

111TH CONGRESS
2^D SESSION

H. R. 4801

To establish the Global Science Program for Security, Competitiveness, and
Diplomacy, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 10, 2010

Mr. BERMAN (for himself, Mr. FORTENBERRY, Mr. LIPINSKI, Mr. BAIRD, and
Mr. HOLT) introduced the following bill; which was referred to the Com-
mittee on Foreign Affairs, and in addition to the Committee on Science
and Technology, for a period to be subsequently determined by the
Speaker, in each case for consideration of such provisions as fall within
the jurisdiction of the committee concerned

A BILL

To establish the Global Science Program for Security,
Competitiveness, and Diplomacy, 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 “Global Science Pro-
5 gram for Security, Competitiveness, and Diplomacy Act
6 of 2010”.

7 **SEC. 2. FINDINGS.**

8 Congress finds the following:

1 (1) International scientific collaboration pro-
2 motes the national security and economic competi-
3 tiveness of the United States. It is therefore a key
4 foreign policy priority of Congress to support such
5 collaboration.

6 (2) During the Cold War, scientific collabora-
7 tion bolstered relationships with United States allies
8 and provided helpful engagement with adversaries.

9 (3) International scientific collaboration today
10 helps the United States find technical solutions to
11 key global challenges, promotes economic develop-
12 ment at home and abroad, improves bilateral rela-
13 tionships, leverages the capabilities of foreign sci-
14 entists and engineers, creates technology that im-
15 proves quality of life, promotes United States values,
16 and enhances the reputation of the United States in
17 the world.

18 (4) The United States faces competition from
19 other countries in the field of international scientific
20 collaboration. Forging international networks with
21 the best individuals and institutions abroad is essen-
22 tial to advancing long-term United States economic
23 interests.

24 (5) Simultaneously, it is of the highest priority
25 for United States national security to ensure that

1 scientists who have been engaged in weapons of
2 mass destruction (WMD)-related research and engi-
3 neering are encouraged and supported, in partner-
4 ship with foreign governments, to engage in produc-
5 tive civil initiatives. This collaboration and other
6 international scientific partnerships can be applied
7 directly to solving pressing problems of global secu-
8 rity, including global pandemics and climate change.

9 (6) Ensuring long-term stability and prosperity
10 in countries vulnerable to terrorist influence requires
11 promoting effective economic development and build-
12 ing the capacity of foreign partners to address con-
13 ditions that give rise to terrorism. International sci-
14 entific collaboration provides a means to advance
15 these objectives.

16 (7) In an era where international skepticism
17 about United States foreign policy abounds, civil so-
18 ciety—including scientists and engineers—plays a
19 critical role in advancing the foreign policy interests
20 of the United States via engagement with scientists
21 abroad. Among foreign scientists and engineers, the
22 United States remains the most attractive destina-
23 tion in the world for graduate education and career-
24 long collaboration.

1 (8) There are a range of activities, such as col-
2 laborative research and exchange programs, best
3 suited to non-government organizations, where inde-
4 pendence from the United States Government pro-
5 vides greater flexibility, agility, and, in some cases,
6 credibility, with foreign scientists.

7 (9) United States scientists, engineers, and
8 innovators are an underutilized asset in efforts to
9 advance United States diplomatic objectives; facili-
10 tating contact between such individuals and foreign
11 populations of interest will advance overall United
12 States foreign policy objectives.

13 **SEC. 3. DEFINITIONS.**

14 In this Act:

15 (1) **ELIGIBLE COUNTRY.**—The term “eligible
16 country” means—

17 (A) a country classified by the World Bank
18 as either lower-middle-income or low-income
19 economies;

20 (B) a country located in the Middle East;

21 (C) a country with a majority population
22 of Muslims; or

23 (D) any other country as determined by
24 the Secretary of State.

1 (2) FEDERAL SCIENCE AGENCY.—The term
2 “Federal science agency” means any Federal agency
3 that is responsible for at least two percent of the
4 total Federal obligation for research and develop-
5 ment at institutions of higher education, according
6 to the most recent data available from the National
7 Science Foundation.

8 (3) ORGANIZATION.—The term “organization”
9 means an educational institution, corporation, part-
10 nership, firm, or entity exempt from taxation under
11 section 501(a) of the Internal Revenue Code of 1986
12 and described in section 501(c)(3) of such Code.

13 **SEC. 4. GLOBAL SCIENCE PROGRAM FOR SECURITY, COM-**
14 **PETITIVENESS, AND DIPLOMACY.**

15 (a) AUTHORIZATION.—The Secretary of State shall
16 establish a program to be known as the “Global Science
17 Program for Security, Competitiveness, and Diplomacy”
18 (referred to in this section and sections 5 and 6 as the
19 “Program”) in accordance with this section and sections
20 5 and 6.

21 (b) ACTIVITIES SUPPORTED.—The Program shall
22 carry out, through the provision of grants, the following
23 activities:

24 (1) COLLABORATIVE RESEARCH.—

1 (A) IN GENERAL.—Establish global re-
2 search competitions that will undertake the fol-
3 lowing:

4 (i) Address the following global chal-
5 lenges: ocean acidification, nonprolifera-
6 tion, multiple drug resistant diseases,
7 water-borne diseases, development of sus-
8 tainable renewable energy resources, sani-
9 tation, food shortage, and water resources.

10 (ii) Engage former WMD scientists to
11 assist in their transition to peaceful, civil-
12 ian research.

13 (iii) Provide incentives for United
14 States businesses to undertake programs
15 employing such scientists for peaceful pur-
16 poses.

17 (iv) Foster stronger partnerships and
18 relations between United States and for-
19 eign universities in science and technology.

20 (B) ACTIVITIES.—Such global research
21 competitions shall include—

22 (i) grants for not more than five years
23 of collaborative research and development
24 projects between United States scientists

1 and engineers and scientists and engineers
2 from eligible countries; and

3 (ii) grants to enhance existing United
4 States-based research programs by adding
5 an international partner from an eligible
6 country.

7 (2) INSTITUTIONAL CAPACITY BUILDING.—

8 (A) GOALS.—The goals of such grants
9 shall be to—

10 (i) strengthen the research infrastruc-
11 ture and science and engineering curricula
12 of institutes of higher learning in eligible
13 countries;

14 (ii) engage foreign students early in
15 their careers with United States scientists
16 and engineers in order to bring such stu-
17 dents into the global sphere of science and
18 foster critical thinking; and

19 (iii) expand existing scholarship ex-
20 changes with students from eligible coun-
21 tries.

22 (B) RESTRICTIONS.—The following restric-
23 tions shall apply to the Program:

24 (i) Funds may not be used for con-
25 struction of facilities.

1 (ii) Not more than 10 percent of each
2 grant may be used for purchase of equip-
3 ment.

4 (iii) No eligible country may receive
5 more than 10 percent of the funds author-
6 ized to be appropriated for the Program
7 for any fiscal year.

8 (C) ACTIVITIES.—Such grants may in-
9 clude—

10 (i) establishing research and education
11 centers at institutes of higher learning in
12 eligible countries to carry out the purposes
13 of this Act; and

14 (ii) providing equipment and training.

15 (3) NONPROLIFERATION.—

16 (A) IN GENERAL.—Conduct research and
17 training programs that—

18 (i) engage scientists and engineers
19 who might otherwise be exploited to par-
20 ticipate in illicit nuclear or WMD weapons
21 programs;

22 (ii) help prevent nuclear and WMD
23 proliferation; or

24 (iii) encourage foreign scientists and
25 engineers, in collaboration with United

1 States partners, to develop technologies
2 and methods to combat WMD terrorism.

3 (B) ACTIVITIES.—Such research and train-
4 ing programs may include—

5 (i) collaborative research competitions
6 that would provide research grants to for-
7 eign scientists and engineers with WMD
8 experience or who could be targeted to par-
9 ticipate in a WMD or nuclear weapons
10 program, and United States scientists and
11 engineers; and

12 (ii) research and training programs
13 for personnel of eligible countries who will
14 be implementing nuclear cooperation agree-
15 ments with the United States or otherwise
16 participating in nuclear programs.

17 (4) GLOBAL VIRTUAL SCIENCE LIBRARY.—To
18 make grants to organizations that provide online ac-
19 cess at little or no cost for scientists and engineers
20 in eligible countries to worldwide science journals.

21 (c) CERTAIN REQUIREMENTS.—Grants awarded pur-
22 suant to subsection (b) (except for grants awarded pursu-
23 ant to paragraph (3) of such subsection) shall be competi-
24 tive, peer-reviewed, and merit-based.

1 (d) ADDITIONAL FUNDING.—In applying for a grant,
2 an organization shall demonstrate how it will seek, to the
3 maximum extent possible, additional funding from partner
4 organizations, foreign governments, private businesses,
5 and other entities, ideally to the level of a full match.

6 **SEC. 5. MANAGEMENT.**

7 (a) POLICY.—

8 (1) IN GENERAL.—The Secretary of State, in
9 consultation with the Director of the Office of
10 Science and Technology Policy, shall promulgate
11 guidelines for review of grant applications to the
12 Program.

13 (2) REQUIREMENTS.—The guidelines required
14 under this subsection shall address, at a minimum,
15 the following:

16 (A) Criteria by which grants shall be se-
17 lected, including a description of diplomatic ob-
18 jectives of the Program.

19 (B) Policies to ensure that grants are in
20 furtherance of United States diplomatic objec-
21 tives.

22 (C) The countries and regions to partici-
23 pate in the Program.

24 (b) IMPLEMENTATION.—

1 (1) IN GENERAL.—The Secretary of State shall
2 coordinate with the Director of the Office of Science
3 and Technology Policy and the Director of the Na-
4 tional Science Foundation to administer and imple-
5 ment the Program, in accordance with the guidelines
6 promulgated pursuant to subsection (a).

7 (2) NATIONAL SCIENCE FOUNDATION.—The Di-
8 rector of the National Science Foundation shall per-
9 form the following activities for the Program:

10 (A) Subject to the guidelines promulgated
11 pursuant to subsection (a), develop and issue
12 solicitations for projects described in section
13 4(b), or coordinate with other Federal science
14 agencies to develop and issue solicitations, as
15 appropriate.

16 (B) Establish peer review panels comprised
17 of individuals with demonstrated experience in
18 relevant fields to—

19 (i) review proposals for grants; and
20 (ii) provide recommendations regard-
21 ing evaluation of such proposals.

22 (C) Award grants based on the peer review
23 recommendations.

24 (D) Administer grants on behalf of the
25 Program.

1 (c) ACCEPTANCE OF FUNDS FROM OUTSIDE
2 SOURCES.—The Program may accept funds from outside
3 sources, including foreign governments, nongovernmental
4 organizations, and private business entities.

5 (d) RULE OF CONSTRUCTION.—Nothing in this Act
6 may be construed to make any grant recipient an agent
7 or establishment of the United States Government.

8 (e) ANNUAL REPORT.—

9 (1) IN GENERAL.—Not later than November 30
10 of each year, the President shall transmit to Con-
11 gress a report relating to the Program for the pre-
12 ceding fiscal year.

13 (2) CONTENTS.—The report required under
14 paragraph (1) shall include the following informa-
15 tion:

16 (A) A comprehensive and detailed report
17 on all operations, activities, and accomplish-
18 ments under the Program.

19 (B) All expenditures of funds from the
20 Program.

21 (C) A report on metrics used to gauge suc-
22 cess of the Program.

1 **SEC. 6. FUNDING.**

2 (a) IN GENERAL.—There is authorized to be appro-
3 priated to the President such sums as may be necessary
4 to carry out sections 4 and 5.

5 (b) ADDITIONAL AUTHORITIES.—Amounts appro-
6 priated pursuant to the authorization for appropriations
7 under subsection (a)—

8 (1) may be referred to as the “Global Science
9 Program for Security, Competitiveness, and Diplo-
10 macy”; and

11 (2) may remain available until expended.

12 (c) TRANSFER AUTHORITY.—The Secretary of State
13 may transfer funds authorized to be appropriated pursu-
14 ant to this section to other Federal agencies, including the
15 National Science Foundation, for the purposes of admin-
16 istering the Program. The Director of the National
17 Science Foundation (NSF) may transfer funds trans-
18 ferred to the NSF, as appropriate, to other Federal
19 science agencies for the purpose of implementing the Pro-
20 gram.

21 **SEC. 7. SENSE OF CONGRESS.**

22 It is the sense of Congress that—

23 (1) the Office of the Science and Technology
24 Advisor of the Department of State should be fur-
25 ther integrated into the overall activities of the De-

1 partment of State, including greater involvement in
2 the activities of regional bureaus; and

3 (2) science is a critical, underutilized resource
4 for United States diplomacy, and that the activities
5 of bureaus with oversight over science programs
6 within the Department should be integrated.

7 **SEC. 8. EMBASSY SCIENCE FELLOWS PROGRAM.**

8 (a) SENSE OF CONGRESS.—It is the sense of Con-
9 gress that—

10 (1) scientific fellows at the Department of State
11 critically augment the capacity of the Department
12 and United States embassies to address science and
13 technology issues;

14 (2) Federal agencies are reluctant to pay the
15 costs of scientists detailed to serve in United States
16 embassies; and

17 (3) expanding existing fellowship programs will
18 meet the Department’s needs to enhance the role of
19 science at United States embassies.

20 (b) AUTHORIZATION.—The Secretary of State is au-
21 thorized to establish a program to be known as the “Em-
22 bassy Science Fellows Program” to serve the following
23 purposes:

1 (1) Pay for the costs of scientists employed at
2 Federal agencies to serve in the Department of
3 State for a period of not longer than three years.

4 (2) Enhance the role scientists play in strength-
5 ening United States diplomatic efforts.

6 (3) Ensure the placement of scientists at
7 United States embassies.

8 (c) AUTHORIZATION OF APPROPRIATIONS.—From
9 amounts made available to the Diplomatic and Consular
10 Programs account of the Department of State, there is
11 authorized to be appropriated to the Secretary of State
12 such sums as may be necessary to implement the Program
13 authorized to be established in accordance with subsection
14 (b).

15 (d) ACCEPTANCE OF FUNDS FROM OUTSIDE
16 SOURCES.—The Embassy Science Fellows Program may
17 accept funds from outside sources, including foundations,
18 nongovernmental organizations, and private business enti-
19 ties.

20 **SEC. 9. JEFFERSON SCIENCE FELLOWS PROGRAM.**

21 (a) SENSE OF CONGRESS.—It is the sense of Con-
22 gress that—

23 (1) tenured academic scientists from United
24 States institutions of higher learning can provide

1 critical expertise and inform foreign policy matters
2 at the Department of State;

3 (2) United States academic institutions enjoy
4 an enhanced reputation in the international scientific
5 community;

6 (3) the presence of United States scientists at
7 the Department of State enhances the utility of
8 science as tool for diplomatic engagement; and

9 (4) the Jefferson Science Fellows Program au-
10 thORIZED to be established pursuant to this section
11 will provide a successful model for augmenting the
12 scientific expertise at the Department of State.

13 (b) AUTHORIZATION.—The Secretary of State is au-
14 thorized to establish a program to be known as the “Jef-
15 ferson Science Fellows Program” to serve the following
16 purposes:

17 (1) Provide an opportunity for tenured re-
18 search-active scientists and engineers from the
19 United States academic community to serve in the
20 Department of State for one year.

21 (2) Maintain an ongoing interactive relationship
22 between United States academic institutions and the
23 Department of State by utilizing former Jefferson
24 Fellows as expert consultants for short-term projects

1 for at least five years following their fellowship ten-
2 ure.

3 (3) Enhance the availability at the Department
4 of State of up-to-date scientific knowledge relevant
5 to foreign policy and international relations.

6 (4) Enhance the use of science as a tool for di-
7 plomacy at the Department of State.

8 (c) AUTHORIZATION OF APPROPRIATIONS.—From
9 amounts made available to the Diplomatic and Consular
10 Programs account of the Department of State, there is
11 authorized to be appropriated to the Secretary of State
12 such sums as may be necessary to implement the Jefferson
13 Science Fellows Program authorized to be established in
14 accordance with subsection (b).

15 (d) ACCEPTANCE OF FUNDS FROM OUTSIDE
16 SOURCES.—The Jefferson Science Fellows Program may
17 accept funds from outside sources, including foundations,
18 nongovernmental organizations, and private business enti-
19 ties.

20 **SEC. 10. SCIENTIFIC ENVOYS PROGRAM.**

21 (a) AUTHORIZATION.—The Secretary of State shall
22 establish a program to be known as the “Scientific Envoys
23 Program”. In carrying out the Program, the Secretary
24 shall appoint scientists and engineers, including Nobel

1 Prize Laureates and renowned researchers and professors,
2 to serve as envoys on behalf of the United States to—

3 (1) represent the commitment of the United
4 States to promote, in collaboration with other coun-
5 tries, the advancement of science and technology;
6 and

7 (2) facilitate partnership with eligible countries.

8 (b) RESTRICTIONS.—The following restrictions shall
9 apply to the Program:

10 (1) Of amounts authorized to be appropriated
11 for the Program, funds may be used to cover only
12 the travel and per diem costs of envoys appointed by
13 the Secretary of State.

14 (2) The total length of travel for any envoy may
15 not exceed 14 days.

16 (3) Not more than 12 envoys may be appointed
17 annually.

18 (4) An envoy may serve a term of not longer
19 than 3 years.

20 (c) AUTHORIZATION OF APPROPRIATIONS.—From
21 amounts made available to the Exchange and Cultural Af-
22 fairs account of the Department of State, there is author-
23 ized to be appropriated to the Secretary of State such
24 sums as may be necessary to implement the Program au-

1 thORIZED to be established in accordance with subsection
2 (a).

3 **SEC. 11. SENSE OF CONGRESS REGARDING SCIENCE-RE-**
4 **LATED CONFERENCES, EXCHANGES, AND**
5 **PROGRAMS.**

6 (a) FINDINGS.—Congress finds the following:

7 (1) The United States is a preeminent location
8 for science-related conferences, exchanges, and pro-
9 grams.

10 (2) Such conferences contribute to State and
11 local economies and provide critical opportunities for
12 United States scientists to interact with foreign
13 counterparts.

14 (3) Recently, the visa process to gain admission
15 to the United States for such events has become suf-
16 ficiently onerous to deter foreign visitors whom the
17 United States should welcome.

18 (b) SENSE OF CONGRESS.—It is the sense of Con-
19 gress that relevant Federal agencies should work to im-
20 prove the overall visa process to ensure that the United
21 States remains a central destination for such conferences,
22 exchanges, and programs.

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