

DELIVERABLE #3

Demographic Data for the Jackson School of Geosciences (JSG) Pod at The University of Texas at Austin

The JSG URGE Pod has 87 Members. Therefore, the Pod is split into "Podlets" to accommodate meeting times and foster discussions in smaller groups. Below is the synthesized deliverable for the JSG pod with specific guidelines for each Podlet.

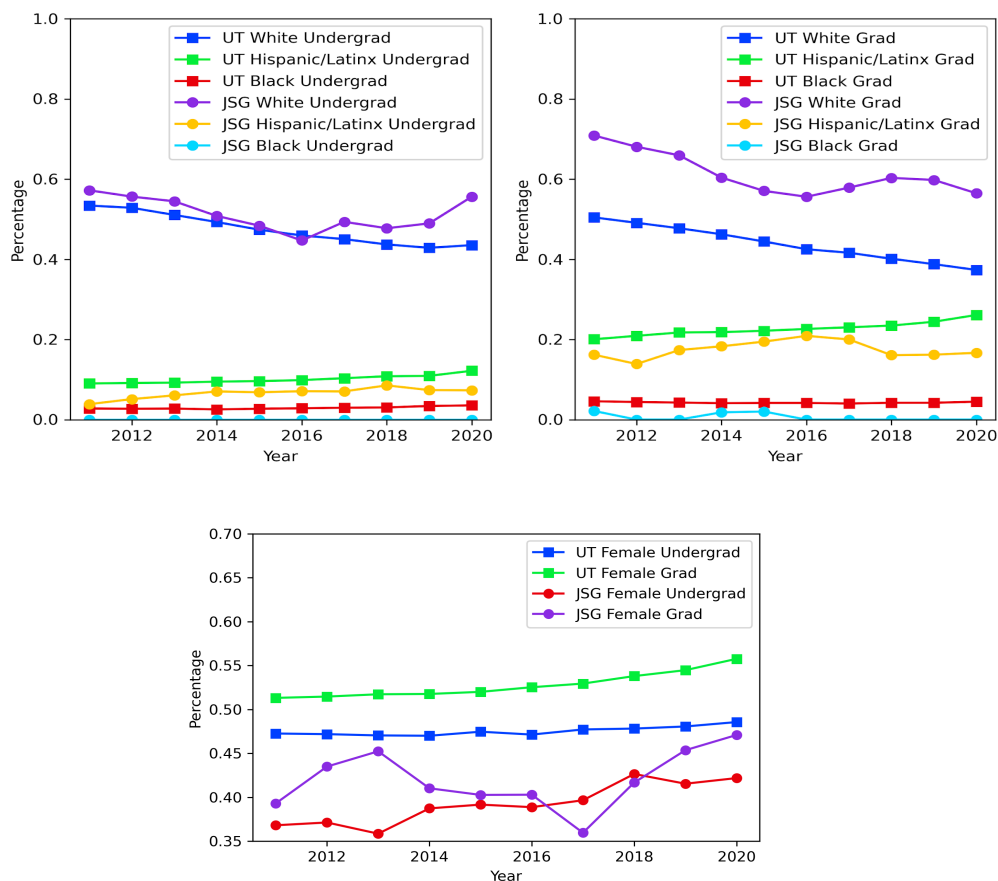
Note: there may not be consensus between podlets.

This is what was found by the JSG URGE Pod at the University of Texas at Austin demographic data (public and internal facing) as well as stated goals for representation, and/or proposals to collect and report demographic data. Some information was public; answers that were only found through follow up with contacts are noted.

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

- UT Austin Data

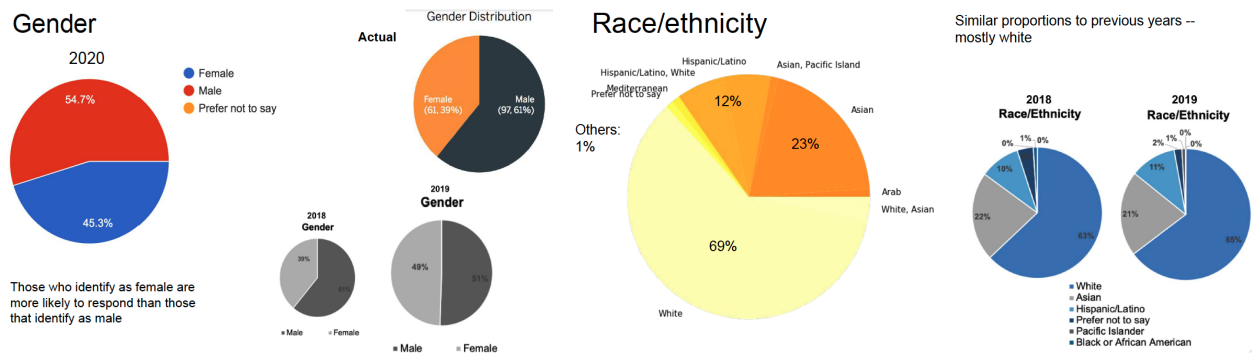
- Students: <https://datausa.io/profile/university/the-university-of-texas-at-austin>
<https://reports.utexas.edu/spotlight-data/students>



- Faculty: <https://provost.utexas.edu/data-reporting/>, by race/ethnicity: <https://provost.utexas.edu/data-reporting/faculty-race-ethnicity/> <https://reports.utexas.edu/spotlight-data/faculty>
 - Comparison of faculty (Gender): <https://provost.utexas.edu/data-reporting/college-school-diversity-comparison-overall/>
 - Comparison of faculty (Race/Ethnicity): <https://provost.utexas.edu/data-reporting/college-school-diversity-comparison-race-ethnicity/>
 - Peer Comparison: <https://provost.utexas.edu/data-reporting/peer-comparisons/>
- JSG Data: <https://www.jsq.utexas.edu/diversity-inclusion/resources-data/geoscience-diversity-data/>
 - (Not Data but could be where data goes: <https://www.jsq.utexas.edu/diversity-inclusion/>)
- CNS Data: <https://cns.utexas.edu/diversity/college-demographics>
- **Our thoughts:**
 - **Some of the gender breakdown in the university and college level documents are not inclusive because it assumes a gender binary and does not incorporate options for gender minorities (e.g., non-binary, gender nonconforming, gender fluid, etc.)**
 - **Undergrad: The proportion of Hispanic and female undergrads in the JSG have been increasing. Black students remain exceptionally poorly represented.**
 - **Grad: The proportion of Hispanic and female grads in the JSG have been in flux. Black students remain exceptionally poorly represented.**
 - **Faculty: The proportion of female faculty in the JSG have been in flux. Black and Hispanic faculty remain exceptionally poorly represented.**
 - **What about demographics in leadership roles (directors/chairs/deans, associate directors/chairs/deans)? E.g., all male (and mostly white) directors, mostly male department chairs (Sharon Mosher is the only exception). This might be accounted for but not made public(?)**
- Past invited speaker demographics
 - We should be able to compile this data (although with so many seminars it would be difficult).
 - JSG as a whole should track this (Relevant paper: <https://www.pnas.org/content/115/1/104>). IEB has been tracking demographic info in the suggestion form... can we update the JSG forms/DeFord forms? Optional demographic form that speakers could fill out (after the talk).
 - The BEG does not collect demographic data on speakers. One individual in a podlet went through BEG seminar speakers from 2015-2021 and tabulated interpreted demographics for the invited speakers (while acknowledging that this classification of speakers into groups based on pictures and resumes rather than on self-identification is not considered base practice).
 - The BEG seminar series has in recent years intentionally been run by early career scientists, which we perceive as a positive.
 - 2015-2021, BEG invited seminar speakers have been 21% women, 78% men. Speakers have been 83% white, 15% Asian, 2% Hispanic, 1% Black.
- **How does your organization compare to others, or to the field as a whole?**
 - As of 2019, JSG faculty are only 7% Asian and 0% Black or Hispanic (compared to 15%, 4%, and 4%, respectively, in peer institutions).
 - “Students”: in the last decade, the number of biracial/multi-ethnic has doubled, the number of Black students has decreased (from <2% to unreported, i.e., less than 5 students), the

number of LatinX students has fluctuated (around 10-12%); the number of women has increased by 5%.

- **Advice:** Allow students to select multiple categories and/or define categories. Define intent of survey. Two questions (e.g., categories vs. true diversity).
 - Include more demographic categories especially for International students (Mediterranean, Arabic, Indian, Asian, etc).
 - Students would also be interested in seeing a similar survey for faculty/staff/etc.
 - Talk to Leah Turner about best practices?
- *Graphic below: Graduate student data for 2020 and comparisons to 2018 and 2019. This data was collected from the annual GSEC survey. This survey is not mandatory... So we are missing a sampling of many students, especially international students. How can we do a better job about collecting this data in the future?*



- **How Does This Compare to the US? The State?**
 - For the undergraduate population at UT Austin, Hispanic and Black students are represented at a little less than HALF of the proportion of Hispanic and Black students in high school (and lower levels) in Texas. While lawsuits and media representations often emphasize the impact of admissions rules on white students, the outrage should be on why Black and Hispanic students are so drastically underrepresented.
 - UT Austin undergraduate demographics, scroll down page: <https://www.utexas.edu/about/diversity-equity-and-inclusion>
 - Texas K-12 demographic data: <https://schools.texastribune.org/states/tx/>
 - JSG is not really tracking the UT Demographics (esp. Hispanic students in grad school). We definitely lag behind the state numbers (Hispanic and Black).
- Data about other places
 - AGI - "Diversity in the Geosciences – a Look at the Data and the Actions of the Community" - <https://www.americangeosciences.org/webinars/diversity-geosciences-look-data-and-actions-community>
 - NSF - annual Survey of Earned Doctorates: <https://www.nsf.gov/statistics/srvydoctorates/#sd&tabs-2> - *caveats* - only doctorates awarded by year, so it doesn't capture MS or undergraduate degrees; only US students
 - GSA - <https://www.geosociety.org/documents/gsa/about/MbrDemographics.pdf>; <https://www.geosociety.org/GSA/About/Diversity/GSA/About/Diversity.aspx>
 - SEPM - Fernandes et al., 2020. "Enriching Lives within Sedimentary Geology": Actionable Recommendations for Making SEPM a Diverse, Equitable and Inclusive Society for All Sedimentary Geologists. Sed. Record: <https://sepm.org/files/183article.ly3dww3vr5refg6g.pdf>

- AGU - available demographic data limited - https://www.agu.org/-/media/Files/AGU_Membership_Demographics_2018.pdf; <https://www.agu.org/-/media/Files/Learn-About-AGU/2014-2019-Honors-Program-Diversity-Report.pdf>
 - AAPG - ?
- Other Resources:
 - Creating and Promoting Gender Equity and Diversity in Professional Geological Societies - <https://eartharxiv.org/repository/view/2060/>
- **Public goals on demographics or increasing representation:**
 - Are there general goals stated at your organization for achieving representation?
 - “Creating a diverse and welcoming environment where students, faculty, researchers and staff from all backgrounds can thrive is a top priority of the Jackson School of Geosciences.” - <https://www.jsg.utexas.edu/diversity-inclusion/>
 - From the strategic plan (www.jsg.utexas.edu/wp-content/uploads/2011/05/JSG_StrategicPlan_2018.pdf):
 - Strategy 2: Increase the number of opportunities for JSG faculty, researchers and students to engage with diverse geoscience researchers and students.
 - Strategy 3: Increase the number of underrepresented students enrolled in JSG at the undergraduate and graduate level.
 - Strategy 4: Increase the number of underrepresented faculty, research scientists and staff in JSG.
 - Strategy 5: Increase the participation of underrepresented groups in geosciences and other STEM fields.
 - For example: “We strive to reach a diverse applicant pool.”
 - Equal gender representation among international applicants
 - Fellowships and awards for diverse applicants (e.g. Jorgensen, Crandall, & Harriott fellowships at UConn)
 - Are there measurable goals stated at your organization for achieving representation?
 - Yes, but they are vague; for example of a more specific goal: “student body should be roughly equal to the demographics of the state of TX”
 - **Suggestions: The JSG Needs to have specific, measurable goals that are assessed yearly.**
 - **These measurable goals should not supplant more aspirational goals towards improving (we need to do more than just have equity, we need inclusion).**
 - Suggested additional goals for your organization:
 - Equal representation at JSG leadership levels
 - Retain diverse students and survey those who exit “the leaky pipeline” about their experiences
 - Third party evaluations of diversity at JSG and reviews of anonymous comments from JSG community to develop solutions and maintain confidentiality
 - Equal pay for people at similar levels regardless of race, gender, ethnicity, etc. (e.g., <https://www.nbcnews.com/news/latino/latino-professors-univ-texas-austin-are-paid-less-few-are-n1090886>). Same with service work, other commitments etc.
 - Reflect the demographic representation to that of Texas at the undergraduate level and to that of the country at the graduate student level, given where funding is coming from.
 - Maybe there is an opportunity to quantify to have xx% of our incoming undergraduates to be 2-year college on-ramps.
 - How can we connect to the students that aren’t even considering UT or Geology. e.g., advertising the range of geoscience/earth science degrees.

- **We need to remember:** Following URGE, we should have a Townhall to share our ideas and determine what policy different groups can push for (e.g., units vs. students vs. GSC)
- **Policy or proposed policy for collecting demographic data at your organization:**
 - UT Austin collects data on students and faculty.
 - **We have data on faculty and students, but not the greater JSG community (e.g. what are the demographics of our research scientists? Staff? Postdocs etc.). This data should be collected and shared on the JSG website.**
 - We need to think through very carefully how and why we are collecting data, recognizing what data are critical and necessary so that we are prioritizing the most important information with respect to the quality of the applicant. We should consider which boxes we make available.
 - We don't want to create animosity or insecurity in applicants who may believe that they did/did not get the job because of which boxes they checked.
 - Perhaps we can allow them to check the boxes to determine fulfillment of the competitive pool for HR purposes, but then the search committee never actually sees the demographic data or if they are/are not a minority applicant.
- **What did you learn about other organizations (or in general) while investigating demographic data?**
 - Increase diversity in seminars: <https://diversity.ideo.columbia.edu/seminardiversity>
 - No all-male panels: <https://www.nature.com/articles/d41586-019-03784-x>
 - Information on collection of demographic data in Canada: <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>
 - JSG Diversity/Inclusion: <https://www.jsj.utexas.edu/diversity-inclusion/about/>
 - UT Austin connection to Fort Valley State: <https://www.fvsu.edu/dual-degree-programs/>
 - "Toward a non-extractive research ethics for transcultural, translingual research: perspectives from the coloniser and the colonised" <https://doi.org/10.1080/01434632.2018.1427755>
 - Bring in examples of diverse geoscientists in lectures:
 - <https://www.diversegeologists.org/> featuring two of our own: [Tim Shin](#), [Rachel Bernard](#)
 - <https://community.geosociety.org/gbqm/dfg>
 - GeoLatinas, Black in XXX, 500 Female Scientists
 - <https://500queerscientists.com> ([Earth and Planetary](#), [Geoscientists](#), [Biology](#))
 - <https://500womenscientists.org/>
 - <https://diversifyeeb.com/>
 - **MONEY FOR FACULTY TO DEVELOP DEI PROJECTS:** <https://provost.utexas.edu/2020/10/23/new-act-grants-for-dei-projects/>
 - **WE NEED TO DO MORE/MAKE CONNECTIONS!**

Graphics

UT-Wide Data

Instructors by Academic Rank and Gender

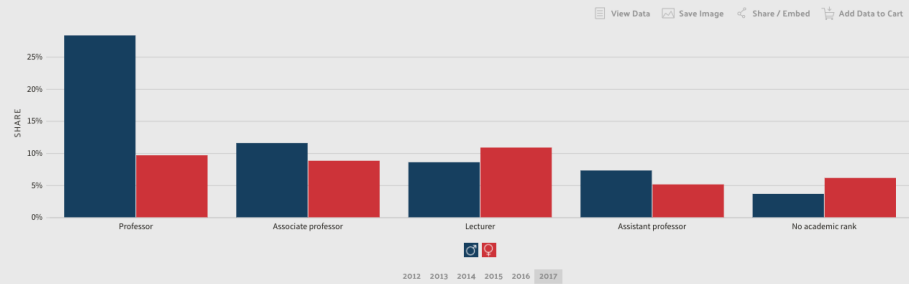
MOST COMMON DEMOGRAPHIC

1. Male Professor
2. Male Associate professor
3. Female Lecturer

In 2017, the most common demographic for instructional staff at The University of Texas at Austin was Male Professor with 730 employees, Male Associate professor with 298 employees, and Female Lecturer with 280 employees.

This chart shows the gender split between each academic rank present at The University of Texas at Austin.

Data from the Integrated Postsecondary Education Data System (IPEDS) Instructional Staff/Salaries



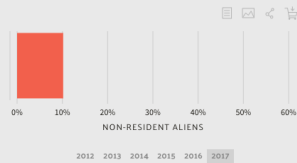
Enrollment by Race & Ethnicity

MOST COMMON RACE OR ETHNICITY

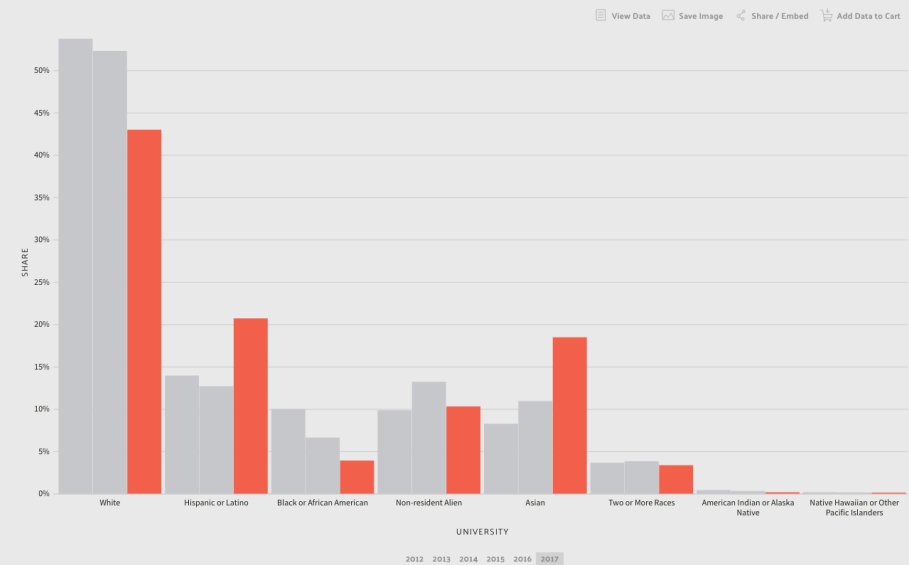
1. White
21,870
2. Hispanic or Latino
10,534
3. Asian
9,399

The enrolled student population at The University of Texas at Austin is 42.4% White, 20.4% Hispanic or Latino, 18.2% Asian, 3.86% Black or African American, 3.32% Two or More Races, 0.163% American Indian or Alaska Native, and 0.118% Native Hawaiian or Other Pacific Islanders. This includes both full-time and part-time students as well as graduate and undergraduates. By comparison, enrollment for all [Doctoral Universities](#) is 51.5% White, 13.4% Hispanic or Latino, and 9.57% Black or African American.

Any student who is studying in the United States on a temporary basis is categorized as a "Non-Resident Alien", and the share of those students are shown in the chart below. Additionally, 634 students (1.23%) did not report their race.



Data from the Integrated Postsecondary Education Data System (IPEDS) Fall Enrollment



DIVERSITY

Graduation Rate by Race and Gender

Showing demographic groups with ≥ 5 graduating students.

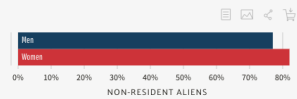
American Indian or Alaska Native Female

HIGHEST GRADUATION RATE (94.1%)

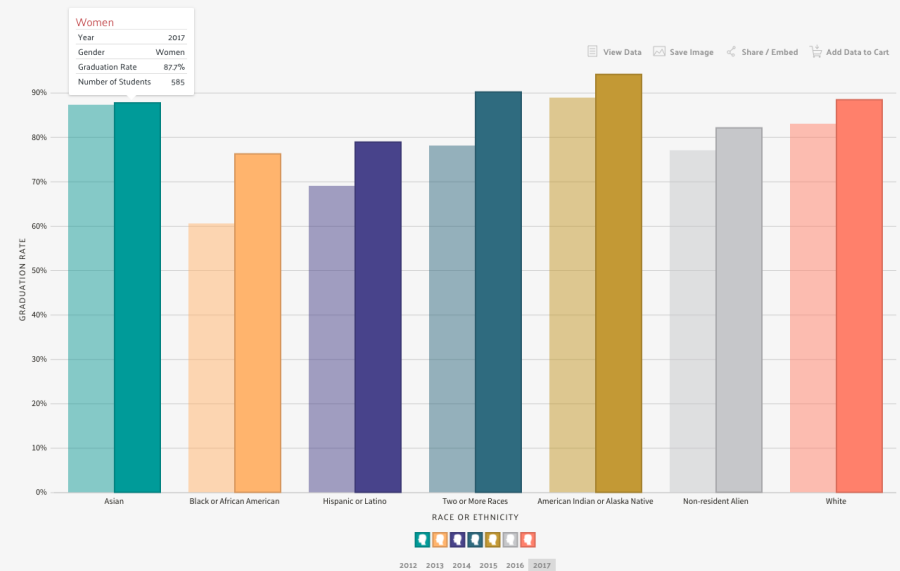
The student demographic with the highest graduation rate at The University of Texas at Austin is Female and American Indian or Alaska Native (94.1% graduation rate). Across all [Doctoral Universities](#), Asian Female students have the highest graduation rate (68.1%).

The department of education defines graduation rate as the percentage of full-time, first-time students who received a degree or award within 150% of "normal time" to completion.

The National Center for Education Statistics (NCES) categorizes any student who is studying in the United States on a temporary basis as a "Non-Resident Alien", and the graduation rate of those students is shown in the chart below. Additionally, 0.256% of graduates (15 students) did not report their race.



Data from the Integrated Postsecondary Education Data System (IPEDS) Graduation Demographics



Race & Ethnicity by Share

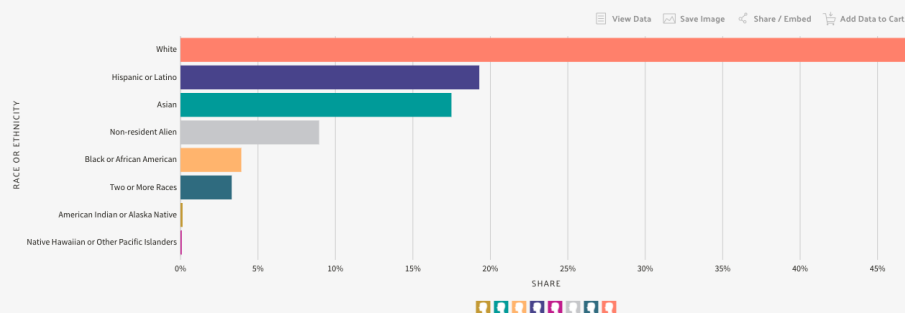
HIST COMMON STUDENT RACE OR ETHNICITY

1. White
7,695 degrees awarded
2. Hispanic or Latino
3,169 degrees awarded
3. Asian
2,874 degrees awarded

The most common race/ethnicity at The University of Texas at Austin is white (7,695 degrees awarded). There were 243 times more white recipients than the next closest race/ethnicity group, hispanic or latino (3169 degrees).

1.08% of degree recipients (179 students) did not report their race.

Data from the Integrated Postsecondary Education Data System
IPEDSI Completions



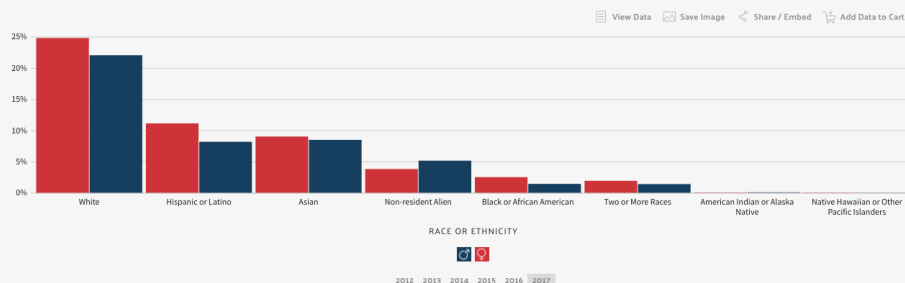
Race & Ethnicity by Gender

HIST COMMON GENDER DEMOGRAPHIC

1. White Female
4,074 degrees awarded
2. White Male
3,621 degrees awarded
3. Hispanic or Latino Female
1,827 degrees awarded

The most common race/ethnicity and gender grouping at The University of Texas at Austin is white female (4,074 degrees awarded). There were 113 times more white female recipients than the next closest race/ethnicity group, white male (3,621 degrees).

Data from the Integrated Postsecondary Education Data System
IPEDSI Completions



Student Profile, Fall 2020

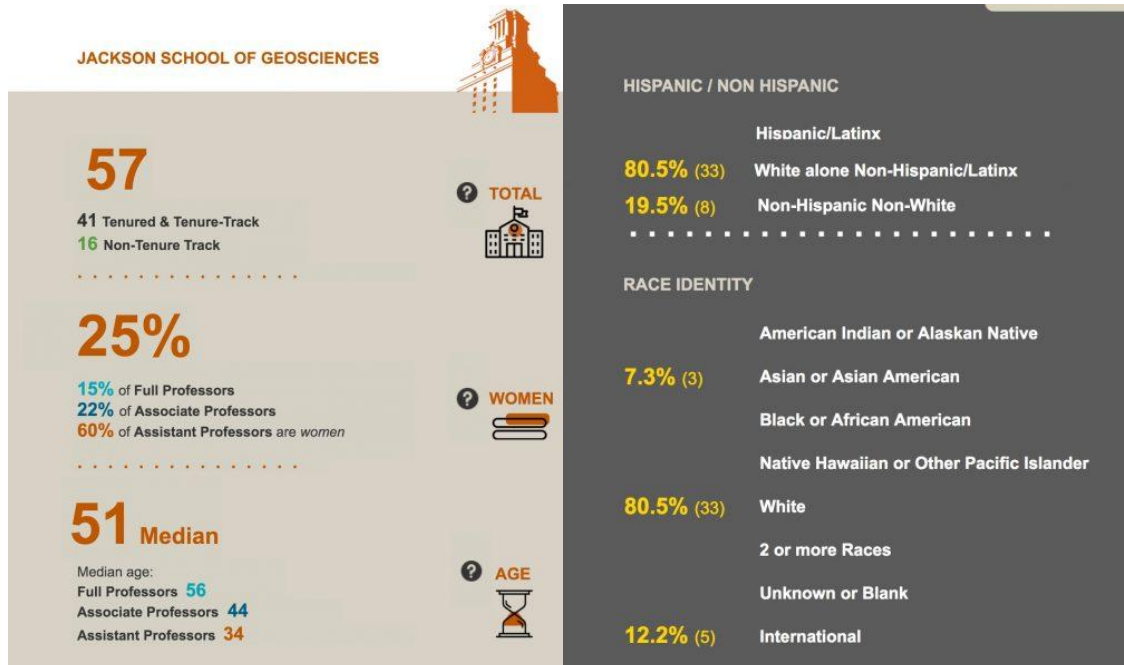
- Gender
 - Women: 54.4%
 - Men: 45.6%
- Ethnicity/Race
 - American Indian or Alaskan Native: 0.1%
 - Asian: 20.2%
 - Black: 5.3%
 - Hispanic: 23.4%
 - International: 10.0%
 - Multiracial (excl. Black or Hispanic): 2.7%
 - Native Hawaiian or other Pacific Islander: 0.1%
 - Unknown or Blank: 1.2%
 - White: 38.9%

*Black includes both "Black or African American Alone" and "Black or African American Multiracial (excluding Hispanic)".

*Students are classified as "International" if they are not U.S. citizens or U.S. permanent residents.

JSG Data

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Geosciences	Asian	24	24	33	38	43	45	41	27	27	27
	Black or African American	7	6	6	8	8	7	5			
	Hispanic/Latinx	51	56	58	74	82	79	76	63	49	43
	International	109	111	123	116	126	129	128	102	90	80
	Two or more, excluding His..	7	9	15	15	19	22	22	21	16	15
	Unknown or Blank		5		11	12	9	11	8	7	9
	White	355	360	374	380	357	319	275	248	215	200



For comparison, here are demographics from the Planetary Science Community from two workforce surveys carried out ~10 years apart and analyzed as part of the Decadal Survey

- AIP Survey Results:
https://dps.aas.org/sites/dps.aas.org/files/reports/2020/Results_from_the_2020_Survey_of_the_Planetary_Science_Workforce.pdf
- White paper source: Valentin-Rivera et al., Who is missing from planetary science?
<https://drive.google.com/file/d/1n4UUI DV426ZwwTQ-0RfI5BtPOF40H5XM/view>

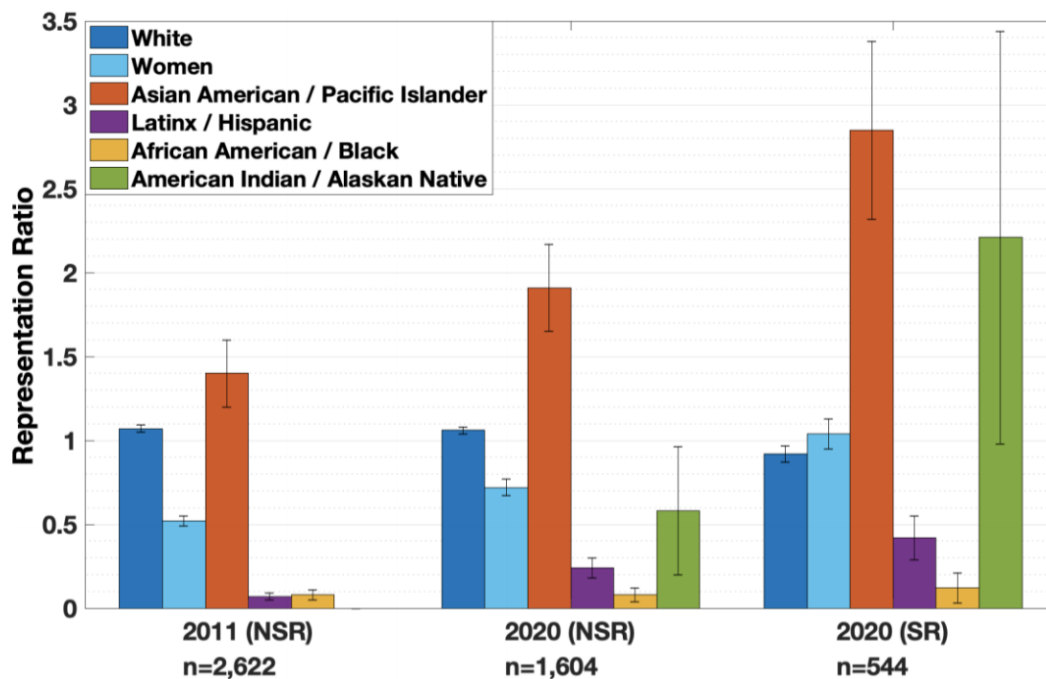


Figure 1: Representation ratio for the demographics surveyed in the 2011 and 2020 planetary science workforce surveys for non-student researchers (NSR) and student researchers (SR). The ratio is relative to the NCLF for the same year. The x-axis label includes the year of the survey and the total number of respondents. Error margins are to a 95% confidence level. Note that no data was collected for American Indian / Alaskan Native in 2011.

Finding: Black/African Americans are significantly underrepresented in the planetary science workforce, including among student researchers in planetary science, geoscience, and physics. Over the past decades, Black/African Americans have seen no improvement in representation.

Finding: Latinx/Hispanics are underrepresented in the planetary science workforce, including among student researchers in planetary science, geoscience, and physics. While their representation has improved, it may only be tracking the population's national growth.

Finding: American Indian/Alaskan Natives are underrepresented in the planetary science workforce and NASA science and engineering workforce. Diversity initiatives may be positively impacting American Indian/Alaskan Natives since they may be represented near or above parity in the group of planetary science student researchers and the overall NASA workforce.

Finding: Women are currently underrepresented in the planetary science workforce and physics Ph.D. programs. Diversity initiatives may have positively impacted women over the past decades. The representation of women is at parity in geoscience Ph.D. programs, planetary science tenure-track positions, and in the group of planetary science student researchers.

Finding: Given the little to no change of the Black/African American and Latinx/Hispanics populations in planetary science and related fields, the representation growth of women over the past years may be primarily attributed to White women.

Finding: Women of color face additional barriers. For example, Black/African American women are underrepresented compared to Black/African American men in physics and geoscience Ph.D. programs, and Latinx/Hispanics women are underrepresented compared to Latinx/ Hispanic men in physics Ph.D. programs.