

# THE CHIPS AND SCIENCE ACT

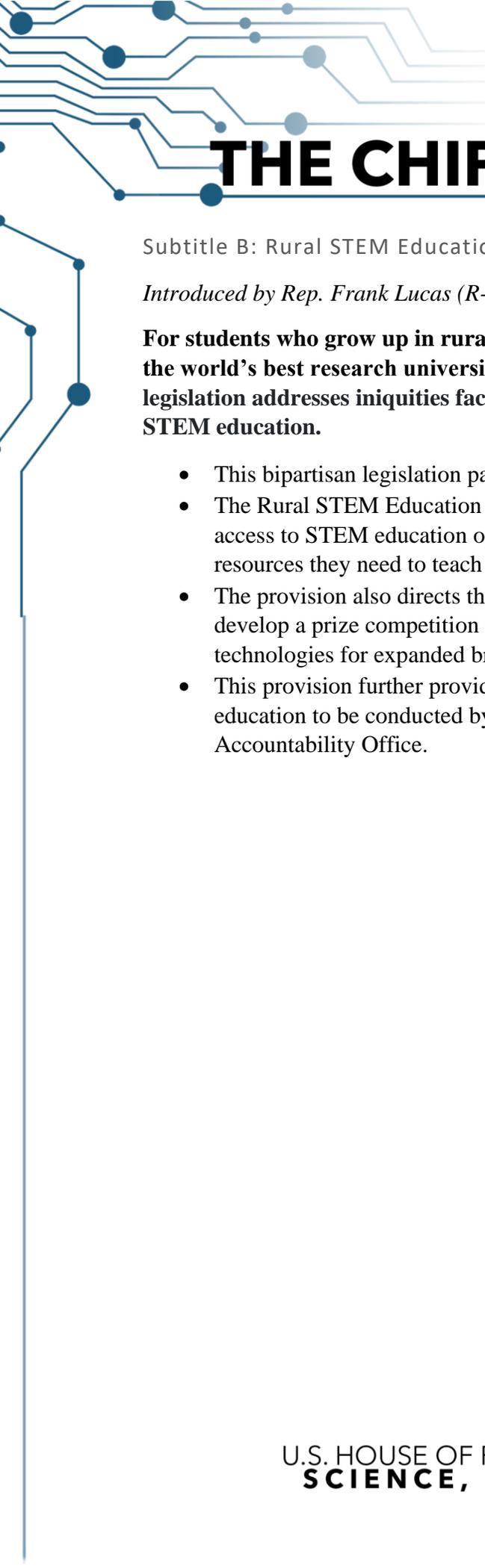
## Title V: Broadening Participation in Science

Subtitle A: STEM Opportunities

*Introduced by Chairwoman Eddie Bernice Johnson (D-TX)*

**This legislation supports policy reforms, research, and data collection to identify and lower barriers facing women, minorities, and other groups underrepresented in science, technology, engineering, and mathematics (STEM) studies and research careers.**

- This bipartisan legislation passed the House in May 2021
- The STEM Opportunities Act would empower Federal agencies and universities to identify and lower barriers to the recruitment, retention, and advancement of women, minorities, and other groups underrepresented in STEM studies and careers.
- It requires agencies to collect comprehensive demographic data on the merit review process and on STEM faculty at U.S. universities.
- The provision supports research on participation and career trajectories and the implementation of best practices for increasing the recruitment and retention of minority students and faculty.
- This provision also pushes Federal agencies to do more to ensure all researchers have a fair shot at receiving funding for their work.
- According to the National Science Foundation's recently released report entitled, *Women, Minorities, and Persons with Disabilities in Science and Engineering*, women hold only 25 percent of full professor positions in STEM.
- The numbers are even more striking for faculty in racial and ethnic minority groups. Black STEM faculty represent only 2.5 percent of full professors across all science disciplines, while only 4.6 percent of full professors are Hispanic.
- In some fields, the disparity is particularly stark. Women make up only 19 percent of full professors in computer science and 11 percent in engineering.
- The number of Black and Hispanic professors in computer science are so small, they cannot be reported without compromising their privacy. In engineering, 2.5 percent of professors are Black and 4.3 percent are Hispanic.



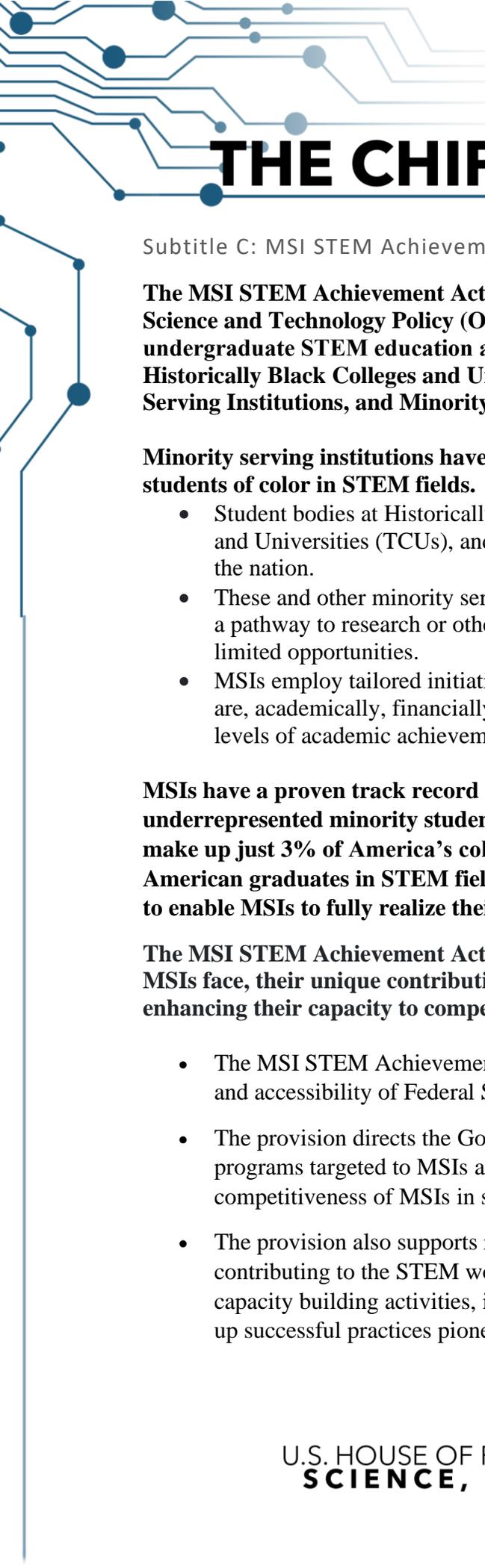
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Subtitle B: Rural STEM Education Research

*Introduced by Rep. Frank Lucas (R-OK)*

**For students who grow up in rural areas of this country, even in states that boast some of the world's best research universities, a STEM career may seem unattainable. This legislation addresses inequities faced by rural students that make it harder to access quality STEM education.**

- This bipartisan legislation passed the House in May 2021
- The Rural STEM Education Act provides for research and development to increase access to STEM education opportunities in rural schools and to provide teachers with the resources they need to teach more effectively.
- The provision also directs the National Institute of Standards and Technology (NIST) to develop a prize competition to advance research and development of creative technologies for expanded broadband access.
- This provision further provides for assessments of Federal investments in rural STEM education to be conducted by the National Academies and the Government Accountability Office.



# THE CHIPS AND SCIENCE ACT

## Subtitle C: MSI STEM Achievement

**The MSI STEM Achievement Act will direct Federal science agencies and the Office of Science and Technology Policy (OSTP) to undertake activities to improve the quality of undergraduate STEM education and enhance the research capacity within our Nation's Historically Black Colleges and Universities, Tribal Colleges and Universities, Hispanic Serving Institutions, and Minority Serving Institutions.**

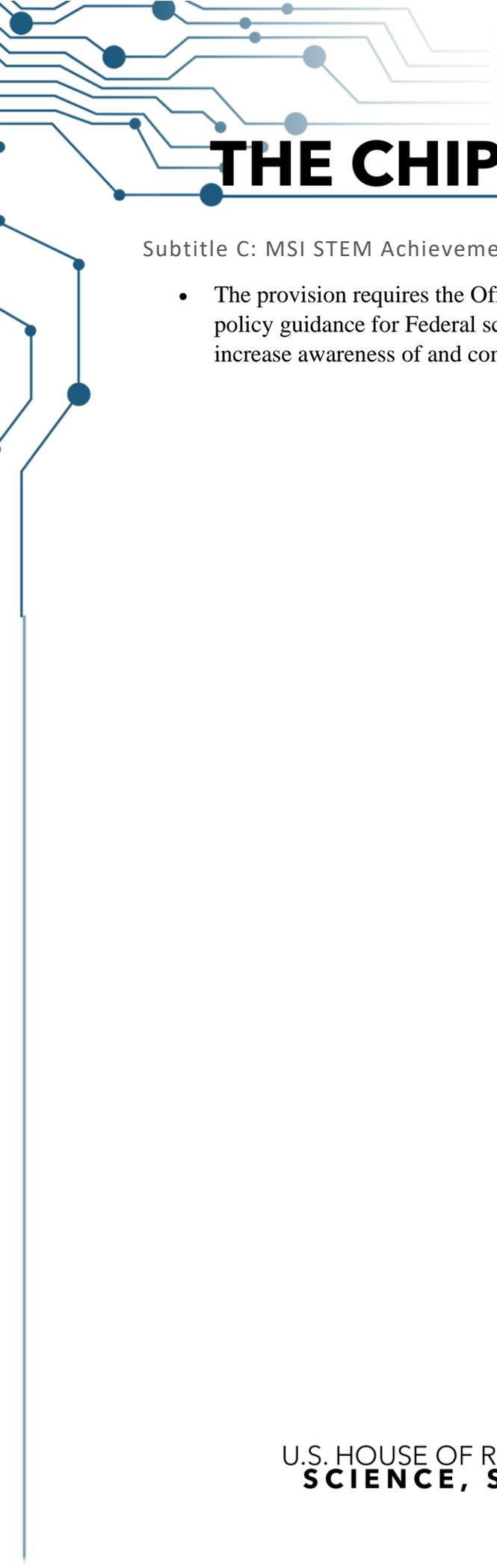
**Minority serving institutions have long played a critical role in training and educating students of color in STEM fields.**

- Student bodies at Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Hispanic Serving Institutions (HSIs) are the most diverse in the nation.
- These and other minority serving institutions (MSIs) offer access to STEM education and a pathway to research or other STEM careers to students who might otherwise have limited opportunities.
- MSIs employ tailored initiatives, policies, and practices that meet students where they are, academically, financially, and socially, while empowering students to reach higher levels of academic achievement.

**MSIs have a proven track record of recruiting, retaining, and graduating underrepresented minority students with STEM degrees. Today, the nation's 106 HBCUs make up just 3% of America's colleges and universities, yet they produce 25% of African American graduates in STEM fields. However, more investment and outreach are needed to enable MSIs to fully realize their potential to contribute to the STEM workforce.**

**The MSI STEM Achievement Act advances research to better understand the challenges MSIs face, their unique contributions to the STEM workforce, and effective approaches to enhancing their capacity to compete for Federal STEM education and research funds.**

- The MSI STEM Achievement Act provides for increased transparency, accountability, and accessibility of Federal STEM education and research funding for MSIs.
- The provision directs the Government Accountability Office to compile an inventory of programs targeted to MSIs and make recommendations for how agencies can increase competitiveness of MSIs in such programs.
- The provision also supports research on the challenges and successes MSIs have had in contributing to the STEM workforce, and provides funding for institutional research capacity building activities, including support for MSI Centers of Innovation to help scale up successful practices pioneered at MSIs

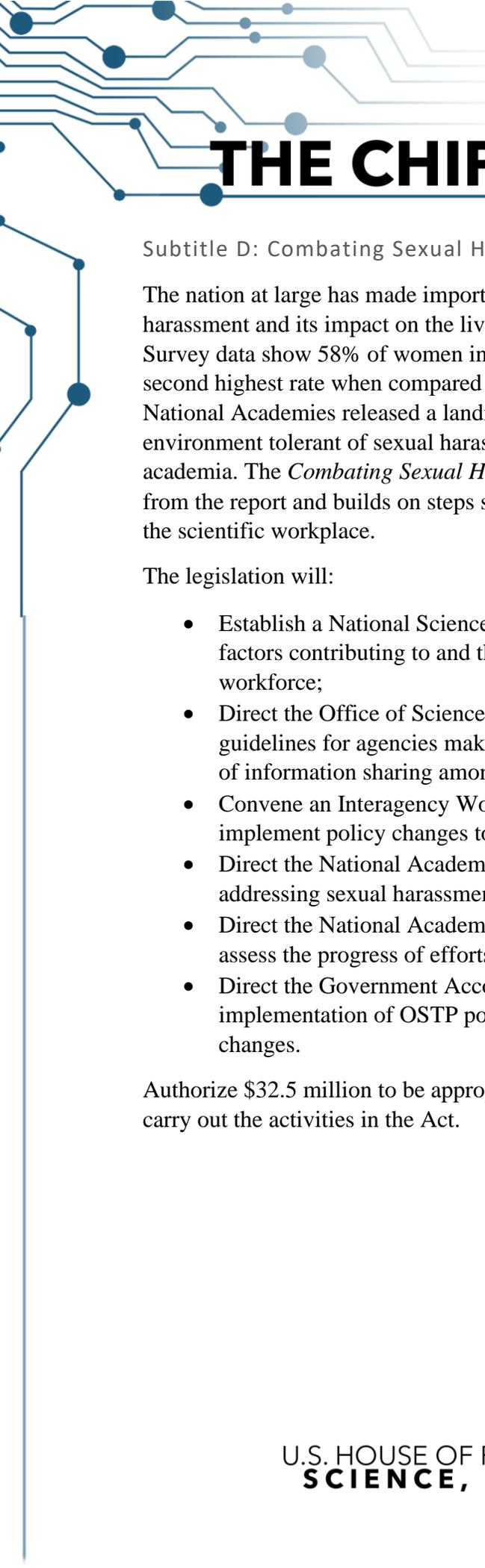


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## Subtitle C: MSI STEM Achievement (continued)

- The provision requires the Office of Science and Technology Policy (OSTP) to issue policy guidance for Federal science agencies to improve engagement with MSIs to increase awareness of and competitiveness in agency funding opportunities.



# THE CHIPS AND SCIENCE ACT

## Subtitle D: Combating Sexual Harassment in Science

The nation at large has made important strides in dealing with the pervasiveness of sexual harassment and its impact on the lives and careers of women, but the work is far from over. Survey data show 58% of women in the academic workplace experience sexual harassment, the second highest rate when compared to the military, private sector, and government. In 2018, the National Academies released a landmark report that examined the factors that foster an environment tolerant of sexual harassment and the impact this has on the careers of women in academia. The *Combating Sexual Harassment in Science Act* addresses key recommendations from the report and builds on steps science agencies have taken to combat sexual harassment in the scientific workplace.

The legislation will:

- Establish a National Science Foundation program to award grants for research into the factors contributing to and the consequences of sexual harassment in the scientific workforce;
- Direct the Office of Science and Technology Policy to issue sexual harassment policy guidelines for agencies making extramural research awards, emphasizing the importance of information sharing among Federal research agencies;
- Convene an Interagency Working Group to coordinate Federal research agency efforts to implement policy changes to address sexual harassment.
- Direct the National Academies to issue an updated responsible conduct in research guide addressing sexual harassment;
- Direct the National Academies to conduct a follow-up study to their 2018 report to assess the progress of efforts to combat sexual harassment.
- Direct the Government Accountability Office to assess Federal research agency implementation of OSTP policy guidance and make recommendations on potential changes.

Authorize \$32.5 million to be appropriated to the Director of the National Science Foundation to carry out the activities in the Act.