A diversity of viewpoints strengthens science and promotes an inclusive university community for all students. I have demonstrated my commitment to diversity in three ways: 1) mentoring and teaching underrepresented minorities; 2) contributing to public dissemination of research to a broad audience; and 3) researching factors that can strengthen diversity in the science, technology, engineering, and mathematics (STEM) disciplines.

Mentoring and teaching underrepresented minorities

My first experience teaching underrepresented minorities was as a computer instructor at Aim High in San Francisco, California. Aim High is a program which sponsors impoverished but gifted middle-school aged children to participate in a 6-week curriculum. Teaching computer skills to a diverse student body taught me the importance of providing hands-on experience with technology to children who were not always afforded this opportunity. Since then, I have strived to mentor and collaborate with underrepresented groups in research and teaching. As a graduate student and post-doc, I mentored three underrepresented minority student interns, one who received an NSF summer fellowship to work in the lab. Without that fellowship, the student would not have been able to afford to do an unpaid internship – too often the norm in science today. In the future, I plan to use NSF funding mechanisms that specifically target minority students, to ensure that my lab provides opportunities for students who may not otherwise be able to join it. I will also present my research at the Annual Biomedical Research Conference for Minority Students to recruit underrepresented minorities directly.

Disseminating to a broad audience

I view my role as a researcher in part to spread knowledge and science to the public. Doing so allows broad and growing potential to engage with diverse populations. Through online platforms (having an updated website, an active Twitter account, and guest blogging for the Psychonomic Society), I am available to anyone with internet access. For those without the internet, I have made it a priority to reach out to my community, giving talks at senior centers and high schools. I plan to continue and expand these efforts. Specifically, I will reach out to local schools to organize science panels with the aim of educating students from diverse backgrounds about science, and encouraging involvement. I will also seek opportunities to write guest blog posts about the role of scientists in promoting diverse viewpoints.

Researching pathways to STEM disciplines

One focus of my applied research is boosting the efficacy of and retention in STEM disciplines through studying and enhancing spatial navigation. Ensuring that students of all backgrounds have the requisite spatial skills to succeed in STEM learning is one of the core aims of this research. The commitment to diversity is thus twofold. First, I will directly research the ways in which underrepresented minorities can be supported in STEM education – through boosting spatial skills. Second, I will seek to recruit trainees who are passionate and concerned about the role of diversity in science.

In sum, I have strived to make diversity a core component of my contribution to science. I have also learned indispensable lessons from my experiences with people of diverse backgrounds. I thus foresee continuing and strengthening this aspect of my career.