This presentation brings together more than ten years of research on high-achieving graduate students, faculty, and staff of Color within and beyond STEM fields. I provide race-conscious answers to the following questions: What do we need to improve the experiences of Black, Indigenous, students of Color? How do we retain marginalized and minoritized STEM faculty? How do some minoritized STEMers manage to survive brutal academic climates, and what does it cost? Why do schools continue to proclaim the necessity for recruiting and maintaining students and faculty in STEM disciplines and departments when the climate of these institutions regularly drives them away?

Given the mission of education, discovery, and service, it is imperative to have well-informed strategies and policies dedicated to identifying, recruiting, and retaining underrepresented people of Color in STEM. In this talk, I will argue that race-conscious mentoring and programming are critical components of such a strategy. The objective of this presentation is to cultivate cultural competence in STEM faculty; and to demonstrate why it is necessary to include in our curricula a history of race and racism in STEM education in the US and abroad.

As a Professor of diversity and STEM education at Vanderbilt University’s Peabody College, I investigate what it means to be racially marginalized while minoritized in the context of learning and achieving in STEM higher education and in the STEM professions. I study in particular the racialized experiences and racial stereotypes that adversely affect the education and career trajectories of underrepresented groups of color. This involves exploring the social, material, and health costs of academic achievement and problematizing traditional forms of success in higher education, with an unapologetic focus on Black folk in these places and spaces. My National Science Foundation (NSF) CAREER grant investigates how marginalization undercuts success in STEM through psychological stress, interrupted STEM career trajectories, impostor phenomenon, and other debilitating race-related trauma for Black, Indigenous, and Latinx doctoral students.