110TH CONGRESS 1ST SESSION H.R. 1867

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 Science3 Foundation Authorization Act of 2007".

4 SEC. 2. DEFINITIONS.

5 In this Act:

6 (1) BOARD.—The term "Board" means the Na7 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" means11 the Director of the Foundation.

(3) 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)).

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)).

(6) SECONDARY SCHOOL.—The term "secondary school" has the meaning given that term by
section 9101(38) of the Elementary and Secondary
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-
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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

authorized under paragraph (1)—
(A) \$5,457,400,000 shall be made available 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

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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 established under section 10 of the National 5 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.Dgranting institu-
25	tions are exempt from the cost sharing require-

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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 in22 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 that 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.

(g) RESEARCH EXPERIENCES FOR UNDERGRADUATES.—The Director shall increase funding for the Research Experiences for Undergraduates program in proportion to the increase in the total amount appropriated
to the Foundation for research and related activities in
any year for which appropriations are authorized by this
Act.

21 (h) GLOBAL WARMING EDUCATION.—

(1) INFORMAL EDUCATION.—As part of Informal Science Education activities, the Director shall
support activities to create informal educational materials, exhibits, and multimedia presentations rel-

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

3 (2) K-12 INSTRUCTIONAL MATERIALS.—As
4 part of Discovery Research K-12 activities, the Di5 rector shall support the development of K-12 edu6 cational materials relevant to global warming, cli7 mate science, and greenhouse gas reduction strate8 gies.

9 SEC. 4. CENTERS FOR RESEARCH ON LEARNING AND EDU10 CATION IMPROVEMENT.

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

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

19 (1) in subsection (a)(1), by inserting "or eligi20 ble nonprofit organizations" after "institutions of
21 higher education";

(2) in subsection (b)(1) by inserting "or an eligible nonprofit organization" after "institution of
higher education"; and

(3) in subsection (b)(1) by striking "of such in 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, including through the Major Research Instrumentation 6 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 proposals are selected for support. The Board shall also 11 12 evaluate the effectiveness of the Foundation's efforts to 13 engage undergraduate students in research experiences in interdisciplinary settings, including through the Research 14 15 in Undergraduate Institutions program and the Research Experiences for Undergraduates program. 16

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 20recommendation 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 Transportation and the Committee on Health, Education, Labor,
 and Pensions of the Senate.

3 SEC. 6. PILOT PROGRAM OF GRANTS FOR NEW INVESTIGA4 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 grant18 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

(2) have submitted a proposal to the Foundation, which may include a proposal submitted to the
Research in Undergraduate Institutions program,

that was rated very good or excellent under the
 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 pro5 gram officers of the Foundation.

6 (e) PROGRAM ADMINISTRATION.—The Director may
7 carry out this section through the Small Grants for Ex8 ploratory Research program.

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

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

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

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

(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;

(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 broad er impacts aspects of research proposals were car ried out and how effective they have been at meeting
 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 tak15 ing and should take to use the broader impacts cri16 terion to improve undergraduate science, mathe17 matics, and engineering education.

18 SEC. 8. 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 coun-

seling, training in preparing grant applications, guidance
 on ways to improve teaching skills, and training in re 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 applies for financial assistance from the Foundation for 11 12 science and engineering research or education describe in 13 its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of re-14 15 search to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed re-16 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. 19

1 SEC. 11. SHARING RESEARCH RESULTS.

2 An investigator supported under a Foundation 3 award, whom the Director determines has failed to comply with the provisions of section 734 of the Foundation Grant 4 5 Policy Manual, shall be ineligible for a future award under any Foundation supported program or activity. The Direc-6 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 Policy Manual and with such other terms and conditions as 10 11 the Director may impose.

12 SEC. 12. FUNDING FOR SUCCESSFUL STEM EDUCATION 13 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 one 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

20 (2) that have the primary purpose of providing21 teacher professional development.

(b) CONTINUATION OF FUNDING.—For grants that
are identified under subsection (a) and that are deemed
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 up to 3 additional years
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beyond their scheduled expiration without the requirement
 for a recompetition. The Director may extend such grants
 for an additional 3 years following a second review within
 1 year before the extended completion date, in accordance
 with subsection (a), and the determination by the Director
 that the objectives of the grant are being achieved.

(c) REPORT TO CONGRESS.—Not later than 2 years
after the date of enactment of this Act, 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 which have been extended in
duration by the authority provided under this section; 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.

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

torically required industry cost sharing, such as the Engi neering Research Centers and Industry/University Coop erative Research Centers. The Board shall also consider
 the impact that the cost sharing policy has on initiating
 new programs for which industry interest and participa 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 the Committee on Commerce, Science, and Transpor-11 12 tation, the Committee on Health, Education, Labor, and Pensions, and the Committee on Appropriations of the 13 Senate, on the results of the evaluation under subsection 14 15 (a).

16 SEC. 14. DONATIONS.

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

21 SEC. 15. ADDITIONAL REPORTS.

22 (a) Report on Funding for Major Facilities.—

(1) PRECONSTRUCTION FUNDING.—The Board
shall evaluate the appropriateness of the requirement 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	$(m_{D,V}) = (1, 1, 2, 2, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,$

25 STRUCTION PLAN.—Section 201(a)(2)(D) of the National

Science Foundation Authorization Act of 1998 (42 U.S.C.
 1862l(a)(2)(D)) is amended by inserting "and for major
 upgrades of facilities in support of Antarctic research pro grams" after "facilities construction account".

5 (c) REPORT ON EDUCATION PROGRAMS WITHIN THE **RESEARCH DIRECTORATES.**—Not later than 6 months 6 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 Health, Education, Labor, and Pensions of the Senate a 11 report cataloging all elementary and secondary school, in-12 13 formal, and undergraduate educational programs and activities supported through appropriations for Research 14 15 and Related Activities. The report shall display the programs and activities by directorate, along with estimated 16 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 IN24 STITUTIONS PROGRAM.—The Director shall transmit to
25 Congress along with the fiscal year 2011 budget request

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

6 (e) ANNUAL PLAN FOR ALLOCATION OF EDUCATION7 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

by the Chairman and assigned at the direction of the 1 Board. The professional members and limited term tech-2 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 service, and the provisions of chapter 51 of such title relat-6 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 Board in connection with the exercise of its powers and 11 12 functions under this Act. Section 14(a)(3) shall apply to 13 each limited term appointment of technical and professional personnel under this subsection. Each appointment 14 15 under this subsection shall be subject to the same security requirements as those required for personnel of the Foun-16 dation appointed under section 14(a).". 17

(c) INCREASE IN NUMBER OF WATERMAN AWARDS
TO THREE.—Section 6(c) of the National Science Foundation Authorization Act of 1975 (42 U.S.C. 1881a) is
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.

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

7 SEC. 18. NATIONAL ACADEMY OF SCIENCE REPORT ON DI8 VERSITY IN STEM FIELDS.

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

(b) SPECIFIC REQUIREMENTS.—The Director shall
ensure that the study described in subsection (a) addresses—

(1) social and institutional factors that shape
the decisions of minority students to commit to education and careers in the science, technology, engineering, and mathematics fields;

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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

science education continue to work in concert for thebenefit of States and local practitioners nationwide.

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

3 (a) IN GENERAL.—The Director is authorized to establish a new program to award grants on a competitive, 4 5 merit-reviewed basis to Hispanic-serving institutions to enhance the quality of undergraduate science, mathe-6 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 degrees in science, mathematics, engineering, or technology. 10

(b) PROGRAM COMPONENTS.—Grants awarded underthis section shall support—

13 (1) activities to improve courses and curriculum
14 in science, mathematics, engineering, and tech15 nology;

16 (2) faculty development;

17 (3) stipends for undergraduate students partici-18 pating 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.

24 SEC. 21. COMMUNICATIONS TRAINING FOR SCIENTISTS.

25 (a) GRANT SUPPLEMENTS FOR COMMUNICATIONS
 26 TRAINING.—The Director shall provide grant supple •HR 1867 EH

ments, on a competitive, merit-reviewed basis, to institu tions receiving awards under the Integrative Graduate
 Education and Research Traineeship program. The
 grant supplements shall be used to train graduate stu dents in the communication of the substance and impor tance of their research to nonscientist audiences, including
 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 Technology of the House of Representatives, and to the Com-11 mittee on Commerce, Science, and Transportation and the 12 13 Committee on Health, Education, Labor, and Pensions of the Senate, describing how the activities required under 14 15 subsection (a) have been implemented. The report shall include data on the number of graduate students trained 16 and the number and size of grant supplements awarded, 17 and a description of the types of activities funded through 18 19 the grant supplements.

> Passed the House of Representatives May 3, 2007. Attest:

> > Clerk.

110TH CONGRESS H. R. 1867

AN ACT

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