

29 January 2025

Dear Representative Barrett,

I'm Danny Caballero, [a professor at Michigan State University \(MSU\)](#), resident of East Lansing, a constituent in your district (MI House District 07), and a first-generation college graduate. I have been a physics and computational science professor at MSU for the last twelve years. **I'm writing to urge you to oppose the harmful impacts of recent executive orders that threaten Michigan's STEM education and workforce development.**

My work is in education and focuses on developing curriculum and pedagogies that improve our STEM programs and ensure MSU's STEM graduates are ready to compete for the future of science and technology. I have won department, college, and university-wide teaching awards including the Presidential Teaching Award in 2018. I have been awarded nearly \$12M in federal and private funding to build these programs, study them, and provide lessons for colleges and programs across the US.

For our work, [the Physics and Astronomy Department](#) was recognized for [Improving Undergraduate Physics Education by the American Physical Society \(APS\) in 2022](#), my team was awarded the [APS's Educational Prize in 2023](#), and I was personally [elected fellow of the APS](#) that year for my educational contributions to the field. At MSU, we aim to graduate the best prepared and most knowledgeable scientists and engineers that we can. Our state deserves to have its young people prepared to compete for the future of work.

President Trump's recent executive orders restrict DEI programs, federal funding, and recruitment efforts that have been key to growing STEM programs in Michigan. These changes create confusion and may jeopardize ongoing initiatives that support our students. The recent freezes to federal grants and loans has only exacerbated the situation; fortunately it has been put on hold by the judiciary. **My request is that you speak with your colleagues in the Michigan delegation and with your colleagues in your party about these impacts and the importance of supporting STEM education and research in Michigan.** Consider the impact of these orders on the programs that I have developed and the students that I have worked with over the last decade; our efforts have improved education for tens of thousands of STEM students at MSU. At best, these orders are confusing and at worst, they are deeply troubling.

As you know, STEM is a critical driver of innovation, a key lever in economic growth and expansion, and an essential effort to compete on the global stage. My work in STEM education with a focus on computing, data science, and machine learning education research is an important aspect of MSU's mission to compete. And my work is critical to the future of Michigan's economy.

These executive orders are both far-reaching and difficult to interpret. I am still unsure what impact these have on my work at MSU. The programs that my team has developed over the last decade to recruit talented students in STEM, to provide those students with the tools and skills necessary to compete in 21st century STEM fields, and to ensure that we continue to remove barriers and provide level playing field for all students seem that they will be deeply impacted, and potentially unable to continue in the future.

My present work focuses on expanding a program of professional development for college and university teachers who want to incorporate computing, machine learning, and data science into their curriculum. The project was built from a successful five-year NSF funded project that

catalyzed the effort. The proposed pause and the potential cancellation of this program would impact the professional development and growth of nearly 1600 university educators across the country as well as their students numbering in the hundreds of thousands.

The impact of these executive orders will be visited on the working-class students, the first-generation students, the students of color, and the students from rural communities that we have worked so hard to recruit and retain in our programs. These students are the future of Michigan's economy and the future of our state. **I urge you to consider the impact of these orders on these students and their families.**

I want to thank you for your time and attention. I do hope that you will consider the impact of these orders on your district, especially on MSU and the students and families that we serve. I would appreciate the opportunity to meet with you to discuss how these policies affect MSU and Michigan's STEM workforce.

Please let me know a time if there is an opportunity to meet.

A handwritten signature in black ink, appearing to read 'M. Caballero', with a long horizontal stroke extending to the right.

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