

111TH CONGRESS  
2D SESSION

# S. 3564

To promote the potential of women in academic science, technology,  
engineering, and mathematics.

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IN THE SENATE OF THE UNITED STATES

JULY 12, 2010

Mr. UDALL of New Mexico introduced the following bill; which was read twice  
and referred to the Committee on Homeland Security and Governmental  
Affairs

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## A BILL

To promote the potential of women in academic science,  
technology, engineering, and mathematics.

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. FULFILLING THE POTENTIAL OF WOMEN IN**  
4               **ACADEMIC SCIENCE, TECHNOLOGY, ENGI-**  
5               **NEERING, AND MATHEMATICS.**

6       (a) DEFINITION OF FEDERAL STEM AGENCY.—In  
7       this Act, the term “Federal STEM agency” means any  
8       Federal agency that is responsible for not less than 2 per-  
9       cent of total Federal research and development funding  
10      in science, technology, engineering, and mathematics (re-

ferred to in this Act as “STEM”) to institutions of higher education, according to the most recent data available from the National Science Foundation.

(b) WORKSHOPS TO ENHANCE GENDER EQUITY IN ACADEMIC STEM.—

(1) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary of Commerce, in consultation with the Director of the Office of Science and Technology Policy, shall develop a uniform policy for all Federal STEM agencies to carry out a program of workshops that educate program officers, members of grant review panels, and institution of higher education STEM department chairs on how to implement methods that minimize the influence of gender bias in evaluation of Federal research grants and in the related academic advancement of actual and potential recipients of these grants, including hiring, tenure, promotion, and selection for any honor based in part on the recipient’s research record.

(2) INTERAGENCY COORDINATION.—The Secretary of Commerce, in consultation with the Director of the Office of Science and Technology Policy, shall ensure that programs of workshops across the Federal STEM agencies are coordinated and sup-

ported jointly as appropriate. As part of this process, the Secretary of Commerce, in consultation with the Director of the Office of Science and Technology Policy, shall ensure that at least 1 workshop is supported every 2 years among the Federal STEM agencies.

(3) ORGANIZATIONS ELIGIBLE TO CARRY OUT WORKSHOPS.—Federal STEM agencies may carry out the program of workshops under this subsection by making grants to eligible organizations. In addition to any other organizations made eligible by the Federal STEM agencies, the following organizations are eligible for grants under this subsection:

(A) Nonprofit scientific and professional societies and organizations that represent 1 or more STEM disciplines.

(B) Nonprofit organizations that have a primary mission or program focus of advancing the participation of women in STEM.

(4) CHARACTERISTICS OF WORKSHOPS.—The workshops shall have the following characteristics:

(A) Invitees to workshops shall include at least—

(i) the chairs of departments in the relevant discipline from at least the top 50

1 institutions of higher education, as deter-  
2 mined by the amount of Federal STEM re-  
3 search and development funds obligated to  
4 each institution of higher education in the  
5 prior year based on data available from the  
6 National Science Foundation;

7 (ii) members of any standing research  
8 grant review panel appointed by the Fed-  
9 eral STEM agencies; and

10 (iii) Federal STEM agency program  
11 officers in the relevant discipline, other  
12 than program officers that participate in  
13 comparable workshops organized and run  
14 specifically for that agency's program offi-  
15 cers.

16 (B) Activities at the workshops shall in-  
17 clude research presentations and interactive dis-  
18 cussions or other activities that increase the  
19 awareness of the influence of gender bias in the  
20 grant-making process and the development of  
21 the academic record necessary to qualify as a  
22 grant recipient, including recruitment, hiring,  
23 tenure review, promotion, and other forms of  
24 formal recognition of individual achievement.

1 (C) Research presentations and other  
2 workshop programs, as appropriate, shall in-  
3 clude a discussion of the unique challenges  
4 faced by women who are members of histori-  
5 cally underrepresented groups and rec-  
6 ommendations for increasing the numbers of  
7 women represented in these groups.

8 (5) REPORT.—Not later than 3 years after the  
9 date of enactment of this Act, the Director of the  
10 Office of Science and Technology Policy shall trans-  
11 mit to the Secretary of Commerce who shall trans-  
12 mit to the Committee on Science and Technology of  
13 the House of Representatives and the Committee on  
14 Commerce, Science, and Transportation of the Sen-  
15 ate a report determining—

16 (A) the effectiveness of the program car-  
17 ried out under this subsection to reduce gender  
18 bias towards women engaged in STEM research  
19 funded by the Federal Government;

20 (B) any recommendations for improving  
21 the workshop evaluation process;

22 (C) the rates of participation by invitees in  
23 the workshops authorized under this subsection;  
24 and

1 (D) any relevant institutional policy or  
2 practice changes implemented by workshop par-  
3 ticipants.

4 (6) MINIMIZING COSTS.—To the extent prac-  
5 ticable, workshops shall be held in conjunction with  
6 national or regional disciplinary meetings to mini-  
7 mize costs associated with participant travel.

8 (c) EXTENDED RESEARCH GRANT SUPPORT AND IN-  
9 TERIM TECHNICAL SUPPORT FOR CAREGIVERS.—

10 (1) POLICIES FOR CAREGIVERS.—Not later  
11 than 6 months after the date of enactment of this  
12 Act, the Secretary of Commerce, in consultation with  
13 the Director of the Office of Science and Technology  
14 Policy, shall develop a uniform policy to extend the  
15 period of grant support for federally funded re-  
16 searchers who have caregiving responsibilities.

17 (2) REPORT.—Upon developing the policy re-  
18 quired under paragraph (1), the Secretary of Com-  
19 merce, in consultation with the Director of the Of-  
20 fice of Science and Technology Policy, shall transmit  
21 a copy of the policy to the Committee on Science  
22 and Technology of the House of Representatives and  
23 to the Committee on Commerce, Science, and Trans-  
24 portation of the Senate.

1 (d) COLLECTION AND REPORTING OF DATA ON FED-  
2 ERAL RESEARCH GRANTS.—

3 (1) IN GENERAL.—Each Federal STEM agency  
4 shall collect standardized annual composite informa-  
5 tion on demographics for all applications and pro-  
6 posals for STEM research and development grants  
7 to institutions of higher education supported by that  
8 agency, including—

- 9 (A) rank, gender, race, and age;
- 10 (B) field;
- 11 (C) award type and budget request;
- 12 (D) review score; and
- 13 (E) funding outcome.

14 (2) REPORTING OF DATA.—

15 (A) IN GENERAL.—The Secretary of Com-  
16 merce, in consultation with the Director of the  
17 Office of Science and Technology Policy, shall  
18 establish a policy to ensure uniformity and  
19 standardization of collection, transmittal, and  
20 reporting of the data required under paragraph  
21 (1).

22 (B) SUBMISSION.—Not later than 2 years  
23 after the date of enactment of this Act, and an-  
24 nually thereafter, each Federal STEM agency  
25 shall submit data collected under paragraph (1)

to the Director of the National Science Foundation.

(C) RESPONSIBILITIES OF THE NATIONAL SCIENCE FOUNDATION.—The Director of the National Science Foundation shall—

(i) be responsible for storing and publishing all of the grant data submitted under subparagraph (B), in conjunction with the biennial report required under section 37 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885d); and

(ii) share such data with the Secretary of Commerce.

(e) COLLECTION OF DATA ON DEMOGRAPHICS OF FACULTY.—

(1) COLLECTION OF DATA.—The Director of the National Science Foundation (referred to in this subsection as the “Director”) shall report, in conjunction with the biennial report required under section 37 of the Science and Engineering Equal Opportunities Act (42 U.S.C. 1885d), statistical summary data on the demographics of STEM discipline faculty at institutions of higher education in the



1 United States. At a minimum, the Director shall  
2 consider—

3 (A) the number and percentage of faculty  
4 by gender, race, and age;

5 (B) the number and percentage of faculty  
6 at each rank, by gender, race, and age;

7 (C) the number and percentage of faculty  
8 who are in nontenure-track positions, including  
9 teaching and research, by gender, race, and  
10 age;

11 (D) the number of faculty who are re-  
12 viewed for promotion, including tenure, and the  
13 percentage of that number who are promoted,  
14 by gender, race, and age;

15 (E) faculty years in rank by gender, race,  
16 and age;

17 (F) faculty attrition by gender, race, and  
18 age;

19 (G) the number and percentage of faculty  
20 hired by rank, gender, race, and age; and

21 (H) the number and percentage of faculty  
22 in leadership positions, including endowed or  
23 named chairs, serving on promotion and tenure  
24 committees, by gender, race, and age.

1           (2) RECOMMENDATIONS.—The Director shall  
2       solicit input and recommendations from relevant  
3       stakeholders, including representatives from institu-  
4       tions of higher education and nonprofit organiza-  
5       tions, on the collection of data required under para-  
6       graph (1), including the development of standard  
7       definitions on the terms and categories to be used in  
8       the collection of such data.

9           (3) REPORT TO CONGRESS.—Not later than 2  
10      years after the date of enactment of this Act, the  
11      Director shall submit a report to Congress on how  
12      the National Science Foundation will gather the de-  
13      mographic data on STEM faculty, including—

14                (A) a description of the data to be reported  
15                and the sources of those data;

16                (B) justification for the exclusion of any  
17                data described in subparagraph (A); and

18                (C) a list of the definitions for the terms  
19                and categories, such as “faculty” and “leader-  
20                ship positions”, to be applied in the reporting  
21                of all data described in subparagraph (A).

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