The Chemistry Department DEI Committee was formed in Summer 2020. Prof. Katie Hart (2020-21, 2023-24), Prof. B Thuronyi (2021-22), and Prof. Sarah Goh (2022-23) have served as chairs. The group has worked toward several goals from our original <u>Diversity</u>, <u>Equity</u>, and <u>Inclusion Action Plan</u>. This document provides some updates on that ongoing work, though it should not be taken as a comprehensive list of Department DEI activities.

DEI Committee

The DEI committee is led by a faculty member appointed by the Department chair. All faculty and staff members in the department are invited and encouraged to attend meetings and participate in ongoing initiatives and events. Meetings are intentionally scheduled during a time when no classes or labs occur, but in practice, the many obligations of faculty and staff limit attendance. Numbers vary from meeting to meeting, but typically there are 5-10 attendees, representing a mix of staff and faculty from diversity identities. Student attendance has, at times, been open-door, but more commonly we have opted to invite students to discuss specific topics and reserved most meetings for faculty/staff work and dialogue.

Meetings occur every other week (6-7 times each semester since Fall 2020), and DEI questions, issues, and plans are regularly reported/discussed during Department meetings. Format varies depending on whether the meeting's agenda aligns more closely with our <u>Action Plan's</u> first category (Education and self-awareness around issues of social justice) or second (Creating a diverse, inclusive environment within the chemistry community). This semester, we have explored Al/language-models and discussed potential impacts on student learning and equity, planned/wrote updates to the website's language around racial justice and our DEI efforts, and strategized about how best to move forward with TA/grader DEI training.

Feedback

The Department solicits feedback in a variety of ways on issues that intersect with or directly address DEI. They include:

- Lab evaluation forms. In contrast with student evaluations of lecture courses (via SCS), evaluation of lab experiences is not centralized by the College. As a department we addressed this gap by creating our own lab evaluation forms, which are reviewed by the lab instructor and the Department chair.
- Additional SCS forms questions. Each unit may add up to 2 additional questions to the SCS forms, which are reviewed by the instructor, the Department chair, and, for untenured faculty, the Committee on Appointments and Promotions. Our Department includes the following questions to better assess student experience:
 - "The instructor supported my growth and learning in this course." (Rated from "strongly disagree" to "strongly agree" on a 7 point scale).
 - "The instructor conveyed course material clearly." (Rated from "strongly disagree" to "strongly agree" on a 7 point scale).
- Senior majors are invited to participate in an exit interview and/or complete an exit survey to share their overarching comments on strengths and areas for improvement for the Department. Unfortunately, the response rate for these exit surveys is not very high,

but we welcome suggestions for how to solicit feedback from this population, especially since they are uniquely positioned to offer holistic perspectives.

 The Chemistry Student Advisory Committee (CSAC) established a DEI working group in 2020 and has been active in hosting roundtable discussions with other STEM student organizations on DEI matters in STEM education. CSAC DEI representatives are invited to Chemistry DEI Committee meetings periodically to share summaries of their findings, which in turn are discussed with the full Department.

TA Training

To better equip Chemistry TAs to support all students in the classroom and lab, the Department has added formal training requirements for TAs with a DEI focus. These have taken a variety of forms so far:

- In Fall 2020 and Spring 2021, Assistant Director for Intergroup Relations and Inclusive Programming Aseel Abulhab (Davis Center) conducted live training sessions covering power dynamics, implicit bias, microaggressions/microaffirmations, and inclusive language for Chemistry TAs (and in Spring 2021, graders).
- In 2021, Chemistry TAs took online training prepared by Dr. Laura Muller, Director of Quantitative Skills Programs and Peer Support, covering effective teaching and learning strategies, imposter syndrome, ethics, and supporting students through challenges and frustrations. TAs were also invited to attend sessions from a full-day workshop from the Peer Academic Support Network in Fall 2021.
- In 2022, Chemistry TAs and graders attended trainings by Nick Hanford, Director of Quantitative Skills Programs, and Aly Corey, Associate Director for Inclusive Learning Environments.
- In 2023, Chemistry TAs attended training by Nick Hanford, Director of Quantitative Skills Programs, covering effective teaching and learning strategies, imposter syndrome, ethics, and supporting students through challenges and frustrations.

Ongoing challenges with trainings (scheduling, payment, compliance) have made them a central focus of the DEI committee's efforts. We continue to consider/discuss what we want these trainings to accomplish, and logistically, how we can make them happen. We are grateful for our on-campus partners at the Rice Center for Teaching, Peer Academic Support Network, and the Davis Center for supporting these training efforts.

Seminars and Speakers

The Department is committed to inviting speakers from diverse identities, experiences, and specialties. This goal is challenging because it relies on the faculty seminar coordinator knowing or making assumptions about how speakers identify. Another challenge this year has been significant budget cuts that limit our ability to pay for any speaker visits, so we simply have fewer visitors than in years past.

All speakers are encouraged to broadly discuss their paths to a career in chemistry as part of their presentations and, if they are comfortable doing so, to share how their identity has shaped their experiences. We hope that this has given students a clearer picture of how they can be included and represented in the chemistry community.

Research

To help all students navigate the process of engaging with research in the Department, Prof. Sarah Goh has led sessions on "Getting Involved with Research in Williams Chemistry" in September 2021, 2022, and 2023. The presentation described what research looks like in the Department, what is expected of students engaged in research, and why/how to get involved. Our intention is to continue hosting a session on this topic each fall semester.

Based on feedback from a CSAC-hosted roundtable, we have also begun posting images of students working in research labs on the board outside the Chemistry main office, alongside the pictures we have long posted of individual Chemistry majors. The intention is to communicate, albeit imperfectly, the diversity of students who engage in research. This was a simple action, and we do not think it adequately addresses the need to ensure equal access to research within the Department. We recognize this is a very important issue and continue to discuss ways to both track how we are doing and do better moving forward. One specific issue has been around whether/how to pay student research assistants, given the end of work-study and transition to full-grant financial aid. Our budgets for RAs cannot support student interest if students are paid for every hour worked; however, paying undergraduate RAs is cited more broadly in many research communities as one of the determining factors for minoritized students. We know we are not the only unit wrestling with these issues, and we look forward to broader conversations at the College-level about DEI-related ramifications for the full-grant financial aid program.

DEI Contacts

To help further open lines of communication between students and faculty around diversity, equity and inclusion, the Department has designated specific DEI contacts, including the DEI Committee chair and the Department chair. These contacts would make themselves available to discuss student experiences in the Department, positive or negative, in addition to existing channels, such as chemistry course instructors and the Davis Center.

CSAC has also appointed a student DEI liaison, who can relay information to the Department, while keeping the individual's identity private. All faculty have been invited to include the names and contact information for both faculty and student DEI liaisons on their course syllabi, and the information is also linked on the website.

Accommodations

While the Department formally adheres to College accommodation policies, rather than attempting to craft its own, it is repeatedly noted by students (in both end-of-semester feedback and exit interviews), that Chemistry is exceptional in efforts to meet and exceed the requirements. It would be valuable moving forward to identify ways to better track and quantify these efforts, but anecdotally, we do spend time and energy educating ourselves about student needs. For example, we have invited experts on campus (G.L. Wallace, Cait Kirby) to Department meetings to discuss different types of accommodations and strategize how to design our courses to be as universally accessible as possible.

Curriculum

This year we began rolling out several significant curricular changes that we believe address certain equity and accessibility issues. Although discussions and planning for these changes pre-date CSAC-led roundtables, they nonetheless intersect with concerns highlighted by students that they lack adequate support in lecture and lab. For a more complete explanation, please see descriptions of the major on the <u>Department website</u>. Briefly, we have (1) created a new course (CHEM 100) designed specifically for students with little-to-no chemistry background that also emphasizes study skills and how to utilize existing resources within the Department and College; (2) designed more pathways into and through the major by offering the first required intro course (CHEM 101) in both fall and spring semesters and allowing students to take either CHEM 200 or CHEM 201 first; and (3) reorganized our organic chemistry topics to consolidate pre-health and biochemistry concepts in a single semester rather than spread across two courses.