

Black scientists gather to form communities and boost diversity in science

Black scientists have been historically underrepresented in academia and science. A 2018 study of the National Center for Education Statistics found that only 6% of faculty in the USA were Black. Systemic racism and other issues that translate into a lack of diversity in research often cause unwelcoming environments for Black scientists. Last fall, sparked by the Black Lives Matter movement and triggered by the #BlackBirdersWeek virtual event, several scientific communities took to social media to create '#BlackIn...' movements. Over the course of a week, organizers offered virtual talks, workshops and social events highlighting Black scientists in their fields. We spoke with the founders of four of these '#BlackIn...' movements to learn how they are empowering the Black scientific community to start conversations about being Black in science, and to discuss strategies for continuing to diversify scientific research.

Clintoria Williams is co-founder of #BlackInPhysiology and is a principal investigator at Wright State University, researching kidney pathophysiology. Sigourney Bell is co-founder of #BlackInCancer and is a graduate student at the University of Cambridge, where she develops novel models and therapeutics for pediatric brain tumors. Stanley Buffonge is co-founder of #BlackInCardio and is a PhD researcher at the University of Bristol focusing on diabetic cardiomyopathy. Kaela **Singleton** is co-founder and president-elect of #BlackInNeuro and is a postdoctoral fellow at Emory University investigating mitochondrial integrity and localization in Menkes disease.

■ What were some of the highlights of your respective '#BlackIn...' weeks? What surprised you the most?

KS: At #BlackinNeuro, we had a bunch of different events. One talk was on how we all became neuroscientists. We had a couple of panels where people talked about their experiences in academia and industry, about the things that they wished they had known, and about how they got to where they are. We also had talks about outreach and mentorship. We also had a social where we all got to know each other, danced together and talked about our favorite music and our favorite African dishes and our culture. It's been very transformative for me.

CW: We had a panel discussion where we brought together four panelists to talk about how to recruit, retain and promote not only Black physiologists but all Black scientists. And I think we were vulnerable, there was a real conversation—it was real talk. To me, the biggest surprise was how big we actually are and how diverse we are. We're not just one-dimensional—we're



Clintoria Williams

not just scientists, we're parents, we are spouses; we are interested in different types of music—and just to be able to show that, it was a good thing that came out of our #BlackInPhysiology week.

I was surprised with the support that we got from the community, because initially, we thought that we were just going to have Black physiologists following our movement, but to know that we have people who are also rooting for us who are our sponsors, who are allies—that was also very exciting.

S. Buffonge: The big talk for me was on how to break down the barriers and change the narratives around cardiovascular health and cardiovascular science. We have obvious disparities, of health in general, but breaking down what is false and what is true and explaining these differences will relay the messages to people in the community, so

that they understand, and take hold. That was a big talk for me because it wasn't just the science but it was also personal.

S. Bell: Some people just really wanted to understand more about cancer, particularly about our own disparities. I even had my mom, who was on the Zoom call, asking questions about cancer that maybe she'd asked me at some point and I didn't know the answer to. There were experts who could answer anything you wanted to ask. The engagement, not only from our own personal communities, but also the ones beyond, has been absolutely amazing.

■ Although these movements stemmed from social unrest in the USA, they have resonated abroad. Two of you—Sigourney and Stanley—are based in the UK. How much different is what is going on in the USA versus that in the UK?

S. Bell: Certainly, the unrest in the USA gave the UK's Black population the opportunity to let the public know systemic racism is not just a thing in the USA, it's also a thing here. And I think that the message really starts to settle in. Our institutions are realizing they don't know how many Black people they have; they don't have stats about this. And I think that was when the penny really started to drop. They're starting to realize there is a problem when Black people are not staying within academia. And why is that? Is it because they're not smart enough? No! Actually, institutions are not creating environments that are conducive to their wanting to stay in the first place. Everything happening in the USA has allowed Black British people to stand up a lot more and say, "No. You know what? I'm fed up! What is there to lose? I have to speak out about this." **S. Buffonge:** So many of the issues that we have are swept under the carpet: they



Sigourney Bell

exist but we, we keep quiet about them, we experience them by ourselves. So, all the things that have been happening in the USA have allowed us to feel like we no longer want to keep quiet. There are things that happen at institutions that we need to talk about, especially in academia. Universities have started to make more statements and have realized that they have had involvement in a lot of these racism issues and that they cannot sweep them under the carpet anymore. We have to speak about it.

■ What has been your experience as a Black person in STEM?

CW: We're in a position where we can't really openly discuss negative experiences, because that can be harmful to our careers. It's sad to have to say that a lot of these were because I'm a Black person. I've had mentors whom I felt denied me mentorship. Initially, I thought, "Well, maybe it's because the way they mentor, or they don't know how to mentor," but then I looked across my cubicle to the next person who was not a person of color and they were getting the mentoring that I felt like I needed in order to get me to the next level in my career. And so, to me, the power that a mentor possesses can make or break someone's career path.

But I've also had the support of my peers and other mentors. Not all of my mentors belonged to underrepresented minorities, but they understood my plight, they understood what I'm up against. I had mentors who were at other institutions who took the time to share their wisdom with me.

I became interested in the #BlackInPhysiology movement because

of a lack of reflection. There has never been a Black president of the American Physiological Society, for example. So, I felt like we needed to have a community where we can support each other, and also serve as a force.

KS: I've had exceptional mentors, but I've also had horrible mentors who have really, really stripped me of my confidence in myself and my ability to do this job, who really made me feel small and insignificant and like I only got to where I was because I was Black and not because I was a talented scientist. It's harder to stay in academia if you don't have that sense of community, if you don't feel like there's a network of people who can relate to your science problem on some level, or who can relate to the compound problem of being Black in America.

S. Bell: My institute has been bringing in new PhDs for the last 12 years. And in those 12 years, I was the second Black student. So, it's been hard in terms of visibility for me, and knowing what I'm able to do. Do I go down the route of trying to be a principal investigator (PI) and have my own lab? Is that accessible to me? Because out of almost 30 PIs in my institute, I have no examples of Black PIs who do what I do. I don't see people who look like me doing what I want to do.

S. Buffonge: There's a lack of representation. You do feel pressure, being a Black person, to do things to help your community. But then sometimes you don't know how to progress because there's no one else like you. And you say, "Okay, I want to do this, but who do I go to who's going to be able to understand what I'm saying?" You constantly feel like a pioneer.

■ In the past, there have been plenty of discussions on how to improve diversity in science, but not enough has been done. Why is that? What does the community need to do to have a real change?

KS: There's definitely a disconnect between what all these diversity, equity and inclusion (DEI) initiatives promote and then what actually happens when you walk into a scientific space and just try to be your normal Black self. I think it's hard because I can understand that institutions have good intentions, but to have good intentions with no follow-through or action isn't doing anything for me or any other Black or brown person I know in science.

I think that we're still talking about DEI because there's not a lot of weight behind it. A lot of institutions think that those diversity efforts just mean increasing the number of Black and brown people at your university. One of the things that



Kaela Singleton

I've really pushed for in my current lab is to expand DEI to include accountability. People say that they support diversity, but they don't really know what that means or what that looks like or what that can do for someone. One of the first things that institutions can really do is hire more Black and brown people, then put them in positions of power and actually give them that power. I also think people need to have training on how to recognize implicit bias.

It's been really weird. I've been invited to a couple of meetings with famous people in science whom I never thought I'd talk to. It can be scary to look someone in the eye and tell them that they're not doing anything for me. I'm comforted by the fact that I get to be in those rooms now and have those conversations. But I'm still waiting for the actions to happen.

S. Bell: In the same way that there's been a push toward PIs learning how to teach and how to mentor, they also have to learn how to support their Black students. Because otherwise, you have students walking into toxic environments. But the stress is doubly hard, because not only are they having to deal with systemic racism within their academic institution but they also walk out onto the street and that same systemic racism exists there, too.

We all have to be open to listening to Black voices. And just because something doesn't seem believable to you because you haven't experienced it, it doesn't mean that it doesn't happen. Trust me, Black people have experienced a lot of racism in their lifetimes, and we know how to pick it out. People



Stanley Buffonge

underestimate how much microaggressions can wear you down.

CW: I feel like now, there are conversations centered on the issue, whereas before, it was on the agenda but it was at the bottom. Focus groups are coming together because now that they realize that this is a problem that's affecting the scientific community, they're willing to talk about it. What can we do to change this? And I think those conversations are finally, seriously being had.

I'm optimistic that this time it will be different. And as long as we have people on the other side of the table who are willing to listen and are willing to address our real concerns, I think that we can change. This is our form of protest. This is our form of bringing awareness and protesting our struggle. The '#BlackIn...' movements, in my opinion, are a form of protest, bringing awareness so that we can have these conversations. And they're not easy conversations; they're very difficult to have on both parts. It's difficult for us to put ourselves out there, it's difficult for us to bring awareness, but we do it, because it's not about us, it's about the next generation.

■ What is the future of the '#Blackin...' movements?

CW: We want to continue the #BlackInPhysiology week, and we want to make it bi-annual. And in between, we want to have workshops. We are planning a #BlackInPhysiology conference the week before the Experimental Biology meeting starts on 27 April.

Hopefully we can keep the momentum going and get some change. It was so exciting; we could possibly see change. All these '#BlackIn...' movements gave us so much hope. Using a social media platform gave us a new way to address an old problem.

KS: People have told me that what we're going is really important to them,

because they didn't know that Black people did science.

I try to be really optimistic, and I think things will change. The new generation of scientists-undergrads and postbacs, grad students who are just starting out and help the postdocs—is asking for training on how to be a good mentor, and is providing resources and examples of how to do that at #BlackinNeuro. People feel a sense of community, both globally—we had a big reach—and also regionally. We're also working with some people to offer mentorship programs and workshops. I think this movement has the possibility to be long-standing and keep building up and giving confidence to Black neuroscientists. **S. Buffonge:** We don't want the conversations to start and then come to an end. It's about continuous progression until we fully eradicate racism in science, and that is going to take many, many years—so these conversations cannot come to a halt. But we can now show that these DEI committees that have developed within faculties can stay strong and stable, and we can ensure that this will continue.

Editorial note: This Q&A has been edited for length and clarity.

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Published online: 12 April 2021

https://doi.org/10.1038/s41591-021-01315-8