

URGEO

Unlearning Racism in Geoscience

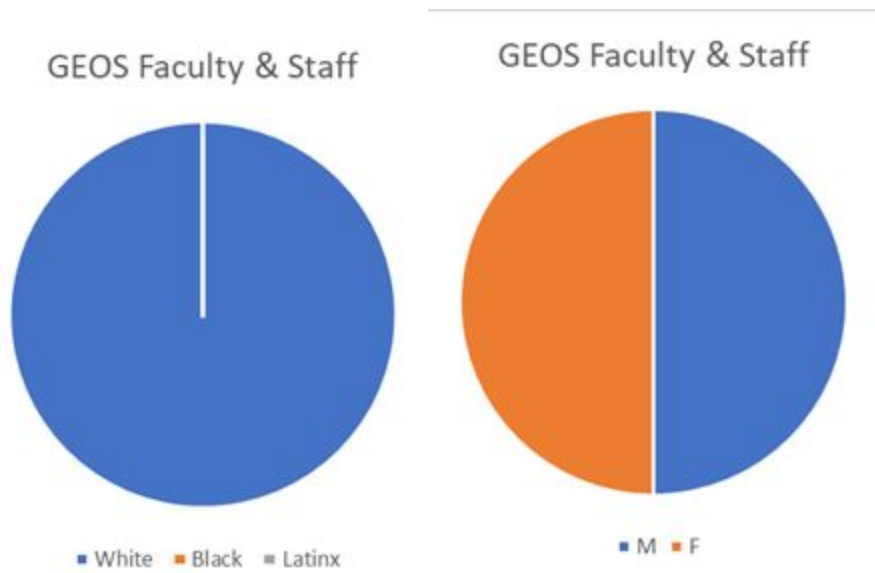
URGE Demographic Data for Chico Geoscience

This is what was found by the Chico Geoscience Pod at California State University, Chico on demographic data (public and internal facing) as well as stated goals for representation, and/or proposals to collect and report demographic data.

- **The link(s) to demographic data at our organization are here:**
 - [Link](#) – Chico State Institutional Research Fact Book
 - [Link](#) - University Current Staff/Student Demographics
 - NA - Analysis of past invited speaker demographics - not previously been collected, other than gender
 - If data are not available, what is the reason for not making it public? NA
 - If data are not collected, what is the reason? Lack of impetus? We will recommend a new a policy to collect and make public these data within our department going forward.

Demographics of GEOS Faculty and Staff, compared to University-wide

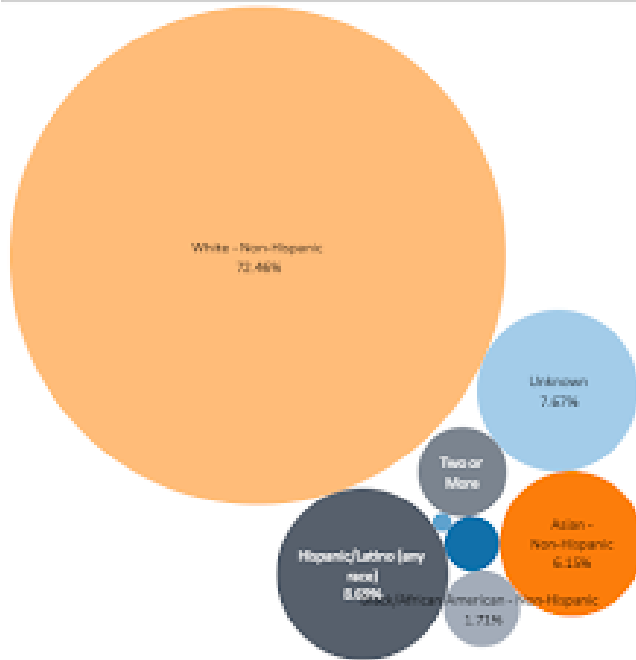
GEOS faculty and staff are 100% white, but are split evenly between male and female genders. In addition, four of our faculty/staff are foreign nationals and several are first generation.



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Employee - 2019 by Race/Ethnicity



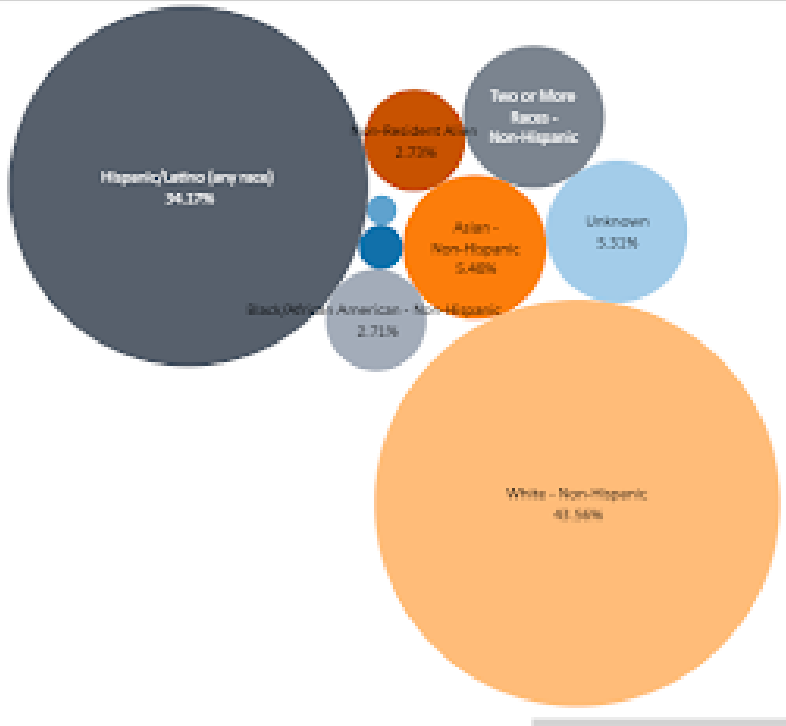
GEOS Student Data compared to University-wide

GEOS students also show low diversity in comparison to students university-wide. In the university, 44% are white, 34% are Hispanic/Latinx, 5.5% are Asian, 2.7% are African-American/Black.

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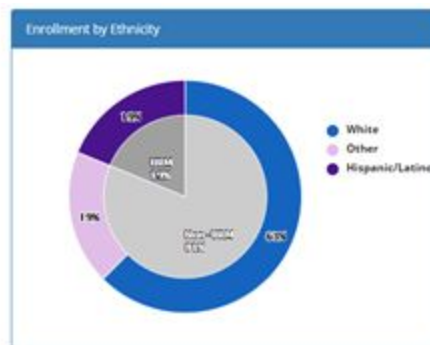
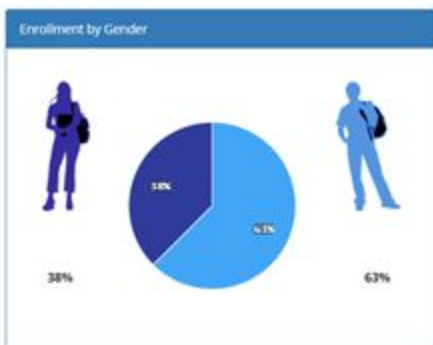
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Student - 2019 by Race/Ethnicity



Geology students:

Geology students are 63% white, 19% Hispanic, 19% other. They are 63% male and 38% female.

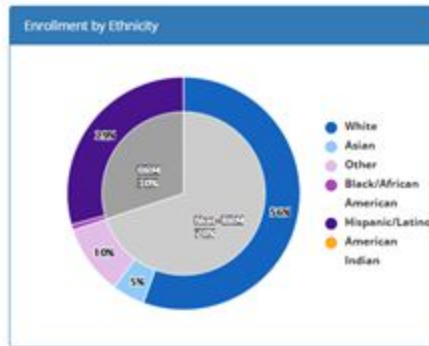
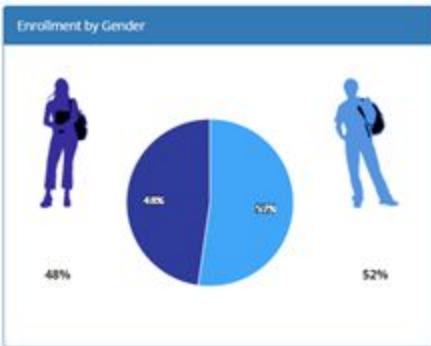


Environmental Science Students: (3 of 4 programs in GEOS Department)

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Environmental Science students are 56% white, 29% Hispanic, 1% Black/African American, 5% Asian and 10% other. They are 52% male and 48% female.



GEOS advisory board

The GEOS Advisory Board is 57% male and 43% female.

GEOS Advisory Board

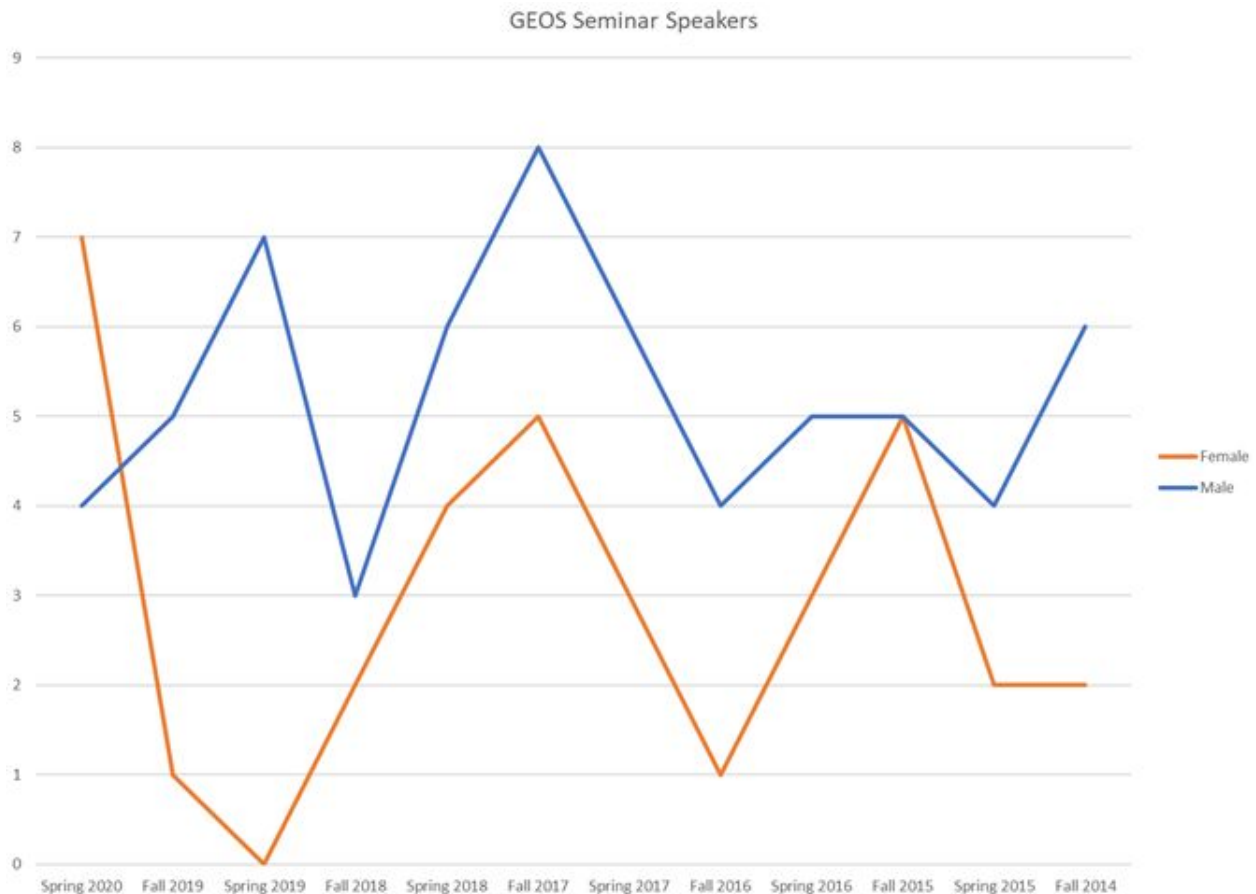


GEOS seminar speakers

The diversity of GEOS seminar speakers varies greatly semester to semester, but typically comprises more male than female, and significantly more white than non-white speakers.

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

We compare CSU, Chico geoscience student demographics to two other universities in the CSU system that we believe are comparable to our programs. We also compare CSU, Chico student demographics with all CSU campuses.

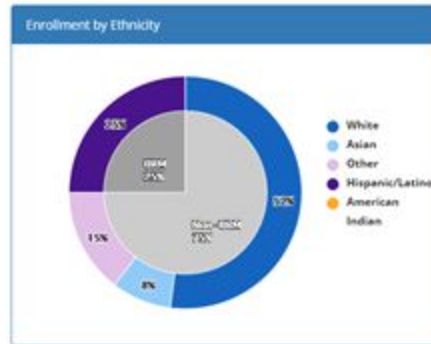
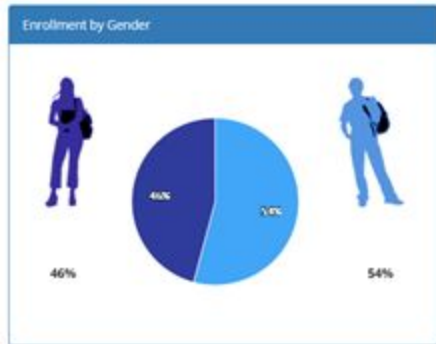
Fresno State (Geology)

CSU Chico Geology students are 63% white, 19% Hispanic, 19% other. They are 63% male and 38% female.

Fresno State Geology students are 57% white, 25% Hispanic, 8% Asian and 15% Other. They are 54% male and 46% female.

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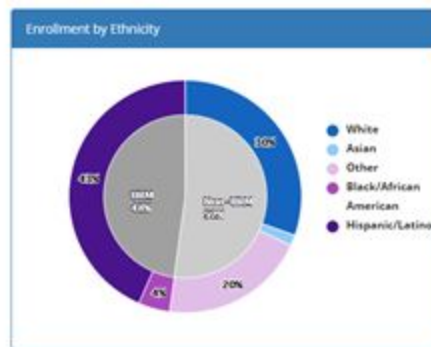
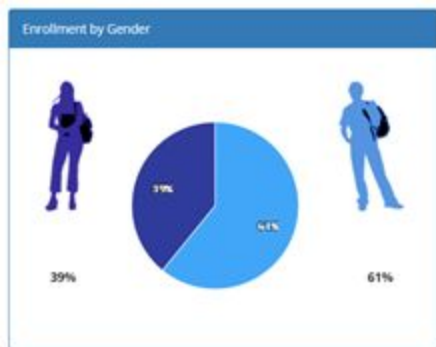
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Northridge State (Geology)

CSU Chico Geology students are 63% white, 19% Hispanic, 19% other. They are 63% male and 38% female.

CSU Northridge Geology students are 30% white, 43% Hispanic, 4% Black/African American, 3% Asian and 20% Other. They are 61% male and 39% female.



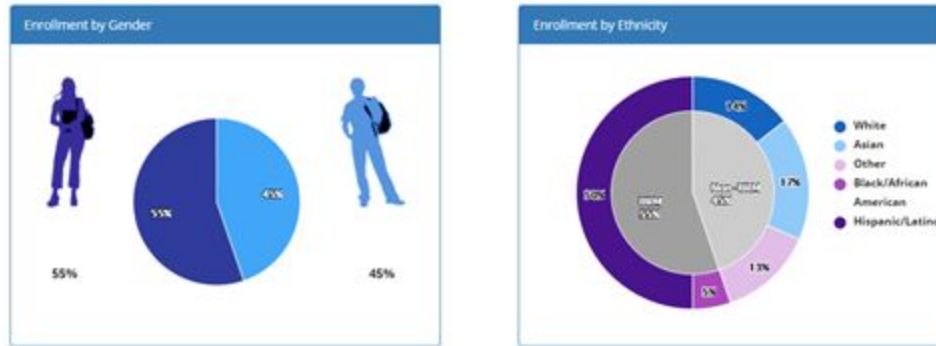
Fresno State (Environmental Science)

CSU Chico Environmental Science students are 56% white, 29% Hispanic, 1% Black/African American, 5% Asian and 10% other. They are 52% male and 48% female.

Fresno State Environmental Science students are 14% white, 50% Hispanic, 17% Asian, 5% Black/African American and 13% Other. They are 45% male and 55% female.

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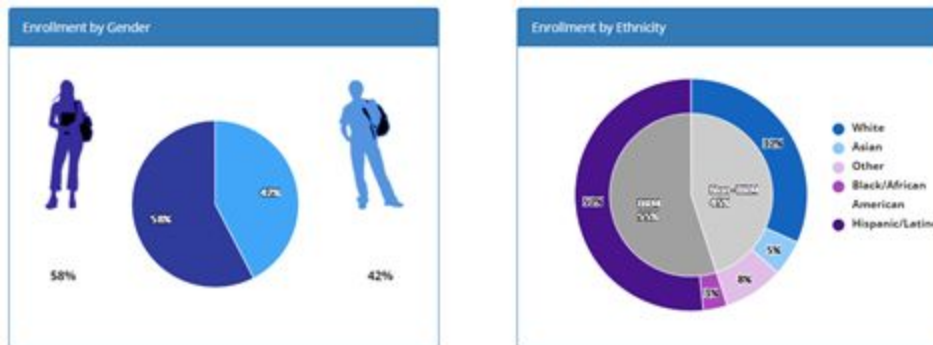
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Northridge State (Ecology)

CSU Chico Environmental Science students are 56% white, 29% Hispanic, 1% Black/African American, 5% Asian and 10% other. They are 52% male and 48% female.

CSU Northridge Ecology students are 32% white, 52% Hispanic, 5% Asian, 3% Black/African American and 5% Other. They are 42% male and 58% female.

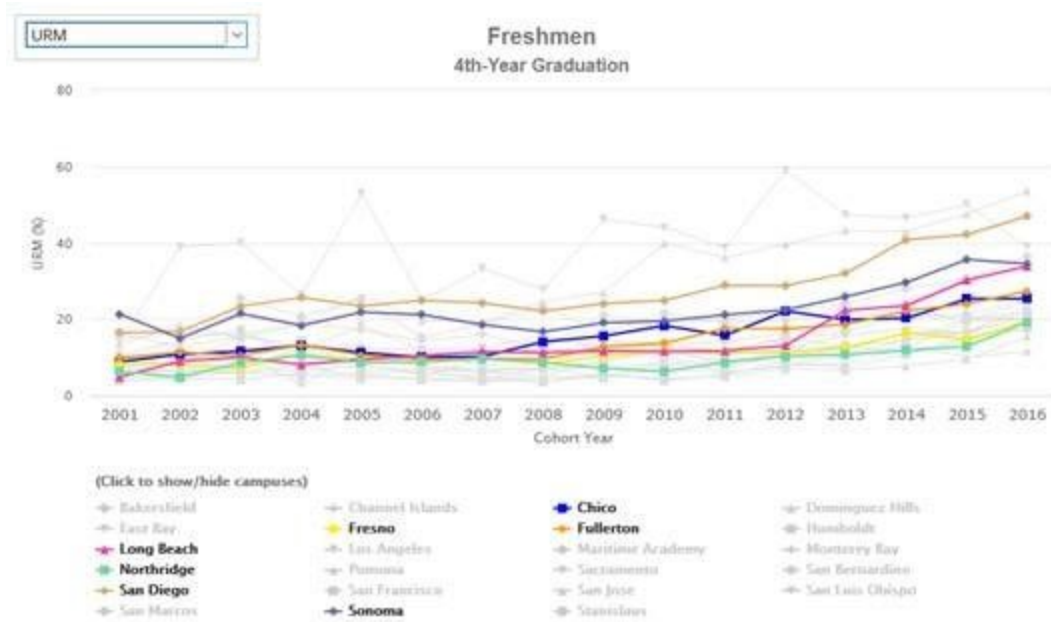


Comparison of all CSU Chico students with other CSU campuses

CSU Chico has had an increasing proportion of Under-Represented Minorities (URM) graduates over the past four years and is now comparable with Fullerton and San Francisco, lower than Sonoma, and higher than Fresno or Northridge. This tells us that our programs are doing a relatively poor job of attracting URM students compared to Fresno and Northridge, who have lower overall proportions of URM students graduating from their campuses, but much higher proportions of URM students in their programs.

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AGI data from 2010-2019 (Gonzales, 2019)

CSU Chico Geology students are 63% white, 19% Hispanic, 19% other. They are 63% male and 38% female.

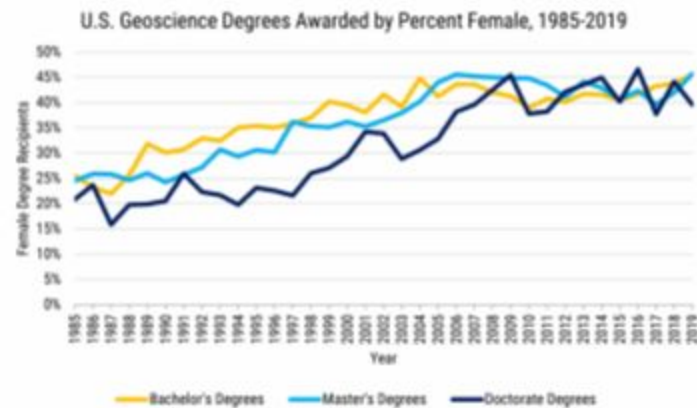
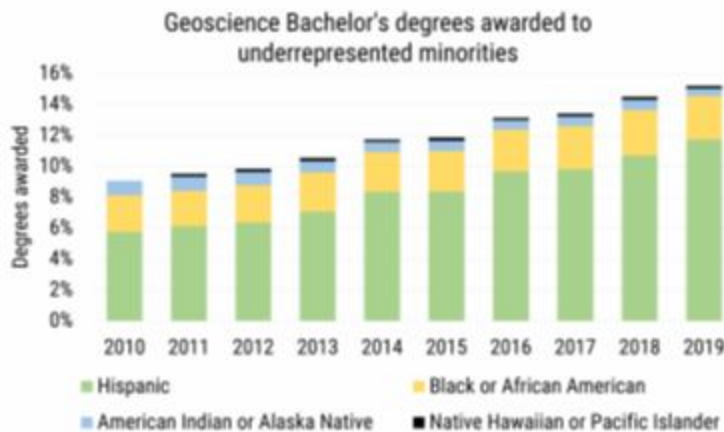
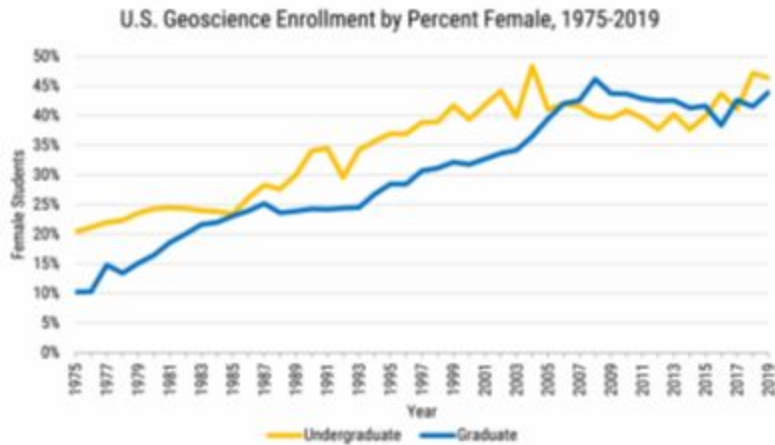
CSU Chico Environmental Science students are 56% white, 29% Hispanic, 1% Black/African American, 5% Asian and 10% other. They are 52% male and 48% female.

AGI data show that in recent years, undergraduate geoscience enrollment has been between ~40-45% female (47% in 2019), and that an increasing number of BS degrees have been awarded to Hispanic students (11% in 2019), and to female students (45% in 2019).

Although both of our programs have a higher proportion of Hispanic students than the national averages, the Geology program attracts a lower proportion of female students than the national average.

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Unlearning Racism in Geoscience





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- **Public goals on demographics or increasing representation:**
 - Are there general goals stated at your organization for achieving representation? Equity, diversity and inclusion is one of three strategic priorities in our University Strategic Plan. Here are two relevant goals:
 - Maximize the recruitment, retention, support, and graduation of diverse students
 - Promote hiring and retention that contributes to a diverse and inclusive community that reflects student demographics
 - Are there measurable goals stated at your organization for achieving representation?
 - Not in the strategic plan (although the second bullet above is implicitly measurable)
 - Suggested additional goals for your organization:
 - We are in the process of hiring a new faculty member in our department and are keen to increase representation of non-white scientists. Increasing diversity is an explicit part of our job advertisement and we shared the job posting with networks promoting diversity in STEM, including the National Association of Black Geoscientists, the Society of Latinxs/Hispanics in Earth and Space Science, the National Organization of Gay and Lesbian Scientists and Technical Professionals, the Earth Science Women's Network, in addition to social media (e.g., Twitter: #RepresentationMatters, #blackandSTEM, #BlackInGeoscience, #WomenInScience, #LGTQSTEM, @EngWomen, @STEMwomen, @MinoritySTEM, @500womensci, @sacnas, @500QueerSci)
 - New policy suggestions (to be presented at an upcoming department faculty meeting):
 - 1. Add culturally diverse courses and course materials (e.g. environmental justice content) to attract a wider variety of students to our programs.
 - 2. Invite diverse speakers to departmental seminars and collect data documenting that diversity.
 - 3. Include discussions of diversity regularly in departmental meetings (e.g. related to hiring, attracting students to our programs, curriculum changes)
 - 4. Ensure that the GEOS department website represents and promotes the achievements of diverse students



Unlearning Racism in Geoscience

- **Policy or proposed policy for collecting demographic data at your organization:**
 - How data are collected, reported, tracked, and utilized in decision making.
 - Race/Ethnicity Collection:
 - Information is gathered through the student application process. They are asked a series of questions and then the data is processed to meet the requirements for reporting to out to the CSU using the national definition by IPEDS and the Census Bureau. IPEDS definition: <https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions>
 - The university is aware that the definition can undercount students that are in the categories of "American Indian or Alaska Native". American Indian is a broad classification and may have a second ethnicity of Hispanic/LatinX and under the processing rules. If a student indicates Hispanic then they are categorized as Hispanic and nothing else. Lower counts can occur for other smaller populations as well for non Hispanic students, because of the category of "Two or More". We are seeing an increase in the Two or More category when students self-identify.
 - Institutional Research has the ethnicity application details, and we are beginning to break these out in our reporting but must also follow the national definitions.
 - Data Reporting/Tracking/Utilizing:
 - Data is reported to the CSU. Then the CSU reports the data to IPEDS. IPEDS data is then used by many at the state and federal levels to review if the job market demand will align with the supply (student majors). Grant opportunities such as the National Science Foundation (NSF) require this demographic data.
 - The Graduation Initiative (GI) 2015, GI 2025 and other initiatives utilize demographic data (Ethnicity/Race, First-Generation, Gender, Gender Identify, Sexual Orientation) to look at diversity and inclusion opportunities to improve graduation rates and to get more students not traditionally served into STEM type of majors.
 - Decision Making:



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- The campus/deans/departments/faculty can use the more detailed data (Institutional research can break out the Two or More students) to make policy changes that better support all students, which in-turn should better support traditionally under-served students.
- OR proposed policy for collecting, reporting, tracking and utilizing demographic data.
 - We propose that our department starts to track this information as part of our recruitment strategy, to attract more diversity in both students and colleagues.
 - We propose to add a Diversity page to our departmental website to help us track our recruitment efforts over time, as well as provide resources for URM students (see example [here](#)).
 - We propose to collect diversity data for seminar speakers and to use that data in considering speakers to invite in subsequent semesters
- **What did you learn about other organizations (or in general) while investigating demographic data?**
 - As expected, our department is less diverse than our university. We were interested to see that while our university has a more diverse student body than similar universities (e.g. CSU Fresno, CSU Northridge), our department has a significantly less diverse student body than geoscience departments at these universities.
 - We are committing to trying to actively attract more diversity in our incoming students by proposing to the department that we start:
 - Highlighting the many resources available for students from groups under-represented in geoscience
 - Including more students of color in our recruitment photos
 - Focusing more heavily on diverse employment opportunities in the geosciences after graduation in our recruitment materials (e.g. most of our faculty work “in the field” but many of our students and potentially interested students may not, so our images of geoscientists and geoscience careers need to represent a variety of opportunities).
 - Add a diversity page to our departmental website showing the diversity of our students and faculty, and highlighting resources for under-served students
 - Host Career Panels for current students featuring diverse and recent graduates. This has started being implemented in Fall 2020 for the Environmental Science degree.