may partner with 1 or more government laboratories, for-profit entities, or other institutions of higher education or nonprofit research institutions.

(3) Funding allocation

The Director shall increase funding for the basic research activities described in paragraph (1), which shall include support for the Centers described in paragraph (2), in proportion to the increase in the total amount appropriated to the Foundation for research and related activities for the fiscal years 2008 through 2010.

(4) Report to Congress

The Director shall transmit to Congress, as part of the President’s annual budget submission under section 1105 of title 31, a report on the amounts allocated for support of research under this section for the fiscal year during which such report is submitted and the levels proposed for the fiscal year with respect to which the budget submission applies.


References in Text


Codification

Section was enacted as part of the America COMPETES 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.

§ 1862o–11. Evaluation and report

The Director shall establish metrics to evaluate the success of the programs established by the Foundation for encouraging individuals identified in section 1885a or 1885b of this title to study and prepare for careers in science, technology, engineering, and mathematics, including programs that provide for mentoring for such individuals. The Director shall carry out evaluations based on the metrics developed and report to Congress annually on the findings and conclusions of the evaluations.


Codification

Section was enacted as part of the America COMPETES 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.

§ 1862o–12. Hispanic-serving institutions undergraduate program

(a) In general

The Director is authorized to establish a new program to award grants on a competitive, merit-reviewed basis to Hispanic-serving institutions (as defined in section 1101a of title 20) to enhance the quality of undergraduate science, technology, engineering, and mathematics education at such institutions and to increase the retention and graduation rates of students pursuing associate’s or baccalaureate degrees in science, technology, engineering, and mathematics.

(b) Program components

Grants awarded under this section shall support—

(1) activities to improve courses and curriculum in science, technology, engineering, and mathematics;
(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 for instrumentation is an allowed use of grants awarded under this section.


Codification
Section was enacted as part of the America COMPETES 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 of this title.

§ 1862o–13. Professional science master's degree programs

(a) Clearinghouse

(1) Development

The Director shall establish a clearinghouse, in collaboration with 4-year institutions of higher education (including applicable graduate schools and academic departments), and industries and Federal agencies that employ science-trained personnel, to share program elements used in successful professional science master's degree programs and other advanced degree programs related to science, technology, engineering, and mathematics.

(2) Availability

The Director shall make the clearinghouse of program elements developed under paragraph (1) available to institutions of higher education that are developing professional science master's degree programs.

(b) Programs

(1) Programs authorized

The Director shall award grants to 4-year institutions of higher education to facilitate the institutions' creation or improvement of professional science master's degree programs that may include linkages between institutions of higher education and industries that employ science-trained personnel, with an emphasis on practical training and preparation for the workforce in high-need fields.

(2) Application

A 4-year institution of higher education desiring a grant under this section shall submit an application to the Director at such time, in such manner, and accompanied by such information as the Director may require. The application shall include—

(A) a description of the professional science master's degree program that the institution of higher education will implement;
(B) a description of how the professional science master's degree program at the institution of higher education will produce individuals for the workforce in high-need fields;
(C) the amount of funding from non-Federal sources, including from private industries, that the institution of higher education shall use to support the professional science master's degree program; and
(D) an assurance that the institution of higher education shall encourage students in the professional science master's degree program to apply for all forms of Federal assistance available to such students, including applicable graduate fellowships and student financial assistance under titles IV and VII of the Higher Education Act of 1965 (20 U.S.C. 1070 et seq., 1133 et seq. [and 42 U.S.C. 2751 et seq.]).

(3) Preferences

The Director shall give preference in making awards to 4-year institutions of higher education seeking Federal funding to create or improve professional science master's degree programs, to those applicants—

(A) located in States with low percentages of citizens with graduate or professional degrees, as determined by the Bureau of the Census, that demonstrate success in meeting the unique needs of the corporate, non-profit, and government communities in the State, as evidenced by providing internships for professional science master's degree students or similar partnership arrangements; or
(B) that secure more than two-thirds of the funding for such professional science master's degree programs from sources other than the Federal Government.

(4) Number of grants; time period of grants

(A) Number of grants

Subject to the availability of appropriated funds, the Director shall award grants under paragraph (1) to a maximum of 200 4-year institutions of higher education.

(B) Time period of grants

Grants awarded under this section shall be for one 3-year term. Grants may be renewed only once for a maximum of 2 additional years.

(5) Evaluation and reports

(A) Development and performance benchmarks

Prior to the start of the grant program, the Director, in collaboration with 4-year institutions of higher education (including applicable graduate schools and academic departments), and industries and Federal agencies that employ science-trained personnel, shall develop performance benchmarks to evaluate the pilot programs assisted by grants under this section.

(B) Evaluation

For each year of the grant period, the Director, in consultation with 4-year institutions of higher education (including applicable graduate schools and academic departments), and industries and Federal agencies that employ science-trained personnel, shall complete an evaluation of each program as-
sisted by grants under this section. Any program that fails to satisfy the performance benchmarks developed under subparagraph (A) shall not be eligible for further funding.

(C) Report
Not later than 180 days after the completion of an evaluation described in subparagraph (B), the Director shall submit a report to Congress that includes—
(i) the results of the evaluation; and
(ii) recommendations for administrative and legislative action that could optimize the effectiveness of the pilot programs, as the Director determines to be appropriate.


REFERENCES IN TEXT

$6,000,000.
In addition to the acquisition of instrumentation and equipment, funds made available by awards under the Major Research Instrumentation program may be used to support the operations and maintenance of such instrumentation and equipment.

(c) Cost sharing
(1) In general
An institution of higher education receiving an award under the Major Research Instrumentation program shall provide at least 30 percent of the cost from private or non-Federal sources.

(2) Exceptions
Institutions of higher education that are not Ph.D.-granting institutions are exempt from the cost sharing requirement in paragraph (1), and the Director may reduce or waive the cost sharing requirement for—
(A) institutions—
(i) that are not ranked among the top 100 institutions receiving Federal research and development funding, as documented by the statistical data published by the Foundation; and
(ii) for which the proposed project will make a substantial improvement in the institution’s capabilities to conduct leading edge research, to provide research experiences for undergraduate students using leading edge facilities, and to broaden the participation in science and engineering research by individuals identified in section 1865a or 1865b of this title; and
(B) consortia of institutions of higher education that include at least one institution that is not a Ph.D.-granting institution.


CODIFICATION
Section was enacted as part of the America COMPETES 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.

§1862o–15. Limit on proposals
(a) Policy
For programs supported by the Foundation that require as part of the selection process for awards the submission of preproposals and that also limit the number of preproposals that may be submitted by an institution, the Director shall allow the subsequent submission of a full proposal based on each preproposal that is determined to have merit following the Foundation’s merit review process.

(b) Review and assessment of policies
The Board shall review and assess the effects on institutions of higher education of the policies of the Foundation regarding the imposition of limitations on the number of proposals that may be submitted by a single institution for programs supported by the Foundation. The Board shall determine whether current policies are well justified and appropriate for the types of programs that limit the number of proposal submissions. Not later than 1 year after August 9, 2007, the Board shall summarize the Board’s findings and any recommendations regarding changes to the current policy on the restriction of proposal submissions in a report to the Committee on Science and Technology of the House of Representatives and to the Committee on Commerce, Science, and Transportation and the Committee on Health, Education, Labor, and Pensions of the Senate.

§ 1862p. National Center for Science and Engineering Statistics

(a) Establishment

There is established within the Foundation a National Center for Science and Engineering Statistics that shall serve as a central Federal clearinghouse for the collection, interpretation, analysis, and dissemination of objective data on science, engineering, technology, and research and development.

(b) Duties

In carrying out subsection (a) of this section, the Director, acting through the Center shall—

(1) collect, acquire, analyze, report, and disseminate statistical data related to the science and engineering enterprise in the United States and other nations that is relevant and useful to practitioners, researchers, policymakers, and the public, including statistical data on—

(A) research and development trends;
(B) the science and engineering workforce;
(C) United States competitiveness in science, engineering, technology, and research and development; and

(D) the condition and progress of United States STEM education;

(2) support research using the data it collects, and on methodologies in areas related to the work of the Center; and

(3) support the education and training of researchers in the use of large-scale, nationally representative data sets.

(c) Statistical reports

The Director or the National Science Board, acting through the Center, shall issue regular, biennial reports required by section 1863(j)(1) of this title and as necessary, special statistical reports on topics related to the national and international science and engineering enterprise such as the biennial report required by section 1863(j)(1) of this title on indicators of the state of science and engineering in the United States.


(1) DIRECTOR.—The term ‘Director’ means the Director of the National Science Foundation.

(2) EPSCoR.—The term ‘EPSCoR’ means the Experimental Program to Stimulate Competitive Research.

(3) FOUNDATION.—The term ‘Foundation’ means the National Science Foundation established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).

(4) INSTITUTION OF HIGHER EDUCATION.—The term ‘institution of higher education’ has the meaning given such term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(5) STATE.—The term ‘State’ means one of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or any other territory or possession of the United States.

(6) UNITED STATES.—The term ‘United States’ means the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other territory or possession of the United States.”

§ 1862p–1. National Science Foundation manufacturing research and education

(a) Manufacturing research

The Director shall carry out a program to award merit-reviewed, competitive grants to institutions of higher education to support fundamental research leading to transformative advances in manufacturing technologies, processes, and enterprises that will support United States manufacturing through improved performance, productivity, sustainability, and competitiveness. Research areas may include—

(1) nanomanufacturing;
(2) manufacturing and construction machines and equipment, including robotics, automation, and other intelligent systems;
(3) manufacturing enterprise systems;
(4) advanced sensing and control techniques;
(5) materials processing; and
(6) information technologies for manufacturing, including predictive and real-time models and simulations, and virtual manufacturing.

(b) Manufacturing education

In order to help ensure a well-trained manufacturing workforce, the Director shall award grants to strengthen and expand scientific and technical education and training in advanced manufacturing, including through the Foundation’s Advanced Technological Education program.


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 1950 which comprises this chapter.

Definitions

For definition of “STEM” as used in this section, see section 2 of Pub. L. 111–358, set out as a note under section 6621 of this title.
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–2. Partnerships for innovation

(a) In general

The Director shall carry out a program to award merit-reviewed, competitive grants to institutions of higher education to establish and to expand partnerships that promote innovation and increase the impact of research by developing tools and resources to connect new scientific discoveries to practical uses.

(b) Partnerships

(1) In general

To be eligible for funding under this section, an institution of higher education must propose establishment of a partnership that—

(A) includes at least one private sector entity; and

(B) may include other institutions of higher education, public sector institutions, private sector entities, and nonprofit organizations.

(2) Priority

In selecting grant recipients under this section, the Director shall give priority to partnerships that include one or more institutions of higher education and at least one of the following:

(A) A minority serving institution.

(B) A primarily undergraduate institution.

(C) A 2-year institution of higher education.

(c) Program

Proposals funded under this section shall seek—

(1) to increase the impact of the most promising research at the institution or institutions of higher education that are members of the partnership through knowledge transfer or commercialization;

(2) to increase the engagement of faculty and students across multiple disciplines and departments, including faculty and students in schools of business and other appropriate non-STEM fields and disciplines in knowledge transfer activities;

(3) to enhance education and mentoring of students and faculty in innovation and entrepreneurship through networks, courses, and development of best practices and curricula;

(4) to strengthen the culture of the institution or institutions of higher education to undertake and participate in activities related to innovation and leading to economic or social impact;

(5) to broaden the participation of all types of institutions of higher education in activities to meet STEM workforce needs and promote innovation and knowledge transfer; and

(6) to build lasting partnerships with local and regional businesses, local and State governments, and other relevant entities.

(d) Additional criteria

In selecting grant recipients under this section, the Director shall also consider the extent to which the applicants are able to demonstrate evidence of institutional support for, and commitment to—

(1) achieving the goals of the program as described in subsection (c);

(2) expansion to an institution-wide program if the initial proposal is not for an institution-wide program; and

(3) sustaining any new innovation tools and resources generated from funding under this program.

(e) Limitation

No funds provided under this section may be used to construct or renovate a building or structure.


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–3. Sustainable chemistry basic research

The Director shall establish a Green Chemistry Basic Research program to award competitive, merit-based grants to support research into green and sustainable chemistry which will lead to clean, safe, and economical alternatives to traditional chemical products and practices. The research program shall provide sustained support for green chemistry research, education, and technology transfer through—

(1) merit-reviewed competitive grants to individual investigators and teams of investigators, including, to the extent practicable, young investigators, for research;

(2) grants to fund collaborative research partnerships among universities, industry, and nonprofit organizations;

(3) symposia, forums, and conferences to increase outreach, collaboration, and dissemination of green chemistry advances and practices; and

(4) education, training, and retraining of undergraduate and graduate students and professional chemists and chemical engineers, including through partnerships with industry, in green chemistry science and engineering.


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–4. Undergraduate broadening participation program

The Foundation shall continue to support the Historically Black Colleges and Universities Undergraduate Program, the Louis Stokes Alliances for Minority Participation program, the Tribal Colleges and Universities Program, and Hispanic-serving institutions as separate programs.


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–5. Research experiences for high school students

The Director shall permit specialized STEM high schools conducting research to participate in major data collection initiatives from universities, corporations, or government labs under a research grant from the Foundation, as part of the research proposal.


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–6. Research experiences for undergraduates

(a) Research sites

The Director shall award grants, on a merit-reviewed, competitive basis, to institutions of higher education, nonprofit organizations, or consortia of such institutions and organizations, for sites designated by the Director to provide research experiences for 6 or more undergraduate STEM students for sites designated at primarily undergraduate institutions of higher education and 10 or more undergraduate STEM students for all other sites, with consideration given to the goal of promoting the participation of individuals identified in section 1885a or 1885b of this title. The Director shall ensure that—

1. at least half of the students participating in a program funded by a grant under this subsection at each site shall be recruited from institutions of higher education where research opportunities in STEM are limited, including 2-year institutions;

2. the awards provide undergraduate research experiences in a wide range of STEM disciplines;

3. the awards support a variety of projects, including independent investigator-led projects, interdisciplinary projects, and multi-institutional projects (including virtual projects);

4. students participating in each program funded have mentors, including during the academic year to the extent practicable, to help connect the students’ research experiences to the overall academic course of study and to help students achieve success in courses of study leading to a baccalaureate degree in a STEM field;

5. mentors and students are supported with appropriate salary or stipends; and

6. student participants are tracked, for employment and continued matriculation in STEM fields, through receipt of the undergraduate degree and for at least 3 years thereafter.

(b) Inclusion of undergraduates in standard research grants

The Director shall require that every recipient of a research grant from the Foundation proposing to include 1 or more students enrolled in certificate, associate, or baccalaureate degree programs in carrying out the research under the grant shall request support, including stipend support, for such undergraduate students as part of the research proposal itself rather than as a supplement to the research proposal, unless such undergraduate participation was not foreseeable at the time of the original proposal.


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–7. STEM industry internship programs

(a) In general

The Director may award grants, on a competitive, merit-reviewed basis, to institutions of higher education, or consortia thereof, to establish or expand partnerships with local or re-
gional private sector entities, for the purpose of providing undergraduate students with integrated internship experiences that connect private sector internship experiences with the students’ STEM coursework. The partnerships may also include industry or professional associations.

(b) Internship program
The grants awarded under subsection (a) may include internship programs in the manufacturing sector.

(c) Use of grant funds
Grants under this section may be used—
1. to develop and implement hands-on learning opportunities;
2. to develop curricula and instructional materials related to industry, including the manufacturing sector;
3. to perform outreach to secondary schools;
4. to develop mentorship programs for students with partner organizations; and
5. to conduct activities to support awareness of career opportunities and skill requirements.

(d) Priority
In awarding grants under this section, the Director shall give priority to institutions of higher education or consortia thereof that demonstrate significant outreach to and coordination with local or regional private sector entities and Regional Centers for the Transfer of Manufacturing Technology established by section 278k(a) of title 15 in developing academic courses designed to provide students with the skills or certifications necessary for employment in local or regional companies.

(e) Outreach to rural communities
The Foundation shall conduct outreach to institutions of higher education and private sector entities in rural areas to encourage those entities to participate in partnerships under this section.

(f) Cost-share
The Director shall require a 50 percent non-Federal cost-share from partnerships established or expanded under this section.

(g) Restriction
No Federal funds provided under this section may be used—
1. for the purpose of providing stipends or compensation to students for private sector internships unless private sector entities match 75 percent of such funding; or
2. as payment or reimbursement to private sector entities, except for institutions of higher education.

(h) Report
Not less than 3 years after January 4, 2011, the Director shall submit a report to Congress on the number and total value of awards made under this section, the number of students affected by those awards, any evidence of the effect of those awards on workforce preparation and jobs placement for participating students, and an economic and ethnic breakdown of the participating students.

§ 1862p–8. Cyber-enabled learning for national challenges
The Director shall, in consultation with appropriate Federal agencies, identify ways to use cyber-enabled learning to create an innovative STEM workforce and to help retrain and retain our existing STEM workforce to address national challenges, including national security and competitiveness, and use technology to enhance or supplement laboratory based learning.

§ 1862p–9. Experimental Program to Stimulate Competitive Research
(a) Findings
The Congress finds that—
1. The National Science Foundation Act of 1950 [42 U.S.C. 1861 et seq.] stated, “it shall be an objective of the Foundation to strengthen research and education in the sciences and engineering, including independent research by individuals, throughout the United States, and to avoid undue concentration of such research and education,”;
2. National Science Foundation funding remains highly concentrated, with 27 States and 2 jurisdictions, taken together, receiving only about 10 percent of all NSF research funding; each of these States received only a fraction of one percent of Foundation’s research dollars each year;
3. the Nation requires the talent, expertise, and research capabilities of all States in order to prepare sufficient numbers of scientists and engineers, remain globally competitive and support economic development.
(b) Continuation of program

The Director shall continue to carry out EPSCoR, with the objective of helping the eligible States to develop the research infrastructure that will make them more competitive for Foundation and other Federal research funding. The program shall continue to increase as the National Science Foundation funding increases.

(c) Congressional reports

The Director shall report to the appropriate committees of Congress on an annual basis, using the most recent available data—

(1) the total amount made available, by State, under EPSCoR;
(2) the amount of co-funding made available to EPSCoR States;
(3) the total amount of National Science Foundation funding made available to all institutions and entities within EPSCoR States; and
(4) efforts and accomplishments to more fully integrate the 29 EPSCoR jurisdictions in major activities and initiatives of the Foundation.

(d) Coordination of EPSCoR and similar Federal programs

(1) Another finding

The Congress finds that a number of Federal agencies have programs, such as Experimental Programs to Stimulate Competitive Research and the National Institutes of Health Institutional Development Award program, designed to increase the capacity for and quality of science and technology research and training at academic institutions in States that historically have received relatively little Federal research and development funding.

(2) Coordination required

The EPSCoR Interagency Coordinating Committee, chaired by the National Science Foundation, shall—

(A) coordinate EPSCoR and Federal EPSCoR-like programs to maximize the impact of Federal support for building competitive research infrastructure, and in order to achieve an integrated Federal effort;
(B) coordinate agency objectives with State and institutional goals, to obtain continued non-Federal support of science and technology research and training;
(C) develop metrics to assess gains in academic research quality and competitiveness, and in science and technology human resource development;
(D) conduct a cross-agency evaluation of EPSCoR and other Federal EPSCoR-like programs and accomplishments, including management, investment, and metric-measuring strategies implemented by the different agencies aimed to increase the number of new investigators receiving peer-reviewed funding, broaden participation, and empower knowledge generation, dissemination, application, and national research and development competitiveness;
(E) coordinate the development and implementation of new, novel workshops, outreach activities, and follow-up mentoring activities among EPSCoR or EPSCoR-like programs for colleges and universities in EPSCoR States and territories in order to increase the number of proposals submitted and successfully funded and to enhance statewide coordination of EPSCoR and Federal EPSCoR-like programs;
(F) coordinate the development of new, innovative solicitations and programs to facilitate collaborations, partnerships, and mentoring activities among faculty at all levels in non-EPSCoR and EPSCoR States and jurisdictions;
(G) conduct an evaluation of the roles, responsibilities and degree of autonomy that program officers or managers (or the equivalent position) have in executing EPSCoR programs at the different Federal agencies and the impacts these differences have on the number of EPSCoR State and jurisdiction faculty participating in the peer review process and the percentage of successful awards by individual EPSCoR State jurisdiction and individual researcher; and
(H) conduct a survey of colleges and university faculty at all levels regarding their knowledge and understanding of EPSCoR, and their level of interaction with and knowledge about their respective State or Jurisdictional EPSCoR Committee.

(3) Meetings and reports

The Committee shall meet at least twice each fiscal year and shall submit an annual report to the appropriate committees of Congress describing progress made in carrying out paragraph (2).

(e) Federal agency reports

Each Federal agency that administers an EPSCoR or Federal EPSCoR-like program shall submit to the OSTP as part of its Federal budget submission—

(1) a description of the program strategy and objectives;
(2) a description of the awards made in the previous year, including—
   (A) the percentage of reviewers and number of new reviewers from EPSCoR States;
   (B) the percentage of new investigators from EPSCoR States;
   (C) the number of programs or large collaborator awards involving a partnership of organizations and institutions from EPSCoR and non-EPSCoR States; and
(3) an analysis of the gains in academic research quality and competitiveness, and in science and technology human resource development, achieved by the program in the last year.

(f) National Academy of Sciences study

(1) In general

The Director shall contract with the National Academy of Sciences to conduct a study on all Federal agencies that administer an Experimental Program to Stimulate Competitive Research or a program similar to the Experimental Program to Stimulate Competitive Research.

(2) Matters to be addressed

The study conducted under paragraph (1) shall include the following:
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(A) A delineation of the policies of each Federal agency with respect to the awarding of grants to EPSCoR States.

(B) The effectiveness of each program.

(C) Recommendations for improvements for each agency to achieve EPSCoR goals.

(D) An assessment of the effectiveness of EPSCoR States in using awards to develop science and engineering research and education, and science and engineering infrastructure within their States.

(E) Such other issues that address the effectiveness of EPSCoR as the National Academy of Sciences considers appropriate.


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 562 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.


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 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–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.


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;

1 See References in Text note below.
(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 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, privacy 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.

§ 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.

(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.

(b) Policy
Not later than 6 months after January 4, 2011, the Director shall develop and implement a pol-
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

(B) when novel approaches are justified, build on the most current research results;

(3) allows for some portion of funds allocated to broader impacts under a research grant to be used for assessment and evaluation of the broader impacts activity;

(4) encourages institutions of higher education and other nonprofit education or research organizations to develop and provide, either as individual institutions or in partnerships thereof, appropriate training and programs to assist Foundation-funded principal investigators at their institutions in achieving the goals of the Broader Impacts Review Criterion as described in subsection (a); and

(5) requires principal investigators applying for Foundation research grants to provide evidence of institutional support for the portion of the investigator’s proposal designed to satisfy the Broader Impacts Review Criterion, including evidence of relevant training, programs, and other institutional resources available to the investigator from either their home institution or organization or another institution or organization with relevant expertise.


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–15. Twenty-first century graduate education

(a) In general

The Director shall award grants, on a competitive, merit-reviewed basis, to institutions of higher education to implement or expand research-based reforms in master’s and doctoral level STEM education that emphasize preparation for diverse careers utilizing STEM degrees, including at diverse types of institutions of higher education, in industry, and at government agencies and research laboratories.

(b) Uses of funds

Activities supported by grants under this section may include—

(1) creation of multidisciplinary or interdisciplinary courses or programs for the purpose of improved student instruction and research in STEM;

(2) expansion of graduate STEM research opportunities to include interdisciplinary research opportunities and research opportunities in industry, at Federal laboratories, and at international research institutions or research sites;

(3) development and implementation of future faculty training programs focused on improved instruction, mentoring, assessment of student learning, and support of undergraduate STEM students;

(4) support and training for graduate students to participate in instructional activities beyond the traditional teaching assistantship, and especially as part of ongoing educational reform efforts, including at pre-K–12 schools, and primarily undergraduate institutions;

(5) creation, improvement, or expansion of innovative graduate programs such as science master’s degree programs;

(6) development and implementation of seminars, workshops, and other professional development activities that increase the ability of graduate students to engage in innovation, technology transfer, and entrepreneurship;

(7) development and implementation of seminars, workshops, and other professional development activities that increase the ability of graduate students to effectively communicate their research findings to technical audiences outside of their own discipline and to nontechnical audiences;

(8) expansion of successful STEM reform efforts beyond a single academic unit to other STEM academic units within an institution or to comparable academic units at other institutions; and

(9) research on teaching and learning of STEM at the graduate level related to the proposed reform effort, including assessment and evaluation of the proposed reform activities and research on scalability and sustainability of approaches to reform.

(c) Partnership

An institution of higher education may partner with one or more other nonprofit education or research organizations, including scientific and engineering societies, for the purposes of carrying out the activities authorized under this section.

(d) Selection process

(1) Applications

An institution of higher education seeking a grant under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum—

(A) a description of the proposed reform effort;

(B) in the case of applications that propose an expansion of a previously implemented reform effort at the applicant’s institution or at other institutions, a description of the previously implemented reform effort;
(C) evidence of institutional support for, and commitment to, the proposed reform effort, including long-term commitment to implement successful strategies from the current reform effort beyond the academic unit or units included in the grant proposal or to disseminate successful strategies to other institutions; and
(D) a description of the plans for assessment and evaluation of the grant proposed reform activities.

(2) Review of applications
In selecting grant recipients under this section, the Director shall consider at a minimum—
(A) the likelihood of success in undertaking the proposed effort at the institution submitting the application, including the extent to which the faculty, staff, and administrators of the institution are committed to making the proposed institutional reform a priority of the participating academic unit or units;
(B) the degree to which the proposed reform will contribute to change in institutional culture and policy such that a greater value is placed on preparing graduate students for diverse careers utilizing STEM degrees;
(C) the likelihood that the institution will sustain or expand the reform beyond the period of the grant; and
(D) the degree to which scholarly assessment and evaluation plans are included in the design of the reform effort.


CODE

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Protect Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2002, 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 1865p of this title.

§ 1863. National Science Board
(a) Composition; appointment; establishment of policies of the Foundation
The Board shall consist of twenty-four members to be appointed by the President, by and with the advice and consent of the Senate, and of the Director ex officio. In addition to any powers and functions otherwise granted to it by this chapter, the Board shall establish the policies of the Foundation, within the framework of applicable national policies as set forth by the President and the Congress.

(b) Executive Committee; delegation of powers and functions
The Board shall have an Executive Committee as provided in section 1865 of this title, and may delegate to it or to the Director or both such of the powers and functions granted to the Board by this chapter as it deems appropriate.

(c) Meetings; nominations; quorum; notice
The persons nominated for appointment as members of the Board (1) shall be eminent in the fields of the basic, medical, or social sciences, engineering, agriculture, education, research management, or public affairs; (2) shall be selected solely on the basis of established records of distinguished service; and (3) shall be so selected as to provide representation of the views of scientific and engineering leaders in all areas of the Nation. In making nominations under this section, the President shall give due regard to equitable representation of scientists and engineers who are women or who represent minority groups. The President is requested, in the making of nominations of persons for appointment as members, to give due consideration to any recommendations for nomination which may be submitted to him by the National Academy of Sciences, the National Academy of Engineering, the National Association of State Universities and Land Grant Colleges, the Association of American Universities, the Association of American Colleges, the Association of State Colleges and Universities, or by other scientific, engineering, or educational organizations.

(d) Term of office; reappointment
The term of office of each member of the Board shall be six years; except that any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term. Any person, other than the Director, who has been a member of the Board for twelve consecutive years shall thereafter be ineligible for appointment during the two-year period following the expiration of such twelfth year.

(e) Meetings; quorum; notice
The Board shall meet annually on the third Monday in May unless, prior to May 10 in any year, the Chairman has set the annual meeting for a day in May other than the third Monday, and at such other times as the Chairman may determine, but he shall also call a meeting whenever one-third of the members so request in writing. The Board shall adopt procedures governing the conduct of its meetings, including delivery of notice and a definition of a quorum, which in no case shall be less than one-half plus one of the confirmed members of the Board.

(f) Election of Chairman and Vice Chairman; vacancy
The election of the Chairman and Vice Chairman of the Board shall take place at each annual meeting occurring in an even-numbered year. The Vice Chairman shall perform the duties of the Chairman in his absence. In case a vacancy occurs in the chairmanship or vice chairmanship, the Board shall elect a member to fill such vacancy.

(g) Appointment and assignment of staff; compensation; security requirements
The Board may, with the concurrence of a majority of its members, permit the appointment
of a staff consisting of professional staff members, technical and professional personnel on leave of absence from academic, industrial, or research institutions for a limited term, and such operations and support staff members as may be necessary. Such staff shall be appointed by the Chairman and assigned at the direction of the Board. The professional members and limited term technical and professional personnel of such staff may be appointed without regard to the provisions of title 5 governing appointments in the competitive service, and the provisions of chapter 51 of such title relating to classification, and shall be compensated at a rate not exceeding the maximum rate payable under section 5370 of such title, as may be necessary to provide for the performance of such duties as may be prescribed by the Board in connection with the exercise of its powers and functions under this chapter. Section 1873(a)(3) of this title shall apply to each limited term appointment of technical and professional personnel under this subsection. Each appointment under this subsection shall be subject to the same security requirements as those required for personnel of the Foundation appointed under section 1873(a) of this title.

(h) Special commissions

The Board is authorized to establish such special commissions as it may from time to time deem necessary for the purpose of this chapter.

(i) Committees; survey and advisory functions

The Board is also authorized to appoint from among its members such committees as it deems necessary, and to assign to committees so appointed such survey and advisory functions as the Board deems appropriate to assist it in exercising its powers and functions under this chapter.

(j) Report to President; submittal to Congress

(1) The Board shall render to the President and the Congress no later than January 15 of each even numbered year, a report on indicators of the state of science and engineering in the United States.

(2) The Board shall render to the President and the Congress reports on specific, individual policy matters within the authority of the Foundation (or otherwise as requested by the Congress or the President) related to science and engineering and education in science and engineering, as the Board, the President, or the Congress determines the need for such reports.

(k) Closed meetings

Portions of Board meetings in which the Board considers proposed Foundation budgets for a particular fiscal year may be closed to the public until the President’s budget for that fiscal year has been submitted to the Congress.

(l) Financial disclosure report for Board members

Members of the Board shall be required to file a financial disclosure report under title II of the Ethics in Government Act of 1978 (5 U.S.C. App. 92 Stat. 1386), except that such reports shall be held confidential and exempt from any law otherwise requiring their public disclosure.


REFERENCES IN TEXT


AMENDMENTS

2011—Subsec. (g). Pub. L. 111–358, §504(a), struck out “not more than 5” before “professional staff members”.

2007—Subsec. (g). Pub. L. 110–69, §7015(b), amended subsec. (g) generally. Prior to amendment, subsec. (g) related to the appointment of a Board staff of not more than five professional staff members and any necessary clerical staff members and the compensation and security requirements for such staff.

1998—Subsec. (g). Pub. L. 107–368, §15(c), substituted “Such staff shall be appointed by the Chairman and assigned at the direction of the Board.” for “Such staff shall be appointed by the Director, after consultation with the chairman of the Board and assigned at the direction of the Board.”

1996—Subsec. (g). Pub. L. 105–207, §202(a)(2), inserted “within the authority of the Foundation (or otherwise as requested by the Congress or the President)” after “individual policy matters”.

English
The Director shall receive basic pay at the rate provided for level II of the Executive Schedule under section 5313 of title 5, and shall serve for a term of six years unless sooner removed by the President.

(b) Exercise of authority of Foundation; actions as final and binding upon the Foundation

Except as otherwise specifically provided in this chapter (1) the Director shall exercise all of the authority granted to the Foundation by this chapter (including any powers and functions which may be delegated to him by the Board), and (2) all actions taken by the Director pursuant to the provisions of this chapter (or pursuant to the authority granted to the Foundation by this chapter) shall be final and binding upon the Foundation.

(c) Delegation and redelegation of functions

The Director may from time to time make such provisions as he deems appropriate authorizing the performance by any other officer, agency, or employee of the Foundation of any of his functions under this chapter, including functions delegated to him by the Board; except that the Director may not redelegate policymaking functions delegated to him by the Board.

(d) Formulation of programs

The formulation of programs in conformance with the policies of the Foundation shall be carried out by the Director in consultation with the Board.

(e) Authority to grant, contract, etc.; delegation of authority or imposition of conditions; reporting requirement

(1) The Director may make grants, contracts, and other arrangements pursuant to section 1870(c) of this title only with the prior approval of the Board or under authority delegated by the Board, and subject to such conditions as the Board may specify.

(2) Any delegation of authority or imposition of conditions under paragraph (1) shall be promptly published in the Federal Register and reported to the Committee on Labor and Human Resources, and the Committee on Commerce, Science, and Transportation, of the Senate and the Committee on Science of the House of Representatives.

(f) Status; power to vote and hold office

The Director, in his capacity as ex officio member of the Board, shall, except with respect to compensation and tenure, be coordinate with the other members of the Board. He shall be a voting member of the Board and shall be eligible for election by the Board as Chairman or Vice Chairman of the Board.


AMENDMENTS


1985—Subsec. (e). Pub. L. 99–159 amended subsec. (e) generally. Prior to amendment, subsec. (e) read as follows: “The Director shall not make any contract, grant, or other arrangement pursuant to section 1870(c) of this title without the prior approval of the Board, except that a grant, contract, or other arrangement involving a total commitment of less than $2,000,000, or less than $500,000 in any one year, or a commitment of such lesser amount or amounts and subject to such other conditions as the Board in its discretion may from time to time determine to be appropriate and publish in the Federal Register, may be made if such action is taken pursuant to the terms and conditions set forth by the Board, and if each such action is reported to the Board at the Board meeting next following such action.”

1968—Subsec. (a). Pub. L. 90–407 inserted provision prescribing the annual rate of compensation of the Director, and struck out provision authorizing the Director to serve as a nonvoting ex officio member of the Board and as the chief executive officer of the Foundation.

Subsec. (b). Pub. L. 90–407 substituted provisions authorizing the Director, except as otherwise provided, to exercise all of the authority granted to the Foundation by this chapter and to take action final and binding upon the Foundation for provisions authorizing the Director, in addition to the powers and duties specifically vested in him by this chapter, to exercise the powers granted by sections 1869 or 1870(c) of this title and such other powers and duties delegated by the Board to him, and the proviso that no action taken by the Director pursuant to section 1869 or 1870(c) shall be final unless in each instance the Board has reviewed and approved the action proposed to be taken, or such action is taken pursuant to the terms of a delegation of authority from the Board or the Executive Committee to the Director.

Subsecs. (c) to (f). Pub. L. 90–407 added subsecs. (c) to (f).

1959—Subsec. (b). Pub. L. 86–232 provided for delegation of authority from the Board or the Executive Committee to the Director.

CHANGE OF NAME

Committee on Labor and Human Resources of Senate changed to Committee on Health, Education, Labor, and Pensions of Senate by Senate Resolution No. 20, One Hundred Sixth Congress, Jan. 19, 1999.

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

EFFECTIVE DATE OF 1968 AMENDMENT

Amendment by Pub. L. 90–407, insofar as related to rates of basic pay, effective on first day of first calendar month which begins on or after July 18, 1968, see section 15(a)(4), set out as a note under section 5313 of Title 5, Government Organization and Employees.

TRANSFER OF FUNCTIONS

Authority of Director of National Science Foundation, from time to time, to make appropriate provi-
sions authorizing performance by any other officer, or by any agency or employee, of National Science Foundation of any of his functions (including functions delegated to him by National Science Board), see Reorg. Plan No. 5 of 1965, eff. July 27, 1965, 30 F.R. 9355, 79 Stat. 1323, set out in the Appendix to Title 5, Government Organization and Employees.

Office of Director of National Science Foundation established under provisions of this section abolished and functions transferred to Director of National Science Foundation appointed pursuant to Reorg. Plan No. 2 of 1962, see section 22 (a), (b) of Reorg. Plan No. 2 of 1962, eff. June 8, 1962, 27 F.R. 5419, 76 Stat. 1253, set out as a note under section 1861 of this title.

STUDY ON RESEARCH AND DEVELOPMENT FUNDING DATA DISCREPANCIES

Pub. L. 107-368, §25, Dec. 19, 2002, 116 Stat. 3067, required the Director of the National Science Foundation to enter into an agreement with the National Academy of Sciences to conduct a comprehensive study to determine the source of discrepancies in Federal reports on obligations and actual expenditures of Federal research and development funding and to submit a report on the results of the study to committees of Congress within one year after Dec. 19, 2002, and required the Director of the Office of Science and Technology Policy to submit to those committees a plan for implementation of the recommendations of the study, within 6 months after the completion of the study.

RESEARCH PURPOSES OF GRANTS; BRIEF STATEMENT IN TITLES

Pub. L. 96-516, §20, Dec. 12, 1980, 94 Stat. 3016, provided that: “The Director of the National Science Foundation shall require the titles of all its grants to contain a brief statement of the purpose of the research being undertaken. Insofar as possible such statements shall be in layman’s language.”

FEASIBILITY STUDY OF SOLAR ENERGY TRANSMISSION TO EARTH

Pub. L. 95-434, §8, Oct. 10, 1978, 92 Stat. 1690, provided that: “(a) The Director of the National Science Foundation, in consultation with the Director of the Office of Science and Technology Policy, the Secretary of Energy, the Administrator of the National Aeronautics and Space Administration, and technical experts in public agencies, private organizations, and academic institutions, is authorized to determine the need to provide support under this Act for a feasible system of transmitting solar energy to Earth by using orbital structures manufactured from lunar or asteroidal materials, and the impact of such a feasibility study, if any, on existing National Science Foundation programs.

“(b) (1) If the Foundation determines that such a feasibility study is necessary, the Foundation is authorized to conduct such a study directly or by grants or contracts with public agencies, private organizations, or academic institutions.

“(2) At the conclusion of any such study the Foundation shall prepare and submit to the President and to the Congress a report of the study, together with such recommendations as the Foundation deems appropriate.

“(3) Of the funds authorized in section 2, $500,000 shall be available to carry out the provisions of this subsection.”

FEASIBILITY STUDY OF THE OPERATION OF THE PEER REVIEW SYSTEM IN THE EVALUATION OF GRANT PROPOSALS

Pub. L. 94-471, §2(f), Oct. 11, 1976, 90 Stat. 2053, provided that: “The Director of the National Science Foundation is authorized and directed to conduct a feasibility study of operating the peer review system used in the evaluation of grant proposals within the Foundation so as to assure that the identity of the proposer is not known to the reviewers of the proposal. Any such system shall be considered to supplement and not to supplant the peer review system in operation in the Foundation on the date of enactment of this Act (Oct. 11, 1976).”

SCIENCE FOR CITIZENS PROGRAM; PREPARATION AND SUBMISSION OF PLAN TO COMMITTEES OF CONGRESS

Pub. L. 94-88, §3, Aug. 9, 1975, 89 Stat. 429, directed the Director of the National Science Foundation to prepare a comprehensive plan for the establishment and conduct of a “Science for Citizens Program” and, within six months from Aug. 9, 1975, submit the plan to specific committees of the House of Representatives and Senate. See section 5 of Pub. L. 94-471, set out as a note under section 1862 of this title.

PARTICIPATION OF PUBLIC IN CONDUCT OF FOUNDATION PROGRAMS; PREPARATION AND SUBMISSION OF PLAN TO COMMITTEES OF CONGRESS

Pub. L. 94-89, §4, Aug. 9, 1975, 89 Stat. 430, authorized the Director of the National Science Foundation to prepare a comprehensive plan to facilitate the participation of members of the public in the formulation, development, and conduct of National Science Foundation programs, policies, and priorities and to submit the resulting recommendations, plans, or other findings to specific committees of the House of Representatives and Senate within 120 days from Aug. 9, 1975.

CONTINUATION OF EXISTING OFFICERS, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90-407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90-407, set out as a note under section 1862 of this title.

§1864a. Deputy Director of the Foundation

There shall be a Deputy Director of the Foundation (referred to in this chapter as the “Deputy Director”), who shall be appointed by the President, by and with the advice and consent of the Senate. Before any person is appointed as Deputy Director, the President shall afford the Board and the Director an opportunity to make recommendations to him with respect to such appointment. The Deputy Director shall receive basic pay at the rate provided for level III of the Executive Schedule under section 5314 of Title 5, and shall perform such duties and exercise such powers as the Director may prescribe. The Deputy Director shall act for, and exercise the powers of, the Director during the absence or disability of the Director or in the event of a vacancy in the office of Director.


AMENDMENTS

1966—Pub. L. 99-383 struck out subsec. (a) designation and struck out subsec. (b) which provided for appointment of four Assistant Directors of the Foundation.

EFFECTIVE DATE

Section, insofar as related to rates of basic pay, effective on first day of first calendar month which begins on or after July 18, 1968, see section 15(a)(4) of Pub. L. 90-407, set out as an Effective Date of 1968 Amendment note under section 5314 of Title 5, Government Organization and Employees.

CONTINUATION OF EXISTING OFFICERS, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90-407 intended to continue in effect the existing offices, procedures, and organization
of the Foundation, see section 16 of Pub. L. 90–407, set out as a note under section 1862 of this title.

§ 1865. Executive Committee

(a) Composition; powers and functions; membership; chairman

There shall be an Executive Committee of the Board (referred to in this chapter as the “Executive Committee”), which shall be composed of five members and shall exercise such powers and functions as may be delegated to it by the Board. Four of the members shall be elected as provided in subsection (b) of this section, and the Director ex officio shall be the fifth member and the chairman of the Executive Committee.

(b) Election to membership; term of office; eligibility for reelection

At each of its annual meetings the Board shall elect two of its members as members of the Executive Committee, and the Executive Committee members so elected shall hold office for two years from the date of their election. Any person, other than the Director, who has been a member of the Executive Committee for six consecutive years shall thereafter be ineligible for service as a member thereof during the two-year period following the expiration of such sixth year. For the purposes of this subsection, the period between any two consecutive annual meetings of the Board shall be deemed to be one year.

(c) Term of vacancy appointment

Any person elected as a member of the Executive Committee to fill a vacancy occurring prior to the expiration of the term for which his predecessor was elected shall be elected for the remainder of such term.

(d) Reports; minority views

The Executive Committee shall render an annual report to the Board, and such other reports as it may deem necessary, summarizing its activities and making such recommendations as it may deem appropriate. Minority views and recommendations, if any, of members of the Executive Committee shall be included in such reports.

§ 1866. Divisions within Foundation

There shall be within the Foundation such Divisions as the Director, in consultation with the Board, may from time to time determine.

PRIOR PROVISIONS

A prior section 8 of act May 10, 1950, which was classified to section 1867 of this title, was repealed by Pub. L. 90–407, § 4, July 18, 1968, 82 Stat. 363.

AMENDMENTS

1968—Pub. L. 90–407, § 6, substituted provisions that there be within the Foundation such divisions as the Director, in consultation with the Board, may from time to time determine for provisions that, unless otherwise provided by the Board, there be within the Foundation a Division of Medical Research, a Division of Mathematical, Physical, and Engineering Sciences, a Division of Biological Sciences, a Division of Scientific Personnel and Education, and such other divisions as the Board deems necessary.

CONSOLIDATION OF DIRECTORATES

Pub. L. 96–516, § 18, Dec. 12, 1980, 94 Stat. 3009, directed National Science Foundation to consolidate all Directorates, including Science Education Directorate, under one roof, in present location of central administrative offices, on or before Aug. 1, 1982.

CONTINUATION OF EXISTING OFFICES, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90–407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90–407, set out as a note under section 1862 of this title.


Section, act May 10, 1950, ch. 171, § 8, 64 Stat. 152, authorized a committee for each division of the Founda-
tion, and provided for the composition, terms of office, chairmanship, rules of procedure, and powers and duties of each divisional committee.

CONTINUATION OF EXISTING OFFICERS, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90–407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90–407, set out as a note under section 1862 of this title.

§ 1868. Special commissions

(a) Each special commission established under section 1863(h) of this title shall be appointed by the Board and shall consist of such members as the Board considers appropriate.

(b) Special commissions may be established to study and make recommendations to the Foundation on issues relating to research and education in science and engineering.


AMENDMENTS

1990—Pub. L. 101–589 substituted “‘accredited’ and struck out ‘‘of higher education’’ for ‘‘foreign’’”.

1985—Pub. L. 99–159 amended section generally. Prior to amendment, section read as follows:

“(a) Each special commission established pursuant to section 1863(l) of this title shall consist of eleven members appointed by the Board, six of whom shall be eminent scientists and five of whom shall be persons other than scientists. Each special commission shall choose its own chairman and vice chairman.

“(b) It shall be the duty of such special commission to make a comprehensive survey of research, both public and private, being carried on in its field, and to formulate and recommend to the Foundation at the earliest practicable date an over-all research program in the field.”

1968—Subsec. (a), Pub. L. 90–407 substituted “section 1863(l) of this title” for “section 1862(a)(7) of this title”.

CONTINUATION OF EXISTING OFFICERS, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90–407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90–407, set out as a note under section 1862 of this title.

§ 1869. Scholarships and graduate fellowships

(a) In general

The Foundation is authorized to award scholarships and graduate fellowships for study and research in the sciences or in engineering at appropriate nonprofit American or nonprofit foreign institutions selected by the recipient of such aid, for stated periods of time. Persons shall be selected for such scholarships and fellowships from among citizens, nationals or lawfully admitted permanent resident aliens of the United States, and such selections shall be made solely on the basis of ability; but in any case in which two or more applicants for scholarships or fellowships, as the case may be, are deemed by the Foundation to be possessed of substantially equal ability, and there are not sufficient scholarships or fellowships, as the case may be, available to grant one to each of such applicants, the available scholarship or scholarships or fellowship or fellowships shall be awarded to the applicants in such manner as will tend to result in a wide distribution of scholarships and fellowships throughout the United States. Nothing contained in this chapter shall prohibit the Foundation from refusing or revoking a scholarship or fellowship award, in whole or in part, in the case of any applicant or recipient, if the Board is of the opinion that such award is not in the best interests of the United States.

(b) Amount

The Director shall establish for each year the amount to be awarded for scholarships and fellowships under this section for that year. Each such scholarship and fellowship shall include a cost of education allowance of $12,000, subject to any restrictions on the use of cost of education allowance as determined by the Director.


AMENDMENTS


1990—Pub. L. 101–589 substituted “‘nationals or lawfully admitted permanent resident aliens’” for “‘or nationals’” in second sentence.

1985—Pub. L. 99–159 substituted “study and research in the sciences or in engineering” for “‘scientific study or scientific work in the mathematical, physical, medical, biological, engineering, social, and other sciences’. “

1968—Pub. L. 90–407 inserted social sciences to the enumerated list of sciences, and substituted “‘throughout the United States’” for “‘among the States, Territories, possessions, and the District of Columbia’”.

1962—Pub. L. 87–835 authorized the Foundation to refuse or revoke a scholarship or fellowship award if they believe such award is not in the best interests of the United States.


1959—Pub. L. 86–232 substituted “appropriate’” for “‘accredited’” and struck out “‘of higher education’” after “foreign institutions’”.

GRADUATE STUDENT SUPPORT

Pub. L. 111–358, title V, § 510(a), (b), Jan. 4, 2011, 124 Stat. 4010, provided that:

“(a) FINDING.—The Congress finds that—

“(1) the Integrative Graduate Education and Research Traineeship program is an important program for training the next generation of scientists and engineers in team-based interdisciplinary research and problem solving, and for providing them with the many additional skills, such as communication skills, needed to thrive in diverse STEM careers; and

“(2) the Integrative Graduate Education and Research Traineeship program is no less valuable to the preparation and support of graduate students than the Foundation’s Graduate Research Fellowship program.

“(b) EQUAL TREATMENT OF IGERT AND GRF.—Beginning in fiscal year 2011, the Director shall increase or, if necessary, decrease funding for the Foundation’s Integrative Graduate Education and Research Traineeship program (or any program by which it is replaced) at least at the same rate as it increases or decreases funding for the Foundation’s Graduate Research Fellowship program.
funding for the Graduate Research Fellowship pro-
gram.”

[For definitions of terms used in section 508(a), (b) of
Pub. L. 111–358, set out above, 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.]

CONTINUATION OF EXISTING OFFICES, PROCEDURES, AND
ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90–407 intended to continue in
effect the existing offices, procedures, and organization
of the Foundation, see section 16 of Pub. L. 90–407, set
out as a note under section 1862 of this title.

§ 1869a. Contracts for precollege science or engi-
"neering curriculum development activities;
inspection of materials by parent or guard-
ian

After August 9, 1975, the Director of the Na-
tional Science Foundation, shall require, as a
condition of any award made by the National
Science Foundation for the purpose of precollege
science or engineering curriculum development
activities, that the awardee, and any sub-
contractors involved in the distribution, mar-
keting, or selling of such science or engineering
curricula, shall include in any testing agree-
ment, sales contract, or other comparable legal
instrument a provision requiring that all in-
structional materials, including teacher’s manu-
als, films, tapes, or other supplementary in-
structional materials developed or provided
under such award, subcontract, or other legal in-
strument, will be made available within the
school district using such materials for inspec-
tion by parents or guardians of children engaged
in educational programs or projects of that
school district. In addition, the Director of the
National Science Foundation shall take such ac-
tion as may be necessary and feasible to modify
awards made for the purpose of precollege
science or engineering curriculum development
and implementation activities on or before Au-
gust 9, 1975, to include such a provision in all
possible cases.

(Pub. L. 94–86, §2(b), Aug. 9, 1975, 89 Stat. 428;
Stat. 892.)

CODIFICATION

Section was not enacted as part of the National
Science Foundation Act of 1950 which comprises this
chapter.

AMENDMENTS

1985—Pub. L. 99–159 inserted “or engineering” after
“science” in three places.

§ 1869b. Issuance of instructions to grantees of
pre-college curriculum projects

The National Science Foundation is directed
to issue instructions to grantees for pre-college
curriculum projects covering the protection of
pre-college students and procedures for involv-
ing such students in pre-college education re-
search and development, pilot-testing, evalua-
tion, and revision of experimental and innova-
tive pre-college curriculum projects funded by
the Foundation. These instructions shall require
such grantees to obtain written approval of the
school board or comparable authority respon-
sible for the schools prior to the involvement of
such students.

(Pub. L. 95–99, §8, formerly §9, Aug. 15, 1977, 91
Stat. 833; renumbered §8, Pub. L. 99–159, title I,
§109(h), Nov. 22, 1985, 99 Stat. 890.)

CODIFICATION

Section was not enacted as part of the National
Science Foundation Act of 1950 which comprises this
chapter.

§ 1869c. Low-income scholarship program

(1) Establishment

The Director of the National Science Founda-
tion (referred to in this section as the “Direc-
tor”) shall award scholarships to low-income in-
dividuals to enable such individuals to pursue
associate, undergraduate, or graduate level de-
grees in mathematics, engineering, or computer
science.

(2) Eligibility

(A) In general

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

(i) must be a citizen of the United States,
a national of the United States (as defined in
section 1101(a) of title 8), an alien admitted
as a refugee under section 1157 of title 8, or
an alien lawfully admitted to the United
States for permanent residence;

(ii) shall prepare and submit to the Direc-
tor an application at such time, in such
manner, and containing such information as
the Director may require; and

(iii) shall certify to the Director that the
individual intends to use amounts received
under the scholarship to enroll or continue
enrollment at an institution of higher edu-
cation (as defined in section 1001(a) of title
20) in order to pursue an associate, under-
graduate, or graduate level degree in mathe-
metics, engineering, computer science, or
other technology and science programs des-
ignated by the Director.

(B) Ability

Awards of scholarships under this section
shall be made by the Director solely on the
basis of the ability of the applicant, except
that in any case in which 2 or more applicants
for scholarships are deemed by the Director to
be possessed of substantially equal ability, and
there are not sufficient scholarships available
to grant one to each of such applicants, the
available scholarship or scholarships shall be
awarded to the applicants in a manner that
will tend to result in a geographically wide
distribution throughout the United States of recipients’ places of permanent residence.

(3) Limitation

The amount of a scholarship awarded under
this section shall be determined by the Director,
except that the Director shall not award a schol-
arship in an amount exceeding $10,000 per year.
The Director may renew scholarships for up to 4
years.

(4) Funding

The Director shall carry out this section only
with funds made available under section
1356(s)(3) of title 8. The Director may use no more than 50 percent of such funds for undergraduate programs for curriculum development, professional and workforce development, and to advance technological education. Funds for these other programs may be used for purposes other than scholarships.

(5) Federal Register

Not later than 60 days after December 8, 2004, the Director shall publish in the Federal Register a list of eligible programs of study.


REFERENCES IN TEXT

Section 1157 of title 8, referred to in par. (2)(A)(i), was in the original “section 207 of the Immigration and Nationality Act”, and was translated as reading section 207 of the Immigration and Nationality Act to reflect the probable intent of Congress.

CODIFICATION

Section was enacted as part of the American Competitiveness and Workforce Improvement Act of 1998, and also as part of the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS

2004—Par. (2)(A)(i). Pub. L. 108–447, §429(a), substituted “computer science, or other technology and science programs designated by the Director” for “or computer science”.

Par. (3). Pub. L. 108–447, §429(b), substituted “$10,000 per year” for “$3,125 per year”.

Par. (4). Pub. L. 108–447, §429(c), inserted at end “The Director may use no more than 50 percent of such funds for undergraduate programs for curriculum development, professional and workforce development, and to advance technological education. Funds for these other programs may be used for purposes other than scholarships.”


2000—Par. (3). Pub. L. 106–313 substituted “$3,125 per year” for “$2,500 per year.”

EFFECTIVE DATE OF 2004 AMENDMENT


§ 1870. General authority of Foundation

The Foundation shall have the authority, within the limits of available appropriations, to do all things necessary to carry out the provisions of this chapter, including, but without being limited thereto, the authority—

(a) to prescribe such rules and regulations as it deems necessary governing the manner of its operations and its organization and personnel; 

(b) to make such expenditures as may be necessary for administering the provisions of this chapter;

(c) to enter into contracts or other arrangements, or modifications thereof, for the carrying on, by organizations or individuals in the United States and foreign countries, including other government agencies of the United States and of foreign countries, of such scientific or engineering activities as the Foundation deems necessary to carry out the purposes of this chapter; and

(d) to receive, manage, and disburse grants, donations, and other payments which relate to scientific or engineering activities without regard to the provisions of section 3324(a) and (b) of title 31;

(e) to acquire by purchase, lease, loan, gift, or condemnation, and to hold and dispose of by grant, sale, lease, or loan, real and personal property of all kinds necessary for, or resulting from, the exercise of authority granted by this chapter;

(f) to receive and use funds donated by others, if such funds are donated without restriction other than that they be used in furtherance of one or more of the general purposes of the Foundation, except that funds may be donated for specific prize competitions for “basic research” as defined in the Office of Management and Budget Circular No. A–11;

(g) to publish or arrange for the publication of scientific and engineering information so as to further the full dissemination of information of scientific or engineering value consistent with the national interest, without regard to the provisions of section 501 of title 44;

(h) to accept and utilize the services of voluntary and uncompensated personnel and to provide transportation and subsistence as authorized by section 5703 of title 5 for persons serving without compensation;

(i) to prescribe, with the approval of the Comptroller General of the United States, the extent to which vouchers for funds expended under contracts for scientific or engineering research shall be subject to itemization or substantiation prior to payment, without regard to the limitations of other laws relating to the expenditure of public funds and accounting therefor;

(j) to arrange with and reimburse the heads of other Federal agencies for the performance of any activity which the Foundation is authorized to conduct; and

(k) during the 5-year period beginning on August 21, 1986, to indemnify grantees, contractors, and subcontractors associated with the Ocean Drilling Program under the provisions of section 2354 of title 10 with all approvals and certifications required by such indemnification made by the Director.

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CODIFICATION


In subsec. (d), “section 332(a) and (b) of title 31” substituted for “section 3648 of the Revised Statutes (31 U.S.C. sec. 529)” on authority of Pub. L. 97–258, §4(b), Sept. 13, 1982, 96 Stat. 1067, the first section of which enacted Title 31, Money and Finance.


AMENDMENTS

2007—Subsec. (f). Pub. L. 110–69 inserted before semicolon at end “, except that funds may be donated for specific prize competitions for ‘basic research’ as defined in the Office of Management and Budget Circular No. A–11”.


Subsec. (g). Pub. L. 99–159, §110(a)(14)(B), (C), substituted “engineering” for “technical” and inserted reference to engineering value.


1968—Subsec. (c). Pub. L. 90–407, §9(a), substituted “scientific activities” for “basic scientific research activities” and “scientific research activities”,” intersessional cooperation or national security” for “national defense”, and inserted “Secretary of State” after “at the request of the”.

Subsec. (d). Pub. L. 90–407, §9(b), substituted “activities” for “research”.


CONTINUATION OF EXISTING OFFICES, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90–407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90–407, set out as a note under section 1862 of this title.

§ 1870a. Buy-American requirements

(a) Award of contracts

The Director shall, to the maximum extent practicable and consistent with current law, award to domestic firms any contracts for the purchase of goods and services intended for direct use by the Foundation.

(b) Report

The Director shall, as soon as possible after October 31, 1988, prepare a report on—

(1) the number of Foundation contracts entered into with foreign firms in fiscal year 1988;

(2) the number of such contracts entered into with domestic firms in that fiscal year;

(3) the number of contracts entered into with foreign firms where the Foundation also received a technically acceptable bid from a domestic firm; and

(4) any steps the Foundation will take to increase the number of contracts awarded to domestic firms.

Such report shall be submitted to the Committee on Science, Space, and Technology of the House of Representatives and the Committees on Labor and Human Resources and Commerce, Science, and Transportation of the Senate.

(c) Definitions

For the purposes of this section—

(1) the term “domestic firm” means a business entity which is organized under the laws of the United States or the laws of a State, district, commonwealth, territory, or possession of the United States, and which conducts business operations in the United States; and

(2) the term “foreign firm” means a business entity not described in paragraph (1).


CODIFICATION

Section was enacted as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

CHANGE OF NAME

Committee on Labor and Human Resources of Senate changed to Committee on Health, Education, Labor, and Pensions of Senate by Senate Resolution No. 20, One Hundred Sixth Congress, Jan. 19, 1999.

Committee on Science, Space, and Technology of House of Representatives treated as referring to Committee on Science of House of Representatives by section 1(a) of Pub. L. 104–14, set out as a note preceding section 21 of Title 2, The Congress. Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 3, 2007.

§ 1871. Disposition of inventions produced under contracts or other arrangements

Each contract or other arrangement executed pursuant to this chapter which relates to scientific or engineering research shall contain provisions governing the disposition of inventions produced thereunder in a manner calculated to protect the public interest and the equities of the individual or organization with which the contract or other arrangement is executed: Provided, however, That nothing in this chapter shall be construed to authorize the Foundation to enter into any contractual or other arrangement inconsistent with any provision of law affecting the issuance or use of patents.


AMENDMENTS

1985—Pub. L. 99–159 struck out subsec. (a) designation, inserted “or engineering” after “scientific”, and struck out subsec. (b) which prohibited Foundation officers and employees from acquiring, etc., patent rights in inventions.

§ 1872. International cooperation and coordination with foreign policy

(a) The Foundation is authorized to cooperate in any international scientific or engineering activities consistent with the purposes of this
chapter and to expend for such international scientific or engineering activities such sums within the limit of appropriated funds as the Foundation may deem desirable. The Director may defray the expenses of representatives of Government agencies and other organizations and of individual scientists or engineers to accredited international scientific or engineering congresses and meetings whenever he deems it necessary in the promotion of the objectives of this chapter. In this connection, with the approval of the Secretary of State, the Foundation may undertake programs granting fellowships to, or making other similar arrangements with, foreign nationals for study and research in the sciences or in engineering in the United States without regard to section 1869 of this title or the affidavit of allegiance to the United States required by section 1874(d)(2) of this title.

(b)(1) The authority to enter into contracts or other arrangements with organizations or individuals in foreign countries and with agencies of foreign countries, as provided in section 1870(c) of this title, and the authority to cooperate in international scientific or engineering activities as provided in subsection (a) of this section, shall be exercised only with the approval of the Secretary of State, to the end that such authority shall be exercised in such manner as is consistent with the foreign policy objectives of the United States.

(2) If, in the exercise of the authority referred to in paragraph (1) of this subsection, negotiation with foreign countries or agencies thereof becomes necessary, such negotiation shall be carried on by the Secretary of State in consultation with the Director.


REFERENCES IN TEXT
Section 1874(d)(2) of this title, referred to in subsec. (a), was redesignated section 1874(c)(2) by Pub. L. 96-516, §21(b)(2), Dec. 12, 1980, 94 Stat. 3010.

AMENDMENTS
1985—Subsec. (a). Pub. L. 99-159, §110(a)(16), inserted “or engineering” after “scientific” the first three places appearing after “scientists” and substituted “study and research in the sciences or in engineering” for “scientific study or scientific work”.

1968—Subsec. (a). Pub. L. 90-407 struck out “, with the approval of the Board,” after “‘The Director’”, and substituted “section 15(d)(2) of this Act” for “section 16(d)(2) of this Act”, which resulted in no change in text because, for purposes of classification, provision was translated as “section 1874(d)(2) of this title”.

1959—Subsec. (a). Pub. L. 86-232 authorized the Foundation, with approval of the Secretary of State, to cooperate in scientific activities rather than scientific research activities, and to grant fellowships or make other arrangements with foreign nationals for scientific study or scientific work in the United States.
Subsec. (b)(1). Pub. L. 86-232 struck out “research” from phrase “scientific research activities”.

1 See in original. Probably should be “deems”.
2 See References in Text note below.

CONTINUATION OF EXISTING OFFICERS, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION
Amendment by Pub. L. 90-407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90-407, set out as a note under section 1862 of this title.


Section, act May 10, 1950, ch. 171, §14, as added July 11, 1958, Pub. L. 85-510, §2, 72 Stat. 353, authorized the Foundation, in carrying out a program of study, research, and evaluation in the field of weather modification, to consult with meteorologists and scientists, make contracts and grants, accept gifts, loan property, conduct hearings, and subpoena books and records.

EFFECTIVE DATE OF REPEAL
Section 11(1) of Pub. L. 90–407 provided that the repeal of this section is effective Sept. 1, 1968, and that provisions authorizing Foundation to initiate and support programs in field of weather modification should remain in effect until Sept. 1, 1968, for purpose of this section.

CONTINUATION OF EXISTING OFFICERS, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION
Repeal by Pub. L. 90-407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90-407, set out as a note under section 1862 of this title.

§ 1873. Employment of personnel

(a) Appointment; compensation; application of civil service provisions; technical and professional personnel; members of special commissions; temporary appointments; travel expenses

(1) The Director shall, in accordance with such policies as the Board shall from time to time prescribe, appoint and fix the compensation of such personnel as may be necessary to carry out the provisions of this chapter. Except as provided in section 1863(h) of this title, such appointments shall be made and such compensation shall be fixed in accordance with the provisions of title 5 governing appointments in the competitive service.

(2) The Director may, under the authority provided by paragraph (1) of this subsection and in accordance with such policies as the Board chooses to prescribe, appoint for a limited term, or on a temporary basis, scientists, engineers, and other technical and professional personnel on leave of absence from academic, industrial, or research institutions to work for the Foundation.

1 See References in Text note below.
(3) The Foundation may pay, to the extent authorized for certain other Federal employees by section 5723 of title 5, travel expenses for any individual appointed for a limited term or on a temporary basis and transportation expenses of his or her immediate family and his or her household goods and personal effects from that individual’s residence at the time of selection or assignment to his or her duty station. The Foundation may pay such travel expenses and transportation expenses to the same extent for such an individual’s return to the former place of residence from his or her duty station, upon separation from the Federal service following an agreed period of service. The Foundation may also pay a per diem allowance at a rate not to exceed the daily amounts prescribed under section 5702 of title 5 to such an individual, in lieu of transportation expenses of the immediate family and household goods and personal effects, for the period of his or her employment with the Foundation. Notwithstanding any other provision of law, the employer’s contribution to any retirement, life insurance, or health benefit plan for an individual appointed for a term of one year or less, which could be extended for no more than one additional year, may be made or reimbursed from appropriations available to the Foundation.

(b) Operation of laboratories and pilot plants

The Foundation shall not, itself, operate any laboratories or pilot plants.

(c) Compensation of members of Board and special commissions

The members of the Board and the members of each special commission shall be entitled to receive compensation for each day engaged in the business of the Foundation at a rate fixed by the Chairman but not exceeding the maximum rate payable under section 5376 of title 5 and shall be allowed travel expenses as authorized by section 5703 of title 5. For the purposes of determining the payment of compensation under this subsection, the time spent in travel by any member of the Board or any member of a special commission shall be deemed as time engaged in the business of the Foundation. Members of the Board and members of special commissions may waive compensation and reimbursement for traveling expenses.

(d) Federal officers as members of special commissions; compensation

Persons holding other offices in the executive branch of the Federal Government may serve as members of special commissions, but they shall not receive remuneration for their services as such members during any period for which they receive compensation for their services in such other offices.

(e) Utilization of appropriations in making contracts

In making contracts or other arrangements for scientific or engineering research, the Foundation shall utilize appropriations available therefor in such manner as will in its discretion best realize the objectives of (1) having the work performed by organizations, agencies, and institutions, or individuals in the United States or foreign countries, including Government agencies of the United States and of foreign countries, qualified by training and experience to achieve the results desired, (2) strengthening the research staff of organizations, particularly nonprofit organizations, in the United States, (3) adding institutions, agencies, or organizations which, if aided, will advance scientific or engineering research, and (4) encouraging independent scientific or engineering research by individuals.

(f) Transfer of research and education funds of other Government departments or agencies

Funds available to any department or agency of the Government for scientific or engineering research or education, or the provision of facilities therefor, shall be available for transfer, with the approval of the head of the department or agency involved, in whole or in part, to the Foundation for such use as is consistent with the purposes for which such funds were provided, and funds so transferred shall be expendable by the Foundation for the purposes for which the transfer was made.

(g) “United States” defined

For purposes of this chapter, the term “United States” when used in a geographical sense means the States, the District of Columbia, the Commonwealth of Puerto Rico, and all territories and possessions of the United States.

(h) Expiration of authorization

Notwithstanding any other provision of law, the authorization of any appropriation to the Foundation shall expire (unless an earlier expiration is specifically provided) at the close of the second fiscal year following the fiscal year for which the authorization was enacted, to the extent that such appropriation has not theretofore actually been made.

(i) Public disclosure of information

(1)(A) Information supplied to the Foundation or a contractor of the Foundation in survey forms, questionnaires, or similar instruments for purposes of section 1862(a)(5) or (6) of this title by an individual, an industrial or commercial organizational, or an educational, academic, or other nonprofit institution when the institution has received a pledge of confidentiality from the Foundation, shall not be disclosed to the public unless the information has been transformed into statistical or abstract formats that do not allow for the identification of the supplier.

(B) Information that has not been transformed into formats described in subparagraph (A) may be used only for statistical or research purposes.

(C) The identities of individuals, organizations, and institutions supplying information described in subparagraph (A) may not be disclosed to the public.

(2) In support of functions authorized by section 1862(a)(5) or (6) of this title, the Foundation may designate, at its discretion, authorized persons, including employees of Federal, State, or local agencies or instrumentalities (including local educational agencies) and employees of private organizations, to have access, for statistical or research purposes only, to information
collected pursuant to section 1862(a)(5) or (6) of this title that allows for the identification of the supplier. No such person may—

(A) publish information collected pursuant to section 1862(a)(5) or (6) of this title in such a manner that either an individual, an industrial or commercial organization, or an educational, academic, or other nonprofit institution that has received a pledge of confidentiality from the Foundation can be specifically identified;

(B) permit anyone other than individuals authorized by the Foundation to examine data that allows for such identification relating to an individual, an industrial or commercial organization, or an academic, educational, or other nonprofit institution that has received a pledge of confidentiality from the Foundation; or

(C) knowingly and willfully request or obtain any nondisclosable information described in paragraph (1) from the Foundation under false pretenses.

(3) Violation of this subsection is punishable by a fine of not more than $10,000, imprisonment for not more than 5 years, or both.


References of Text
Section 1862(h) of this title, referred to in subsec. (a), was redesignated section 1863(g) of this title by Pub. L. 94–282, title V, §503, May 11, 1976, 90 Stat. 473. The General Schedule, referred to in subsec. (a)(1), is set out under section 5332 of title 5.

Amendments
2002—Subsec. (1). Pub. L. 107–368 amended subsec. (1) generally. Prior to amendment, subsec. (1) read as follows: “Information supplied to the Foundation or a contractor of the Foundation by an industrial or commercial organization in survey forms, questionnaires, or similar instruments for the purposes of subsection (a)(5) or (a)(6) of section 1862 of this title may not be disclosed to the public unless such information has been transformed into statistical or aggregate formats that do not allow the identification of the supplier. The names of organizations supplying such information may not be disclosed to the public.”

1999—Subsec. (c). Pub. L. 105–207 substituted “shall be entitled to receive” for “shall receive” and “the maximum rate payable under section 5376” for “the rate specified for the daily rate for GS–18 of the General Schedule under section 5322” and inserted at end “For the purposes of determining the maximum rate payable under subsection (a), the time spent in travel by any member of the Board or any member of a special commission shall be deemed as time engaged in the business of the Foundation. Members of the Board and members of special commissions may waive compensation and reimbursement for travel expenses without the consent of the President. Starting with fiscal year 1990, the Foundation shall submit to the Congress in each fiscal year, at the time of the release of the President’s budget, a three-year budget estimate for the Foundation. The three-year budget shall include funding estimates for each major activity, including each scientific directorate, the United States Antarctic Program, the Science and Engineering Education Directorate, and the Program Development and Management activity.”


1985—Subsec. (b). Pub. L. 99–159, §109(e)(1)(A), (B), struck out subsec. (b), relating to outside employment and activities, and redesignated subsec. (c) as (b). Subsecs. (c), (d), Pub. L. 99–159, §109(e)(1)(B), redesignated subsec. (d) and (e) as (c) and (d), respectively. Former subsec. (c) redesignated (b).

Subsec. (e). Pub. L. 99–159, §§109(e)(1)(B), 110(a)(18)(A), redesignated subsec. (f) as (e) and inserted “or engineering” after “scientific” wherever appearing. Former subsec. (e) redesignated (d).

Subsec. (f). Pub. L. 99–159, §§109(e)(1)(B), 110(a)(18)(B), redesignated subsec. (g) as (f) and substituted “engineering” for “technical”. Former subsec. (f) redesignated (e).

Subsecs. (g), (h). Pub. L. 99–159, §109(e)(1)(B), redesignated subsecs. (h) and (i) as (g) and (h), respectively. Former subsec. (g) redesignated (f).


1977—Subsec. (d). Pub. L. 95–99 substituted provisions authorizing compensation at a daily rate fixed by the chairman but not exceeding the rate specified for the daily rate for GS–18 of the General Schedule under section 5322 of title 5 for provisions authorizing a daily rate of $100.


1968—Subsec. (a). Pub. L. 90–407, §12, substituted provisions making applicable chapter 51 and subchapter III of chapter 53 of title 5, relating to classification and General Schedule pay rates, for provisions making applicable the civil-service laws and regulations and the Classification Act of 1949, and provisions that the members of special commissions be appointed without regard to the provisions of title 5, governing appointments in the competitive service, for provisions that the Deputy Director, and members of divisional committees and special commissions be appointed without regard to the civil-service laws or regulations. Provisions this subsection, relating to outside employment and activities of certain specified officers of the Foundation, were designated as subsec. (b).

Subsec. (b). Pub. L. 90–407, §12, redesignated provisions of former subsec. (a) as (b) and added Assistant Directors to specified officers of Foundation prohibited from engaging in outside employment and activities. Former subsec. (b), providing for the appointment of a Deputy Director, was struck out.

Subsec. (d). Pub. L. 90–407, §12, struck out applicability to members of each divisional committee, and substituted “$100” for “$50” and “section 5703” for “section 738–2.”

Subsec. (e). Pub. L. 90–407, §12, struck out “the divisional committees and after” may serve as members of”.

Subsec. (f). Pub. L. 90–407, §12, redesignated subsec. (g) as (f), in cl. (2) substituted “United States” for “States, Territories, possessions, and the District of Columbia”, in cl. (3) substituted “advance scientific research” for “advance basic research”, and in cl. (4) sub-
stituted “independent scientific research” for “independent basic research”. Former subsec. (f), exempting members of Board, divisional committees, or special commissions, from provisions of former sections 281, 283, or 284 of title 18 or former section 99 of title 5, unless the act made unlawful by the aforementioned former sections directly involved or directly interested the Foundation, was struck out.

Subsec. (g). Pub. L. 90–407, §12, redesignated subsec. (h) as (g) and struck out “and, until such time as an appropriation is made available directly to the Foundation, for general administrative expenses of the Foundation without regard to limitations otherwise applicable to such funds” after “the purposes for which the transfer was made”. Former subsec. (g) redesignated (f).


TRANSFER OF FUNCTIONS

Authority of Director of National Science Foundation, from time to time, to make appropriate provisions authorizing performance by any other officer, or by any agency or employee, of National Science Foundation of any of his functions (including functions delegated to him by National Science Board), see Reorg. Plan No. 5 of 1965, eff. July 27, 1965, 30 F.R. 9355, 79 Stat. 1223, set out in the Appendix to Title 5, Government Organization and Employees.

REFERENCES TO MAXIMUM RATE UNDER 5 U.S.C. 5376

Except as otherwise provided, reference to maximum rate under section 5376 of Title 5, Government Organization and Employees, before first day of first pay period beginning on or after 180th day after Oct. 8, 2008, considered reference to basic pay rate for level IV of Executive Schedule (5 U.S.C. 5315) and reference to maximum rate on or after first day of first pay period beginning on or after 180th day after Oct. 8, 2008, considered reference to basic pay rate for level III of Executive Schedule (5 U.S.C. 5314), or for level II of the Executive Schedule (5 U.S.C. 5313) for certain employees, see section 2(d)(3) of Pub. L. 110–372, set out as an Effective Date of 2008 Amendment note under section 5376 of Title 5.

EMPLOYMENT OF MINORITIES, WOMEN, AND HANDICAPPED INDIVIDUALS IN EXECUTIVE LEVEL POSITIONS

Pub. L. 94–471, §7, Oct. 11, 1976, 90 Stat. 2056, provided that:

“(a) The Director of the National Science Foundation shall initiate an intensive search for qualified women, members of minority groups, and handicapped individuals to fill executive level positions in the National Science Foundation. In carrying out the requirement of this subsection, the Director shall work closely with organizations which have been active in seeking greater recognition and utilization of the scientific and technical capabilities of minorities, women, and handicapped individuals. The Director shall improve the representation of minorities, women, and handicapped individuals on advisory committees, review panels, and all other mechanisms by which the scientific community provides assistance to the Foundation. The Director of the National Science Foundation shall report quarterly to the Congress on the status of minorities, women, and handicapped individuals and activities undertaken pursuant to this section.

“(b) Notwithstanding any other provision of this or any other Act, the National Science Foundation shall, with funds available from the program “Minorities, Women, and Handicapped Individuals in Science” conduct experimental forums, conferences, workshops or other activities designed to improve scientific literacy and to encourage and assist minorities, women, and handicapped individuals to undertake and to advance in careers in scientific research and science education.

“(c) In order to promote increased participation by minorities in careers in science and engineering, the National Science Foundation is authorized and directed to make available planning and study grants for programs including, but not limited to, Minority Centers for Graduate Education in Science and Engineering in accordance with this subsection.

“(2) The grants for Minority Centers for Graduate Education shall be used to determine the need for and feasibility of developing Centers to be established at geographically dispersed educational institutions which——

“(A) have substantial minority student enrollment; “(B) are geographically located near minority population centers; “(C) demonstrate a commitment to encouraging and assisting minority students, researchers, and faculty; “(D) have an existing or developing capability to offer doctoral programs in science and engineering; “(E) will support basic research and the acquisition of necessary research facilities and equipment; “(F) will serve as a regional resource in science and engineering for the minority community which the Center is designed to serve; and “(G) will develop joint educational programs with nearby undergraduate institutions of higher education which have a substantial minority student enrollment.

“(3) The Director, in consultation with groups which have been active in seeking greater recognition of the scientific and technical capabilities of minorities, shall establish criteria for the award of the grants, and shall report to the Committee on Science and Technology of the House of Representatives and the Committee on Labor and Public Welfare [now Committee on Health, Education, Labor, and Pensions] of the Senate on the results of activities including an evaluation and assessment of the entire program carried out under this subsection, not later than March 1, 1977.”

CONTINUATION OF EXISTING OFFICES, PROCEDURES, AND ORGANIZATION OF THE NATIONAL SCIENCE FOUNDATION

Amendment by Pub. L. 90–407 intended to continue in effect the existing offices, procedures, and organization of the Foundation, see section 16 of Pub. L. 90–407, set out as a note under section 1622 of this title.


§1874. Security provisions

(a) Nuclear energy research and development

The Foundation shall not support any research or development activity in the field of nuclear energy, nor shall it exercise any authority pursuant to section 1879(c) of this title in respect to that field, without first having obtained the concurrence of the Secretary of Energy that such activity will not adversely affect the common defense and security. To the extent that such activity involves restricted data as defined in the Atomic Energy Act of 1954 [32 U.S.C. 2011 et seq.] the provisions of that Act regarding the control of the dissemination of restricted data and the security clearance of those individuals to be given access to restricted data shall be ap-
applicable. Nothing in this chapter shall supersede or modify any provision of the Atomic Energy Act of 1954.

(b) Research relating to national defense

(1) In the case of scientific or engineering research activities under this chapter in connection with matters relating to the national defense, with respect to which funds have been transferred to the Foundation from the Department of Defense in accordance with the provisions of section 1873(f) of this title, the Secretary of Defense shall establish such security requirements and safeguards, including restrictions with respect to access to information and property, as he deems necessary.

(2) In the case of scientific or engineering research activities under this chapter in connection with matters relating to the national defense other than research activities referred to in paragraph (1) of this subsection, the Foundation shall establish such security requirements and safeguards, including restrictions with respect to access to information and property, as it deems necessary.

(3) Any agency of the Government exercising investigatory functions is authorized to make such investigations and reports as may be requested by the Foundation in connection with the enforcement of security requirements and safeguards, including restrictions with respect to access to information and property, established under paragraph (1) or (2) of this subsection.


REFERENCES IN TEXT


AMENDMENTS


1988—Subsec. (c). Pub. L. 100–570 struck out subsec. (c) which related to oath and statement prerequisite to acceptance of scholarship or fellowship, ineligibility of Communist organization members, and penalties for violation.


1980—Subsec. (c), (d). Pub. L. 96–516 redesignated subsec. (d) as (c), and struck out former subsec. (c) relating to clearance of personnel by the Civil Service Commission.


1967—Subsec. (b)(1). Pub. L. 90–407, §13, substituted “section 1873(g) of this title” for “section 1873(h) of this title”.

1962—Subsec. (d). Pub. L. 87–835 designated existing provisions as par. (1), inserted reference to section 1869 of this title, and substituted the requirement, for applications made on or after Oct. 1, 1962, of a full statement regarding convictions for crimes, other than any committed before age 16 or for minor traffic violations, and any criminal charges punishable by thirty days confinement, or more, pending at time of application for scholarship or fellowship, for the requirement of an affidavit stating the affidavit did not believe in, and was not a member or supporter of any organization believing in, or teaching, the violent overthrow of the United States Government, or by any illegal means, in such par. (1), and added par. (2).


Section 1878, Pub. L. 85–864, title IX, § 903, Sept. 2, 1958, 72 Stat. 1601, provided National Science Foundation with same power and authority in carrying out its functions under sections 1876 to 1879 of this title as it had in carrying out its functions under this chapter.


§ 1880. National Medal of Science

There is established a National Medal of Science (hereinafter referred to as the “medal”), which shall be of such design and materials and bear such inscriptions as the President, on the basis of recommendations submitted by the National Science Foundation, may prescribe, and shall be awarded as provided in section 1881 of this title.

(Pub. L. 86–209, § 1, Aug. 25, 1959, 73 Stat. 431.)

Codification

Section was not enacted as part of the National Science Foundation Act of 1950 which comprises this chapter.

§ 1881. Award of National Medal of Science

(a) Recommendations

The President shall from time to time award the medal, on the basis of recommendations received from the National Academy of Sciences or on the basis of such other information and evidence as he deems appropriate, to individuals who in his judgment are deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical, engineering, behavioral or social sciences.

(b) Number

Not more than twenty individuals may be awarded the medal in any one calendar year.

(c) Citizenship

An individual may not be awarded the medal unless at the time such award is made he—

(1) is a citizen or other national of the United States; or

(2) is an alien lawfully admitted to the United States for permanent residence who (A) has filed an application for petition for naturalization in the manner prescribed by section 1445(b) of title 8 and (B) is permanently ineligible to become a citizen of the United States.

(d) Ceremonies

The presentation of the award shall be made by the President with such ceremonies as he may deem proper, including attendance by appropriate Members of Congress.


Codification

Section was not enacted as part of the National Science Foundation Act of 1950 which comprises this chapter.

Amendments


Ex. Ord. No. 11287. Award and Presentation of National Medal of Science


By virtue of the authority vested in me by the Act of August 25, 1959, entitled “An Act To Establish a National Medal of Science To Provide Recognition for Individuals Who Make Outstanding Contributions in the Physical, Biological, Mathematical, and Engineering Sciences,” 73 Stat. 431 (hereinafter referred to as the Act) (42 U.S.C. 1880, 1881), and as President of the United States, it is ordered as follows:

SECTION 1. Award of Medal. (a) The President shall award the National Medal of Science (hereinafter referred to as the Medal) established by the Act, the specifications of which are prescribed by Executive Order No. 10910 of January 17, 1961, as amended, on the basis of recommendations received by him in accordance with the provisions of this Order to individuals who in his judgment are deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical, or engineering sciences.

(b) The following-described criteria shall govern the award of the Medal—
(1) Not more than twenty individuals shall be awarded the Medal in any one calendar year.

(2) No individual shall be awarded the Medal unless, at the time such award is made:

(A) is a citizen or other national of the United States; or

(B) is an alien lawfully admitted to the United States for permanent residence who (i) has filed a petition for naturalization in the manner prescribed by Section 334(b) of the Immigration and Nationality Act [8 U.S.C. 1445(b)], and (ii) is not permanently ineligible to become a citizen of the United States.

(3) Notwithstanding the provisions of paragraph (2) of this subsection, the Medal may be awarded posthumously, but only to individuals who, at the time of their death, met the conditions set forth in paragraph (2).

The Medal shall not be awarded to any individual after the fifth anniversary of the day of his death.

(c) Each Medal awarded shall be suitably inscribed. Each individual awarded the Medal shall also receive a citation descriptive of the award.

(d) The presentation of the Medal shall be made in accordance with Section 2(a) of the Act.

SIC. 2. The President's Committee. (a) There is hereby established the President's Committee on the National Medal of Science hereinafter referred to as the Committee, which shall be composed of twelve appointive members and two ex officio members and shall assist the President, as provided in this order, in connection with the carrying out of the Act.

Each appointive member of the Committee shall be appointed by the President from among appropriately qualified citizens of the United States. Except as otherwise provided in subsection (e) of this Section, each such member shall be appointed for a term of three years or for the balance of the unexpired term of his predecessor, whichever is appropriate. Members may be reappointed to serve one additional term of three years. As nearly as practicable, the appointive members of the Committee shall comprise a cross section of the major fields of science and engineering.

(c) The following shall be ex officio members of the Committee:

(1) The Science Adviser.

(2) The President of the National Academy of Sciences.

(d) The President shall from time to time designate one of the members of the Committee as Chairman thereof.

(e) Of the persons first designated as members of the Committee under the provisions of subsection (b) of this Section, four shall be designated to serve until December 31, 1966, four shall be designated to serve until December 31, 1967, and four shall be designated to serve until December 31, 1968.

SIC. 3. Preliminary Procedure. (a) The Committee shall receive, on behalf of the President, (1) the recommendations made by the National Academy of Sciences respecting the award of the Medal pursuant to the provisions of Section 2(a) of the Act (subsec. (a) of this section), and (2) such similar recommendations as may be made by any other nationally representative scientific or engineering organization or other qualified source. Each such recommendation shall include or be accompanied by such appropriate supporting material as the Committee may from time to time specify.

(b) On the basis of such criteria, information, and evidence as it may deem appropriate, and subject to the provisions of Section 1 of this Order, the Committee shall designate, from among the individuals recommended in accordance with Section 3(a) of this Order, those individuals whom the Committee recommends for the award of the Medal and shall transmit the names of those individuals to the President, together with its recommendations. In so transmitting its recommendations, the Committee (1) shall include expressions of its views concerning, and such other information as may be pertinent to, its recommendations, and (2) may arrange the names of all or some of the recommended individuals in a sequence deemed by it to indicate the order of precedence in which the individuals involved deserve to receive the Medal.

(c) Each recommendation respecting the award of the Medal to an individual which is transmitted to the President by the Committee shall be accompanied by a draft of a citation describing the contributions which are being recognized by the award.

SIC. 4. Time of Awards and Recommendations. (a) Unless otherwise directed by the President, announcement of the award of the Medal shall be made during the last sixty days of each calendar year and ceremonies for presentation of the Medal shall be held during the first ninety days of the calendar year following the announcement of the award.

(b) Recommendations for awards of the Medals shall be submitted to the Committee, pursuant to Section 3(a) of this Order, by the first day of July of the year in which it is proposed that they be announced by the President. Recommendations of the Committee shall be delivered to the President by the fifteenth day of October of the year in which it is proposed that they be announced. Awards of the Medal may be based upon recommendations of the Committee or upon such other information and evidence as the President deems appropriate.

SIC. 5. Services and Expenses. (a) The National Science Foundation is authorized to provide such assistance as may be necessary and appropriate to carry out the purposes of this Order.

(b) The members of the Committee shall serve without compensation, but the National Science Foundation is authorized to reimburse them for travel expenses and to pay them per diem in lieu of subsistence as authorized for persons serving without compensation (5 U.S.C. 735–735c).

SIC. 6. Prior Orders. (a) Subject to the provisions of this Order, the President's Committee on the National Medal of Science established by Section 2 of this Order shall be deemed to constitute a continuation of the Committee of the same name established by Executive Order No. 10961 of August 21, 1961. The latter Order is hereby revoked.

(b) Executive Order No. 10910 of January 17, 1961, is hereby amended by deleting from its title the words "AND AWARD", and by deleting the last two sentences of Section 1, and all of Section 2, thereof.

EXTENSION OF TERM OF PRESIDENT’S COMMITTEE ON THE NATIONAL MEDAL OF SCIENCE


Term of the President's Committee on the National Medal of Science extended until Sept. 30, 1985, by Ex. Ord. No. 12489, Sept. 28, 1984, 49 F.R. 38927, formerly set out as a note under section 14 of the Federal Advisory Committee Act in the Appendix to Title 5.

Term of the President's Committee on the National Medal of Science extended until Sept. 30, 1986, by Ex. Ord. No. 12534, Sept. 30, 1985, 50 F.R. 40319, formerly set out as a note under section 14 of the Federal Advisory Committee Act in the Appendix to Title 5.
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Term of the President's Committee on the National Medal of Science extended until Sept. 30, 1993, by Ex. Ord. No. 13385, § 1(j), Sept. 29, 1997, 62 F.R. 51755, formerly set out as a note under section 14 of the Federal Advisory Committee Act in the Appendix to Title 5.


Term of the President's Committee on the National Medal of Science extended until Sept. 30, 2003, by Ex. Ord. No. 13351, Sept. 29, 2009, 74 F.R. 50909, set out as a note under section 14 of the Federal Advisory Committee Act in the Appendix to Title 5.

§ 1881a. Alan T. Waterman Award

(a) Establishment; amounts; terms

The National Science Foundation is authorized to establish the Alan T. Waterman Award for research or advanced study in the mathematical, physical, medical, biological, engineering, behavioral, social, or other sciences. The award authorized by this section shall consist of a suitable medal and a grant to support further research or study by the recipient. The National Science Board will periodically establish the amounts and terms of such grants under this section.

(b) Purpose

Awards under this section shall be made to recognize and encourage the work of younger scientists whose capabilities and accomplishments show exceptional promise of significant future achievement.

(c) Number

Not more than three awards may be made under this section in any one fiscal year.


Codification

Section was enacted as part of the National Science Foundation Authorization Act, 1976, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Amendments

2007—Subsec. (c). Pub. L. 110–69 amended subsec. (c) generally. Prior to amendment, subsec. (c) read as follows: “No more than one award shall be made under this section in any one fiscal year.”


1995—Subsec. (b). Pub. L. 104–16 substituted provisions requiring the National Science Board to periodically establish amounts and terms of grants, for provisions limiting the grant awarded to $50,000 per year for a period not exceeding three years.


§ 1881b. Presidential awards for teaching excellence

(1)(A) The President is authorized to make Presidential Awards for Excellence in Mathematics and Science Teaching to kindergarten through grade 12 school teachers of mathematics and science who have demonstrated outstanding teaching ability in the field of teaching mathematics or science.

(B) Each year the President is authorized to make no fewer than 108 awards under subparagraph (A). In selecting teachers for an award authorized by this subsection, the President shall select at least two teachers—

(i) from each of the several States;

(ii) from the District of Columbia;

(iii) from the Commonwealth of Puerto Rico;

(iv) from among the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and other commonwealths, territories, and possessions of the United States; and

(v) from schools established outside the several States and the District of Columbia by any agency of the Federal Government for dependents of the employees of such agency.

(2) The President shall carry out this subsection, including the establishment of the selection procedures, after consultation with the Director and other appropriate officials of Federal agencies.

(3)(A) Funds to carry out this subsection for any fiscal year shall be made available from amounts appropriated pursuant to annual authorization of appropriations for the Foundation for Education and Human Resources.

(B) Amounts made available pursuant to subparagraph (A) shall be available for making awards under this subsection, for administrative expenses, for necessary travel by teachers se-
lected under this subsection, and for special activities related to carrying out this subsection.


Codification
Section was enacted as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Amendments

Termination of Trust Territory of the Pacific Islands
For termination of Trust Territory of the Pacific Islands, see note set out preceding section 1581 of Title 48, Territories and Insular Possessions.

§ 1882. Information furnished to Congressional committees

Notwithstanding any other provision of this or any other Act, the Director of the National Science Foundation and the National Science Board shall keep the Committee on Labor and Human Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives fully and currently informed with respect to all of the activities of the National Science Foundation.


References in Text
This Act, referred to in text, is Pub. L. 96–44, known as the National Science Foundation Authorization Act for Fiscal Year 1980. For classification of this Act to the Code, see Tables.

Codification
Section was enacted as part of the authorization act cited as the credit to this section, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Prior Provisions
Provisions similar to this section were contained in the following prior authorization acts:

Amendments
1994—Pub. L. 103–437 substituted “Science, Space, and Technology” for “Science and Technology”.

Change of Name
Committee on Labor and Human Resources of Senate changed to Committee on Health, Education, Labor, and Pensions of Senate by Senate Resolution No. 20, One Hundred Sixth Congress, Jan. 19, 1999.
Committee on Science, Space, and Technology of House of Representatives treated as referring to Committee on Science of House of Representatives by section 1(a) of Pub. L. 104–14, set out as a note preceding section 21 of Title 2, The Congress. Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 3, 2007.

§ 1883. Office of Small Business Research and Development

The National Science Foundation is authorized and directed to establish an Office of Small Business Research and Development. The Foundation through the Office of Small Business Research and Development and in cooperation and consultation with the Small Business Administration shall—

(1) foster communication between the National Science Foundation and the small business community, and insure that the set-aside for small business concerns provided under this Act or any other Act authorizing appropriations for the National Science Foundation is fully and effectively utilized;
(2) collect, analyze, compile, and publish information concerning grants and contracts awarded to small business concerns by the Foundation, and the procedures for handling proposals submitted by small business concerns;
(3) assist individual small business concerns in obtaining information regarding programs, policies, and procedures of the Foundation, and assure the expeditious processing of proposals by small business concerns based on scientific and technical merit; and
(4) recommend to the Director and to the National Science Board such changes in the procedures and practices of the Foundation as may be required to enable the Foundation to draw fully on the resources of the small business research and development community.


References in Text
This Act, referred to in par. (1), is Pub. L. 94–471, Oct. 11, 1976, 90 Stat. 2053, known as the National Science Foundation Authorization Act, 1977, which, insofar as classified to the Code, enacted sections 1882 and 1883 of this title, amended title 1883 of this title, and en acted provisions set out as notes under sections 1862, 1864, 187, and 5820 of this title. For complete classification of this Act to the Code, see Short Title of 1976 Amendment note set out under section 1861 of this title and Tables.

Codification
Section was enacted as part of the National Science Foundation Authorization Act, 1977, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Amendments


§ 1885. Congressional statement of findings and declaration of policy respecting equal opportunities in science and engineering

(a) The Congress finds that it is in the national interest to promote the full use of human resources in science and engineering and to insure the full development and use of the scientific and engineering talents and skills of men and women, equally, of all ethnic, racial, and economic backgrounds, including persons with disabilities.

(b) The Congress declares it is the policy of the United States to encourage men and women, equally, of all ethnic, racial, and economic backgrounds, including persons with disabilities, to acquire skills in science, engineering, and mathematics, to have equal opportunity in education, training, and employment in scientific and engineering fields, and thereby to promote scientific and engineering literacy and the full use of the human resources of the Nation in science and engineering. To this end, the Congress declares that the highest quality science and engineering over the long-term requires substantial support, from currently available research and educational funds, for increased participation in science and engineering by women, minorities, and persons with disabilities. The Congress further declares that the impact on women, minorities, and persons with disabilities which is produced by advances in science and engineering must be included as essential factors in national and international science, engineering, and economic policies.


CODIFICATION

Section was enacted as part of the Science and Engineering Equal Opportunities Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS

2002—Subsec. (a). Pub. L. 107–368, § 16(1), substituted “backgrounds, including persons with disabilities” for “backgrounds”.

Subsec. (b). Pub. L. 107–368, § 16(2), inserted “backgrounds” after “backgrounds,” and substituted “backgrounds” for “and minorities” in two places.

1985—Subsec. (a). Pub. L. 99–159, § 111(b)(2), substituted “engineering” for “technology” and “scientific and engineering talents and skills” for “scientific talent and technical skills”.


SHORT TITLE


SEVERABILITY OF SCIENCE AND ENGINEERING EQUAL OPPORTUNITIES ACT

Section 38 of Pub. L. 96–516 provided that: “If a provision of this Act [enacting sections 1865 to 1885 of this title and 1885 of this title] is held invalid, the validity of the other provisions of the Act shall not be affected. If an application of a provision of this Act to a person or circumstance is held invalid, the validity of the application of the provisions to another person or circumstance shall not be affected.”

REPORTS TO CONGRESS CONCERNING NATIONAL POLICY DEVELOPMENT OF PROMOTION, ETC., OF EQUAL OPPORTUNITY FOR WOMEN AND MINORITIES IN SCIENCE AND TECHNOLOGY, AND IMPACTS OF SCIENCE AND TECHNOLOGY ON WOMEN AND MINORITIES

Section 35 of Pub. L. 96–516 directed President, with assistance of Director of Office of Science and Technology Policy and Director of Foundation, to prepare and transmit before Jan. 20, 1982, a report to Congress proposing a comprehensive national policy and program, including budgetary and legislative recommendations, for promotion of equal opportunity for women and minorities in science and technology, and directed President, with assistance of Director of Office of Science and Technology Policy, heads of appropriate executive departments, and Director of the Foundation to prepare and transmit before Jan. 1, 1983, a report to Congress proposing a comprehensive policy, including budgetary and legislative recommendations, concerning direct and indirect impacts of science and technology on women and minorities.

§ 1885a. Women in science and engineering; support of activities by Foundation for promotion, etc.

The Foundation is authorized to—

(1) support activities designed to—

(A) increase the participation of women in courses of study at the undergraduate, graduate, and postgraduate levels leading to degrees in scientific and engineering fields;

(B) encourage women to consider and prepare for careers in science and engineering;

or

(C) provide traineeship and fellowship opportunities for women in science and engineering;

(2) support programs in science, engineering, and mathematics in elementary and secondary schools so as to stimulate the acquisition of knowledge, skills, and information by female students and to increase female student awareness of career opportunities requiring scientific and engineering skills;

(3) support activities in continuing education in science and engineering which provide opportunities for women who—

(A) are in the work force, or

(B) who are not in the work force because their careers have been interrupted,

to acquire new knowledge, techniques, and skills in scientific and engineering fields;

and (4) undertake a comprehensive research program designed to increase public understanding of (A) the potential contribution of women in science and engineering and (B) the means to facilitate the participation and advance-
ment of women in scientific and engineering careers;
(5) establish a visiting women scientists and engineers program;
(6) support activities designed to improve the availability and quality of public information concerning the importance of the participation of women in careers in science and engineering;
(7) support activities of museums and science centers which demonstrate potential to interest and involve women in science and engineering;
(8) make grants, to be known as the National Research Opportunity Grants, to women scientists and engineers who (A) have received their doctorates within five years prior to the date of the award or (B) have received their doctorates, have had their careers interrupted, and are re-entering the workforce within five years after such interruption;
(9) make grants to women eligible under paragraph (8) to assist such women in planning and developing a research project eligible for support under such paragraph;
(10) provide support to individuals or academic institutions for full-time or part-time visiting professorships for women in science and engineering; and
(11) support demonstration project activities of individuals, public agencies, and private entities designed to encourage the employment and advancement of women in science and engineering.


CODIFICATION
Section was enacted as part of the Science and Engineering Equal Opportunities Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS
Par. (2). Pub. L. 99-159, § 111(b)(6)(A), (B), inserted "engineering", after "science", and substituted "engineering" for "technical".
Par. (5). Pub. L. 99-159, § 111(b)(6)(C), inserted applicability to engineers.
Par. (11). Pub. L. 99-159, § 111(b)(6)(E), substituted "science and engineering" for "science, engineering, and technology".

COMMISSION ON THE ADVANCEMENT OF WOMEN AND MINORITIES IN SCIENCE, ENGINEERING, AND TECHNOLOGY DEVELOPMENT

"SECTION 1. SHORT TITLE.
"This Act may be cited as the 'Commission on the Advancement of Women and Minorities in Science, Engineering, and Technology Development Act'.

"SEC. 2. FINDINGS.
"The Congress finds the following:
"(1) According to the National Science Foundation's 1996 report, Women, Minorities, and Persons with Disabilities in Science and Engineering—
"(A) women have historically been underrepresented in scientific and engineering occupations, and although progress has been made over the last several decades, there is still room for improvement;
"(B) female and minority students take fewer high-level mathematics and science courses in high school;
"(C) female students earn fewer bachelor's, master's, and doctoral degrees in science and engineering;
"(D) among recent bachelor's and master's engineering graduates, women are less likely to be in the labor force, to be employed full-time, and to be employed in their field than are men;
"(E) among doctoral scientists and engineers, women are far more likely to be employed at 2-year institutions, are far less likely to be employed in research universities, and are much more likely to teach part-time;
"(F) among university full-time faculty, women are less likely to chair departments or hold high-ranked positions;
"(G) a substantial salary gap exists between men and women with doctorates in science and engineering;
"(H) Blacks, Hispanics, and Native Americans continue to be seriously underrepresented in graduate science and engineering programs; and
"(I) Blacks, Hispanics, and Native Americans as a group are 23 percent of the population of the United States, but only 6 percent are scientists or engineers.

"(2) According to the National Research Council's 1995 report, Women Scientists and Engineers Employed in Industry: Why So Few?
"(A) limited access is the first hurdle faced by women seeking industrial jobs in science and engineering, and while progress has been made in recent years, common recruitment and hiring practices that make extensive use of traditional networks often overlook the available pool of women;
"(B) once on the job, many women find paternalism, sexual harassment, allegations of reverse discrimination, different standards for judging the work of men and women, lower salary relative to their male peers, inequitable job assignments, and other aspects of a male-oriented culture that are hostile to women; and
"(C) women to a greater extent than men find limited opportunities for advancement, particularly for moving into management positions, and the number of women who have achieved the top levels in corporations is much lower than would be expected, based on the pipeline model.

"(3) The establishment of a commission to examine issues raised by the findings of these two reports would help—
"(A) to focus attention on the importance of eliminating artificial barriers to the recruitment, retention, and advancement of women and minorities in the fields of science, engineering, and technology, and in all employment sectors of the United States;
"(B) to promote work force diversity;
"(C) to sensitize employers to the need to recruit and retain women and minority scientists, engineers, and computer specialists; and
"(D) to encourage the replication of successful recruitment and retention programs by universities, corporations, and Federal agencies having difficulties in employing women or minorities in the fields of science, engineering, and technology.

"SEC. 3. ESTABLISHMENT.
"There is established a commission to be known as the 'Commission on the Advancement of Women and
Minorities in Science, Engineering, and Technology Development' (in this Act referred to as the 'Commission').

'SEC. 4. DUTY OF THE COMMISSION.'

The Commission shall review available research, and, if determined necessary by the Commission, conduct additional research to—

(1) identify the number of women, minorities, and individuals with disabilities in the United States in specific types of occupations in science, engineering, and technology development;

(2) examine the preparedness of women, minorities, and individuals with disabilities to—

(A) pursue careers in science, engineering, and technology development; and

(B) advance to positions of greater responsibility within academia, industry, and government;

(3) describe the practices and policies of employers and labor unions relating to the recruitment, retention, and advancement of women, minorities, and individuals with disabilities in the fields of science, engineering, and technology development; and

(4) identify the opportunities for, and artificial barriers to, the recruitment, retention, and advancement of women, minorities, and individuals with disabilities in the fields of science, engineering, and technology development in academia, industry, and government;

(5) compile a synthesis of available research on lawful practices, policies, and programs that have successfully led to the recruitment, retention, and advancement of women, minorities, and individuals with disabilities in science, engineering, and technology development;

(6) issue recommendations with respect to lawful policies that government (including Congress and appropriate Federal agencies), academia, and private industry can follow regarding the recruitment, retention, and advancement of women, minorities, and individuals with disabilities in science, engineering, and technology development;

(7) identify the disincentives for women, minorities, and individuals with disabilities to continue graduate education in the fields of engineering, physics, and computer science;

(8) identify university undergraduate programs that are successful in retaining women, minorities, and individuals with disabilities in the fields of science, engineering, and technology development;

(9) identify the disincentives that lead to a disproportionate number of women, minorities, and individuals with disabilities leaving the fields of science, engineering, and technology development before completing their undergraduate education;

(10) assess the extent to which the recommendations of the Task Force on Women, Minorities, and the Handicapped in Science and Technology established under section 8 of the National Science Foundation Authorization Act for Fiscal Year 1987 (Public Law 99-383; 42 U.S.C. 1885a note) have been implemented;

(11) compile a list of all federally funded reports on the subjects of encouraging women, minorities, and individuals with disabilities to enter the fields of science and engineering and retaining women, minorities, and individuals with disabilities in the science and engineering workforce that have been issued since the date that the Task Force described in paragraph (10) submitted its report to Congress;

(12) assess the extent to which the recommendations contained in the reports described in paragraph (11) have been implemented; and

(13) evaluate the benefits of family-friendly policies in order to assist recruiting, retaining, and advancing women in the fields of science, engineering, and technology such as the benefits or disadvantages of the Family and Medical Leave Act of 1993 (29 U.S.C. 2001 et seq. [see Short Title note set out under section 2601 of Title 29, Labor, and Tables]).

'SEC. 5. MEMBERSHIP.'

(a) NUMBER AND APPOINTMENT.—The Commission shall be composed of 11 members as follows:

(1) One member appointed by the President from among for-profit entities that hire individuals in the fields of engineering, science, or technology development.

(2) Two members appointed by the Speaker of the House of Representatives from among such entities.

(3) One member appointed by the minority leader of the House of Representatives from among such entities.

(4) Two members appointed by the majority leader of the Senate from among such entities.

(5) One member appointed by the minority leader of the Senate from among such entities.

(6) Two members appointed by the Chairman of the National Governors Association from among individuals in education or academia in the fields of life science, physical science, or engineering.

(7) Two members appointed by the Vice Chairman of the National Governors Association from among such individuals.

(b) INITIAL APPOINTMENTS.—Initial appointments shall be made under subsection (a) not later than 90 days after the date of the enactment of this Act [Oct. 14, 1998].

(c) TERMS.—

(1) IN GENERAL.—Each member shall be appointed for the life of the Commission.

(2) VACANCIES.—A vacancy in the Commission shall be filled in the manner in which the original appointment was made.

(d) PAY OF MEMBERS.—Members shall not be paid by reason of their service on the Commission.

(e) TRAVEL EXPENSES.—Each member shall receive travel expenses, including per diem in lieu of subsistence, in accordance with sections 5702 and 5703 of title 5, United States Code.

(f) QUORUM.—A majority of the members of the Commission shall constitute a quorum for the transaction of business.

(g) CHAIRPERSON.—The Chairperson of the Commission shall be elected by the members.

(h) MEETINGS.—The Commission shall meet not fewer than 5 times in connection with and pending the completion of the report described in section 8. The Commission shall hold additional meetings for such purpose if the Chairperson or a majority of the members of the Commission requests the additional meetings in writing.

(i) EMPLOYMENT STATUS.—Members of the Commission shall not be deemed to be employees of the Federal Government by reason of their work on the Commission except for the purposes of—

(1) the tort claims provisions of chapter 171 of title 28, United States Code; and

(2) subchapter I of chapter 81 of title 5, United States Code, relating to compensation for work injuries.

'SEC. 6. DIRECTOR AND STAFF OF COMMISSION; EXPERTS AND CONSULTANTS.'

(a) DIRECTOR.—The Commission shall appoint a Director who shall be paid at a rate not to exceed the maximum annual rate of basic pay payable under section 5550 of title 5, United States Code.

(b) STAFF.—The Commission may appoint and fix the pay of additional personnel as the Commission considers appropriate.

(c) APPLICABILITY OF CERTAIN CIVIL SERVICE LAWS. —The Director and staff of the Commission may be appointed without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and may be paid without regard to the provisions of chapter 51 and subchapter III of chapter 53 of that title relating to classification and General Schedule pay rates, except that an individual so appointed may not receive more than in excess of the maximum annual rate of basic pay payable under section 5550 of title 5, United States Code.
“(d) EXPERTS AND CONSULTANTS.—The Commission may procure temporary and intermittent services under section 3109(b) of title 5, United States Code, at rates for individuals not to exceed the maximum annual rate of basic pay payable under section 3576 of title 5, United States Code.

“(e) STAFF OF FEDERAL AGENCIES.—Upon request of the Commission, the Director of the National Science Foundation or the head of any other Federal department or agency may detail, on a reimbursable basis, any of the personnel of that department or agency to the Commission to assist it in carrying out its duties under this Act.

“SEC. 7. POWERS OF COMMISSION.

“(a) HEARINGS AND SESSIONS.—The Commission may, for the purpose of carrying out this Act, hold hearings, sit and act at times and places, take testimony, and receive evidence as the Commission considers appropriate. The Commission may administer oaths or affirmations to witnesses appearing before it.

“(b) POWERS OF MEMBERS AND AGENTS.—Any member or agent of the Commission may, if authorized by the Commission, take any action which the Commission is authorized to take by this section.

“(c) OBTAINING OFFICIAL DATA.—The Commission may secure directly from any department or agency of the United States information necessary to enable it to carry out this Act. Upon request of the Chairperson of the Commission, the head of that department or agency shall furnish that information to the Commission.

“(d) MAILS.—The Commission may use the United States mails in the same manner and under the same conditions as other departments and agencies of the United States.

“(e) ADMINISTRATIVE SUPPORT SERVICES.—Upon the request of the Commission, the Administrator of General Services shall provide to the Commission, on a reimbursable basis, the administrative support services necessary for the Commission to carry out its responsibilities under this Act.

“(f) CONTRACT AUTHORITY.—To the extent provided in advance in appropriations Acts, the Commission may contract with and compensate Government and private agencies or persons for the purpose of conducting research or surveys necessary to enable the Commission to carry out its duties under this Act.

“SEC. 8. REPORT.

“Not later than 1 year after the date on which the initial appointments under section 5(a) are completed, the Commission shall submit to the President, the Congress, and the highest executive official of each State, a written report containing the findings, conclusions, and recommendations of the Commission resulting from the study conducted under section 4.

“SEC. 9. CONSTRUCTION; USE OF INFORMATION OBTAINED.

“(a) IN GENERAL.—Nothing in this Act shall be construed to require any non-Federal entity (such as a business, college or university, foundation, or research organization) to provide information to the Commission concerning such entity’s personnel policies, including salaries and benefits, promotion criteria, and affirmative action plans.

“(b) USE OF INFORMATION OBTAINED.—No information obtained from any entity by the Commission may be used in connection with any employment related litigation.

“SEC. 10. TERMINATION, ACCESS TO INFORMATION.

“(a) TERMINATION.—The Commission shall terminate 30 days after submitting the report required by section 8.

“(b) ACCESS TO INFORMATION.—On or before the date of the termination of the Commission under subsection (a), the Commission shall provide to the National Science Foundation the information gathered by the Commission in the process of carrying out its duties under this Act. The National Science Foundation shall act as a central repository for such information and shall make such information available to the public, including making such information available through the Internet.

“SEC. 11. REVIEW OF INFORMATION PROVIDED BY THE NATIONAL SCIENCE FOUNDATION AND OTHER AGENCIES.

“(a) PROVISION OF INFORMATION.—At the request of the Commission, the National Science Foundation and any other Federal department or agency shall provide to the Commission any information determined necessary by the Commission to carry out its duties under this Act, including—

“(1) data on academic degrees awarded to women, minorities, and individuals with disabilities in science, engineering, and technology development, and workforce representation and the retention of women, minorities, and individuals with disabilities in the fields of science, engineering, and technology development; and

“(2) information gathered by the National Science Foundation in the process of compiling its biennial report on Women, Minorities, and Persons with Disabilities in Science and Engineering.

“(b) REVIEW OF INFORMATION.—The Commission shall review any information provided under subsection (a) and shall include in the report required under section 8—

“(1) recommendations on how to correct any deficiencies in the collection of the types of information described in that subsection, and in the analysis of such data, which might impede the characterization of the factors which affect the attraction and retention of women, minorities, and individuals with disabilities in the fields of science, engineering, and technology development; and

“(2) an assessment of the biennial report of the National Science Foundation on Women, Minorities, and Persons with Disabilities in Science and Engineering, and recommendations on how that report could be improved.

“SEC. 12. DEFINITION OF STATE.

“In this Act, the term ‘State’ includes the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Virgin Islands, and any other territory or possession of the United States.

“SEC. 13. AUTHORIZATION OF APPROPRIATIONS.

“There are authorized to be appropriated to carry out this Act—

“(1) $400,000 for fiscal year 1999; and

“(2) $400,000 for fiscal year 2000.”

“Task Force on Women, Minorities, and the Handicapped in Science and Technology

Pub. L. 99–383, § 8, Aug. 21, 1986, 100 Stat. 815, provided that:

“(a) It is the purpose of this section to establish a task force on women, minorities, and the handicapped in science and technology to—

“(1) examine the current status of women, minorities, and the handicapped in science and engineering positions in the Federal Government and in federally assisted research programs;

“(2) coordinate existing Federal programs designed to promote the employment of women, minorities, and the handicapped in such positions;

“(3) suggest cooperative interagency programs for promoting such employment;

“(4) identify exemplary State, local, or private sector programs designed to promote such employment; and

“(5) develop a long-range plan to advance opportunities for women, minorities, and the handicapped in Federal scientific and technical positions in federally assisted research, and to coordinate the activities of
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participating agencies with the Committee on Equal Opportunities in Science and Engineering established by section 36 of the National Science Foundation Authorization and Science and Technology Equal Opportunities Act (now the National Science Foundation Authorization and Science and Engineering Equal Opportunities Act) (42 U.S.C. 1865c), after the termination of the task force established by this section.

(b) For purposes of this section, the term ‘participating agency’ means—

(1) the National Science Foundation;

(2) the Department of Health and Human Services;

(3) the National Aeronautics and Space Administration;

(4) the Environmental Protection Agency;

(5) the Department of Agriculture;

(6) the Department of Defense;

(7) the Department of Education;

(8) the Department of Energy;

(9) the Department of Commerce; and

(10) the Department of the Interior.

(c)(1) The task force on women, minorities, and the handicapped in science and technology shall be composed of individuals appointed by participating agencies pursuant to this subsection.

The head of each participating agency shall appoint two individuals to serve as members of the task force. If an appointed member is unable to serve for the duration of the task force, the head of the participating agency who appointed that member shall appoint another individual to fill the vacancy.

(2) Task force members may be appointed from private business, academia, professional associations, or nonprofit foundations.

(3) The task force shall prepare and submit a report on its findings and recommendations to the President, the Congress, and the head of each participating agency not later than December 31, 1989.

(4) The Office of Science and Technology Policy shall call the first meeting of the task force not later than 90 days after the date of enactment of this Act [Aug. 21, 1986], shall ensure that each participating agency has appointed two members, and shall assist the task force to meet its objectives.

(f)(1) Members of the task force not otherwise employed by the Federal Government shall be reimbursed for travel, subsistence, and other necessary expenses incurred by them in carrying out the duties of the task force.

(2) The Director of the National Science Foundation shall make provision for administrative support of the task force, and may enter into agreements with the heads of other participating agencies to facilitate the work of the task force.

(g) The task force shall terminate on January 31, 1990.

§ 1885b. Participation in science and engineering of minorities and persons with disabilities

(a) The Foundation is authorized (1) to undertake or support a comprehensive science and engineering education program to increase the participation of minorities in science and engineering, and (2) to support activities to initiate research at minority institutions.

(b) The Foundation is authorized to undertake or support programs and activities to encourage the participation of persons with disabilities in the science and engineering professions.


CODIFICATION

Section was enacted as part of the Science and Engineering Equal Opportunities Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS


Subsec. (b). Pub. L. 105–207, §202(d)(1)(B), added subsec. (b) and struck out former subsec. (b), which read as follows: “By September 30, 1981, the Director, with the advice and assistance of the Committee on Equal Opportunities in Science and Technology established in section 1885c of this title, shall prepare and transmit to the Committee on Labor and Human Resources of the Senate and the Committee on Science and Technology of the House of Representatives a report proposing a comprehensive and continuing program at the Foundation to promote the full participation of minorities in science and engineering. Such report shall contain budgetary and legislative recommendations for the carrying out of such program by the Foundation.”


§ 1885c. Committee on Equal Opportunities in Science and Engineering

(a) Establishment; purposes

There is established within the Foundation a Committee on Equal Opportunities in Science and Engineering (hereinafter referred to as the “Committee”). The Committee shall provide advice to the Foundation concerning (1) the implementation of the provisions of sections 1885 to 1885d of this title and (2) other policies and activities of the Foundation to encourage full participation of women, minorities, and persons with disabilities in scientific, engineering, and professional fields.

(b) Membership; Chairperson; term of members

Each member of the Committee shall be appointed by the Director. In addition, the Chairman of the National Science Board may designate a member of the Board as a member of the Committee. Members of the Committee shall be appointed to serve for a three-year term, and may be reappointed to serve one additional term of three years.

(c) Responsibilities of Committee

The Committee shall be responsible for reviewing and evaluating all Foundation matters relating to opportunities for the participation in, and the advancement of, women, minorities, and persons with disabilities in education, training, and science and engineering research programs.

(d) Standing or ad hoc subcommittees

The Committee may organize such standing or ad hoc subcommittees as the Committee finds appropriate.

(e) Biennial report

Every two years, the Committee shall prepare and transmit to the Director a report on its activities during the previous two years and proposed activities for the next two years. The Director shall transmit to Congress the report, unaltered, together with such comments as the Director deems appropriate.

REFERENCES IN TEXT
Sections 1885 to 1885d of this title, referred to in subsec. (a), was in the original “this Act”, meaning sections 31 et seq. of Pub. L. 96–516, as amended, known as the “Science and Engineering Equal Opportunities Act”, which enacted sections 1885 to 1885d of this title and provisions set out as notes under sections 1861 and 1885 of this title. For complete classification of this Act to the Code, see Short Title of 1990 Amendment note set out under section 1861 of this title and Tables.

CODIFICATION
Section was enacted as part of the Science and Engineering Equal Opportunities Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS
1998—Subsec. (a). Pub. L. 105–207, §202(d)(2)(A), substituted “minorities, and persons with disabilities in scientific” for “minorities, and other groups currently underrepresented in scientific”. Subsec. (b). Pub. L. 105–207, §202(d)(2)(E), struck out “with the concurrence of the National Science Board” after “the Director” and substituted “In addition, the Chairman of the National Science Board may designate a member of the Board as a member of the Committee.” for “The Chairperson of the National Science Board Committee on Minorities and Women shall be an ex officio member of the Committee.” Subsec. (c). Pub. L. 105–207, §202(d)(2)(C), (D), added subsec. (c) and struck out former subsec. (c) which read as follows: “There shall be a subcommittee of the Committee as the Subcommittee on Women in Science and Engineering. The Subcommittee on Women in Science and Engineering shall have responsibility for all Committee matters relating to (1) the participation in and opportunities for the education, training, and research of women in science and engineering and (2) the impact of science and engineering on women. The Subcommittee shall be composed of all the women members of the Committee and such other members of the Committee as the Committee may designate.” Subsec. (d). Pub. L. 105–207, §202(d)(2)(F), struck out “additional” after “organize such.” Pub. L. 105–207, §202(d)(2)(C), (E), redesignated subsec. (e) as (d) and struck out former subsec. (d) which read as follows: “There shall be a subcommittee of the Committee which shall be known as the Subcommittee on Minorities in Science and Engineering. The Subcommittee on Minorities in Science and Engineering shall have responsibility for all Committee matters relating to (1) the participation in and opportunities for the education, training, and research for minorities in science and engineering and (2) the impact of science and engineering on minorities. The Subcommittee shall be composed of all minority members of the Committee and such other members of the Committee as the Committee may designate.” Subsecs. (e), (f). Pub. L. 105–207, §202(d)(2)(E), redesignated subsec. (f) as (e). Former subsec. (e) redesignated (d).


TERMINATION OF ADVISORY COMMITTEE
Advisory committees established after Jan. 5, 1973 to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a committee established by the President or an officer of the Federal Government, such committee is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a committee established by the Congress, its duration is otherwise provided by law. See section 14 of Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 776, set out in the Appendix to Title 5, Government Organization and Employees.

REPORT BY COMMITTEE ON EQUAL OPPORTUNITIES IN SCIENCE AND ENGINEERING

(1) a summary of its findings over the previous 10 years;

(2) a description of past and present policies and activities of the Foundation to encourage full participation of women, minorities, and persons with disabilities in science, mathematics, and engineering fields, including activities in support of minority-serving institutions; and

(3) an assessment of the trends in participation in Foundation activities, and an assessment of the success of Foundation policies and activities, along with proposals for new strategies or the broadening of existing successful strategies toward facilitating the goals of that Act (42 U.S.C. 1885 et seq.).”

[For definitions of terms used in section 20 of Pub. L. 107–368, set out above, see section 4 of Pub. L. 107–368, set out as a note under section 1862n of this title.]

§ 1885d. Biennial reports
(a) By January 30 of each odd-numbered year, the Director shall simultaneously transmit a report to the Congress, the Attorney General, the Director of the Office of Science and Technology Policy, the Chairman of the Equal Employment Opportunity Commission, the Director of the Office of Personnel Management, the Secretary of Labor, the Secretary of Education, and the Secretary of Health and Human Services.

(b) The report required by subsection (a) of this section shall contain—

(1) an accounting and comparison, by sex, race, and ethnic group and by discipline, of the participation of women and men in scientific and engineering positions, including—

(A) the number of individuals in permanent and temporary positions and in full-time and part-time scientific and engineering positions by appropriate level or similar category;

(B) the average salary of individuals in such scientific and engineering positions;

(C) the number and type of promotional opportunities realized by individuals in such scientific and engineering positions;

(D) the number of individuals serving as principal investigators in federally con-
ducted or federally supported research and development; and
(E) the unemployment rate of individuals seeking scientific and engineering positions;
(2) an assessment, including quantitative and other data, of the proportion of women and minorities studying scientific and engineering fields, including mathematics and computer skills, at all educational levels; and
(3) such other data, analyses, and evaluations as the Director, acting on the advice of the Committee on Equal Opportunities in Science and Engineering, determines appropriate to carry out the Foundation’s functions as well as the policies and programs of sections 1885 to 1885d of this title.


REFERENCES IN TEXT
Sections 1885 to 1885d of this title, referred to in subsec. (b)(3), was in the original “this Act”, meaning sections 31 et seq. of Pub. L. 96–516, as amended, known as the Science and Engineering Equal Opportunities Act, which enacted sections 1885 to 1885d of this title and provisions set out as notes under sections 1861 and 1865 of this title. For complete classification of this Act to the Code, see Short Title of 1980 Amendment note set out under section 1861 of this title and Tables.

CODIFICATION
Section was enacted as part of the Science and Engineering Equal Opportunities Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS

§ 1886. Data collection and analysis

The National Science Foundation is authorized to design, establish, and maintain a data collection and analysis capability in the Foundation for the purpose of identifying and assessing the research facilities needs of universities. The needs of universities, by major field of science and engineering, for construction and modernization of research laboratories, including fixed equipment and major research equipment, shall be documented. University expenditures for the construction and modernization of research facilities, the sources of funds, and other appropriate data shall be collected and analyzed. The Foundation, in conjunction with other appropriate Federal agencies, shall conduct the necessary surveys every 2 years and report the results to the Congress. The first report shall be submitted to the Congress by September 1, 1986.


CODIFICATION
Section was enacted as part of the National Science Foundation Authorization Act for Fiscal Year 1986, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

§ 1886a. Data on specific fields of study

The National Science Foundation shall continue to collect statistically reliable data on the field of degree of college-educated individuals to fulfill obligations under section 1863(j)(1) of this title and the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885 et. seq.). If the Director of the Foundation determines that there is a legal impediment to the continued collection of this data, he shall inform the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than 180 days after December 30, 2005.


REFERENCES IN TEXT
The Science and Engineering Equal Opportunities Act, referred to in text, is Part B of Pub. L. 96–516, Dec. 12, 1980, 94 Stat. 3001, as amended, which enacted sections 1885 to 1885d of this title and provisions set out as notes under sections 1861 and 1885 of this title. For complete classification of this Act to the Code, see Short Title of 1990 Amendment note set out under section 1861 of this title and Tables.

CODIFICATION
Section, formerly classified to section 1883 of this title, was transferred following the enactment of Title 51, National and Commercial Space Programs, by Pub. L. 111–314.

CHANGE OF NAME
Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007.

§ 1887. Indemnification of grantees, contractors, and subcontractors under ocean drilling program; approvals and certifications by Director

The Foundation is on and after November 25, 1985, authorized to indemnify grantees, contractors, and subcontractors associated with the ocean drilling program under the provisions of section 2354 of title 10, with all approvals and certifications required thereby made by the Director of the National Science Foundation.


CODIFICATION
Section was enacted as part of the appropriation act cited as the credit to this section, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

PRIOR PROVISIONS
Provisions similar to this section were contained in the following prior appropriation act: Pub. L. 98–371, title II, §301, July 18, 1984, 98 Stat. 1226.

CHAPTER 16A—GRANTS FOR SUPPORT OF SCIENTIFIC RESEARCH


Section 1891, Pub. L. 85–934, §1, Sept. 6, 1958, 72 Stat. 1793, authorized the head of each executive agency to