

## BLACK LIVES MATTER: PROMOTING DIVERSITY, EQUITY, AND INCLUSION IN GEOCHEMISTRY

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### **Geochemical Society and European Association of Geochemistry Town Hall Meeting**

The murder of Black American George Floyd on 25 May 2020 in Minneapolis (Minnesota, USA), and the recent and historical suffering of countless other Black Americans, have catalyzed a reflection among many professional scientific societies about their stated commitments to diversity, equity, and inclusion. Against the backdrop of the global COVID-19 pandemic, itself an unprecedented modern challenge which disproportionately affects minority groups, there is an ever-growing urgency that statements made by scientific societies will result in action to end racism, discrimination, and violence against Black people and other marginalized groups the world over. The Geochemical Society (GS) and the European Association of Geochemistry (EAG) know that more needs to be done and that we all have a role to play in creating a just and equitable society.

On 12 June 2020, the GS–EAG ran a town hall meeting called “Black Lives Matter – Promoting Diversity, Equity, and Inclusion in Geochemistry.” During the event, over 500 participants heard from community members on how to fight racism, increase diversity and equity in our discipline, and to make the GS, the EAG, and the Goldschmidt meeting safe and inclusive for all. We will follow this theme over the next few issues, beginning with the following opening statements from the four early career researchers on the town hall panel.

#### **Emily H.G. Cooperdock (University of Southern California, USA)**

In 1972, Randolph Bromery, a Black man and a geophysicist who was the Chancellor of the University of Massachusetts at the time, made the opening remarks at the First National Conference on Minority Participation in Earth Sciences and Mineral Engineering (Gillette and Gillette 1972). In those remarks he said: “According to current records, there are at least 30,000 Earth scientists in the United States. If we were to say that minority peoples should at least be represented in proportion to their distribution in the general population, then there should be some 5,000 earth scientists from minority groups, since we comprise between 17 and 18 percent of the nation’s population.” After enumerating the estimated number of minorities in US higher education Earth science programs he concluded: “By these figures, if population equity is our goal, we’re running about 4,750 short.”

In the 2020 world we live in, the percentage of underrepresented minorities—including Black, Latinx, and Native American people—in the US population has reached ~30%. And yet, data indicate that the proportion of minorities in the Earth sciences has not significantly changed since the early 1970s. In 1973, 0.5% of US PhDs in the Earth sciences were awarded to Black people. Forty-three years later, in 2016, about 1% of US PhDs in Earth sciences were awarded to Black people. That is not progress.

I hope these quotes and figures highlight the fact that a) discussions around the inclusion of minorities and Black people in the geosciences have occurred with varying intensity over the past decades, and that b) there has been, so far, no effective impact on inclusion of US minorities, including Black people, within the Earth sciences at the PhD level, despite the efforts of the past several decades.

To my fellow white colleagues participating today. We come together with the understanding that the topic of today’s town hall—systemic and blatant racism against Black people—is something that affects us and our field of study. It may feel awkward and uncomfortable for many white people to engage in this topic, but I can tell you right now, and I’m sure my colleagues on this panel will agree, that I’m not doing it because it feels easy and fun. I implore you to exit your comfort zone and enter the dialogue in a constructive and purposeful way. I ask that you take this time to listen and not to react. If you find yourself

explaining the status quo, if you find yourself justifying the status quo, if you find yourself defending the status quo, you’re doing it wrong.

*The proportion of Black people awarded PhDs in Earth sciences has barely changed in 43 years – Why? It is time to enter the dialogue in a constructive and purposeful way.*

#### **Jabrane Labidi (Institut de Physique du Globe de Paris, France)**

I write this piece as a non-Black north African man, from a place of solidarity with my Black peers. In the spirit of unity, I challenge all my colleagues, including People of Color, to show up in support of our Black colleagues who may experience disproportionate bias and discrimination on campuses not only in the US but also in Europe, Canada, and elsewhere. The obstacles experienced by our Black colleagues are unacceptable, and we need to contribute to challenging the status quo.

We must question the role of campus police. How may we be proactive towards diversity while allowing campus police officers to question the existence of Black students and faculty in university libraries? Being “on campus while Black” all too often leads to cases of bullying by campus police (Otterman 2019).

We must also examine our financial and collaborative ties with industries or groups who do not reflect our values. For example, some companies and groups may inappropriately exploit resources, not respect human rights, and display bad behavior. This appears inconsistent with demonstrations of inclusivity. We must create workplaces that are truly welcoming to diverse groups, including Black people and other People of Color. I suspect that this will require revisiting how we obtain samples, the collaborations and alliances that we foster, and the supply chains that we support.

*To be proactive in diversity, equity, and inclusion, we need to examine all aspects of our workplace, from how people are treated, to how we obtain samples, to our collaborations and alliances, and to what supply chains we support.*

#### **James W. Dottin III (University of Maryland, USA)**

As geoscientists, we are aware of the racial disparity of not having enough Black people in our field. This is well known, and so visually apparent when we attend global conferences. As academics, we recognize that diversity is important, and we need change. The way I see it, right now there are two important questions we face related to the needed change.

The first is “How?” “How can I help?” “How can I instill change?” This is the question everyone is asking. People want to help but don’t know how. Or they may have many ideas but don’t know how to execute or implement them. As you ponder the “How” questions, I also ask you to also reflect on the question of “What am I doing?” “What actions associated with my day-to-day life or academic presence contribute to the problem?” Convict yourself of your contribution to the problem of systemic racism.

The second question is “Why?” “Why do I want change?” “Why do I want to help?” This is the question many people are not asking. Diversity isn’t needed simply because it is lacking in our field. Diversity is needed to address the human right of equal representation that has been stripped away from so many through a system of exclusion and oppression. Only when individual and corporate convictions are made and there is a widespread recognition and understanding of the long-term effects of systemic oppression can the geoscience community decide on actions related to “How can I help?”

Systemic racism is a public health crisis where people's lives are at stake. The world's views and actions towards the Black communities have been a cancer through time and, as geoscientists, we are now being called to action. We are being called to put our TIME and MONEY where our mouths are. Here, I emphasize time because, as academics, the pressure to publish and succeed is so strong that we neglect other aspects of our work, such as mentorship and inspiring our youth. As a colleague and as a Black African-American man, I challenge all of you to open your gates (both physically and metaphorically) and actively recruit Black youth into your departments. I challenge you to create strong meaningful connections with students at schools where parents don't already know university professors.

*I challenge you to build trust in your communities and to create efforts moving forward that are purposeful and meaningful.*

**Benjamin Keisling**  
(Lamont–Doherty Earth Observatory,  
Columbia University, New York, USA)

The other day I read a letter by Dr. Tyrone Hayes (Hayes 2020) of the University of California, Berkeley about his harrowing experience being a Black professor there. He ends his story by writing, “My wish is that we don't let my experience become the experience of any other students or faculty of color.” It reminded me of something else that Dr. Randolph Bromery said in 1972 during the conference Emily Cooperdock mentioned (above). Dr. Bromery said, “You see that we're not only going to have to find minority people for the Earth sciences, but we're going to have to change the environment they'll be working in as well—that not everyone has to be a pioneer.”

As geoscientists, we all share a unique appreciation for the ways that the past informs our understanding of the present, and even the future. So, let me echo James Dottin III (above)—WHY do these words, spoken nearly fifty years ago, still ring so true today? HOW have we let this happen? Black geoscientists have been speaking about their experiences for decades. If their stories surprise us now it is because we have not been listening.

A lot of us have come here today to learn about what we can start doing, but first I want to say a few things about what I'd like you to stop doing. Stop telling me that my work on diversity and inclusion is a distraction from my research. Stop telling me that it's not valuable and that it won't help me get a job. On every campus there are people—and often they are students, the most precarious and precious members of our community—who are organizing to dismantle the racist structures that entrap our society and that poison our institutions. Stop telling us that fighting for equity and justice and Black lives doesn't have a place in science. Stop getting in our way.

We don't do this work for approval or recognition. We don't do this work to get jobs. We do this work because people are dying. I don't want a job in a department that fails to speak out boldly and bravely against injustice or that fails to say that Black lives matter, or that fails to act in a meaningful way every single day when our Black colleagues face discrimination, harassment, and violence inside our own institutions and in society at large.

So, start listening. Start changing the environment so that not every Black student has to be a pioneer, like Dr. Randolph Bromery said in 1972. Start doing the work so that no Black student has to have a #BlackintheIvory story like Dr. Tyrone Hayes. Start organizing with us. This is an invitation. It is our collective responsibility. We have neglected it for too long.

Thank you. Let's start the discussion.

*Start listening, change the social environment, do the work, and organize with us.*

## REFERENCES

- Bernard RE, Cooperdock EHG (2018) No progress on diversity in 40 years. *Nature Geoscience* 11: 292-295
- Gillette R, Gillette E (eds) (1972) Report of the First National Conference on Minority Participation in Earth Science and Mineral Engineering. Colorado School of Mines, Golden, 135 pp
- Hayes TB (2020) The Rothfels Lab stands against racism everywhere. <https://rothfelslab.berkeley.edu/2020/06/04/the-rothfels-lab-stands-against-racism-everywhere/> Accessed June 2020
- Otterman S (2020) Black Columbia student's confrontation with security becomes flashpoint over racism on campus. *The New York Times*, 18 April 2019. <https://www.nytimes.com/2019/04/18/nyregion/black-columbia-student-alexander-mcnab.html> Accessed June 2020



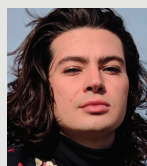
**Emily H.G. Cooperdock** is an assistant professor of Earth sciences at the University of Southern California (USA). Her group uses thermochronology and geochemistry to study the movement of the lithosphere and fluids at tectonic plate boundaries. In 2018, she coauthored with Dr. Rachel E. Bernard a *Nature Geoscience* commentary entitled “No Progress on Diversity in 40 Years”, which highlighted the fact that ethnic and racial diversity among geoscience doctorate recipients has not significantly changed over the past four decades.



**Jabrane Labidi** works as an isotope geochemist at the Institut de Physique du Globe de Paris (IPGP) (Paris, France). Labidi researches volatile dynamics, the origins of planetary interiors, and the early solar system. Labidi earned his Bachelor's degree in 2007 and his Master's and PhD at IPGP. He defended his PhD in 2012 and was a postdoc for a little over 5 years in the USA, first in Washington DC and then in Los Angeles. During the current difficult time, Labidi is taking a firm stance that Black lives matter, and he is committed to a complete gutting and rebuilding of the systems set in place within academia.



**James W. Dottin III** is a postdoc at the University of Maryland (USA) where he uses sulfur isotopes in meteorites to study the early solar system. James received his BA from Wesleyan University (Connecticut, USA), followed by an MSc and PhD in geology from the University of Maryland (UMD). As a member of the Inclusivity, Diversity, and Equity Awareness Committee in the Department of Geology at UMD, James is committed to tearing down the barriers that contribute to systemic racism and to promoting an equitable climate. James is optimistic that, by employing acceptance, trust, hard work, and humility, many of these efforts can be translated into the larger geoscience community.



**Benjamin Keisling** is a postdoctoral fellow at Lamont–Doherty Earth Observatory, Columbia University (New York, USA). He uses geochemical data coupled with numerical models to understand how the ice sheets in Greenland and Antarctica responded to past climate change. For the last few years, he has served as a lead organizer for LGBTQIA+ events at the American Geophysical Union's (AGU's) Fall Meeting. As a graduate student, he cofounded the BRiDGE program to address issues of diversity and inclusion at University of Massachusetts, Amherst (USA). He also serves as a mentor to diverse undergraduate students through the STEMSEAS program. Keisling is a member of the AGU's Diversity and Inclusion Advisory Committee.