Dr. Willand-Charnley's Diversity Statement

Promoting equity, inclusion and diversity in STEM disciplines is a major goal of academic institutions, I strongly support and believe in this endeavor. I believe equity, inclusion, and diversity are the keys to scholarly advancement. I have spent my career learning how to promote all three in the classroom and research lab.

I began my academic career at a community college during which time I tutored a variety of students, including, underrepresented minorities (URMs), African and Native American students, who had a wealth of desire, eagerness to learn and, more importantly, an abundance of intellectual diversity. Working with URMs at the community college taught me that knowledge is enriched by equity, inclusion, and diversity and they are the keys to scholarly advancement. URMs contribute a multitude of unique experiences, different creative lenses, and offer an innovativeness to solve complex problems, separately and collaboratively, through problem solving that ultimately giving scholarly advancement an essential paradigm shift.

As an NIH NIGMS's IRACDA (Institutional Research and Academic Career Development Award) scholar, the mission of which is to foster and promote the development of a diverse assembly of future scientists to address the needs of the biomedical, behavioral, and clinical research needs, I learned how to create an inclusive and equitable classroom and research setting via active learning During my time at San Jose State University, for example, I encountered the same wonderful experience with my organic and biochemistry students as I did at the community college, diverse minds offering innovative insight to learning new concepts and proposing solutions to solving problems. To ensure equity and inclusiveness in the class, as well as, how to work as a team in the lab, I utilized an active learning technique called Process Oriented Guided Inquiry Learning (POGIL), where by I placed my students into groups of 3 or 4, in which they each serve an important role, and gave them carefully designed, never before seen, material on enzymes. The material contained information and data both followed by leading questions. These questions guided my students to formulate their own valid conclusions by way of recapitulating the scientific method. As I monitored their progress as a f acilitator I witnessed each student sharing in the experience and offering their unique perspectives to help one another learn the material and solve the problems. Misconception about the material were brought to light through this exercise and I heard them being corrected by unique metaphors from one another.

The IRACDA program gave me the tools to work with a diverse group of students in the classroom and in the lab, however, it is important to me to provide an avenue outside of both in which to harness diverse brain power towards research in the STEM sciences. Towards this goal, prior to joining IRACDA, I developed a scientific outreach program in Stanford's department of chemistry that puts scientists in K-6 classrooms. I was a teacher for Bay Area Scientists In Schools (BASIS) and a member of the Coalition for Education and Outreach. I have been involved in "Chemistry Day," a scientific outreach for surrounding high schools. These activities were motivated by my desire to propagate and influence a diversity group of students to pursue research in the STEM sciences.

During my time at SDState outreach efforts have already been underway to help promote diversity into the STEM sciences via outreach (see Outreach table to learn more). The RAWC lab is committed to a diverse, equitable, and inclusive laboratory environment. The lab will

continue to dedicate efforts in all three arenas (diversity, equitability, and inclusivity) as a collective avenue to service the global community through progressive and interdisciplinary research.

The RAWC lab follows, supports, and practices the guidelines per SDSU's Office of Diversity, Inclusion, Equity & Access (https://www.sdstate.edu/office-diversity-inclusion-equity-access)