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Grow and Diversify Our STEM Workforce

The United States has long recognized science as critical to our national defense and economic security. Our STEM workforce is a global leader in innovation and discovery.

To maintain our leadership in a competitive global economy, we must increase the size and bolster the support of our STEM workforce.

As we look towards the next generation of STEM scholars and professionals, we have an opportunity and the responsibility to provide greater support for our talented domestic students and professionals.¹

In its *Vision 2030* report, the National Science Board (NSB) estimates that the number of women must nearly double; Black and African Americans must more than double; and Hispanic and Latinos must triple in number in order to address the existing talent gap in STEM fields.²

In line with this, the percentages of U.S. women, African Americans, American Indians and Alaska Natives, and Hispanics and Latinos who receive mathematical sciences PhD degrees have failed to reflect national demographics.

Opportunities in the mathematical sciences are plentiful and foundational to all STEM fields. Making the mathematical sciences more inclusive will increase diversity across the STEM workforce at large.

The American Mathematical Society encourages legislation to transform the mathematical and statistical sciences workforce through greater inclusion of women and underrepresented minorities in order to boost our nation's ability to maintain global preeminence in the mathematical sciences.

Specifically, we urge Congress to pass legislation that will

- 1. Engage all students in high-quality K-12 education** by co-sponsoring the bipartisan and bicameral Mathematical and Statistical Modeling Education Act (H.R.3588, S.1839);
- 2. Support students from historically underserved populations** as they move through undergraduate- and graduate-level STEM programs, thereby increasing the number of students from minority groups getting STEM degrees. This includes doubling the size of Pell Grants and robustly funding the Graduate Assistance in Areas of National Needs (GAANN) program at the U.S. Department of Education;

"Talent is the treasure on which America's [science and engineering] enterprise and the nation's prosperity, health, and security depend."

— *Vision 2030, National Science Board, 2020*

3. **Enhance the research capacity at HBCUs and other Minority Serving Institutions (MSIs)** by co-sponsoring the HBCU RISE Act (H.R.8140, S.4018);
4. **Provide “on ramps” for mid-career workers, including workers from underrepresented populations, to reenter the STEM workforce** by co-sponsoring the STEM RESTART Act (H.R.2794, S.1297);
5. **Provide strong and sustained appropriations for the National Science Foundation in order to support diversity, equity, and inclusion efforts across the agency.**

Almost 30% of Black PhD holders in STEM fields earned their undergraduate degree at an HBCU, even though these institutions number just 3% of all colleges and universities in the United States.

Source: Springboard to science: the institutions that shaped Black researchers' careers, *Nature*, 13 September 2021

1 By 2026, science and engineering jobs are predicted to grow by 13%, compared with 7% growth in the overall US workforce. “Science and Engineering Labor Force,” *Science & Engineering Indicators 2020*. nces.nsf.gov/pubs/nsb20198

2 nsf.gov/nsb/publications/vision2030.pdf

About the American Mathematical Society

Founded in 1888, the American Mathematical Society (AMS) is dedicated to advancing the interests of mathematical research and scholarship and connecting the diverse global mathematics community. The AMS has 30,000 individual members worldwide and supports mathematical scientists at every career stage.

Office of Government Relations

Advocating at the federal level for the mathematical sciences

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