

URGE

Unlearning Racism in Geoscience

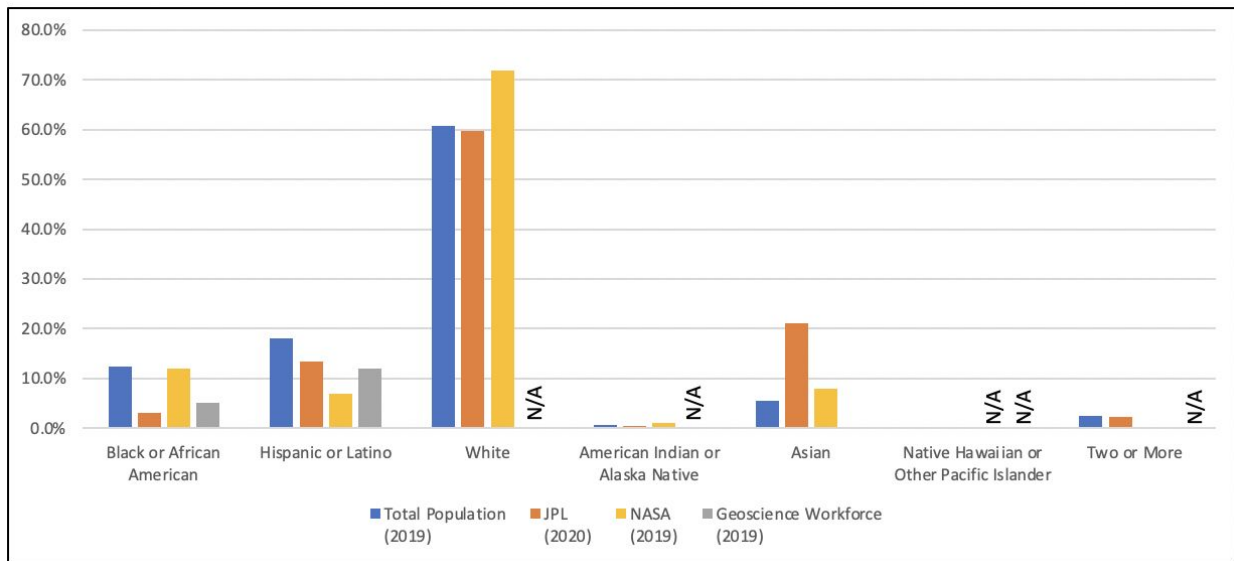
URGE Demographic Data for the JPL Sea Level and Ice Group at the California Institute of Technology, Jet Propulsion Laboratory (JPL)

JPL stores demographic data on a website internal to JPL employees at

inclusion.jpl.nasa.gov/demographic-data

The demographic data represents the entirety of the lab workforce, and is available for the last three years in 2018, 2019, 2020. To facilitate our discussion on demographic data, we compared JPL's demographics to that of the total U.S. population, the total NASA workforce, and the geoscience workforce (using data from AGI):

Race	Total Population (2019)	JPL (2020)	NASA (2019)	Geoscience Workforce (2019)
Black or African American	12.3%	3.0%	12.0%	5.0%
Hispanic or Latino	18.0%	13.4%	7.0%	12.0%
White	60.7%	59.7%	72.0%	
American Indian or Alaska Native	0.7%	0.4%	1.1%	
Asian	5.5%	21.1%	8.0%	
Native Hawaiian or Other Pacific Islander	0.2%	0.2%		
Two or More	2.4%	2.2%	0.3%	



Using these available statistics, we are able to compare JPL's demographics to that of the geoscience workforce for two BIPOC groups - individuals who identify as Black or African American (BAA), and those who identify as Hispanic or Latino (HL). We find that JPL's BAA percent (3%) is less than the total for geosciences (5%), but JPL's HL fraction (13.4%) is higher



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than for the geoscience workforce (12%). Both groups are still underrepresented in comparison to the general U.S. population. We point out that these percentages compare the total JPL workforce with the geoscience workforce, and don't reflect the demographics of Earth Scientists at JPL in particular.

In our pod meeting, we discussed the quantity and extent of available demographic data. It was pointed out that these data have only recently been made available as part of JPL's Inclusion Action Plan. While there have been requests for more data to be made available, there has been some reluctance to do so because some posit that these statistics are a "trailing indicator" on JPL's progress to hire a more diverse workforce in that they reflect hiring practices 10 years or more in the past.

In considering pathways for individuals to get hired at JPL, we highlighted several points which could contribute to a more diverse workforce:

- Set long-term benchmarks
 - As our future will be made up of a more diverse and educated population than generations before, we should strive to do better than the national average. Meeting this goal requires a long term plan that relies on quantifiable metrics.
- Engage the local community around JPL
 - The LA community around JPL is one of the most diverse cities in the U.S. and is home to several minority-serving institutions (e.g. the Cal State System). We recommend that JPL become more involved with our neighboring community, particularly with K-12 students, to foster interest in geoscience both at local institutions and in JPL's own internship programs - an important way in which young scientists are exposed to science at JPL.
- Develop incentives for scientists working with interns
 - JPL has developed undergraduate internship programs in partnership with MSI's. However, in a typical 10-week internship, it can be difficult for undergraduate students to get "up to speed" and work independently on a project. Consequently, mentorship can be time-intensive and may detract from completing projects, publishing papers, etc - the typical metrics for scientific success. If consideration of this commitment were included in the assessment of scientists' work, more folks might be willing to take on interns, helping to foster younger students' interest in geoscience.
- Review hiring practices
 - While JPL has incentive to hire candidates from underrepresented backgrounds, we should consider roadblocks that may limit applicants from underrepresented backgrounds from advancing through the application phase (procedural



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blindspots). For example, where are JPL hiring opportunities advertised? Are the application procedures clearly delineated?