

This deliverable serves to aggregate information obtained by the California Area pod on demographic data (public and internal facing), stated goals for representation, and proposals to collect and report demographic data at the organizations we reside. Because we do not all reside at the same institution, we individually undertook the research for our respective organizations and present the results in this document which represents the collective efforts of all pod members. Members of our pod come from the following institutions.

1. National Aeronautic and Space Administration (NASA)
2. National Oceanic and Atmospheric Administration (NOAA)
3. University of California Irvine
4. University of California Los Angeles
5. Whittier College

Session 3 Deliverables for NASA

Links do demographic data

NASA Organization level Workforce data:

<https://www.nasa.gov/offices/odeo/workforce-data>

Speaker analysis - not currently available. This analysis has not been completed (as far as I am aware). There is a lot of granularity in my organization--different centers have branch level and project level speakers. It may be possible to do this analysis since (at least for the talks at my project) are archived. Only the names and current affiliations are typically saved in addition to their talk title/research area. No demographic data are noted.

- **How does your organization compare to others, or to the field as a whole?**

I cannot tell how similar federal agencies compare to NASA. I cannot find publicly available data on the demographics of NIST, NOAA and USGS (the most similar in terms of employment of scientists).

The numbers shown for NASA are consistent with the professorial demographics in Physics (roughly 75% white, ~10% Asian) with the exception of Black representation--NASA has higher representation of Black people, at the ~12% range of the workforce. This is (surprisingly) roughly consistent with the population of Black people as a whole in the US. In my limited (and exclusively remote) experience of working at NASA, scientists are very consistently white. I wonder if these overall numbers do not reflect true diversity (equity and inclusion of people from all racial/ethnic groups at all levels) but concentrations of certain racial/ethnic groups in certain jobs/roles--I wonder specifically about support staff, administrative staff, HR staff (and others) and the demographics within different positions/roles. This is actually addressed in NASA Model Equal Employment Opportunity Program Status Report "Blacks and African Americans account for almost 12 percent of the NASA workforce but represent 6 percent of NASA's S&E [Scientist and Engineer] workforce and only 2 percent of SL [Senior Level] and ST [Senior Scientific and Professional] employees." Indeed, on page 60 of the report (<https://www.nasa.gov/sites/default/files/atoms/files/a2020-00087-signed-05-08-2020-tagged.pdf>) Figure 1 shows the breakdown of Occupational Categories by Race and Ethnicity, FY 2019 showing an overrepresentation of Black people in clerical staff.

- **Public goals on demographics or increasing representation:**

From 2016 - 2019 Diversity and Inclusion Strategic Implementation plan

(https://www.nasa.gov/sites/default/files/atoms/files/final_di_plan_8-15-16_tagged.pdf)

5 principles for DE&I:

1. Demonstrated Leadership Commitment

All levels of Agency leadership, following the example of the Administrator and Deputy Administrator, will demonstrate their commitment to diversity and inclusion through

career assignments and awards, their individual actions, and by highlighting the topic at leadership meetings.

2. Employee Engagement and Effective Communication

NASA builds an inclusive, collaborative, open, and innovative work environment that enhances employees' work life and encourages career development.

3. Continuous D&I Education, Awareness, and Skills Development

NASA maintains a continuous program to ensure that all employees understand the importance of embracing D&I and acquire the skills needed to demonstrate actions and behaviors across the wide demographic of the Agency.

4. Demonstrated Commitment to Community Partnerships

Actively partner and build constructive relationships with schools, community based organizations, small businesses, and professional associations to expand outreach to diverse communities.

5. Shared Accountability and Responsibility for D&I

All leaders, managers and employees at NASA model inclusive behavior through individual and organizational actions that foster NASA's ability to promote diverse viewpoints, backgrounds and experience.

In the strategic plan, NASA describes strategies with specific actions, measures, due dates and offices responsible. In this way the strategic plan offers specific, measurable goals to increase diversity and inclusion. In my opinion, some of the strategies would not result in the changes desired by the organization--for example, strategy 3 heightened awareness of DE&I is not a solution to hiring practices that are deeply rooted in sexism/racism.

I'm not sure exactly what I would suggest to my organization--in general, I think more actions to enhance accountability at all levels rather than simply awareness.

The link(s) to demographic data at our organization are here:

<https://www.noaa.gov/sites/default/files/atoms/files/MD-715%20FY19%20NOAA%20State%20of%20Agency%20%28Final%29%20Public.pdf> - This information was compiled by NOAA's director of the Office of Inclusion and Civil Rights. The workforce demographics begins on page 10 of this document and is split into female/male groups (no non-binary category) for each race (Hispanic, White, Black/African American, Asian, Native Hawaiian and Pacific Islanders, American Indian or Alaskan Natives, and two or more races). Comparisons for changes since 2010 are provided, and percentages relative to the civilian labor force (CLF) are given. This information is further broken down for different "staff offices/unsec (under secretary)" and "line offices" within NOAA. Line offices are the applied science and science operations offices and staff offices are the administrative, logistical, educational offices (see this page for more clarification: <https://www.noaa.gov/about/organization>). Discussion and analysis of the prevalence of individuals with disabilities in the organization is also shown.

The line offices (applied science) include the National Environmental Satellite, Data and Information Service (NESDIS), National Marine Fisheries Service (NMFS), National Ocean Service (NOS), National Weather Service (NWS), Office of Marine & Aviation Operations (OMAO), and Office of Oceanic & Atmospheric Research (OOAR). I'll only refer to the line offices in the following (with the exception of fisheries, they are mostly earth, ocean, and atmospheric scientists).

I can't find speaker demographics, and I don't know if there is a reason for that or if they have not considered aggregating and making that public.

How does your organization compare to others, or to the field as a whole?

Across the board in the line offices, Hispanic males and females are underrepresented relative to the civilian labor force. White men are far overrepresented and white women are mostly far underrepresented. Black men and women are generally underrepresented, with the exception of a couple offices. Asian males and females tend to be slightly overrepresented, with a couple exceptions, where Asian women are underrepresented. Native American or Native Alaskans are almost entirely underrepresented, and males of two or more races are generally more underrepresented than females of two or more races.

NOAA employs only some geoscientists, so I wouldn't compare to the numbers for geosciences specifically. However, in general, Native American/Native Alaskans, Hispanics, and Black/African American are underrepresented, as they are in geosciences. Perhaps because I came from the geosciences or perhaps I am located in Hawaii (a more diverse state than some), I have actually been impressed with NOAA's diversity thus far.

Public goals on demographics or increasing representation:

My impression from my limited time here thus far is that the Office of Inclusion and Civil Rights is one of the most active offices, with many, many webinars, recognition and webinars/programs highlighting a different demographic group every month, and since summer of 2020 discussions, town halls, and surveys to try to improve the environment for BIPOC individuals. My unscientific impression is that NOAA at the highest levels care greatly about the cause; however, I suspect that this drive is not fully embraced at all levels within their ~10,000+ employees, which may be where the issues lie.

They have many stated general goals, and numerous documents all highlighting their commitment to improving diversity, improving recruitment and retention, and improving the work environment for their employees. It is noteworthy that they offer far, far more trainings, webinars, etc. regarding diversity than any geoscience/earth science organization I have been involved with (with the exception of the Africa Array program at Penn State).

In many ways, their comparison to the civilian labor force and comparison through time implies a “measurable goal”. The report above also highlights results from surveys, including the FEVS (Federal Employee Viewpoint Survey) that are sent every year to NOAA employees. Some of those metrics track complaints, the resolution process, and other objective measures. However, within that there appears to be some general “how do you feel about this” type survey questions. If the NOAA workforce is ~70-80% white, then maybe a score of ~70-80% doesn’t say much? But perhaps I misunderstood those metrics in the reports.

The report also highlights several notable awards and rankings that they have received, such as “A Top 20 Supporter of HBCUs” and “A Top 50 STEM supporter for American Indian Science and Engineering”.

Policy or proposed policy for collecting demographic data at your organization:

I can’t find online info for this. However, all data are collected at the time that an employee applies for a position in NOAA, which then remains in their personnel folders for the duration of their time there.

UCLA Demographics - Session 3 Deliverable

The link(s) to demographic data at our organization are here:

- UCLA demographics: <https://admission.ucla.edu/apply/student-profile>
- This link has some information about demographics in the “Our baseline now” header” <https://www.physicalsciences.ucla.edu/diversity/#:~:text=As%20of%202015%2C%20onl,y%20about,of%20our%20faculty%20were%20women.&text=By%202019%2C%20Africa,n%20American%20and,of%20the%20graduate%20student%20population.>
- UCLA Atmospheric and Oceanic Sciences Demographics information: <https://grad.ucla.edu/programs/physical-sciences/atmospheric-and-oceanic-sciences/>
- Helpful website for demographics of any physical science department <https://grad.ucla.edu/graduate-program-statistics/enrollment/?t=Programtrendswithinafield>

- **How does your organization compare to others, or to the field as a whole?**

A lot of the things mentioned in the paper found on this website, Creating and Promoting Gender Equity and Diversity in Professional Geological Societies -

<https://eartharxiv.org/repository/view/2060/>, are similar to what I have personally found at UCLA in both the physical sciences department in general and for the department I am in, the Atmospheric and Oceanic Sciences department. Most professors in the physical sciences, AOS department included are male, with a significant number or majority of them white males. I have only ever had two female professors in any of my scientific classes for both undergraduate and graduate school. Furthermore, diversity in my department and the physical sciences as a whole is not good. It seems as there are ongoing efforts to increase diversity in my department and the physical sciences, but it is unclear that the scientific programs at UCLA are able to retain a diverse student body. I don't think that enough emphasis has been put on having a friendly/safe working environment here in general.

Public goals on demographics or increasing representation:

The UCLA Physical Sciences department has a section on their website about their diversity goals. They outline their commitment to increasing diversity, establish their current baseline, have created a student advisory board to track record of commitment to diversity, and offers resources for diversity training, diversity fellowships, support for diversity and equity courses, etc. <https://www.physicalsciences.ucla.edu/diversity/>

The UCLA Atmospheric and Oceanic Sciences department has released a statement on their website pledging to actively create a diverse academic community and foster a safe learning environment. <https://atmos.ucla.edu/diversity-statement> In terms of measurable goals, I don't think that has been released to the public yet, although I know they are working on ways to increase diversity within the department.

Policy or proposed policy for collecting demographic data at your organization:

- [Link](#) - How data are collected, reported, tracked, and utilized in decision making.
- OR proposed policy for collecting, reporting, tracking and utilizing demographic data.

UCLA has a number of survey that they use to collect information about the student body, faculty, and staff <https://equity.ucla.edu/data-hub/>. They mention that an outside consulting firm, Rankin and Associates, conducted a systemwide campus climate study in 2012-2013. Otherwise, it seems like the UCLA Student Affairs Information and Research Office (SAIRO) creates and administers the surveys mentioned in this website.

It also seems like the UCLA Social Sciences has connections to the California Census Research Data Center (CCRDC), which mentions demographic data. <http://ccrdc.ucla.edu/>

- **What did you learn about other organizations (or in general) while investigating demographic data?**
 - <https://diversity.ideo.columbia.edu/seminardiversity> - Increase diversity in seminars
 - <https://www.nature.com/articles/d41586-019-03784-x> - No all-male panels
 - <http://www.ohrc.on.ca/en/policy-and-guidelines-racism-and-racial-discrimination/part-3-%E2%80%93-guidelines-implementation-monitoring-and-combating-racism-and-racial-discrimination> - more information on collection of demographic data in Canada.

Session 3 Deliverables for UCI

Links to demographic data

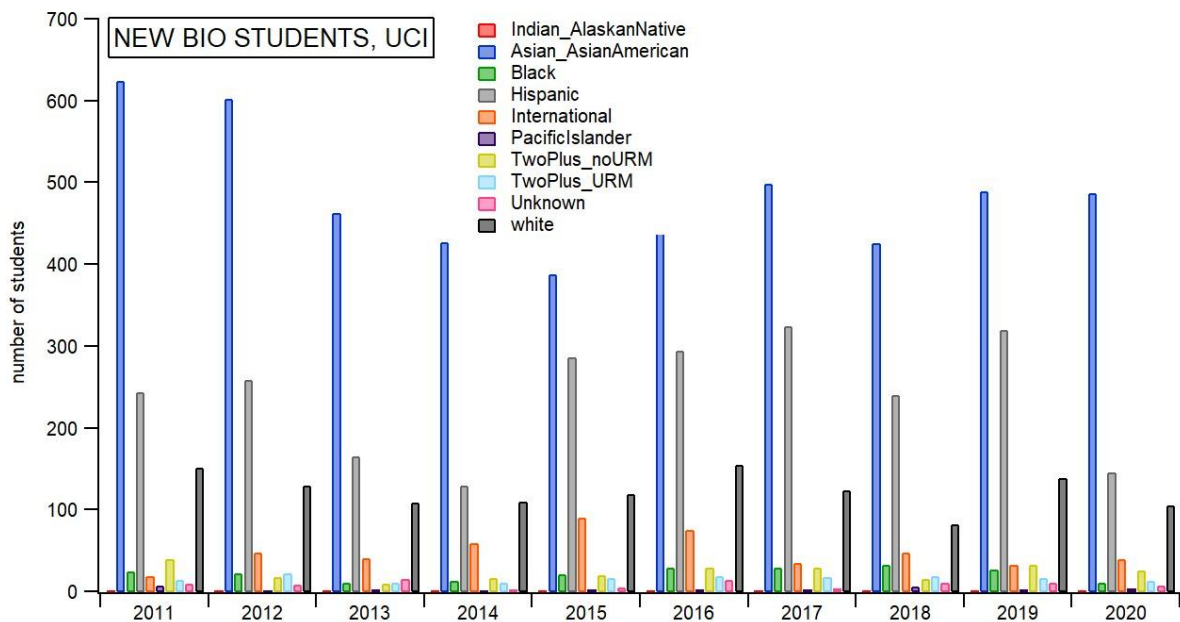
UCI data hub: <https://www.oir.uci.edu/Data-Hub/index.php>

Speaker analysis - not currently available to my knowledge. The Eco/Evo department had a special seminar series during Fall focused on inviting more diverse speakers to talk about their SCIENCE. Not just seminars about diversity, equity, and inclusion. I am not aware of similar seminar series in other departments at UCI.

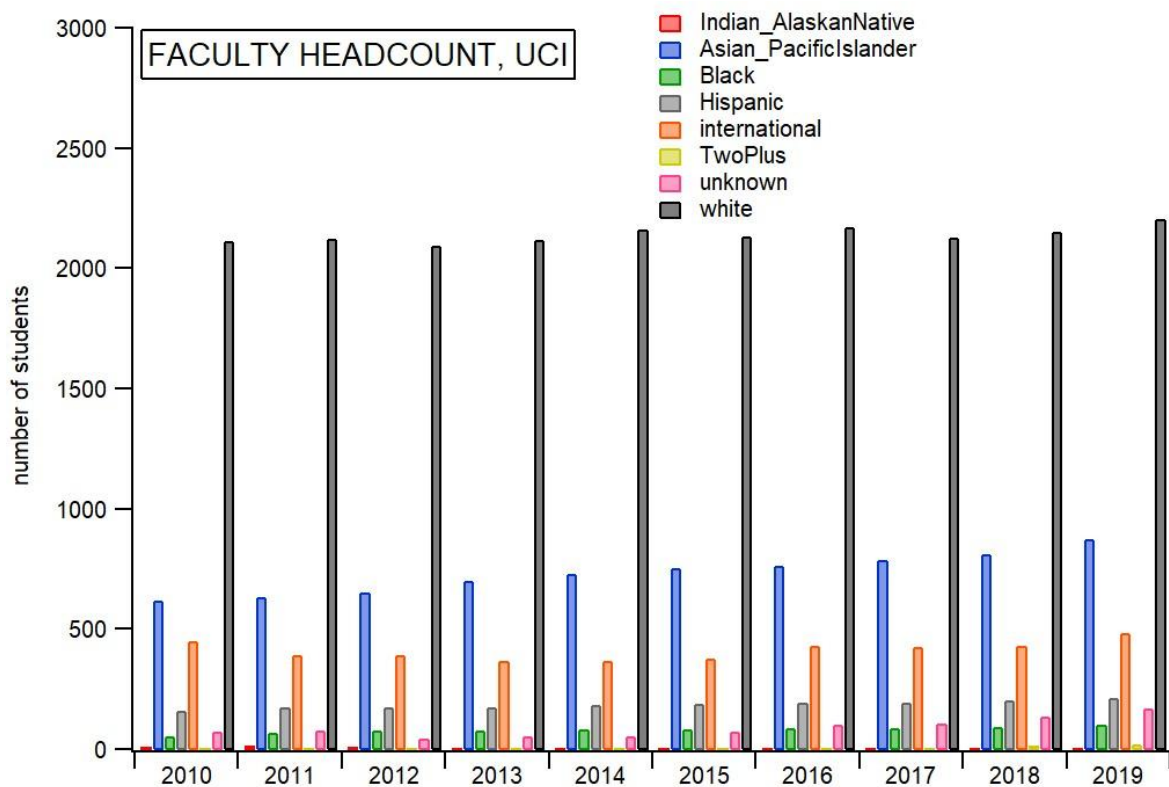
- **How does your organization compare to others, or to the field as a whole?**

2 graphs below show some demographics at UCI.

New students entering UCI BioSci



Faculty headcount for UCI (all schools)



Comparing to other institutions, UCI has higher proportion of Asian and Hispanic students. However, the faculty remains predominantly white, which is similar to most other academic institutions.

- **Public goals on demographics or increasing representation:**

UCI has implemented a broad Black Thriving Initiative summarized here: <https://inclusion.uci.edu/uci-black-thriving-initiative/>

One of the major goals is to increase recruitment and retention of Black scholars.

In addition, UCI BioSci has created a new Associate Dean of Diversity, Equity, and Inclusion. In this capacity, they will be distributing resources to focus on not only recruitment and retention of Black scholars/students, but also to support programs that will make our campus less hostile to Black scholars/students.

<https://cnlm.uci.edu/2020/09/30/cnlm-director-michael-a-yassa-is-the-first-associate-dean-of-diversity-equity-and-inclusion-for-the-school-of-biological-sciences/>

- **Policy or proposed policy for collecting demographic data at your organization:**

I am serving on a working group in Eco/Evo to establish a new anti-racism, equity, diversity, and inclusion council. One of the duties of the council will be to collect and track demographic data in the department.

This is what was found at Whittier College regarding demographic data (public and internal facing) as well as stated goals for representation.

- **The link to demographic data at Whittier College is here:**
 - <https://www.whittier.edu/academics/ira/facts> - Organization, Company, University Current Staff/Student Demographics can be found in the organizational factbook which is updated annually.
 - To my knowledge, we do not collect demographic data on invited speakers.
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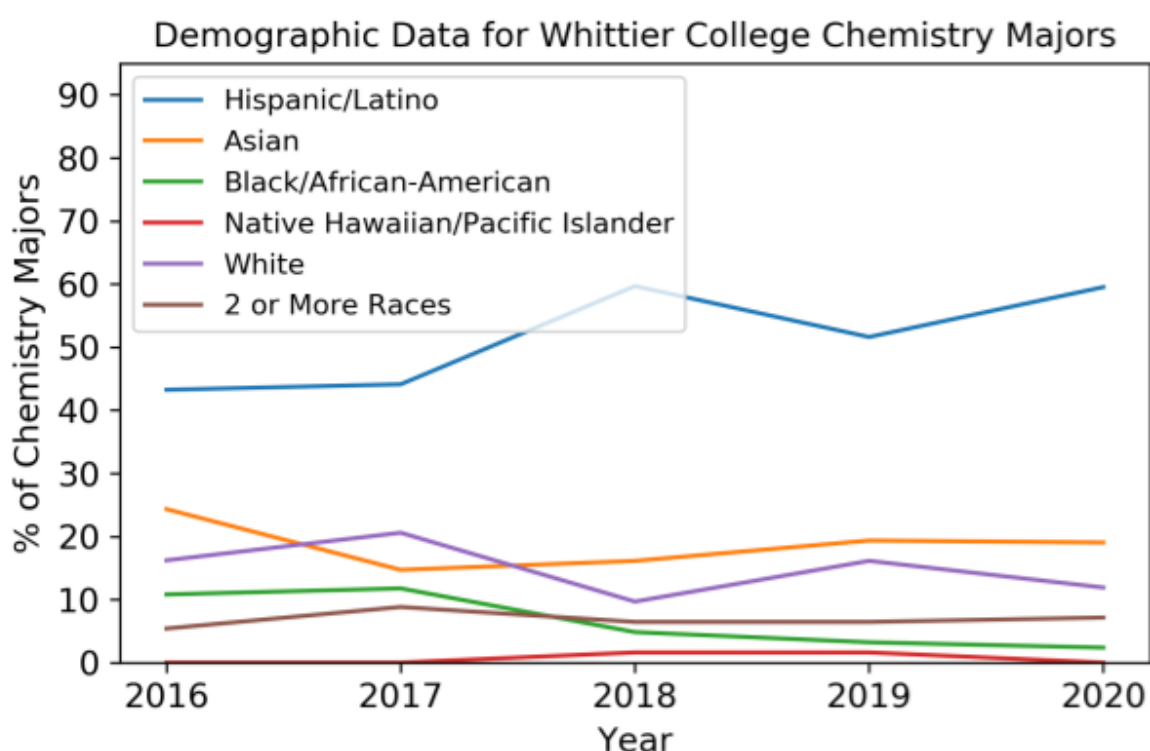


Figure 1: Racial demographic data for chemistry majors at Whittier College. American Indian/Alaska Native, while a category in the Institutional Post Secondary Data Education Data System (IPEDS) is not shown on this plot because we do not have any chemistry majors who identify as being part of that group over this time period.

- **How does your organization compare to others, or to the field as a whole?**
 - From a student standpoint, the fraction of Hispanic/Latino majors we educate is much higher than other organizations, including other Hispanic-serving institutions in this pod. Our major demographics largely mirror the college with one notable exception. While the fraction of Asian students majoring in chemistry is smaller compared to other organizations, the college student body as a whole is between

- 6-10% Asian students over the time period in Fig. 1. Thus, a high proportion of our majors are Asian compared to the college as a whole.
- From a faculty standpoint, like many colleges and universities, a higher proportion of the faculty (61%) are white compared to the student body (~30%). In the physical sciences (Math, Physics, Chemistry) only one tenure track faculty member is female despite the tenure track faculty overall being evenly split between male and female according to the fact book. It should also be noted that the demographic data appear to be collected assuming a binary gender distribution rather than accounting for a spectrum of gender identities.
 - These findings underscore the importance of looking past top-line numbers when assessing organizational diversity.
- **Public goals on demographics or increasing representation:**
 - This past summer, college leadership released a racial justice and equity plan: <https://www.whittier.edu/news/wed-08052020-554-pm/whittier-college-releases-racial-justice-equity-action-plan>

As part of that plan, college leadership committed to:

“Address recruitment and retention of Black Board of Trustee members, executive leadership, faculty, staff, coaches, and students. This work includes:

 - Expanding recruitment activities and criteria to value diverse backgrounds and develop diverse pipelines of candidates.
 - Evaluating appointment and personnel processes.
 - Improving mentoring processes and programs.
 - Increasing data collection and analysis regarding inclusion and equity for Black students, staff, faculty, and institutional leadership. We will meaningfully engage with students in this process.”
 - The faculty are also in the process of drafting and approving a strategic plan for equity and inclusion.
- **Policy or proposed policy for collecting demographic data at your organization:**
 - The office of institutional research and assessment collects and maintains demographic data. They also provide and maintain tools for faculty and staff to visualize and use these data.