



EPS Diversity Statement in the Wake of George Floyd's Death

Following George Floyd's shocking death and the ensuing protests over the past couple of weeks, we have heard from various campus administrators, groups, and organizations, and have witnessed our university step up in condemning racism and discrimination.

We think it is fitting for you to now hear from the Department of Earth and Planetary Sciences and learn about our commitment to equity and justice for all people, especially as we pause to recognize #shutdownSTEM, #shutdownACADEMIA, and the 'Strike For Black Lives' movement ([Chen, 2020](#)).

The Department of Earth and Planetary Sciences prides itself on having a collegial, inclusive, and equitable atmosphere for all our students and faculty. Diverse perspectives are important and necessary in teaching, research, and service. We are dedicated to maintaining an inclusive work environment, to fostering different ideas, supporting those with different abilities, backgrounds, and needs, and to ensuring that every departmental activity is open to all students, faculty, staff, and visitors regardless of race, sex, creed, age, sexual orientation, national origin, religion, or disability. We will not discriminate on the basis of race, color, national or ethnic origin, immigration status, socioeconomic background, marital or parental status, sex, sexual orientation, gender identity or expression, religion or religious belief, age, disability, veteran status, or any other reason. We strive to conduct ourselves in a professional manner and treat everyone with dignity and respect.

As members of the University of Tennessee, we are required to follow the University's general Code of Conduct (<https://conduct.tennessee.edu/>). Over the past year, we also established a departmental Code of Conduct for Inclusion, which is intended to address ongoing issues within our scientific community that have profoundly impacted our research workplace and individual lives and careers (<https://eps.utk.edu/docs/Strategic Plan.pdf>). The departmental Code of Conduct for Inclusion includes a set of recognized principles and practices to encourage professional behavior:

- Excellence, integrity, and honesty in all aspects of professional work.
- Professional courtesy, equity, and fairness in working with others.
- Freedom to responsibly pursue science without interference or coercion.
- Unselfish cooperation in all department activities.
- Legal compliance in all aspects of the department's professional activities.

Members of our department have been deliberately and strategically working to celebrate and improve diversity and inclusivity within our department, and to advance equity, diversity, and inclusion in our classrooms, in our research programs, and within the broader geoscience community. We are

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participating in training activities, diversity programs, and proposal opportunities that seek to increase the number of underrepresented students in our department, as well as opportunities that will broaden and welcome more diverse representation. We are becoming educated in the use of inclusive language, in recognizing micro-aggressions, and in breaking down barriers to education and research. We sometimes make mistakes, but we learn from them and will always apologize when we fall short.

Sadly, our discipline lags far behind other STEM fields ([Goldberg, 2019](#)) in reflecting the racial diversity of the US population, which includes, for example, 13.4% Black or African American and 18.3% Hispanic citizens. According to the American Geoscience Institute decadal report and other studies, all underrepresented minority groups are receiving about 6% of all geoscience PhD degrees nationwide. Decades of data in the geosciences show the failures of past efforts to improve racial and ethnic diversity ([Núñez et al., 2019](#); [Dutt, 2020](#)). Student and community engagement, recruitment, and hiring practices at all education levels have excluded Black Americans and other underrepresented minorities ([Bernard & Cooperdock, 2018](#)). White male stereotypes within our discipline have built additional barriers to encouraging and promoting diversity. National initiatives within the geosciences, such as through the American Geophysical Union (<https://www.agu.org/Learn-and-Develop/Learn/Travel-Research-Grants/AGU-Bridge-Program>), will begin to address the abysmal numbers.

Historic and systemic racism and marginalization of Black Americans and other communities of color have resulted in significant environmental injustices. Communities of color continue to be disproportionately impacted by unregulated resource exploitation and pollution and are at the greatest risk from health crises like pandemics and the consequences of climate change. Moreover, the lack of pre-college earth and environmental education, particularly in public school systems in the US, further reduces exposure to the geosciences that cuts across racial and socioeconomic divides ([Stokes et al., 2015](#)). As a result, progress to make the geosciences a more welcoming subject of study for members of the Black community maybe slow. Although the geosciences are tackling some of these issues head on, our discipline may still be an unappealing career choice for some students because of the lack of representation from their own community.

We have a lot of work to do. Over the past five years, our department has started to see slow improvements in the diversity of our overall student populations, with participation among Black, Asian, Hispanic, and Native American undergraduate students increasing from 4.8 % to almost 10%, and our graduate programs improving from about 2% to 11% for this upcoming Fall 2020 semester. However, the percentage of Black geosciences students has remained quite low, representing no more than about 2% of all our students. This is problematic considering that Black students comprise 5.8% of the undergraduate and 5.6% of the graduate students at the university, as well as the fact that these percentages do not reflect the US population.

Changes to the culture of our field, as well as our recruitment strategies and efforts, our mentoring programs, retention metrics, and professional development all need to be addressed. We are working on listening and responding to student and community concerns, then implementing policies to match words with actions. For example, this past year, the department removed the GRE exam requirement for admission, which has historically served as a financial barrier to some graduate school applicants from underrepresented communities. We also offered application waivers to reduce another financial hurdle. Consequently, the number and diversity of applications has increased, and time will tell whether

these strategies continue to have the same impact on diversifying the applicant pool and potentially improving admissions rates for Black students.

We also recognize that more work is required to diversify our faculty and staff. Nationwide, on average, only about 4% of all tenured or tenure-track faculty positions in the geosciences are held by people of color ([Nelson, 2012](#)). Having a more diverse faculty creates positive feedback loops, where students see people who look like them and may feel more welcomed. We acknowledge that stronger and different recruitment efforts will be needed in the future as we hire new faculty.

We encourage everyone to seek out how our professional societies, which receive our hard-earned membership dollars, have been spoken out over the past couple of weeks. Like us, they are taking a stand with protesters against the deaths of George Floyd and other innocent Black Americans. They are denouncing racism and pledging action. We echo their stance that Black Lives Matter. We suggest you read their statements (listed below). We hope you will use their resources to learn what you can do to commit to diversity, equality, and inclusivity.

We recognize that academic success is predicated on an environment where everyone feels safe, secure, welcome, and included. We remain committed to removing barriers to improve diversity and inclusion within our departmental and the overall geoscience community. We are dedicated to supporting all of our students, researchers, postdoctoral scholars, and employees, and are trying to address the needs of everyone in making our department a welcoming place. Therefore, if you or someone you know is experiencing duress for any reason – racism and discrimination, economic hardship, or other personal injustice – please approach someone for help, including anyone on the department’s Diversity Council or within department leadership. We will do everything in our power to help you overcome these issues, access resources that may be available to you, and support and advocate for you in a respectful and inclusive manner.

References

- Bernard & Cooperdock, 2018 - <https://www.nature.com/articles/s41561-018-0116-6>
- Chen, 2020 - <https://www.sciencemag.org/news/2020/06/researchers-around-world-prepare-shutdownstem-and-strike-black-lives>
- Dutt, 2020 - <https://www.nature.com/articles/s41561-019-0519-z>
- Goldberg, 2019 - <https://www.nytimes.com/2019/12/23/science/earth-science-diversity-education.html>
- Nelson, 2012 - <https://pubs-acrs-org.proxy.lib.utk.edu/doi/full/10.1021/bk-2017-1255.ch002>
- Núñez et al., 2019 - <https://www.tandfonline.com/doi/full/10.1080/10899995.2019.1675131>
- Stokes et al., 2015 - <https://www.tandfonline.com/doi/abs/10.5408/14-038.1?journalCode=ujge20>

Statements by Professional Societies on Diversity, the Death of George Floyd, and Racism

- American Geophysical Union - <https://fromtheprow.agu.org/agu-demands-diversity-equity-and-inclusion/>
- Geological Society of America - <https://www.geosociety.org/GSA/About/Diversity/GSA/About/Diversity.aspx?hkey=60b3e63f-c62a-4195-a3a4-a301908d60b3>
- AAAS - <https://www.sciencemag.org/news/2020/06/researchers-around-world-prepare-shutdownstem-and-strike-black-lives> and <https://www.sciencemag.org/news/2020/06/protests-over-killings-black-people-could-erode-racism-researcher-says>
- Geochemical Society - <https://www.geochemsoc.org/news/2020/06/04/gs-response-minneapolis-tragedy>
- Paleontological Society - <https://www.paleosoc.org/paleo-society-statement-anti-racism/>
- American Chemical Society - <https://www.acs.org/content/acs/en/about/acs-statement-on-the-killing-of-george-floyd.html>
- 500 Women Scientists - <https://500womenscientists.org/updates/2020/6/1/take-action>
- American Astronomical Society - <https://aas.org/posts/news/2020/06/aas-president-calls-all-members-support-black-americans-now>
- And more –
 - <https://physicsworld.com/a/us-scientific-societies-condemn-racism-in-the-wake-of-george-floyd-death/>
 - <https://www.washingtonpost.com/weather/2020/06/02/scientists-speak-out-against-racial-injustice-discrimination-amid-national-protests/>