

Charwoman Eddie Bernice Johnson (D-TX)

Full Committee Hearing: Achieving the Promise of a Diverse STEM Workforce May 9, 2019

Good morning and welcome to today's hearing.

I am eager to hear from today's distinguished panel of witnesses, each of whom is a leader in overcoming obstacles to bring more people into STEM studies and careers. Thank you for the work you do and for being with us today.

There is no denying the fact that our success as a nation is closely tied to our capacity to build and sustain a highly-skilled workforce, one that is equipped to take on the pressing challenges of the 21st century and to maintain our leadership in the global economy.

Right now, we are facing grave challenges on many fronts. We are battling an opioid crisis and seeking cures for diseases like cancer. We are losing lives every day to gun violence and suicide. We are rooting out terrorists and fighting back against attempts to hack our democracy. We are racing to find sustainable sources of energy and working to mitigate the destructive effects of climate change.

Meanwhile, our economic competitiveness is threatened as competitors like China invest heavily in science and make advances in critical technologies like quantum computing and artificial intelligence.

To solve these problems, we need a cadre of trained scientists and engineers pushing the boundaries of what we know and what we can achieve. We need computer scientists and economists. Biologists and mathematicians. Engineers, chemists and social scientists. So far, we have gotten by with a STEM workforce that does not come close to representing the diversity of our nation. However, if we continue to leave behind so much of our nation's brainpower, we cannot succeed.

The Census Bureau predicts that by 2045, over half of all Americans will be non-white. Over half of all children under 18 will be non-white by 2020. As the rest of the country becomes more diverse, the STEM workforce has been slow to respond. In addition, I have watched with dismay for decades as women have also made too few gains in the STEM workforce. Discrimination,

harassment, bias, and cultural and institutional barriers are preventing many of our brightest minds from realizing their greatest potential.

Today's discussion is long overdue. The last time the Science Committee held a hearing focused on the issue of broadening participation in STEM was in March of 2010. Dr. Malcom can confirm that because she was here, testifying about the challenges facing women, minorities, and persons with disabilities at all levels of education and career development.

I'm sorry to say that in the years since this Committee last addressed this issue, progress has been very slow. Some fields have seen no gains at all. In 2010, women earned 20 percent of physics bachelor's degrees, today they earn 19 percent. The share of engineering degrees earned by black men is the same today as it was in 2010, just 3 percent. Hispanic women are still earning less than 2 percent of bachelor's degrees in computer science.

We have a lot of work to do. As Chairwoman of the Science Committee I am determined to do what I can to move the needle. I was very glad to be joined by my good friend Ranking Member Lucas in introducing H.R. 2528, the STEM Opportunities Act of 2019, earlier this week. This bill supports policy reforms and research and data collection to understand and lower barriers faced by women and minority researchers in academia and federal laboratories.

The way I see it, we have two possible futures: one in which we embrace the changing face of our nation, and one in which our leadership continues to erode. The choice is an easy one, but the work required to get us there is not.

I look forward to hearing the recommendations and insight from this wise panel on how we get there.