

107TH CONGRESS
1ST SESSION

H. R. 1472

To authorize appropriations for fiscal years 2002, 2003, 2004, and 2005
for the National Science Foundation, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 4, 2001

Ms. EDDIE BERNICE JOHNSON of Texas (for herself, Mr. HALL of Texas, Ms. RIVERS, Mr. ETHERIDGE, Mr. ISRAEL, Mr. COSTELLO, Ms. JACKSON-LEE of Texas, Mr. WU, Mr. UDALL of Colorado, Mr. LARSON of Connecticut, Ms. LOFGREN, Ms. WOOLSEY, Mr. GORDON, Mr. BACA, Mr. BARCIA, Mr. BAIRD, and Mr. MOORE) introduced the following bill; which was referred to the Committee on Science

A BILL

To authorize appropriations for fiscal years 2002, 2003, 2004, and 2005 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “National Science
5 Foundation Authorization Act of 2001”.

6 **SEC. 2. FINDINGS.**

7 The Congress finds the following:

1 (1) The National Science Foundation merits
2 praise and public recognition for its major contribu-
3 tions during the past 50 years to the development of
4 the Nation’s academic research enterprise, which is
5 the envy of the world.

6 (2) The economic strength and security of the
7 United States and the quality of life of all Ameri-
8 cans are grounded in the Nation’s scientific and
9 technological capabilities.

10 (3) The National Science Foundation plays a
11 key role in the support of basic research in all
12 science and engineering disciplines and in science,
13 mathematics, engineering, and technology education
14 at all levels.

15 (4) The research and education activities of the
16 National Science Foundation promote the discovery,
17 integration, dissemination, and application of new
18 knowledge in service to society and prepare future
19 generations of scientists, mathematicians, and engi-
20 neers who will be necessary to ensure America’s
21 leadership in the global marketplace.

22 (5) The National Science Foundation must be
23 provided with sufficient resources to enable it to
24 carry out its responsibilities to develop intellectual
25 capital, strengthen the scientific infrastructure, inte-

1 grate research and education, and enhance the deliv-
2 ery of mathematics and science education and im-
3 prove the technological literacy of all citizens.

4 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS.**

5 (a) FISCAL YEAR 2002.—

6 (1) IN GENERAL.—There are authorized to be
7 appropriated to the National Science Foundation
8 \$5,078,400,000 for fiscal year 2002.

9 (2) SPECIFIC ALLOCATIONS.—Of the amount
10 authorized under paragraph (1)—

11 (A) \$3,859,700,000 shall be made avail-
12 able to carry out Research and Related Activi-
13 ties, of which—

14 (i) \$561,000,000 shall be made avail-
15 able for Biological Sciences;

16 (ii) \$556,300,000 shall be made avail-
17 able for Computer and Information Science
18 and Engineering;

19 (iii) \$489,400,000 shall be made
20 available for Engineering;

21 (iv) \$624,400,000 shall be made avail-
22 able for Geosciences;

23 (v) \$1,028,700,000 shall be made
24 available for Mathematical and Physical

1 Sciences, of which \$210,000,000 shall be
2 made available for Mathematical Sciences;

3 (vi) \$189,000,000 shall be made avail-
4 able for Social, Behavioral, and Economic
5 Sciences;

6 (vii) \$236,000,000 shall be made
7 available for United States Polar Research
8 Programs;

9 (viii) \$62,600,000 shall be made avail-
10 able for United States Antarctic Logistical
11 Support Activities; and

12 (ix) \$112,300,000 shall be made avail-
13 able for Integrative Activities, of which
14 \$75,000,000 shall be made available for
15 Major Research Instrumentation;

16 (B) \$903,400,000 shall be made available
17 for Education and Human Resources, of
18 which—

19 (i) such sums as may be necessary
20 shall be made available to allow for a min-
21 imum of 900 new awards for Graduate Re-
22 search Fellowships;

23 (ii) \$18,000,000 shall be made avail-
24 able for evaluation activities carried out by

1 the Research, Evaluation and Communica-
2 tion division; and

3 (iii) \$67,000,000 shall be made avail-
4 able for research activities carried out by
5 the Research, Evaluation and Communica-
6 tion division, of which \$25,000,000 shall
7 be made available for the Interagency Re-
8 search Initiative;

9 (C) \$135,200,000 shall be made available
10 for Major Research Equipment, of which—

11 (i) \$17,400,000 shall be made avail-
12 able for the EarthScope;

13 (ii) \$16,900,000 shall be made avail-
14 able for the Large Hadron Collider;

15 (iii) \$9,000,000 shall be made avail-
16 able for Millimeter Array;

17 (iv) \$12,500,000 shall be made avail-
18 able for HLAPER;

19 (v) \$55,000,000 shall be made avail-
20 able for Terascale Computing Systems;
21 and

22 (vi) \$24,400,000 shall be made avail-
23 able for the Network for Earthquake Engi-
24 neering Simulation;

1 (D) \$173,300,000 shall be made available
2 for Salaries and Expenses; and

3 (E) \$6,800,000 shall be made available for
4 the Office of Inspector General.

5 (b) FISCAL YEAR 2003.—

6 (1) IN GENERAL.—There are authorized to be
7 appropriated to the National Science Foundation
8 \$5,840,200,000 for fiscal year 2003.

9 (2) SPECIFIC ALLOCATIONS.—Of the amount
10 authorized under paragraph (1)—

11 (A) \$4,471,700,000 shall be made avail-
12 able to carry out Research and Related Activi-
13 ties, of which—

14 (i) \$634,000,000 shall be made avail-
15 able for Biological Sciences;

16 (ii) \$645,200,000 shall be made avail-
17 able for Computer and Information Science
18 and Engineering;

19 (iii) \$553,000,000 shall be made
20 available for Engineering;

21 (iv) \$706,000,000 shall be made avail-
22 able for Geosciences;

23 (v) \$1,216,900,000 shall be made
24 available for Mathematical and Physical

1 Sciences, of which \$300,000,000 shall be
2 made available for Mathematical Sciences;

3 (vi) \$259,000,000 shall be made avail-
4 able for Social, Behavioral, and Economic
5 Sciences;

6 (vii) \$267,000,000 shall be made
7 available for United States Polar Research
8 Programs;

9 (viii) \$62,600,000 shall be made avail-
10 able for United States Antarctic Logistical
11 Support Activities; and

12 (ix) \$128,000,000 shall be made avail-
13 able for Integrative Activities, of which
14 \$85,000,000 shall be made available for
15 Major Research Instrumentation;

16 (B) \$1,038,900,000 shall be made avail-
17 able for Education and Human Resources, of
18 which—

19 (i) such sums as may be necessary
20 shall be made available to allow for a min-
21 imum of 900 new awards for Graduate Re-
22 search Fellowships;

23 (ii) \$20,000,000 shall be made avail-
24 able for evaluation activities carried out by

1 the Research, Evaluation and Communica-
2 tion division; and

3 (iii) \$77,000,000 shall be made avail-
4 able for research activities carried out by
5 the Research, Evaluation and Communica-
6 tion division, of which \$28,000,000 shall
7 be made available for the Interagency Re-
8 search Initiative;

9 (C) \$138,700,000 shall be made available
10 for Major Research Equipment, of which—

11 (i) \$28,500,000 shall be made avail-
12 able for the EarthScope;

13 (ii) \$9,700,000 shall be made avail-
14 able for the Large Hadron Collider;

15 (iii) \$15,000,000 shall be made avail-
16 able for Millimeter Array;

17 (iv) \$12,000,000 shall be made avail-
18 able for the National Ecological Observ-
19 atory Network;

20 (v) \$39,500,000 shall be made avail-
21 able for HIAPER; and

22 (vi) \$4,500,000 shall be made avail-
23 able for the Network for Earthquake Engi-
24 neering Simulation;

1 (D) \$183,700,000 shall be made available
2 for Salaries and Expenses; and

3 (E) \$7,200,000 shall be made available for
4 the Office of Inspector General.

5 (c) FISCAL YEAR 2004.—

6 (1) IN GENERAL.—There are authorized to be
7 appropriated to the National Science Foundation
8 \$6,716,200,000 for fiscal year 2004.

9 (2) SPECIFIC ALLOCATIONS.—Of the amount
10 authorized under paragraph (1)—

11 (A) \$5,176,300,000 shall be made avail-
12 able to carry out Research and Related Activi-
13 ties, of which—

14 (i) \$329,000,000 shall be made avail-
15 able for Social, Behavioral, and Economic
16 Sciences;

17 (ii) \$390,000,000 shall be made avail-
18 able for Mathematical Sciences; and

19 (iii) \$100,000,000 shall be made
20 available for the Major Research Instru-
21 mentation;

22 (B) \$1,194,700,000 shall be made avail-
23 able to carry out Education and Human Re-
24 sources;

1 (C) \$142,900,000 shall be made available
2 for Major Research Equipment, of which—

3 (i) \$15,700,000 shall be made avail-
4 able for the EarthScope;

5 (ii) \$25,000,000 shall be made avail-
6 able for Millimeter Array;

7 (iii) \$20,000,000 shall be made avail-
8 able for the National Ecological Observ-
9 atory Network;

10 (iv) \$7,500,000 shall be made avail-
11 able for HIAPER; and

12 (v) \$17,000,000 shall be made avail-
13 able for the Network for Earthquake Engi-
14 neering Simulation;

15 (D) \$194,700,000 shall be made available
16 for Salaries and Expenses; and

17 (E) \$7,600,000 shall be made available for
18 the Office of Inspector General.

19 (d) FISCAL YEAR 2005.—

20 (1) IN GENERAL.—There are authorized to be
21 appropriated to the National Science Foundation
22 \$7,723,600,000 for fiscal year 2005.

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

1 (A) \$5,988,000,000 shall be made avail-
2 able to carry out Research and Related Activi-
3 ties, of which \$480,000,000 shall be made
4 available for Mathematical Sciences;

5 (B) \$1,373,900,000 shall be made avail-
6 able to carry out Education and Human Re-
7 sources;

8 (C) \$147,200,000 shall be made available
9 for Major Research Equipment, of which—

10 (i) \$13,200,000 shall be made avail-
11 able for the EarthScope;

12 (ii) \$35,000,000 shall be made avail-
13 able for Millimeter Array;

14 (iii) \$27,000,000 shall be made avail-
15 able for the National Ecological Observ-
16 atory Network; and

17 (iv) \$7,500,000 shall be made avail-
18 able for HIAPER;

19 (D) \$206,400,000 shall be made available
20 for Salaries and Expenses; and

21 (E) \$8,100,000 shall be made available for
22 the Office of Inspector General.

23 **SEC. 4. PRIORITY FOR RESOURCE ALLOCATION.**

24 In allocating resources made available under section
25 3 for Research and Related Activities, the National

1 Science Foundation shall give priority to increasing aver-
2 age grant size and duration.

3 **SEC. 5. PROPORTIONAL REDUCTION OF RESEARCH AND**
4 **RELATED ACTIVITIES AMOUNTS.**

5 If the amount appropriated pursuant to section
6 3(a)(2)(A), 3(b)(2)(A), or 3(c)(2)(A) is less than the
7 amount authorized under that subparagraph, the amount
8 available for each scientific directorate and major activity
9 under that subparagraph shall be reduced by the same
10 proportion.

11 **SEC. 6. CONSULTATION AND REPRESENTATION EXPENSES.**

12 From appropriations made under authorizations pro-
13 vided in this Act, the Director of the National Science
14 Foundation may use not more than \$10,000 in each fiscal
15 year for official consultation, representation, or other ex-
16 traordinary expenses.

17 **SEC. 7. MAJOR RESEARCH INSTRUMENTATION.**

18 The National Science Foundation shall conduct a re-
19 view and assessment of the Major Research Instrumenta-
20 tion Program and provide a report to Congress on its find-
21 ings and recommendations by September 1, 2002. The re-
22 port shall include—

23 (1) estimates of the needs, by major field of
24 science and engineering, of institutions of higher
25 education for the types of research instrumentation

1 that are eligible for acquisition under the guidelines
2 of the Major Research Instrumentation Program;

3 (2) the distribution of awards and funding lev-
4 els by year and by major field of science and engi-
5 neering for the Major Research Instrumentation
6 Program, since the inception of the Program; and

7 (3) an analysis of the impact of the Major Re-
8 search Instrumentation Program on the research in-
9 strumentation needs that were documented in the
10 National Science Foundation's 1994 survey of aca-
11 demic research instrumentation needs.

12 **SEC. 8. ASSESSMENT AND PLAN FOR PROGRAMS TO EN-**
13 **COURAGE CAREERS IN SCIENCE AND ENGI-**
14 **NEERING BY UNDERREPRESENTED GROUPS.**

15 (a) ASSESSMENT.—The Director of the National
16 Science Foundation shall conduct a review and assessment
17 of the precollege and undergraduate programs of the Na-
18 tional Science Foundation that are focused on increasing
19 the numbers of individuals pursuing careers in science,
20 mathematics, and engineering, who are from segments of
21 the population underrepresented in these career fields.

22 The study shall—

23 (1) determine the effectiveness of the Founda-
24 tion's programs, with emphasis on quantitative evi-
25 dence of the programs' impact on increasing the

1 numbers of individuals obtaining baccalaureate and
2 graduate degrees in science, mathematics, and engi-
3 neering and subsequently entering careers in those
4 fields;

5 (2) identify the principal characteristics of ef-
6 fective programs and factors that would affect the
7 replication of effective programs at other sites; and

8 (3) develop recommendations for surveys and
9 for other data collection and analysis activities that
10 would strengthen the Foundation's capability to as-
11 sess the effectiveness of these programs and to rep-
12 licate and enlarge successful programs.

13 (b) PLAN.—On the basis of the assessment under
14 subsection (a), the Director shall develop a plan for—

15 (1) instituting a research grants program and
16 allocating resources for the Foundation's internal as-
17 sessment activities to address recommendations de-
18 veloped under subsection (a)(3); and

19 (2) scaling up and replicating programs and ac-
20 tivities that have been determined to be effective in
21 increasing the numbers of baccalaureate and grad-
22 uate degrees in science, mathematics, and engineer-
23 ing from segments of the population underrep-
24 resented in these career fields.

1 (c) TRANSMITTAL TO CONGRESS.—The National
2 Science Foundation shall transmit to Congress within 18
3 months after the date of enactment of this Act a report
4 setting forth the findings, conclusions, and recommenda-
5 tions of the assessment conducted in accordance with sub-
6 section (a) and the plan developed in accordance with sub-
7 section (b), including recommended funding levels for pro-
8 posed programs and activities.

9 **SEC. 9. NATIONAL RESEARCH FACILITIES PLAN.**

10 Section 201 of the National Science Foundation Au-
11 thorization Act of 1998 is amended by adding at the end
12 the following new subsection:

13 “(c) COST CATEGORIES.—All cost data on facilities
14 construction, repair and upgrades, operations, and main-
15 tenance provided in the plan required under subsection (a)
16 shall indicate the source of the funds by appropriations
17 account. Data supplied on operations costs shall indicate
18 current and planned funding for instrumentation develop-
19 ment and upgrades required to maintain the scientific
20 value of the facility.”.

21 **SEC. 10. REPORTS ELIMINATION.**

22 Section 3003(a)(1) of the Federal Reports Elimini-
23 tion and Sunset Act of 1995 (31 U.S.C. 1113 note)
24 does not apply to any report required to be submitted
25 under any of the following provisions of law:

1 (1) Section 4(j)(1) of the National Science
2 Foundation Act of 1950 (42 U.S.C. 1863(j)(1)).

3 (2) Section 36(e) of the Science and Engineer-
4 ing Equal Opportunities Act (42 U.S.C. 1885c(e)).

5 (3) Section 37 of the Science and Engineering
6 Equal Opportunities Act (42 U.S.C. 1885d).

7 (4) Section 108 of the National Science Foun-
8 dation Authorization Act for Fiscal Year 1986 (42
9 U.S.C. 1886).

10 (5) Section 101(a)(3) of the High-Performance
11 Computing Act of 1991 (15 U.S.C. 5511(a)(3)).

12 (6) Section 3(a)(7) and (f) of the National
13 Science Foundation Act of 1950 (42 U.S.C.
14 1862(a)(7) and (f)).

15 (7) Section 7(a) of the National Science Foun-
16 dation Authorization Act, 1977 (42 U.S.C. 1873
17 note).

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