



## CCE Diversity Equity Inclusion Committee Meeting Minutes

Date: November 1, 2021

Attendees: Brian Stoltz, Scott Cushing, Julia Kornfeld, Kim See, Kyle Virgil, Paolina Martinez, Janny Manasse, Lindsey Malcom-Piqueux, Elyse Garlock  
Absent: Bil Clemons, Reina Buenconsejo, Stephanie Threat

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### Item 1: Approval of the Meeting Minutes for Posting

**Subitem A:** Approval of meeting minutes

**Subitem B:** DEI Moments update.

- The CCE faculty agreed with the committee's recommendation to start with internal seminars and group meetings. DEI Moments will be reevaluated in the spring.

**Subitem C:** CCE Accessibility

- Three handicap spaces were removed in the demolition of Mead for the construction of Resnick. A single space across the street in the south parking structure, which is not easily accessible was to cover the three removed spaces. After multiple communications, there are three temporary accessible parking spots behind Schlinger. There was no proper planning for the removal of the handicap spaces or for finding accessible parking close to Noyes, Beckman.
- Caltech has been negligent in the handling of ADA situations on campus. Unless someone speaks up about accessibility issues, the committee will be unable to pursue the problem.

**Decision:** Increase awareness of accessibility issues in CCE and on campus

**Next Steps:** Monitor DEI Moments across the division.

### Item 2: Lindsey Malcolm-Piqueux Data Presentation:

- Lindsey spoke at our September 23, 2021, meeting on Advancing Inclusion, Diversity, Equity and Accessibility in CCE in terms of the Data. Today she focuses on CCE data that we plan to post on our DEI website.
- First, to finish a few items not covered at the last meeting.

**Slide 1 – Cover Page (Please contact [egarlock@caltech.edu](mailto:egarlock@caltech.edu) for Lindsey's presentation on Advancing Inclusion, Diversity, Equity and Accessibility)**

**Slide 2 - Strategies for Coordination and Centralization** (to coordinate and centralize where appropriate –throughout the divisions)

- **Creation and Dissemination of IDEA-Related Tools and Trainings**
  - **Evaluation rubrics** (e.g., DEI Postdoc Programs, Diversity Statement) There are several divisions that have a named DEI postdoc fellowship program. A rubric to help evaluate diversity statements was created so people know what to look for, what should they

contain. To assist, a writing program has been created at CCID in cooperation with the Hickman Writing Center on crafting a diversity statement.

- **Equity-Focused Program Assessment** – When you are putting in place several programs or activities with respect to DEI, my office can assist with consultation and offers analytic support on how you do program assessment in ways that are equity focused. Creating equity and closing equity gaps that may exist in recruitment and retention.
- **Equity-Minded Faculty Hiring Practices** – Several search committees have undergone training in mitigating the effect of implicit bias in faculty search processes. In fact, there are a broader range of things that could be done in terms of making sure that all the hiring practices, the evaluation rubrics, as well as the position descriptions are crafted to mitigate bias.
- **Inclusive Caltech Communication Guide**-a communication guide on the how to ensure we are using inclusive language, using similar terminology across the campus, and that it reflects our most up to date understanding in terms of diversity, equity, and inclusion.
- **Increased Communication, Collaboration, and Consultation**- Many of you already know that the groups listed below are embedding DEI in their everyday work.
  - **President’s Diversity Council**
  - **Faculty Board**
  - **Deans and Directors**
  - **Division and Option-Level DEI Committees and Coordinators**
  - **CCID**
- **IDEA Council: Community of Practice**
  - **Sharing, scaling, and translating effective approaches.** On grant proposals, we received one requiring resources and community of practices not only from faculty, staff, administrators and postdocs, graduate students, undergrads, and alumni to become involved in advancing IDEA at Caltech in ways that are evidence based and scaling what works and scaling what doesn’t.
  - **Alignment of Practices and Shared Goals.** Caltech is a flat organization and different from other higher education institutions. Our work will need to be effective but not cause issues related to the success of the decentralized model at Caltech
- **Questions:**
  - In terms of communication, as we move forward, should we use IDEA at Caltech in lieu of DEI efforts?
  - We hope to move toward that language for 2 reasons – One is values driven; the other is a Caltech reason. We want to include accessibility at Caltech. Most of the Divisions and options, however, are still using DEI.
  - At the institute level, we have not paid enough attention to accessibility. There are so many ways to approach this. An accessibility specialist was hired to work with students.
  - In terms of training for Faculty search committees, is CCID working on a training that faculty search participants can undergo? In our division, we are thinking of making the training mandatory for the faculty on search committees. Those on multiple search committees can go through it once. It should be annual and available around August, September, or October. Does this training exist?
  - It already exists, but usually the division chair or the chair of the search committee reaches out to me or CCID and/or to the members of the Title 9 team to request the training. It is important to have a set time for the training prior to the search.

- Where do we stand with the centralization of choosing attendees to the NOBCCHE and SACNAS etc. conferences? CCE decided to send our own request. What the Institute's decision is on this?
- It is centralized and is a collaboration between the Career Advising and Experiential Learning center (CAEL) with Clare Ralph, the director. Funding is available. Our CCID team works with the various outreach affinity groups informing them of the conferences and how to apply. Several divisions are working with CAEL.
- Is there special funding available? Or are the funds what was originally requested. We have very limited funds, so we cannot commit as much as other divisions might commit. Is there any institute funding? We are supportive, once there are CCE students interested in participating in the conferences. However, we need to know what type of funds are required and what we are committing to before we decide.

#### **The Data:**

##### **Slide 3: Undergraduates Identifying as Female at Caltech and in CCE, 2000-2021**

**CCE** – 2000-41.2%, 2011 – 54.6%, 2021 58.5%

**Caltech** – 2000 32.1%, 2011 39.5%, 2021 44.7%

We have reliable data back to 2009, that is when we shifted to a new student information system, there are paper records for previous years that can be accessed. One thing to note is that this is self-identified sex right now. The CIT data systems are not accounting for expansive identity yet.

##### **Slide 4: Undergraduates Identifying as Female in Chemical Engineering and Chemistry, 2010-2021**

**Chem Eng** – 2010 – 55.8%, 2015-40.4%, 2021 – 58.3%

**Chemistry** – 2010 – 52.8%, 2015- 54.4%, 2021- 58.6%

**Caltech**- 2010 – 38.5%, 2015 – 39.1%, 2021 – 44.7%

Broken down by option to look at the past academic years. The most up to date data available is as of this Fall. You see that with ChemEng and Chemistry there is some movement.

##### **Slide 5: Undergraduates Identifying as Female by Caltech Division, 2010 -2021**

Looking at the other divisions, ignore the HHS dotted line due few students. The other lines give you a clearer sense of students identifying as female. CCE is in the top tier of the divisions. In GPS you see quite a bit of jumping around because it has a smaller group of undergraduates 5 to 12 students.

##### **Slide 6: Graduate Students Identifying as Female at Caltech and in CCE, 2000 to 2021**

**CCE** – 2000 – 29.5%, 2010 – 35.9%, 2021 – 36.5%

**Caltech** – 2000 – 24.2%, 2010- 29.1% - 2021- 33.3%

Here are graduate students identifying as female. For now, looking over the same 21-year period a higher proportion in CCE identifying. For the first time we have reached about a third of graduate students.

##### **Slide 7: Graduate Students Identifying as Female in BMB, Ch, and ChE, 2010 – 2021**

**BMB** - 2010 - 37.3%, 2015 – 42.2%, 2021- 41.7%

**Chem** – 2010 - 34.8%, 2015 – 39.1%, 2021 – 40.2%

**ChE** – 2010 – 39.6%, 2015 – 27.8%, 2021 – 17.5%

**CIT** - 2010 – 29.1%, 2015 – 27.6%, 2021 – 33.3%

Here you see the options. Here you can see BMB is the burgundy color. BMB and Chemistry are the areas that are pulling up CCE above the institutional average. ChemEng is more than 10% below the institute average for the recent year. I believe ChemEng is your smallest option. In 2010 it was slightly above the institute average.

- Is that the entire option for BMB or only those who identify with CCE?

- That is the entire option, the student information system does not separate out CCE BMB option. BMB is reflected in both CCE & BBE.
- If there is an internal way that I can separate it out for you?
- If you contact Courtney Oaida, she will know how to separate those persons from the total BMB. If you only look at the students in CCE, unsure which it would be larger. Chemistry is the largest option on campus and the driving force in the Division.

**Slide 8: Portion of Graduate Students Identifying as Female by Caltech Division, 2010 -2021**

Here is the Division level and here HSS is bigger at the graduate level. GPS has the largest group. CCE is at the top of the divisions. I am always careful to compare at the national level as well.

**Slide 9: Share of Caltech Undergraduates from Racially Minoritized Groups, 2000-2021**

**CCE:** 2000- 10.6%, 2011 – 9.2%, 2021 – 28.3%

**Caltech:** 2000 – 7.6%, 2011 – 8.9%, 2021 – 29.8%

Here I aggregated all domestic undergraduate students who identify either fully or in part with under-represented minority groups that are: African American, Black, Latinx, Hispanic, Indigenous, Native American, Alaskan Native, Pacific Islander, Native Hawaiian. Any multi-racial undergraduate student that identifies with one of those groups is captured on this graph. The reason, it is difficult to separate the groups in the undergraduate level because you have a lot of multi-racial students who are underrepresented minorities. If you identified them, it would exceed the total number because we have many multi-racial students. If you identify each minority, it will increase the data. If you want it split out because it will be more of a rate rather than a share of the data, because we have demographic trends. We only have racial ethnic data for domestic undergraduate students. We do not collect that for international students and that is a big problem. We need to allow international students to self-identify. We know that for international students – the US context is not the same as it is in other countries. Over the last 20 years there is a bit a flip flop looking at the most recent year, they are incredibly close (i.e., the institute and the division). The undergrads declare an option as sophomore, so the division does not reflect this until later. If trends continue as they have been I believe CCE will be above the institute average.

- If this were extended to the entire US population what is the percentage that would essentially identify as coming from a racially minoritized group?
- The reason why it is tough is because in the context of the US, I would say that our Asian American populations are racially minoritized. Minoritization is a socio-political process, so it is not a stagnate definition.
- It is around 40%. If you look in the context of STEM, Asian Americans are not included in the undergraduate level and that is problematic, because Asian American students are not monolithic, if you look at Southeast Asian, Hmong, Laotian, Vietnamese, and Filipino students, those students experience the same kind of marginalization and similar patterns of outcomes as African American and Latinx students, they should be included. At Caltech, we do not have that level of detail. We are working to get that detailed demographic data. It depends but it is around 40%. If you look at age cohort it is much higher among younger individuals than those who are above 25.
- I really appreciate this point being brought up, the US government for grants etc. have these very exclusive definitions of what they think diversity is, I have several Asian students in lab that have talked with me in private about how they feel marginalized and face discrimination on campus.
- At CCID, we now serve APIDA+ Students. Alison Tominaga was hired to program for our Asian students, specifically in STEM. The institute is working on eliminating the model minority myth.

**Slide 10: Undergraduates from Racially Minoritized Groups in Chemical Engineering and Chemistry, 2010-2021**

**ChemEng:** 2010 – 5.2%, 2015 – 22.8%, 2021 – 25.8%

**Chemistry:** 2010 – 15.1%, 2015 – 8.7%, 2021 – 24.1%

**CIT:** 2010 – 8.9%, 2015 - 15.6%, 2021- 29.8%

ChemEng has been above the institution and Chemistry has been increasing. In Spring, I believe we will see higher percentages for both ChemEng and Chemistry after we include all the options.

**Slide 11: % Underrepresented Minority Undergraduates by Caltech Division, 2010-2021**

In terms of the divisions, we are seeing the same kind of pattern. This is the proportion of URM's all the divisions are much more closely grouped together. GPS has 6 students. PMA is slightly above CCE.

**Slide 12: Share of Caltech Graduate Students from Racially Minoritized Groups, 200-2021**

**CCE:** 2000 - 4.0%, 2010 – 7.7%, 2021 - 10.9%

**CIT:** 2000 – 4.5%, 2010 – 6.2%, 2021 - 9.4%

In terms of graduate students, this is the similar 21year trend going back and forth, but CCE is above the Institutional average this year at almost 11 percent where the institution is at 9.4%.

**Slide 13: Graduate Students from Racially Minoritized Groups in BMB, Ch, and ChE, 2010 -2021**

**BMB** - 2010 - 19.6%, 2015 – 8.9%, 2021- 16.7%

**Chem** – 2010 - 5.9%, 2015 – 8.1%, 2021 – 11.2%

**ChE** – 2010 – 3.5%, 2015 – 5.6%, 2021 – 5.3%

**CIT** - 2010 – 6.2%, 2015 – 5.4%, 2021 – 9.4%

You see a similar pattern of differences within the division here as with women graduate students. This includes multi-racial students who identify in part, as being in an historically underrepresented minority.

- Does this include this year's first year graduate students? Yes.

**Slide 15: Peer Comparison Data- Earned Doctorates by Field, Analogous to Caltech's Academic**

**Divisions:** It is important to contextualize the data in terms of peer comparison data.

**Slide 16: Share of PhDs in Chemistry and Chemical Engineering Earned by Women at Caltech and Peer Institutions, 2010 – 2019:** Chicago: 25.6 %, Harvard: 32.4%, MIT: 32.4%, Stanford: 33.7%, UCLA: 33.7%, **Caltech: 35.1%**, UC Berkley:36.2%, Princeton: 36.5%, UC Irvine: 36.6%, Yale: 40.9%, USC: 46.6%

**Slide 17: Share of PhDs in Chemistry and Chemical Engineering Earned by URMs at Caltech and Peer Institutions, 2010 – 2019:** USC: 1.9%, Yale: 1.9%, Chicago: 2.7%, Stanford:3.1%, Harvard:3.5%, MIT: 4.3%, Princeton: 4.7%, **Caltech:5.4%**, UC Berkeley: 5.7%, UC Irvine: 6.5%, UCLA:8.5%.

**Slide 18: Share of PhDs in Chemistry and Chemical Engineering Earned by International Students at Caltech and Peer Institutions, 2010 – 2019:** UC Berkeley: 13.2%, UC Irvine: 15.6%, **Caltech: 16.0%**, Yale: 26.9%, Stanford: 27.2%, UCLA: 28.0%, Princeton: 29.3%, MIT: 35.5%, Harvard: 40.6%, Chicago: 49.4% USC: 52.5%