

Contributions to Diversity

My awareness of inequities and challenges faced by underrepresented minority students was significantly increased during my 15 years at the Fresno State University. Not only did I become more aware, but I was also able to make contributions to reducing barriers.

I worked with dedicated leaders at Fresno State who were themselves committed to lessening health disparities, providing opportunities in education and research training to underrepresented minorities, and creating various outreach efforts to educate and inform diverse and disadvantaged students about science and health care opportunities.

I was particularly impacted by two individuals whom I consider national champions of diversity and inclusion. First, an informal meeting with Dr. Frank Bayliss (SFSU Professor Emeritus of Biology) at a social meeting motivated me to realize the importance of developing training grants, particularly for URM graduate students at Fresno State. It took three times to convince NIH that a Bridges program with the newly formed UC Merced would greatly value our graduate students. Seven years later, more than 15 students from Fresno State URM graduate students completing their Ph.D. program at UC Merced. Second, I had the honor of working with Fresno State Provost Jeri Echeverria (2003-2009) and multiple faculty members in the College of Science and Math to create the research infrastructure to enhance a culture of research education at Fresno State.

My qualifications to employ inclusive strategies arise from years of working with diverse student populations in educational settings. I strongly feel that it is essential to provide opportunities for underrepresented students in research since this would eventually increase the number of these students engaged in research in academic, government, and industrial labs. This is one of the motivating reasons to join Fresno State after spending close to a decade at Lawrence Livermore National Laboratory and continue to be involved in active research programs.

My personal experience teaching diverse groups of students has given me insight into the value of individual differences in background, thought processes, and philosophies, and instilled a commitment to creating an inclusive environment. Forming a self-assembled and adoptive support network of students, faculty, and administrators is essential for success. Unfortunately, most students do not have equitable access to these methods, tools, and systems. Thus, my goal is to help students who are less privileged to create and navigate these networks such that they can endure the inadvertent challenges their futures hold. My approach to creating these networks is not "one size fits all" because it is necessary to address multiple facets of diversity such as first-generation college status, gender, race, social class, and sexual orientation. The long-term conscious effort required to include traditionally underserved communities is especially critical at institutions like Sac State to support social justice aspects of the University's core values and provide authentic, high-quality educational experiences for all students on campus.

The commonly held belief that the attrition of academically weaker students accounts for losses of minority students from STEM degree programs does not stand up to scrutiny. According to the recent research, in higher education, researchers have uncovered several factors that can influence the success of racial and ethnic minority students, including economic factors, such as financial aid and employment experiences; institutional type; campus culture and climate; institutional agents; psychological factors, such as self-concept and self-efficacy as well as opportunity and support programs. Evidence-based approaches

suggest that the key factors leading to student attrition are mentoring, education, research, and financial support. These components are identifiable, and their theoretical underpinnings support their inclusion should from the classroom and continue in every aspect of the curriculum.

Mentoring can address multiple critical issues for students, such as providing a sense of community, breaking down perceived barriers, addressing social and academic problems on campus, providing career development to emphasize the value of the degree, and providing a mechanism to enable early interventions in the event of academic difficulties. With these in mind, I focus my interactions on building solid mentoring relationships with faculty, staff, and in particular, with my peers.

I apply these principles in developing several undergraduate and graduate training programs at Fresno State, such as the RISE and Bridges to Doctorate programs. I have made a significant effort to facilitate a culture of diversity and inclusion in all my endeavors at Fresno State. I realize that the progress is slow, and I feel confident that a systematic and conscious effort at all the levels of the University – staff, faculty, and the administration consistently is necessary not only to bring social equity via education but also towards a systemic shift for equal opportunity. In particular, efforts to recruit underrepresented minority faculty across the campus and specifically in STEM are needed.

Finally, I am impressed with the Sac State commitment to inclusive excellence. I feel that my experiences at a private institution, national laboratory, and public universities in both urban and rural settings would prove valuable in advancing current and future equity, diversity, and inclusion efforts.