

112TH CONGRESS
2D SESSION

H. R. 6303

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

IN THE HOUSE OF REPRESENTATIVES

AUGUST 2, 2012

Mr. CARNAHAN (for himself, Mr. MORAN, Mr. HOLT, and Mr. LIPINSKI) introduced the following bill; which was referred to the Committee on Foreign Affairs, and in addition to the Committee on Science, Space, 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 2012”.

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 catalyzes domestic and international job creation,
17 creates international markets for United States
18 goods and services, and enhances the reputation of
19 the United States in the world.

20 (4) Forging international networks with the
21 best individuals and institutions abroad is essential
22 to advancing long-term United States economic in-
23 terests. Enhancing international technology-based
24 entrepreneurship cultivates greater prosperity for
25 the United States by bringing the most promising

1 international technologies to the attention of the
2 United States business community, empowers entre-
3 preneurs abroad to apply technology that solves local
4 and global problems, and addresses economic condi-
5 tions that give rise to global political and economic
6 instability.

7 (5) Simultaneously, it is of the highest priority
8 for United States national security to ensure that
9 scientists who have been engaged in weapons of
10 mass destruction (WMD)-related research and engi-
11 neering are encouraged and supported, in partner-
12 ship with foreign governments, to engage in produc-
13 tive civil initiatives. This collaboration and other
14 international scientific partnerships can be applied
15 directly to solving pressing problems of global secu-
16 rity, including global pandemics and climate change.

17 (6) Ensuring long-term stability and prosperity
18 in countries vulnerable to terrorist influence requires
19 promoting effective economic development and build-
20 ing the capacity of foreign partners to address con-
21 ditions that give rise to terrorism. International sci-
22 entific collaboration provides a means to advance
23 these objectives.

24 (7) In an era where international skepticism
25 about United States foreign policy abounds, civil so-

1 ciety—including scientists and engineers—plays a
2 critical role in advancing the foreign policy interests
3 of the United States via engagement with their
4 counterparts abroad. Among foreign scientists and
5 engineers, the United States remains the most at-
6 tractive destination in the world for graduate edu-
7 cation, starting a technology-based business, and ca-
8 reer-long collaboration.

9 (8) Engaging women in the scientific enterprise
10 is beneficial to the well-being of women and girls, as
11 well as to global stability and prosperity. Improving
12 access to education and science opportunities for
13 women and girls advances their economic viability,
14 along with that of their families and broader com-
15 munities. Moreover, the scientific field thrives on ex-
16 changes of a broad range of ideas. Including female
17 voices, and those of all minorities, in scientific dia-
18 logue leads to more significant discoveries and cre-
19 ative solutions to local and global challenges.

20 (9) There are a range of activities, such as col-
21 laborative research and exchange programs, best
22 suited to non-government organizations, where inde-
23 pendence from the United States Government pro-
24 vides greater flexibility, agility, and, in some cases,
25 credibility, with foreign scientists.

1 (10) United States scientists, engineers, and
2 innovators are an underutilized asset in efforts to
3 advance United States diplomatic objectives; facili-
4 tating contact between such individuals and foreign
5 populations of interest will advance overall United
6 States foreign policy objectives.

7 **SEC. 3. DEFINITIONS.**

8 In this Act:

9 (1) **ELIGIBLE COUNTRY.**—The term “eligible
10 country” means—

11 (A) a country classified by the World Bank
12 as either lower-middle-income or low-income
13 economies;

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

15 (C) a country with a majority population
16 of Muslims;

17 (D) a country located in sub-Saharan Afri-
18 ca;

19 (E) a country visited by a scientific envoy
20 under section 11; or

21 (F) any other country as determined by
22 the Secretary of State.

23 (2) **ORGANIZATION.**—The term “organization”
24 means an educational institution, corporation, part-
25 nership, firm, or entity exempt from taxation under

1 section 501(a) of the Internal Revenue Code of 1986
2 and described in section 501(c)(3) of such Code.

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

5 (a) **AUTHORIZATION.**—The Secretary of State is au-
6 thorized to establish a program to be known as the “Glob-
7 al Science Program for Security, Competitiveness, and Di-
8 plomacy” (referred to in this section and sections 5, 6,
9 and 7 as the “Program”) in accordance with this section
10 and sections 5 and 6.

11 (b) **ACTIVITIES SUPPORTED.**—The Program is au-
12 thorized to carry out, through the provision of grants, the
13 following activities:

14 (1) **COLLABORATIVE RESEARCH.**—

15 (A) **IN GENERAL.**—Establish global, re-
16 gional, or country-specific research competitions
17 that will undertake the following:

18 (i) Address global challenges such as
19 ocean acidification, nonproliferation, mul-
20 tiple drug resistant diseases, water-borne
21 diseases, development of sustainable renew-
22 able energy resources, sanitation, food
23 shortage, and water resources.

1 (ii) Engage former WMD scientists to
2 assist in their transition to peaceful, civil-
3 ian research.

4 (iii) Provide incentives for United
5 States businesses to undertake programs
6 employing such scientists for peaceful pur-
7 poses.

8 (iv) Foster stronger partnerships and
9 relations between United States and for-
10 eign universities in science and technology.

11 (B) ACTIVITIES.—Such global research
12 competitions are authorized to include—

13 (i) grants for not more than five years
14 of collaborative research and development
15 projects between United States scientists
16 and engineers and scientists and engineers
17 from eligible countries; and

18 (ii) grants to enhance existing United
19 States-based research programs by adding
20 an international partner from an eligible
21 country.

22 (2) INSTITUTIONAL CAPACITY BUILDING.—

23 (A) GOALS.—The goals of such grants
24 shall be to—

1 (i) strengthen the research infrastruc-
2 ture and science and engineering curricula
3 of institutes of higher learning in eligible
4 countries;

5 (ii) engage foreign students early in
6 their careers with United States scientists
7 and engineers in order to bring such stu-
8 dents into the global sphere of science and
9 foster critical thinking; and

10 (iii) encourage and expand exchanges
11 between students and faculty from eligible
12 countries and students and faculty from
13 the United States.

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

16 (i) Funds may not be used for con-
17 struction of facilities.

18 (ii) No eligible country may receive
19 more than 35 percent of the funds author-
20 ized to be appropriated for the Program
21 for any fiscal year.

22 (C) ACTIVITIES.—Such grants may in-
23 clude—

24 (i) establishing research and education
25 centers at institutes of higher learning in

1 eligible countries to carry out the purposes
2 of this Act; and

3 (ii) providing equipment, training, and
4 professional skills development.

5 (3) NONPROLIFERATION OF WMD PROGRAMS.—

6 (A) IN GENERAL.—Conduct research and
7 training programs that—

8 (i) engage scientists and engineers
9 who might otherwise be exploited to par-
10 ticipate in illicit nuclear programs;

11 (ii) help prevent nuclear and WMD
12 proliferation;

13 (iii) encourage foreign scientists and
14 engineers, in collaboration with United
15 States partners, to develop technologies
16 and methods to combat WMD terrorism;
17 or

18 (iv) provide training in safe laboratory
19 practices and conditions for civilian re-
20 searchers working with potentially dan-
21 gerous pathogens and chemicals to ensure
22 that such pathogens and chemicals do not
23 fall into the hands of terrorists or rogue
24 states, that such practices are fostering
25 safe working conditions for civilian re-

1 searchers, and that the potential is strictly
2 minimized for accidental release into local
3 populations of such pathogens and chemi-
4 cals.

5 (B) ACTIVITIES.—Such research and train-
6 ing programs may include—

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

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

19 (iii) training programs in safe labora-
20 tory practices and conditions for civilian
21 researchers working with potentially dan-
22 gerous pathogens and chemicals.

23 (4) GLOBAL VIRTUAL SCIENCE LIBRARY.—To
24 make grants to organizations that provide online ac-

1 cess at little or no cost for scientists and engineers
2 in eligible countries to worldwide science journals.

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

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

12 **SEC. 5. MANAGEMENT.**

13 (a) POLICY.—

14 (1) IN GENERAL.—The Secretary of State is
15 authorized to promulgate guidelines for review of
16 grant applications to the Program.

17 (2) REQUIREMENTS.—Guidelines promulgated
18 under this subsection shall address, at a minimum,
19 the following:

20 (A) Criteria by which grants shall be se-
21 lected, including a description of diplomatic ob-
22 jectives of the Program.

23 (B) Policies to ensure that grants are in
24 furtherance of United States diplomatic objec-
25 tives.

1 (C) The countries and regions to partici-
2 pate in the Program.

3 (b) IMPLEMENTATION.—

4 (1) SECRETARY OF STATE.—The Secretary of
5 State is authorized to—

6 (A) subject to the guidelines promulgated
7 pursuant to subsection (a) and based on the
8 recommendations forwarded to the Secretary of
9 State by the Director of the National Science
10 Foundation pursuant to paragraph (2)(C),
11 make final determinations on the award of
12 grants;

13 (B) administer grants on behalf of the
14 Program to foreign organizations collaborating
15 with organizations domiciled in the United
16 States in accordance with the terms of this Act;

17 (C) coordinate with the Director of the Of-
18 fice of Science and Technology Policy and the
19 Director of the National Science Foundation to
20 administer and implement the Program, in ac-
21 cordance with the guidelines promulgated pur-
22 suant to subsection (a); and

23 (D) develop, review, make final determina-
24 tions, award, and administer grants for Pro-
25 gram activities to carry out section 4(b)(3),

1 which may be implemented through existing re-
2 sources, mechanisms, and awards of the De-
3 partment of State's Global Threat Reduction
4 Program.

5 (2) DIRECTOR OF NATIONAL SCIENCE FOUNDA-
6 TION.—The Director of the National Science Foun-
7 dation, in accordance with the memorandum of un-
8 derstanding required under subsection (e), is author-
9 ized to perform the following activities for the Pro-
10 gram (except for activities to carry out section
11 4(b)(3)):

12 (A) Develop and issue solicitations for
13 projects described in paragraphs (1), (2), and
14 (4) of section 4(b), or coordinate with other
15 Federal science agencies to develop and issue
16 such solicitations, as appropriate.

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

20 (i) review, based on scientific merit,
21 proposals for grants; and

22 (ii) provide recommendations regard-
23 ing evaluation of such proposals.

1 (C) Make recommendations to the Sec-
2 retary of State for grants based on the peer re-
3 view recommendations.

4 (D) Administer grants on behalf of the
5 Program to organizations domiciled in the
6 United States that are collaborating with for-
7 eign organizations in accordance with the terms
8 of this Act.

9 (e) AGREEMENT REQUIRED.—Not later than 120
10 days after the date of the enactment of this Act, the Sec-
11 retary of State shall enter into a memorandum of under-
12 standing with the Director of the National Science Foun-
13 dation to coordinate activities carried out pursuant to this
14 Act.

15 (d) ACCEPTANCE OF FUNDS FROM OUTSIDE
16 SOURCES.—The Program may accept funds from outside
17 sources, including foreign governments, nongovernmental
18 organizations, and private business entities.

19 (e) RULE OF CONSTRUCTION.—Nothing in this Act
20 may be construed to make any grant recipient an agent
21 or establishment of the United States Government.

22 (f) ANNUAL REPORT.—

23 (1) IN GENERAL.—Not later than November 30
24 of each year, the President shall transmit to Con-

1 gress a report relating to the Program for the pre-
2 ceding fiscal year.

3 (2) CONTENTS.—The report required under
4 paragraph (1) shall include the following informa-
5 tion:

6 (A) A report on operations, activities, and
7 accomplishments under the Program, including,
8 if appropriate, a classified annex.

9 (B) All expenditures of funds from the
10 Program.

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

13 (g) ASSISTANCE OTHERWISE PROHIBITED BY
14 LAW.—

15 (1) IN GENERAL.—The Secretary of State may
16 not use the authorities provided in this Act to pro-
17 vide any type of assistance, make any grants, or
18 carry out any activities described in section 4 that
19 are otherwise prohibited by any provision of law.

20 (2) ACTIVITIES RELATING TO CHINA.—Any ac-
21 tivity undertaken pursuant to this section with the
22 Government of China or a nongovernmental entity in
23 China may not involve a transfer of items on the
24 United States Munitions List (established by the
25 President under section 38(a)(1) of the Arms Ex-

1 port Control Act (22 U.S.C. 2778(a)(1)) or Com-
2 merce Control List (maintained under part 774 of
3 title 15, Code of Federal Regulations).

4 **SEC. 6. FUNDING.**

5 (a) IN GENERAL.—There is authorized to be appro-
6 priated such sums as may be necessary to carry out sec-
7 tions 4 and 5.

8 (b) ADDITIONAL AUTHORITIES.—Amounts appro-
9 priated pursuant to the authorization for appropriations
10 under subsection (a)—

11 (1) may be referred to as the “Global Science
12 Program for Security, Competitiveness, and Diplo-
13 macy”; and

14 (2) may remain available until expended.

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

24 (d) PROHIBITION.—None of the funds authorized to
25 be appropriated for the Program may be used for a Con-

1 gressional earmark as defined in clause 9(d) of rule XXI
2 of the Rules of the House of Representatives.

3 **SEC. 7. ADVISORY PANEL ON INTERNATIONAL SCIENTIFIC**
4 **COOPERATION.**

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

7 (1) an advisory panel will assist the Secretary
8 of State in maximizing the impact of the Program,
9 including forging links between the global science
10 and business community and United States sci-
11 entists; and

12 (2) individuals with international business and
13 science expertise who are not employees of the
14 United States Government could bring invaluable
15 perspectives to the Program.

16 (b) PANEL ESTABLISHMENT.—

17 (1) IN GENERAL.—The Secretary of State may
18 establish a panel to be known as the “Advisory
19 Panel on International Scientific Cooperation” to fa-
20 cilitate implementation of the Program.

21 (2) RESPONSIBILITIES.—The Advisory Panel
22 should provide advice and guidance to the Secretary
23 of State on the policy and implementation of pro-
24 grams and projects of the Program.

1 (3) MEMBERSHIP.—If the Secretary of State
2 establishes the Advisory Panel, members of the Ad-
3 visory Panel shall be drawn from—

4 (A) individuals with experience and leader-
5 ship in the fields of science, international busi-
6 ness, and engineering; and

7 (B) individuals with experience and leader-
8 ship in nongovernmental entities, including uni-
9 versities, that implement science research pro-
10 grams.

11 (4) COMPENSATION.—No member of the Advi-
12 sory Panel may receive compensation for services
13 performed as a member of the Panel.

14 **SEC. 8. SENSE OF CONGRESS.**

15 It is the sense of Congress that—

16 (1) the Office of the Science and Technology
17 Advisor of the Department of State should be fur-
18 ther integrated into the overall activities of the De-
19 partment of State, including greater involvement in
20 the activities of regional bureaus; and

21 (2) science is a critical, underutilized resource
22 for United States diplomacy, and that the activities
23 of bureaus with oversight over science programs
24 within the Department should be integrated.

1 **SEC. 9. EMBASSY SCIENCE FELLOWS PROGRAM.**

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

4 (1) scientific fellows at the Department of State
5 critically augment the capacity of the Department
6 and United States embassies to address science and
7 technology issues;

8 (2) Federal agencies are reluctant to pay the
9 costs of scientists detailed to serve in United States
10 embassies; and

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

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

18 (1) Pay for the costs of scientists employed at
19 Federal agencies to serve in the Department of
20 State.

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

23 (3) Ensure the placement of scientists at
24 United States embassies.

25 (c) AUTHORIZATION OF APPROPRIATIONS.—From
26 amounts made available to the Diplomatic and Consular

1 Programs account of the Department of State, there is
2 authorized to be appropriated to the Secretary of State
3 such sums as may be necessary to implement the Program
4 authorized to be established in accordance with subsection
5 (b).

6 (d) ACCEPTANCE OF FUNDS FROM ADDITIONAL
7 SOURCES.—The Secretary of State may accept funds from
8 additional sources, including foundations, nongovern-
9 mental organizations, private business entities, and other
10 Federal agencies to implement the Program authorized to
11 be established in accordance with subsection (b).

12 **SEC. 10. JEFFERSON SCIENCE FELLOWS PROGRAM.**

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

15 (1) tenured or similarly ranked academic sci-
16 entists from United States institutions of higher
17 learning can provide critical expertise and inform
18 foreign policy matters at the Department of State;

19 (2) United States academic institutions enjoy
20 an enhanced reputation in the international scientific
21 community;

22 (3) the presence of United States scientists at
23 the Department of State and at diplomatic and con-
24 sular missions enhances the utility of science as tool
25 for diplomatic engagement; and

1 (4) the Jefferson Science Fellows Program au-
2 thorized to be established pursuant to this section
3 will provide a successful model for augmenting the
4 scientific expertise at the Department of State.

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

9 (1) Provide an opportunity for tenured or simi-
10 larly ranked research-active scientists and engineers
11 from the United States academic community to
12 serve in the Department of State for one year.

13 (2) Maintain an ongoing interactive relationship
14 between United States academic institutions and the
15 Department of State by utilizing former Jefferson
16 Fellows as expert consultants for short-term projects
17 for at least five years following their fellowship ten-
18 ure.

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

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

24 (c) AUTHORIZATION OF APPROPRIATIONS.—

1 (1) IN GENERAL.—There is authorized to be
2 appropriated to the Secretary of State such sums as
3 may be necessary to implement the Jefferson
4 Science Fellows Program authorized to be estab-
5 lished in accordance with subsection (b).

6 (2) USE OF FUNDS.—The Secretary of State is
7 authorized to use amounts appropriated pursuant to
8 the authorization of appropriations under paragraph
9 (1) to make grants or enter into cooperative agree-
10 ments related to Department of State science and
11 technology fellowship programs, including for assist-
12 ance in recruiting fellows and the payment of sti-
13 pends, travel, and other appropriate expenses to fel-
14 lows.

15 (3) NOT COMPENSATION.—Stipends made avail-
16 able under this section may not be considered com-
17 pensation for purposes of section 209 of title 18,
18 United States Code.

19 (d) ACCEPTANCE OF FUNDS FROM OUTSIDE
20 SOURCES.—The Secretary of State may accept funds from
21 outside sources, including foundations, nongovernmental
22 organizations, and private business entities to implement
23 the Jefferson Science Fellows Program authorized to be
24 established in accordance with subsection (b).

1 **SEC. 11. SCIENTIFIC ENVOYS PROGRAM.**

2 (a) AUTHORIZATION.—The Secretary of State is au-
3 thorized to establish a program to be known as the “Sci-
4 entific Envoys Program”. In carrying out the Program,
5 the Secretary shall appoint scientists and engineers, in-
6 cluding Nobel Prize Laureates and renowned researchers
7 and professors, to serve as envoys on behalf of the United
8 States to—

9 (1) represent the commitment of the United
10 States to promote, in collaboration with other coun-
11 tries, the advancement of science and technology;
12 and

13 (2) facilitate partnership with eligible countries.

14 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
15 authorized to be appropriated to the Secretary of State
16 such sums as may be necessary to implement the Program
17 authorized to be established in accordance with subsection
18 (a).

19 **SEC. 12. SENSE OF CONGRESS REGARDING SCIENCE-RE-**
20 **LATED CONFERENCES, EXCHANGES, AND**
21 **PROGRAMS.**

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

23 (1) The United States is a preeminent location
24 for science-related conferences, exchanges, and pro-
25 grams.

1 (2) Such conferences contribute to State and
2 local economies and provide critical opportunities for
3 United States scientists to interact with foreign
4 counterparts.

5 (3) Recently, the visa process to gain admission
6 to the United States for such events has become suf-
7 ficiently onerous to deter foreign visitors whom the
8 United States should welcome.

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

○