

In high school my interest in mathematics developed in parallel with an understanding that women are grossly underrepresented in technical fields. Concerned about the impact of gender bias on my career, I chose to attend Bryn Mawr College, an all-women's institution, for my undergraduate education. As an undergraduate, I also participated in the Summer Program for Women in Mathematics (SPWM) at the George Washington University, the Nebraska Conference for Undergraduate Women in Mathematics, and the Women and Mathematics Program at the Institute for Advanced Study. These single-sex environments equipped me with the confidence, tenacity, and role models to succeed in a male dominated field and taught me about the barriers facing all underrepresented minorities in the sciences.

I took these lessons with me as I moved into more male dominated mathematical spaces in graduate school, first at the University of Cambridge, and then at UCLA for my Ph.D. In both places I organized Women-in-Math events to discuss the challenges faced by women mathematicians. Activities of the Women-in-Math group at UCLA include mentoring young women graduate students, inviting distinguished women speakers to campus, advocating against sexual harassment, and community outreach events. For example, I have partnered with other graduate students to put on EmpowHer STEM Day, an event that introduces underprivileged middle school girls to scientific careers through interactive math and science demonstrations. In 2012 I returned to SPWM as a teaching assistant and mentor for undergraduate women majoring in math from across the country. In recognition of my work with women in math, I was selected as one of five inaugural members of UCLA's chapter of the Bouchet Graduate Honor Society - a group that recognizes commitment to improving diversity within graduate education, and I attended the Yale Bouchet Conference on Diversity and Graduate Education. Furthermore, I participated in campus-wide diversity initiatives including Equity, Inclusion, Diversity Day and the Forum to Reclaim Diversity. I look forward to continuing to mentor women and other underrepresented minorities in math at UCSD.

I am interested in the phenomenon of stereotype threat as it relates to diversity in mathematics. Briefly, stereotype threat is the risk of confirming, as self-characteristic, a negative stereotype about one's group (Steele and Aronson, 1995). One intervention that diminishes stereotype threat around mathematics is to correct the commonly held belief that mathematical ability is an inherent trait. As I explain to my classes, mathematics is a skill one develops through patient practice. Correcting this belief about the nature of mathematical ability improves the performance of all students, especially those from underrepresented groups. As a Teaching Assistant Consultant (TAC) in 2013, I shared information about stereotype threat with new teaching assistants (TAs) by inviting UCLA social psychologist Dr. Jenessa Shapiro to give a presentation on the topic in MATH 495. This was an ideal audience to educate about stereotype threat since they constantly interact with the diverse undergraduate student body. The presentation was a success and has been permanently incorporated into the MATH 495 curriculum.

I have been and will continue to be passionate about using my position and privilege to create opportunities that increase diversity in academia. A Postdoctoral position at UCSD will allow me to pursue my research in a world-class mathematics department while supporting my efforts to increase diversity in my field.