

URGE

Unlearning Racism in Geoscience



URGE Demographic Data for University of Massachusetts Amherst Department of Geosciences

This is what was found by the University of Massachusetts Amherst Department of Geosciences on demographic data (public and internal facing) as well as stated goals for representation, and/or proposals to collect and report demographic data.

The Bromery Legacy: Our department benefits greatly from a long association with Dr. Randolph W. (Bill) Bromery. Dr. Bromery arrived at UMass in 1967, hired as a tenure-track professor, our first geophysicist, and only the 3rd Black recipient of a PhD in Geosciences. Although he rose through the academic administration rapidly (he was appointed Chancellor of the University in 1971), he maintained strong ties with our department until his death in 2013. Prior to his passing, he and his wife established the Randolph and Cecile Bromery Fund in the department, which supports graduate fellowships and undergraduate scholarships to students of color. The department also hosts an annual Bromery Lecture, which invites African-American geoscientists to visit campus and present on their research.

- **The link(s) to demographic data at our organization are here:**
 - ([link](#)) The University provides a rich database on past and current diversity demographics. General UMass diversity data for 2020-2021: undergraduates (17%), graduates (17%) and faculty/staff (11%). Only 7% of the faculty in the College of Natural Sciences are URM. % reported are for African American, Chicano/Latino, and Native American/Alaska Native. Based on US citizens/permanent residents reporting race/ethnicity.
 - Recent statistics for Geosciences Department
 - Undergraduate programs: The department has three undergraduate majors; percent ALANA students for each major for F2019 are: Geology (11%), Earth Systems (18%) and Geography (10%). Additionally, the department shares an Environmental Sciences major (17%) with the Environmental Conservation Department.
 - Graduate students enrolled in 2020: Geography MS programs (7%), Geosciences MS and PhD program (21%)
 - Faculty: The Geosciences currently has 22 full time faculty (tenure stream and non-tenure stream) of which 2 are from URM groups (9%) and another 4 are international faculty of color (27% faculty of color).

- We are planning to post diversity demographic information on our department web page
 - Invited Speaker demographics
 - Past invited speaker demographics: Kiesling et al (2020) [What is in a seminar](#) was led by UMass Geosciences students. When Kiesling and Bryant coordinated the department lecture series in 2017-29, they set goals for the incoming speakers: *“At least 50% of the roughly 20 speakers would be women (up from an average of 40% over the previous 4 years), and more than one speaker would be a person of color.”* Because the Geosciences faculty resisted inviting more URM and women speakers, Kiesling and Bryant with students from the Environmental Conservation Department secured funds and support to run a new Bridge speaker series that invites early career speakers from minoritized groups. This successful program has expanded to include all of the College of Natural Sciences and has become a model for ways to increase visibility of URM scientists and provide near peer mentoring.
 - The 2020-2021 academic year offered opportunities for virtual talks from folks farther than driving distance, which greatly opened the pool of potential speakers. We also instituted a policy that graduate students can nominate speakers. The results is that this past year 4 out of 17 speakers are URM (6 if we count the Bromery and Bridge program speakers) and 15 of the 17 are women.
 - Organizers (graduate students and post-docs) of the speaker series change each year and the demographic data hasn't yet been collected longitudinally. We are working to collect this data and will add to the diversity page of our web site.
- **How does your organization compare to others, or to the field as a whole?**
 - AGI - “Diversity in the Geosciences” [link here](#) indicates that underrepresented undergraduates earning BS degrees in geosciences has increased in the past ten years from ~7 to 15%. MS degrees awarded have increased from 7 to 10% and PhD degrees earned shows slight increase but remains ~ 6%.
 - Our graduate geography program has similar demographics to the national average.
 - Our graduate geosciences program (20%) is much more diverse than the national average (6-10%) in part due to the benefit of Bromery fellowships that support students, as well as UMass graduate school fellowships for underrepresented students and our participation in the AGU Bridge program, which started in 2020. Over the past ten years, our enrollment of underrepresented graduate students has increased with the inauguration of these funding opportunities.
 - The Geosciences department has greater % URM faculty than the UMass College of Natural Sciences. We note that the numbers of URM faculty in Geosciences are small (only 2) so that increases or decreases of one person can greatly impact the percentages.

- **Public goals on demographics or increasing representation:**
 - UMass Amherst [Office of Diversity, Equity and Inclusion](#) improve and support campus climate for all students, faculty and staff. Recruitment, retention and promotion are key elements of that office's [strategic plan](#).
 - Our department has not (yet) stated goals for representation. At minimum we should expect to continue to hire and admit folks from underrepresented groups and increase representation. We will work to keep our department statistics above the national average for geosciences departments.

- **Policy or proposed policy for collecting demographic data at your organization:**
 - The university has an extensive database for diversity information that is continually updated ([link](#)).
 - We are currently collecting 10 year trends in demographics for undergraduate and graduate students and plan to post this information on the diversity tab of the department's website.
 - We will also add historical demographic information on the department to the web page.

- **What did you learn about other organizations (or in general) while investigating demographic data?**
 - In this process, we became more aware of the Universities extensive tracking of demographic information ([link to Factbook](#)) and support underrepresented folks (link to the [Office of Diversity, Equity and Inclusion](#)).
 - In this process we recognize the importance not only tracking enrollment, but also retention and graduation rates of underrepresented students.