

110TH CONGRESS  
1ST SESSION

# H. R. 1867

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## AN ACT

To authorize appropriations for fiscal years 2008, 2009, and 2010 for the National Science Foundation, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “National Science  
3 Foundation Authorization Act of 2007”.

4 **SEC. 2. DEFINITIONS.**

5 In this Act:

6 (1) **BOARD.**—The term “Board” means the Na-  
7 tional Science Board established under section 2 of  
8 the National Science Foundation Act of 1950 (42  
9 U.S.C. 1861).

10 (2) **DIRECTOR.**—The term “Director” means  
11 the Director of the Foundation.

12 (3) **ELEMENTARY SCHOOL.**—The term “elemen-  
13 tary school” has the meaning given that term by  
14 section 9101(18) of the Elementary and Secondary  
15 Education Act of 1965 (20 U.S.C. 7801(18)).

16 (4) **FOUNDATION.**—The term “Foundation”  
17 means the National Science Foundation.

18 (5) **INSTITUTION OF HIGHER EDUCATION.**—The  
19 term “institution of higher education” has the  
20 meaning given such term in section 101(a) of the  
21 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

22 (6) **SECONDARY SCHOOL.**—The term “sec-  
23 ondary school” has the meaning given that term by  
24 section 9101(38) of the Elementary and Secondary  
25 Education Act of 1965 (20 U.S.C. 7801(38)).

1 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS.**

2 (a) FISCAL YEAR 2008.—

3 (1) IN GENERAL.—There are authorized to be  
4 appropriated to the Foundation \$6,500,000,000 for  
5 fiscal year 2008.

6 (2) SPECIFIC ALLOCATIONS.—Of the amount  
7 authorized under paragraph (1)—

8 (A) \$5,080,000,000 shall be made avail-  
9 able for research and related activities, of which  
10 \$115,000,000 shall be made available for the  
11 Major Research Instrumentation program;

12 (B) \$873,000,000 shall be made available  
13 for education and human resources, of which—

14 (i) \$94,000,000 shall be for Mathe-  
15 matics and Science Education Partner-  
16 ships established under section 9 of the  
17 National Science Foundation Authorization  
18 Act of 2002 (42 U.S.C. 1862n);

19 (ii) \$70,000,000 shall be for the Rob-  
20 ert Noyce Scholarship Program established  
21 under section 10 of the National Science  
22 Foundation Authorization Act of 2002 (42  
23 U.S.C. 1862n-1);

24 (iii) \$44,000,000 shall be for the  
25 Science, Mathematics, Engineering, and  
26 Technology Talent Expansion Program es-

1           tablISHED under section 8(7) of the Na-  
2           tional Science Foundation Authorization  
3           Act of 2002 (Public Law 107–368); and

4                   (iv) \$51,620,000 shall be for the Ad-  
5           vanced Technological Education program  
6           established by section 3(a) of the Scientific  
7           and Advanced-Technology Act of 1992  
8           (Public Law 102–476);

9                   (C) \$245,000,000 shall be made available  
10          for major research equipment and facilities con-  
11          struction;

12                   (D) \$285,600,000 shall be made available  
13          for agency operations and award management;

14                   (E) \$4,050,000 shall be made available for  
15          the Office of the National Science Board; and

16                   (F) \$12,350,000 shall be made available  
17          for the Office of Inspector General.

18          (b) FISCAL YEAR 2009.—

19                   (1) IN GENERAL.—There are authorized to be  
20          appropriated to the Foundation \$6,980,000,000 for  
21          fiscal year 2009.

22                   (2) SPECIFIC ALLOCATIONS.—Of the amount  
23          authorized under paragraph (1)—

24                           (A) \$5,457,400,000 shall be made avail-  
25          able for research and related activities, of which

1           \$123,100,000 shall be made available for the  
2           Major Research Instrumentation program;

3           (B) \$934,000,000 shall be made available  
4           for education and human resources, of which—

5           (i) \$100,600,000 shall be for Mathe-  
6           matics and Science Education Partner-  
7           ships established under section 9 of the  
8           National Science Foundation Authorization  
9           Act of 2002 (42 U.S.C. 1862n);

10          (ii) \$101,000,000 shall be for the  
11          Robert Noyce Scholarship Program estab-  
12          lished under section 10 of the National  
13          Science Foundation Authorization Act of  
14          2002 (42 U.S.C. 1862n-1);

15          (iii) \$55,000,000 shall be for the  
16          Science, Mathematics, Engineering, and  
17          Technology Talent Expansion Program es-  
18          tablished under section 8(7) of the Na-  
19          tional Science Foundation Authorization  
20          Act of 2002 (Public Law 107-368); and

21          (iv) \$55,200,000 shall be for the Ad-  
22          vanced Technological Education program  
23          as established by section 3(a) of the Sci-  
24          entific and Advanced-Technology Act of  
25          1992 (Public Law 102-476);

1 (C) \$262,000,000 shall be made available  
2 for major research equipment and facilities con-  
3 struction;

4 (D) \$309,760,000 shall be made available  
5 for agency operations and award management;

6 (E) \$4,120,000 shall be made available for  
7 the Office of the National Science Board; and

8 (F) \$12,720,000 shall be made available  
9 for the Office of Inspector General.

10 (c) FISCAL YEAR 2010.—

11 (1) IN GENERAL.—There are authorized to be  
12 appropriated to the Foundation \$7,493,000,000 for  
13 fiscal year 2010.

14 (2) SPECIFIC ALLOCATIONS.—Of the amount  
15 authorized under paragraph (1)—

16 (A) \$5,863,200,000 shall be made avail-  
17 able for research and related activities, of which  
18 \$131,700,000 shall be made available for the  
19 Major Research Instrumentation program;

20 (B) \$1,003,000,000 shall be made avail-  
21 able for education and human resources, of  
22 which—

23 (i) \$107,600,000 shall be for Mathe-  
24 matics and Science Education Partner-  
25 ships established under section 9 of the

1 National Science Foundation Authorization  
2 Act of 2002 (42 U.S.C. 1862n);

3 (ii) \$133,000,000 shall be for the  
4 Robert Noyce Scholarship Program estab-  
5 lished under section 10 of the National  
6 Science Foundation Authorization Act of  
7 2002 (42 U.S.C. 1862n-1);

8 (iii) \$60,000,000 shall be for the  
9 Science, Mathematics, Engineering, and  
10 Technology Talent Expansion Program es-  
11 tablished under section 8(7) of the Na-  
12 tional Science Foundation Authorization  
13 Act of 2002 (Public Law 107-368); and

14 (iv) \$59,100,000 shall be for the Ad-  
15 vanced Technological Education program  
16 as established by section 3(a) of the Sci-  
17 entific and Advanced-Technology Act of  
18 1992 (Public Law 102-476);

19 (C) \$280,000,000 shall be made available  
20 for major research equipment and facilities con-  
21 struction;

22 (D) \$329,450,000 shall be made available  
23 for agency operations and award management;

24 (E) \$4,250,000 shall be made available for  
25 the Office of the National Science Board; and

1 (F) \$13,100,000 shall be made available  
2 for the Office of Inspector General.

3 (d) MAJOR RESEARCH INSTRUMENTATION.—

4 (1) AWARD AMOUNT.—The minimum amount  
5 of an award under the Major Research Instrumenta-  
6 tion program shall be \$100,000. The maximum  
7 amount of an award under the program shall be  
8 \$4,000,000, except if the total amount appropriated  
9 for the program for a fiscal year exceeds  
10 \$125,000,000, in which case the maximum amount  
11 of an award shall be \$6,000,000.

12 (2) USE OF FUNDS.—In addition to the acquisi-  
13 tion of instrumentation and equipment, funds made  
14 available by awards under the Major Research In-  
15 strumentation program may be used to support the  
16 operations and maintenance of such instrumentation  
17 and equipment.

18 (3) COST SHARING.—

19 (A) IN GENERAL.—An institution of higher  
20 education receiving an award shall provide at  
21 least 30 percent of the cost from private or  
22 non-Federal sources.

23 (B) EXCEPTIONS.—Institutions of higher  
24 education that are not Ph.D.-granting institu-  
25 tions are exempt from the cost sharing require-

1           ment in subparagraph (A), and the Director  
2           may reduce or waive the cost sharing require-  
3           ment for—

4                   (i) institutions—

5                           (I) which are not ranked among  
6                           the top 100 institutions receiving Fed-  
7                           eral research and development fund-  
8                           ing, as documented by the statistical  
9                           data published by the Foundation;  
10                          and

11                          (II) for which the proposed  
12                          project will make a substantial im-  
13                          provement in the institution’s capa-  
14                          bilities to conduct leading edge re-  
15                          search, to provide research experi-  
16                          ences for undergraduate students  
17                          using leading edge facilities, and to  
18                          broaden the participation in science  
19                          and engineering research by individ-  
20                          uals identified in section 33 or 34 of  
21                          the Science and Engineering Equal  
22                          Opportunities Act (42 U.S.C. 1885a  
23                          or 1885b); and

24                          (ii) consortia of institutions of higher  
25                          education that include at least one institu-

1                   tion that is not a Ph.D-granting institu-  
2                   tion.

3           (e) UNDERGRADUATE EDUCATION PROGRAMS.—The  
4 Director shall continue to carry out programs in support  
5 of undergraduate education, including those authorized in  
6 section 17 of the National Science Foundation Authoriza-  
7 tion Act of 2002 (42 U.S.C. 1862n–6). Funding for these  
8 programs shall increase in proportion to the increase in  
9 the total amount appropriated to the Foundation in any  
10 year for which appropriations are authorized by this Act.

11           (f) LIMIT ON PROPOSALS.—

12               (1) POLICY.—For programs that require as  
13 part of the selection process for awards the submis-  
14 sion of preproposals and that also limit the number  
15 of preproposals that may be submitted by an institu-  
16 tion, the Director shall allow the subsequent submis-  
17 sion of a full proposal based on each preproposal  
18 that is determined to have merit following the Foun-  
19 dation’s merit review process.

20               (2) REVIEW AND ASSESSMENT OF POLICIES.—

21 The Board shall review and assess the effects on in-  
22 stitutions of higher education of the policies of the  
23 Foundation regarding the imposition of limitations  
24 on the number of proposals that may be submitted  
25 by a single institution for programs supported by the

1 Foundation. The Board shall determine whether cur-  
2 rent policies are well justified and appropriate for  
3 the types of programs that limit the number of pro-  
4 posal submissions. Not later than 1 year after the  
5 date of enactment of this Act, the Board shall sum-  
6 marize its findings and any recommendations re-  
7 garding changes to the current policy on the restric-  
8 tion of proposal submissions in a report to the Com-  
9 mittee on Science and Technology of the House of  
10 Representatives and to the Committee on Commerce,  
11 Science, and Transportation and the Committee on  
12 Health, Education, Labor, and Pensions of the Sen-  
13 ate.

14 (g) RESEARCH EXPERIENCES FOR UNDERGRADU-  
15 ATES.—The Director shall increase funding for the Re-  
16 search Experiences for Undergraduates program in pro-  
17 portion to the increase in the total amount appropriated  
18 to the Foundation for research and related activities in  
19 any year for which appropriations are authorized by this  
20 Act.

21 (h) GLOBAL WARMING EDUCATION.—

22 (1) INFORMAL EDUCATION.—As part of Infor-  
23 mal Science Education activities, the Director shall  
24 support activities to create informal educational ma-  
25 terials, exhibits, and multimedia presentations rel-

1       evant to global warming, climate science, and green-  
2       house gas reduction strategies.

3               (2) K–12 INSTRUCTIONAL MATERIALS.—As  
4       part of Discovery Research K–12 activities, the Di-  
5       rector shall support the development of K–12 edu-  
6       cational materials relevant to global warming, cli-  
7       mate science, and greenhouse gas reduction strate-  
8       gies.

9       **SEC. 4. CENTERS FOR RESEARCH ON LEARNING AND EDU-**  
10               **CATION IMPROVEMENT.**

11       (a) FUNDING FOR CENTERS.—The Director shall  
12       continue to carry out the program of Centers for Research  
13       on Learning and Education Improvement as established  
14       in section 11 of the National Science Foundation Author-  
15       ization Act of 2002 (42 U.S.C. 1862n–2).

16       (b) ELIGIBILITY FOR CENTERS.—Section 11 of the  
17       National Science Foundation Authorization Act of 2002  
18       (42 U.S.C. 1862n–2) is amended—

19               (1) in subsection (a)(1), by inserting “or eligi-  
20       ble nonprofit organizations” after “institutions of  
21       higher education”;

22               (2) in subsection (b)(1) by inserting “or an eli-  
23       gible nonprofit organization” after “institution of  
24       higher education”; and

1           (3) in subsection (b)(1) by striking “of such in-  
2           stitutions” and inserting “thereof”.

3 **SEC. 5. INTERDISCIPLINARY RESEARCH.**

4           (a) IN GENERAL.—The Board shall evaluate the role  
5 of the Foundation in supporting interdisciplinary research,  
6 including through the Major Research Instrumentation  
7 program, the effectiveness of the Foundation’s efforts in  
8 providing information to the scientific community about  
9 opportunities for funding of interdisciplinary research pro-  
10 posals, and the process through which interdisciplinary  
11 proposals are selected for support. The Board shall also  
12 evaluate the effectiveness of the Foundation’s efforts to  
13 engage undergraduate students in research experiences in  
14 interdisciplinary settings, including through the Research  
15 in Undergraduate Institutions program and the Research  
16 Experiences for Undergraduates program.

17           (b) REPORT.—Not later than 1 year after the date  
18 of enactment of this Act, the Board shall provide the re-  
19 sults of its evaluation under subsection (a), including a  
20 recommendation for the proportion of the Foundation’s re-  
21 search and related activities funding that should be allo-  
22 cated for interdisciplinary research, to the Committee on  
23 Science and Technology of the House of Representatives  
24 and the Committee on Commerce, Science, and Transpor-

1 tation and the Committee on Health, Education, Labor,  
2 and Pensions of the Senate.

3 **SEC. 6. PILOT PROGRAM OF GRANTS FOR NEW INVESTIGA-**  
4 **TORS.**

5 (a) IN GENERAL.—The Director shall carry out a  
6 pilot program to award one-year grants to individuals to  
7 assist them in improving research proposals that were pre-  
8 viously submitted to the Foundation but not selected for  
9 funding.

10 (b) USE OF FUNDS.—Grants awarded under this sec-  
11 tion shall be used to enable an individual to resubmit an  
12 updated research proposal for review by the Foundation  
13 through the agency’s competitive merit review process.  
14 Uses of funds made available under this section may in-  
15 clude the generation of new data and the performance of  
16 additional analysis.

17 (c) ELIGIBILITY.—To be eligible to receive a grant  
18 under this section, an individual shall—

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

22 (2) have submitted a proposal to the Founda-  
23 tion, which may include a proposal submitted to the  
24 Research in Undergraduate Institutions program,

1 that was rated very good or excellent under the  
2 Foundation's competitive merit review process.

3 (d) SELECTION PROCESS.—The Director shall make  
4 awards under this section based on the advice of the pro-  
5 gram officers of the Foundation.

6 (e) PROGRAM ADMINISTRATION.—The Director may  
7 carry out this section through the Small Grants for Ex-  
8 ploratory Research program.

9 (f) NATIONAL SCIENCE BOARD REVIEW.—The  
10 Board shall conduct a review and assessment of the pilot  
11 program under this section, including the number of new  
12 investigators funded, the distribution of awards by type  
13 of institution of higher education, and the success rate  
14 upon resubmittal of proposals by new investigators funded  
15 through this pilot program. Not later than 3 years after  
16 the date of enactment of this Act, the Board shall summa-  
17 rize its findings and any recommendations regarding  
18 changes to or the continuation of the pilot program in a  
19 report to the Committee on Science and Technology of the  
20 House of Representatives and the Committee on Com-  
21 merce, Science, and Transportation and the Committee on  
22 Health, Education, Labor, and Pensions of the Senate.

23 **SEC. 7. BROADER IMPACTS MERIT REVIEW CRITERION.**

24 (a) IN GENERAL.—In evaluating research proposals  
25 under the Foundation's broader impacts criterion, the Di-

1 rector shall give special consideration to proposals that in-  
2 volve partnerships between academic researchers and in-  
3 dustrial scientists and engineers that address research  
4 areas that have been identified as having high importance  
5 for future national economic competitiveness, such as  
6 nanotechnology.

7 (b) PARTNERSHIPS WITH INDUSTRY.—The Director  
8 shall encourage research proposals from institutions of  
9 higher education that involve partnerships with businesses  
10 and organizations representing businesses in fields that  
11 have been identified as having high importance for future  
12 national economic competitiveness and that include input  
13 on the research agenda from and cost-sharing by the in-  
14 dustry partners.

15 (c) REPORT ON BROADER IMPACTS CRITERION.—  
16 Not later than 1 year after the date of enactment of this  
17 Act, the Director shall transmit to Congress a report on  
18 the impact of the broader impacts grant criterion used by  
19 the Foundation. The report shall—

- 20 (1) identify the criteria that each division and  
21 directorate of the Foundation uses to evaluate the  
22 broader impacts aspects of research proposals;
- 23 (2) provide a breakdown of the types of activi-  
24 ties by division that awardees have proposed to carry  
25 out to meet the broader impacts criterion;

1           (3) provide any evaluations performed by the  
2           Foundation to assess the degree to which the broad-  
3           er impacts aspects of research proposals were car-  
4           ried out and how effective they have been at meeting  
5           the goals described in the research proposals;

6           (4) describe what national goals, such as im-  
7           proving undergraduate science, mathematics, and  
8           engineering education, improving K–12 science and  
9           mathematics education, promoting university-indus-  
10          try collaboration and technology transfer, and broad-  
11          ening participation of underrepresented groups, the  
12          broader impacts criterion is best suited to promote;  
13          and

14          (5) describe what steps the Foundation is tak-  
15          ing and should take to use the broader impacts cri-  
16          terion to improve undergraduate science, mathe-  
17          matics, and engineering education.

18 **SEC. 8. POSTDOCTORAL RESEARCH FELLOWS.**

19          (a) MENTORING.—The Director shall require that all  
20          grant applications that include funding to support  
21          postdoctoral researchers include a description of the men-  
22          toring activities that will be provided for such individuals,  
23          and shall ensure that this part of the application is evalu-  
24          ated under the Foundation’s broader impacts merit review  
25          criterion. Mentoring activities may include career coun-

1 seling, training in preparing grant applications, guidance  
2 on ways to improve teaching skills, and training in re-  
3 search ethics.

4 (b) REPORTS.—The Director shall require that an-  
5 nual reports and the final report for research grants that  
6 include funding to support postdoctoral researchers in-  
7 clude a description of the mentoring activities provided to  
8 such researchers.

9 **SEC. 9. RESPONSIBLE CONDUCT OF RESEARCH.**

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

18 **SEC. 10. REPORTING OF RESEARCH RESULTS.**

19 The Director shall ensure that all final project re-  
20 ports and citations of published research documents re-  
21 sulting from research funded, in whole or in part, by the  
22 Foundation, are made available to the public in a timely  
23 manner and in electronic form through the Foundation's  
24 Web site.

1 **SEC. 11. SHARING RESEARCH RESULTS.**

2 An investigator supported under a Foundation  
3 award, whom the Director determines has failed to comply  
4 with the provisions of section 734 of the Foundation Grant  
5 Policy Manual, shall be ineligible for a future award under  
6 any Foundation supported program or activity. The Direc-  
7 tor may restore the eligibility of such an investigator on  
8 the basis of the investigator's subsequent compliance with  
9 the provisions of section 734 of the Foundation Grant Pol-  
10 icy Manual and with such other terms and conditions as  
11 the Director may impose.

12 **SEC. 12. FUNDING FOR SUCCESSFUL STEM EDUCATION**  
13 **PROGRAMS.**

14 (a) EVALUATION OF PROGRAMS.—The Director shall,  
15 on an annual basis, evaluate all of the Foundation's grants  
16 that are scheduled to expire within one year and—

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

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

22 (b) CONTINUATION OF FUNDING.—For grants that  
23 are identified under subsection (a) and that are deemed  
24 by the Director to be successful in meeting the objectives  
25 of the initial grant solicitation, the Director may extend  
26 the duration of those grants for up to 3 additional years

1 beyond their scheduled expiration without the requirement  
2 for a recompetition. The Director may extend such grants  
3 for an additional 3 years following a second review within  
4 1 year before the extended completion date, in accordance  
5 with subsection (a), and the determination by the Director  
6 that the objectives of the grant are being achieved.

7 (c) REPORT TO CONGRESS.—Not later than 2 years  
8 after the date of enactment of this Act, the Director shall  
9 submit a report to the Committee on Science and Tech-  
10 nology of the House of Representatives and to the Com-  
11 mittee on Commerce, Science, and Transportation and the  
12 Committee on Health, Education, Labor, and Pensions of  
13 the Senate that—

14 (1) lists the grants which have been extended in  
15 duration by the authority provided under this sec-  
16 tion; and

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

21 **SEC. 13. COST SHARING.**

22 (a) IN GENERAL.—The Board shall evaluate the im-  
23 pact of its policy to eliminate cost sharing for research  
24 grants and cooperative agreements for existing programs  
25 that were developed around industry partnerships and his-

1 torically required industry cost sharing, such as the Engi-  
2 neering Research Centers and Industry/University Coop-  
3 erative Research Centers. The Board shall also consider  
4 the impact that the cost sharing policy has on initiating  
5 new programs for which industry interest and participa-  
6 tion are sought.

7 (b) REPORT.—Not later than 6 months after the date  
8 of enactment of this Act, the Board shall report to the  
9 Committee on Science and Technology and the Committee  
10 on Appropriations of the House of Representatives, and  
11 the Committee on Commerce, Science, and Transpor-  
12 tation, the Committee on Health, Education, Labor, and  
13 Pensions, and the Committee on Appropriations of the  
14 Senate, on the results of the evaluation under subsection  
15 (a).

16 **SEC. 14. DONATIONS.**

17 Section 11(f) of the National Science Foundation Act  
18 of 1950 (42 U.S.C. 1870(f)) is amended by inserting at  
19 the end before the semicolon “, except that funds may be  
20 donated for specific prize competitions”.

21 **SEC. 15. ADDITIONAL REPORTS.**

22 (a) REPORT ON FUNDING FOR MAJOR FACILITIES.—  
23 (1) PRECONSTRUCTION FUNDING.—The Board  
24 shall evaluate the appropriateness of the require-  
25 ment that funding for detailed design work and

1 other preconstruction activities for major research  
2 equipment and facilities come exclusively from the  
3 sponsoring research division rather than being avail-  
4 able, at least in part, from the Major Research  
5 Equipment and Facilities Construction account.

6 (2) MAINTENANCE AND OPERATION COSTS.—  
7 The Board shall evaluate the appropriateness of the  
8 Foundation’s policies for allocation of costs for, and  
9 oversight of, maintenance and operation of major re-  
10 search equipment and facilities.

11 (3) REPORT.—Not later than 6 months after  
12 the date of enactment of this Act, the Board shall  
13 report on the results of the evaluations under para-  
14 graphs (1) and (2) and on any recommendations for  
15 modifying the current policies related to allocation of  
16 funding for major research equipment and facilities  
17 to the Committee on Science and Technology and  
18 the Committee on Appropriations of the House of  
19 Representatives, and to the Committee on Com-  
20 merce, Science, and Transportation, the Committee  
21 on Health, Education, Labor, and Pensions, and the  
22 Committee on Appropriations of the Senate.

23 (b) INCLUSION OF POLAR FACILITIES UPGRADES IN  
24 MAJOR RESEARCH EQUIPMENT AND FACILITIES CON-  
25 STRUCTION PLAN.—Section 201(a)(2)(D) of the National

1 Science Foundation Authorization Act of 1998 (42 U.S.C.  
2 18621(a)(2)(D)) is amended by inserting “and for major  
3 upgrades of facilities in support of Antarctic research pro-  
4 grams” after “facilities construction account”.

5 (c) REPORT ON EDUCATION PROGRAMS WITHIN THE  
6 RESEARCH DIRECTORATES.—Not later than 6 months  
7 after the date of enactment of this Act, the Director shall  
8 transmit to the Committee on Science and Technology of  
9 the House of Representatives and the Committee on Com-  
10 merce, Science, and Transportation and the Committee on  
11 Health, Education, Labor, and Pensions of the Senate a  
12 report cataloging all elementary and secondary school, in-  
13 formal, and undergraduate educational programs and ac-  
14 tivities supported through appropriations for Research  
15 and Related Activities. The report shall display the pro-  
16 grams and activities by directorate, along with estimated  
17 funding levels for the fiscal years 2006, 2007, and 2008,  
18 and shall provide a description of the goals of each pro-  
19 gram and activity. The report shall also describe how the  
20 programs and activities relate to or are coordinated with  
21 the programs supported by the Education and Human Re-  
22 sources Directorate.

23 (d) REPORT ON RESEARCH IN UNDERGRADUATE IN-  
24 STITUTIONS PROGRAM.—The Director shall transmit to  
25 Congress along with the fiscal year 2011 budget request

1 a report listing the funding success rates and distribution  
2 of awards for the Research in Undergraduate Institutions  
3 program, by type of institution based on the highest aca-  
4 demic degree conferred by the institution, for fiscal years  
5 2008, 2009, and 2010.

6 (e) ANNUAL PLAN FOR ALLOCATION OF EDUCATION  
7 AND HUMAN RESOURCES FUNDING.—

8 (1) IN GENERAL.—Not later than 60 days after  
9 the date of enactment of legislation providing for the  
10 annual appropriation of funds for the Foundation,  
11 the Director shall submit to the Committee on  
12 Science and Technology and the Committee on Ap-  
13 propriations of the House of Representatives, and to  
14 the Committee on Commerce, Science, and Trans-  
15 portation, the Committee on Health, Education,  
16 Labor, and Pensions, and the Committee on Appro-  
17 priations of the Senate, a plan for the allocation of  
18 education and human resources funds authorized by  
19 this Act for the corresponding fiscal year, including  
20 any funds from within the research and related ac-  
21 tivities account used to support activities that have  
22 the primary purpose of improving education or  
23 broadening participation.

1           (2) SPECIFIC REQUIREMENTS.—The plan shall  
2 include a description of how the allocation of fund-  
3 ing—

4           (A) will affect the average size and dura-  
5 tion of education and human resources grants  
6 supported by the Foundation;

7           (B) will affect trends in research support  
8 for the effective instruction of mathematics,  
9 science, engineering, and technology;

10          (C) will affect the K–20 pipeline for the  
11 study of mathematics, science, engineering, and  
12 technology; and

13          (D) will encourage the interest of individ-  
14 uals identified in section 33 or 34 of the  
15 Science and Engineering Equal Opportunities  
16 Act (42 U.S.C. 1885a or 1885b) in mathe-  
17 matics, science, engineering, and technology,  
18 and help prepare such individuals to pursue  
19 postsecondary studies in these fields.

20 **SEC. 16. ADMINISTRATIVE AMENDMENTS.**

21          (a) TRIANNUAL AUDIT OF THE OFFICE OF THE NA-  
22 TIONAL SCIENCE BOARD.—Section 15(a) of the National  
23 Science Foundation Authorization Act of 2002 (42 U.S.C.  
24 4862n–5) is amended—

1           (1) in paragraph (3), by striking “an annual  
2           audit” and inserting “an audit every three years”;

3           (2) in paragraph (4), by striking “each year”  
4           and inserting “every third year”; and

5           (3) by inserting after paragraph (4) the fol-  
6           lowing new paragraph:

7           “(5) MATERIALS RELATING TO CLOSED POR-  
8           TIONS OF MEETINGS.—To facilitate the audit re-  
9           quired under paragraph (3) of this subsection, the  
10          Office of the National Science Board shall maintain  
11          the General Counsel’s certificate, the presiding offi-  
12          cer’s statement, and a transcript or recording of any  
13          closed meeting, for at least 3 years after such meet-  
14          ing.”.

15          (b) LIMITED TERM PERSONNEL FOR THE NATIONAL  
16          SCIENCE BOARD.—Subsection (g) of section 4 of the Na-  
17          tional Science Foundation Act of 1950 (42 U.S.C.  
18          1863(g)) is amended to read as follows:

19          “(g) The Board may, with the concurrence of a ma-  
20          jority of its members, permit the appointment of a staff  
21          consisting of not more than 5 professional staff members,  
22          technical and professional personnel on leave of absence  
23          from academic, industrial, or research institutions for a  
24          limited term and such operations and support staff mem-  
25          bers as may be necessary. Such staff shall be appointed

1 by the Chairman and assigned at the direction of the  
2 Board. The professional members and limited term tech-  
3 nical and professional personnel of such staff may be ap-  
4 pointed without regard to the provisions of title 5, United  
5 States Code, governing appointments in the competitive  
6 service, and the provisions of chapter 51 of such title relat-  
7 ing to classification, and shall be compensated at a rate  
8 not exceeding the maximum rate payable under section  
9 5376 of such title, as may be necessary to provide for the  
10 performance of such duties as may be prescribed by the  
11 Board in connection with the exercise of its powers and  
12 functions under this Act. Section 14(a)(3) shall apply to  
13 each limited term appointment of technical and profes-  
14 sional personnel under this subsection. Each appointment  
15 under this subsection shall be subject to the same security  
16 requirements as those required for personnel of the Foun-  
17 dation appointed under section 14(a).”.

18       (c) INCREASE IN NUMBER OF WATERMAN AWARDS  
19 TO THREE.—Section 6(c) of the National Science Founda-  
20 tion Authorization Act of 1975 (42 U.S.C. 1881a) is  
21 amended to read as follows:

22       “(c) Up to three awards may be made under this sec-  
23 tion in any one fiscal year.”.

1 **SEC. 17. NATIONAL SCIENCE BOARD REPORTS.**

2 Paragraphs (1) and (2) of section 4(j) of the National  
3 Science Foundation Act of 1950 (42 U.S.C. 1863(j)(1)  
4 and (2)) are amended by striking “, for submission to”  
5 and “for submission to”, respectively, and inserting  
6 “and”.

7 **SEC. 18. NATIONAL ACADEMY OF SCIENCE REPORT ON DI-**  
8 **VERSITY IN STEM FIELDS.**

9 (a) IN GENERAL.—The Foundation shall enter into  
10 an arrangement with the National Academy of Sciences  
11 for a report, to be transmitted to the Congress not later  
12 than 1 year after the date of enactment of this Act, about  
13 barriers to increasing the number of underrepresented mi-  
14 norities in science, technology, engineering, and mathe-  
15 matics fields and to identify strategies for bringing more  
16 underrepresented minorities into the science, technology,  
17 engineering, and mathematics workforce.

18 (b) SPECIFIC REQUIREMENTS.—The Director shall  
19 ensure that the study described in subsection (a) address—  
20 es—

21 (1) social and institutional factors that shape  
22 the decisions of minority students to commit to edu-  
23 cation and careers in the science, technology, engi-  
24 neering, and mathematics fields;

1           (2) specific barriers preventing greater minority  
2 student participation in the science, technology, en-  
3 gineering, and mathematics fields;

4           (3) primary focus points for policy intervention  
5 to increase the recruitment and retention of under-  
6 represented minorities in America’s future work-  
7 force;

8           (4) programs already underway to increase di-  
9 versity in the science, technology, engineering, and  
10 mathematics fields, and their level of effectiveness;

11          (5) factors that make such programs effective,  
12 and how to expand and improve upon existing pro-  
13 grams;

14          (6) the role of minority-serving institutions in  
15 the diversification of America’s workforce in these  
16 fields and how that role can be supported and  
17 strengthened; and

18          (7) how the public and private sectors can bet-  
19 ter assist minority students in their efforts to join  
20 America’s workforce in these fields.

21 **SEC. 19. SENSE OF THE CONGRESS REGARDING THE MATH-**  
22 **EMATICS AND SCIENCE PARTNERSHIP PRO-**  
23 **GRAMS OF THE DEPARTMENT OF EDUCATION**  
24 **AND THE NATIONAL SCIENCE FOUNDATION.**

25 It is the sense of the Congress that—

1           (1) although the mathematics and science edu-  
2           cation partnership program at the National Science  
3           Foundation and the mathematics and science part-  
4           nership program at the Department of Education  
5           practically share the same name, the 2 programs are  
6           intended to be complementary, not duplicative;

7           (2) the National Science Foundation partner-  
8           ship programs are innovative, model reform initia-  
9           tives that move promising ideas in education from  
10          research into practice to improve teacher quality, de-  
11          velop challenging curricula, and increase student  
12          achievement in mathematics and science, and Con-  
13          gress intends that the National Science Foundation  
14          peer-reviewed partnership programs found to be ef-  
15          fective should be put into wider practice by dissemi-  
16          nation through the Department of Education part-  
17          nership programs; and

18          (3) the Director of the National Science Foun-  
19          dation and the Secretary of Education should have  
20          ongoing collaboration to ensure that the 2 compo-  
21          nents of this priority effort for mathematics and  
22          science education continue to work in concert for the  
23          benefit of States and local practitioners nationwide.

1 **SEC. 20. HISPANIC-SERVING INSTITUTIONS UNDER-**  
2 **GRADUATE PROGRAM.**

3 (a) IN GENERAL.—The Director is authorized to es-  
4 tablish a new program to award grants on a competitive,  
5 merit-reviewed basis to Hispanic-serving institutions to  
6 enhance the quality of undergraduate science, mathe-  
7 matics, engineering, and technology education at such in-  
8 stitutions and to increase the retention and graduation  
9 rates of students pursuing associate's or baccalaureate de-  
10 grees in science, mathematics, engineering, or technology.

11 (b) PROGRAM COMPONENTS.—Grants awarded under  
12 this section shall support—

13 (1) activities to improve courses and curriculum  
14 in science, mathematics, engineering, and tech-  
15 nology;

16 (2) faculty development;

17 (3) stipends for undergraduate students partici-  
18 pating in research; and

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

21 (c) INSTRUMENTATION.—Funding for instrumenta-  
22 tion is an allowed use of grants awarded under this sec-  
23 tion.

24 **SEC. 21. COMMUNICATIONS TRAINING FOR SCIENTISTS.**

25 (a) GRANT SUPPLEMENTS FOR COMMUNICATIONS  
26 TRAINING.—The Director shall provide grant supple-

1 ments, on a competitive, merit-reviewed basis, to institu-  
2 tions receiving awards under the Integrative Graduate  
3 Education and Research Traineeship program. The  
4 grant supplements shall be used to train graduate stu-  
5 dents in the communication of the substance and impor-  
6 tance of their research to nonscientist audiences, including  
7 policymakers.

8 (b) REPORT TO CONGRESS.—Not later than 3 years  
9 after the date of enactment of this Act, the Director shall  
10 transmit a report to the Committee on Science and Tech-  
11 nology of the House of Representatives, and to the Com-  
12 mittee on Commerce, Science, and Transportation and the  
13 Committee on Health, Education, Labor, and Pensions of  
14 the Senate, describing how the activities required under  
15 subsection (a) have been implemented. The report shall  
16 include data on the number of graduate students trained  
17 and the number and size of grant supplements awarded,  
18 and a description of the types of activities funded through  
19 the grant supplements.

Passed the House of Representatives May 3, 2007.

Attest:

*Clerk.*



110<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

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**H. R. 1867**

**AN ACT**

To authorize appropriations for fiscal years 2008, 2009, and 2010 for the National Science Foundation, and for other purposes.