

115TH CONGRESS 1ST SESSION H.R. 2709

To increase the participation of historically underrepresented demographic groups in science, technology, engineering, and mathematics education and industry.

IN THE HOUSE OF REPRESENTATIVES

May 25, 2017

Mrs. Carolyn B. Maloney of New York (for herself, Mr. Meeks, and Ms. Jackson Lee) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To increase the participation of historically underrepresented demographic groups in science, technology, engineering, and mathematics education and industry.

- 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 "Women and Minorities
- 5 in STEM Booster Act of 2017".
- 6 SEC. 2. GRANT PROGRAM TO INCREASE THE PARTICIPA-
- 7 TION OF WOMEN AND UNDERREPRESENTED
- 8 MINORITIES IN STEM FIELDS.
- 9 (a) FINDINGS.—Congress finds the following:

- 1 (1) According to the National Academy of 2 Sciences, STEM education at the undergraduate 3 level is vital to developing a workforce that will allow 4 the United States to remain the leader in the 21st 5 century global economy.
 - (2) According to the 2013 American Community Survey Report on disparities in STEM employment, women comprise about half of the United States workforce but only make up 26 percent of STEM workers.
 - (3) According to the National Center of Education Statistics, women were more likely than men to switch out of STEM majors—32 percent vs. 26 percent.
 - (4) According to the 2010 Association of American University Women report "Why So Few?" approximately 52 percent of women in STEM fields quit their jobs about 10 years into their careers. It is important for gender equality to increase the retention of women in STEM fields, as women in STEM careers earn 33 percent more than those in non-STEM jobs, and have a smaller wage gap relative to men.
 - (5) According to recent Census Bureau projections, minorities will account for 57 percent of the

- United States population by 2060. According to the
 National Action Council for Minorities in Engineering, Inc., as the United States works to remain competitive in the world of technological innovation, the
 United States should address the need to increase
 the number of individuals from underrepresented minority segments of the population who work in engineering.
 - (6) The Higher Education Research Institute at the University of California, Los Angeles, found that, while freshmen from underrepresented minority groups express an interest in pursuing a STEM undergraduate degree at the same rate as all other freshmen, only 22.1 percent of Latino students, 18.4 percent of African-American students, and 18.8 percent of Native American students studying in STEM fields complete their degree within 5 years, compared to an approximate 33 percent and 42 percent 5-year completion rate for White and Asian students, respectively.
 - (7) According to the 2015 Asian Americans Advancing Justice report "Making America Work", data on Asian Americans and Pacific Islanders (AAPIs) on average hide the fact that some subgroups are underrepresented in STEM fields. For

- example: only 9 percent of Cambodian, 8 percent of Laotian, 8 percent of Hmong, and 7 percent of Na-
- 3 tive Hawaiian and Pacific Islander workers hold
- 4 STEM jobs, compared to 12 percent of the total
- 5 American population holding STEM jobs.

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

(8) According to 3-year estimates from the 2013 American Community Survey, Southeast Asian Americans and Pacific Islanders have higher poverty rates and lower educational attainment rates compared to the overall population. Fifteen percent of the overall population lives below the Federal poverty level, while 21 percent of Pacific Islanders, 21 percent of Cambodian, 26 percent of Hmong, 17 percent of Laotian, and 16 percent of Vietnamese community members live in poverty. Compared to 29 percent of the overall population with a bachelor's degree or higher, members of Pacific Islanders, Cambodian, Hmong, Lao, and Vietnamese communities only have a bachelor's degree or higher at rates of 15 percent, 16 percent, 16 percent, 13 percent, and 27 percent, respectively. Levels of poverty and postsecondary educational attainment correlate with these groups' underrepresentation in STEM employment. Other Asian American and Pacific Islander subgroups with similar poverty and edu-

- cational attainment rates are similarly underrepresented in STEM employment.
- 3 (9) A 2014 National Center for Education Sta-
- 4 tistics study found that women and underrep-
- 5 resented minorities leave the STEM fields at higher
- 6 rates than their counterparts, leading to a need to
- develop resources to retain these groups in the
- 8 STEM fields.
- 9 (b) Program Authorized.—The Director of the
- 10 National Science Foundation shall award grants to eligible
- 11 entities, on a competitive basis, to enable such eligible en-
- 12 tities to carry out the activities described in subsection (d),
- 13 in order to increase the participation of women and under-
- 14 represented minorities in the fields of science, technology,
- 15 engineering, and mathematics.
- 16 (c) APPLICATION.—Each eligible entity that desires
- 17 to receive a grant under this section shall submit an appli-
- 18 cation to the National Science Foundation at such time,
- 19 in such manner, and containing such information as the
- 20 Director of the National Science Foundation may reason-
- 21 ably require.
- 22 (d) AUTHORIZED ACTIVITIES.—An eligible entity
- 23 that receives a grant under this section shall use such
- 24 grant funds to carry out one or more of the following ac-
- 25 tivities designed to increase the participation of women or

minorities underrepresented in science and engineering, or 2 both: 3 (1) Online workshops. (2) Mentoring programs that partner science, 5 technology, engineering, or mathematics profes-6 sionals with students. 7 (3) Internships for undergraduate and graduate 8 students in the fields of science, technology, engi-9 neering, and mathematics. 10 (4) Conducting outreach programs that provide 11 elementary school and secondary school students 12 with opportunities to increase their exposure to the 13 fields of science, technology, engineering, or mathe-14 matics. 15 (5) Programs to increase the recruitment and 16 retention of underrepresented faculty. 17 (6) Such additional programs as the Director of 18 the National Science Foundation may determine. 19 (e) Definitions.—In this Act— (1) the term "minority" means American In-20 21 dian, Alaskan Native, Black (not of Hispanic ori-22 gin), Hispanic (including persons of Mexican, Puerto 23 Rican, Cuban, and Central or South American ori-24 gin), Asian (including underrepresented subgroups),

Native Hawaiian, Pacific Islander origin subgroup,

25

- or other ethnic group underrepresented in science and engineering; and
- (2) the term "underrepresented in science and 3 engineering" means a minority group whose number 4 5 of scientists and engineers per 10,000 population of that group is substantially below the comparable fig-6 7 ure for scientists and engineers who are White and not of Hispanic origin, as determined by the Sec-8 retary of Education under section 637.4(b) of title 9 10 34, Code of Federal Regulations.
- 11 (f) AUTHORIZATION OF APPROPRIATIONS.—There 12 are authorized to be appropriated to carry out this section 13 \$15,000,000 for each of fiscal years 2018, 2019, 2020, 14 2021, and 2022.

 \bigcirc