Statement on diversity, equity, and inclusion (DEI)

My philosophy on DEI

The love of science and engineering motivates people from highly diverse backgrounds to pursue higher education. However, societal and systemic biases can serve as a barrier to many talented students and researchers, as evidenced by demographic data of participants in STEM and higher education in general. To best harness the talent and drive that is present in individuals of all races, gender identities, sexual orientations, and socioeconomic backgrounds, we must strive to identify, mitigate, and eliminate these barriers. This can be done by supporting DEI-focused student communities, and conducting outreach to underserved populations. *I have contributed to DEI efforts during my time at Caltech, and am excited to continue doing so, both as a faculty member of a top institution and as a woman in STEM.*

Past contributions

In 2020, I was one of 4 organizers of a department-level town hall on DEI. We organized an open discussion among current students and postdocs on how our department (CMS) could embody DEI values and recruit and support underrepresented individuals. Based on these discussions, I led the writing of a letter to faculty members containing suggestions, many of which were adopted. Some key changes were: the formation of a departmental DEI council that would sustainably support DEI initiatives; the appointment of a departmental ombudsperson to whom students could anonymously report; the creation of the CMS Gradient for Change award to support and recognize student DEI efforts; the inclusion of a DEI statement on formal department and lab websites to transparently state our values for prospective students and researchers. This experience showed me *how DEI values can be translated into concrete actionable items for students and faculty members*, and also ways in which I, as a faculty member, could support DEI initiatives in the future.

During my PhD, I also served as Chair of the Graduate Women in CMS group for over 2 years. My goal was to *promote community and camaraderie among women in the department*. I organized group lunches, dinners, and game events – these events often featured women faculty with whom students and postdocs could have candid conversations.

Throughout my PhD, I have been highly active in the CMS community. I regularly volunteered for departmental orientations and visit days – I served on peer panels, led discussions and social events, and helped create a welcoming environment for incoming and visiting students. In my second year, I was one of two organizers for "prelim prep" sessions. These sessions helped first-year students prepare for the department's mandatory preliminary exams (a.k.a. qualifying exams). I curated and sometimes wrote questions and solutions for the practice exams, solicited student proctors for the verbal part of the exam, and arranged for group meals afterward. I have also been an active volunteer for Caltech's International Student Programs, serving as an orientation leader and mentor for incoming international students.

Planned future contributions

Supporting DEI-focused communities. Student life, especially graduate student life, can be challenging and isolating. These challenges are often exacerbated by marginalized identity, resulting in decreased mental wellness and lower performance. This leads to the leaky pipeline phenomenon, in which marginalized students are disproportionately likely to drop out of programs. Formation of clubs and communities – whether for a department, interest, or identity (e.g. women's groups) – plays a large role in mitigating these challenges and making school a more enjoyable experience. Additionally, these communities can be a welcoming space in which students can discuss concerns and offer support to one another. However, student-led communities often fizzle out as student organizers graduate or become

busy. As a faculty member, I can play a more permanent role and help facilitate transitions in leadership for one or more of these groups, and also offer mentorship, support, advocacy, and advice when needed.

Outreach to local underserved populations. Opportunities for STEM enrichment are unequally distributed; intelligent and talented individuals are often deprived of these opportunities due to factors outside their control (e.g. socioeconomic status). As a faculty member at a top institution, I am excited to assist with and/or facilitate outreach programs within the local community, particularly to underserved and underrepresented populations. Depending on the needs of the community and the established activities within the school, this can take the form of STEM-based clubs or summer activities, hosting students for brief summer projects in my lab, visit days, etc.