116TH CONGRESS
1ST SESSION

S. 2578

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

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 26, 2019

Ms. HIRONO (for herself, Mr. BROWN, Ms. DUCKWORTH, Mr. DURBIN, Mrs. GILLIBRAND, Ms. KLOBUCHAR, and Ms. ROSEN) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

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A BILL

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

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Women and Minorities in STEM Booster Act of 2019''.

SEC. 2. GRANT PROGRAM TO INCREASE THE PARTICIPATION OF WOMEN AND UNDERREPRESENTED MINORITIES IN STEM FIELDS.

(a) FINDINGS.—Congress finds the following:

(1) According to the National Academy of Sciences, STEM education at the undergraduate level is vital to developing a workforce that will allow the United States to remain the leader in the 21st century global economy.

(2) According to a recent American Community Survey Report on disparities in STEM employment conducted in 2013, women comprise about half of the United States workforce but only make up 26 percent of STEM workers.

(3) According to the National Science Foundation, women only represent 28 percent of all science and engineering workers, comprising 29 percent of physical scientists, 25 percent of computer and mathematical scientists, and 13 percent of engineers.

(4) According to the National Center of Education Statistics (NCES), women were more likely than men to switch out of STEM majors—32 percent compared to 26 percent.

(5) Additionally, NCES found that while a higher percentage of bachelor's degrees were awarded to females than to males in 2016, (58 percent

compared to 42 percent), within STEM fields a lower percentage of bachelor's degrees were awarded to females than to males (36 percent compared to 64 percent).

(6) 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.

(7) According to recent Census Bureau projections, minorities will account for 57 percent of the United States population by 2060.

(8) 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.

(9) 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 percent of Latino students, 18 percent of African-American students, and 19 percent of Native American students studying in STEM fields complete their degree within 5 years, compared to around 33 percent and 42 percent 5-year completion rates for White and Asian students, respectively.

(10) 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, with only 9 percent of Cambodian, 8 percent of Laotian, 8 percent of Hmong, and 7 percent of Native Hawaiian and Pacific Islander workers hold STEM jobs, compared to 12 percent of the total American population holding STEM jobs.

(11) 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.

(12) Additionally, while 15 percent of the overall population lives below the Federal poverty level, several minority populations have significantly higher poverty rates including 20 percent of Native Hawaiian and Pacific Islanders, 21 percent of Cambodian, 28 percent of Hmong, 17 percent of Laotian, and 33 percent of Bhutanese Americans. Compared to 30 percent of the overall population with a bachelor's degree or higher, less than 20 percent of Pacific Islanders, Cambodians, Hmongs, Laotians, and Bhutanese had a bachelor's degree or higher at rates of 15 percent, 18 percent, 17 percent, 16 percent, and 9 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 educational attainment rates are similarly underrepresented in STEM employment.

(13) A 2014 National Center for Education Statistics study found that women and underrepresented minorities leave the STEM fields at higher rates than their counterparts, leading to a need to develop resources to retain these groups in the STEM fields.

(b) PROGRAM AUTHORIZED.—The Director of the National Science Foundation shall award grants to eligible entities, on a competitive basis, to enable such eligible entities to carry out the activities described in subsection (d), in order to increase the participation of women and underrepresented minorities in the fields of science, technology, engineering, and mathematics.

(c) APPLICATION.—Each eligible entity that desires to receive a grant under this section shall submit an application to the National Science Foundation at such time, in such manner, and containing such information as the Director of the National Science Foundation may reasonably require.

(d) AUTHORIZED ACTIVITIES.—An eligible entity that receives a grant under this section shall use such grant funds to carry out one or more of the following activities designed to increase the participation of women or minorities underrepresented in science and engineering, or both:

(1) Online workshops.

(2) Mentoring programs that partner science, technology, engineering, or mathematics professionals with students.

(3) Internships for undergraduate and graduate students in the fields of science, technology, engineering, and mathematics.

(4) Conducting outreach programs that provide elementary school and secondary school students with opportunities to increase their exposure to the fields of science, technology, engineering, or mathematics.

(5) Programs to increase the recruitment and retention of underrepresented faculty.

(6) Such additional programs as the Director of the National Science Foundation may determine.

(e) DEFINITIONS.—In this Act—

(1) the term ''minority'' means American Indian, Alaskan Native, Black (not of Hispanic origin), Hispanic (including persons of Mexican, Puerto Rican, Cuban, and Central or South American origin), Asian (including underrepresented subgroups), Native Hawaiian, Pacific Islander origin subgroup, or other ethnic group underrepresented in science and engineering; and

(2) the term ''underrepresented in science and engineering'' means a minority group whose number of scientists and engineers per 10,000 population of that group is substantially below the comparable fig-

ure for scientists and engineers who are White and not of Hispanic origin, as determined by the Secretary of Education under section 637.4(b) of title 34, Code of Federal Regulations.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $15,000,000 for each of fiscal years 2020, 2021, 2022, 2023, and 2024.

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