

Diversity Statement

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As instructors, mentors and ambassadors of mathematics, it is important that we reflect on our actions and the influence they have on the current and next generation of mathematicians. The body of mathematics is becoming increasingly more diverse as math becomes more accessible and globalized, due in no small part to the combined efforts of many mathematicians and public advocates. It is particularly important to be mindful of treating students from diverse backgrounds with equity, and to give them the encouragement and opportunity necessary to be a part of our shared mathematical community.

I was born in South Florida and come from a Hispanic family (Dominican and Puerto Rican), and the community I grew up in was particularly diverse. I attended a high school where 75% of the students were Black or Hispanic. At my undergraduate institution Florida Atlantic University (FAU), almost 50% of the student body was Black or Hispanic. However, my higher-level math courses did not reflect this statistic. When discussing math with my childhood friends, they would often express interest in the problems I was working on, but in the same breath also tell me that math wasn't for them. I believe many people are math-averse because they are afraid of being wrong, and this is in part due to unconscious biases based on race, gender and socioeconomic factors, among others. To this end, I try my best to avoid these pitfalls in my mentoring and teaching endeavors, and instead try to foster a sense of belonging for each of my students. I try to make a conscious effort to be mindful of the unique mathematical perspectives that each student has.

I have been fortunate enough to receive the NSF Graduate Research Fellowship as a student. After receiving this fellowship, I spent some time at FAU encouraging other students to apply for it, and offering to review drafts of their applications. While in my PhD program, I continued to give FAU students advice on how to strengthen their applications, and which graduate programs to apply to. I believe there is a lack of outreach being done on behalf of these scholarships and awards in "less prestigious" or more diverse institutions (such as FAU), as well as an unwarranted lack of confidence on these students' behalves. To this end, I have encouraged the math department at my undergraduate institution to have students reach out to me about my experiences applying to graduate schools and fellowships, and I continue to encourage my own students at the Ohio State University (OSU) to apply to them as well. Additionally, I hope that my mathematical successes can help me serve as a role model for students with a similar background.

As a graduate student at the University of Georgia (UGA) and as a postdoc at OSU, I have mentored several undergraduates in mathematics reading and research projects. One of my students, Summer Haag, received a university-wide assistantship for her work with me on non-unitary partitions. During our project meetings, I also gave her advice on graduate and summer programs she should apply to; currently, she is pursuing a PhD in mathematics at the University of Colorado Boulder.

At UGA, I participated in a diversity and inclusion program, organized by what is now called the Office of Academic and Community Engagement. This includes participation in courses focused on: examining opportunities to enhance diversity and inclusion in the classroom; understanding unconscious bias in the classroom, and how to identify and manage it; discussing privilege and how it operates at interpersonal, institutional and structural

levels; understanding common mental health diagnoses and their impact on the classroom; and examining disability accommodations in the classroom. These courses have helped me reflect on the way I teach my classes. For example, to make my classes more inclusive, when asking the class a more conceptual question, I ask them to think about it for half a minute before they give me their responses. This way, students who typically aren't as quick to respond will have a chance to collect their own thoughts on the question. At the start of the semester, I also tell my students about the resources OSU has for academic accommodations, and emphasize that it is never a problem for me to accommodate their general and specific needs. Students have told me in private that they appreciate me doing this, either because they didn't know such accommodations existed, or because they were too embarrassed to initiate a discussion with me about it. These are just some of the efforts I have made towards making my classes more equitable and inclusive for my students.

Currently, I am a mentor for and co-organizer of the Cycle program at OSU. It is similar in structure to the OSU directed reading program (which runs in parallel), in that undergraduate participants will work on a reading or research project with grad student or faculty mentors for 1-2 semesters. However, Cycle has the express goal of providing mentoring for underrepresented math undergraduates, as well as professional development, to support their transition into research. [Click here](#) for more information on Cycle (note that the description of Cycle on the site has changed recently). I am also a faculty advisor for the Math Grad Student Association (MGSA) at OSU. One of the main goals of MGSA is to foster a diverse and inclusive community within the math department, see its page [here](#) (wording might change there soon, too).

I hope to continue learning about diversity and inclusion in the classroom, so that I can make my courses more accessible and inclusive for my students. I also hope to encourage and guide underrepresented math students in their studies, as well as students that come from diverse or atypical backgrounds, so that they can enjoy the wonderful universe of mathematics as much as we do.