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Taking Action: Intentional Inclusivity

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Taking Action: Intentional Inclusivity

By Lesley-Ann Giddings, PhD

Since the beginning of the pandemic, many of us have spent more time at home. It has been a time for us to reflect upon our careers and families, mourn old routines, and dream of what we will do once the pandemic is over. It was during this time that the horrendous murders of Ahmaud Arbery, George Floyd, Breonna Taylor, and countless other Black citizens took place, causing an international reckoning with the daily racial oppression faced by many within Black and Brown communities. Even though countless other murders have been captured on video and circulated for years, people finally had the time to watch the videos and reflect.

It became apparent that concrete structural changes had to be made. Many people took to the streets to protest, while others urged their organizations and institutions to not only make statements but make systemic changes to dismantle racism. We are now at the point where *diversity* is teetering at a point of being more than just a buzzword. Many now recognize that creating inclusive and equitable environments is necessary. People are finally willing to dedicate significant resources and time to this cause.

Members of the ASP Diversity, Equity, and Inclusion Committee recently [polled](#) the ASP community to determine what our membership is interested in reading about. To date, of the 178 people who responded, most would like to know more about how to create inclusive workplaces where people truly feel comfortable being themselves. There is a sense of urgency to do this work; however, many do not know where to start. Simply tweeting about the importance of diversity initiatives is not enough. Hiring someone from a marginalized group because that is the current trend without providing the support a candidate needs to ensure their success is not enough. Proposing to do a two-day science workshop involving Black and Brown children for outreach in your next grant application is

not enough. While these gestures are important first steps, they are not sufficient to eradicate racial inequality in our country. We need cultural and structural changes that focus on inclusion and prioritize antiracist practices.

We ultimately want to build a strong pipeline that recruits and retains students from all backgrounds in science, technology, engineering, and mathematics (STEM). The American Chemical Society (ACS) recently published data showing that the chemistry pipeline is broken at the undergraduate level.¹ For example, we lose many Black undergraduates in introductory chemistry courses^{2,3} and fewer Black chemistry majors continue to graduate school compared to other racial and ethnic groups.¹ In 2018, only 4.5% of all chemistry PhDs were awarded to Black graduate students.⁴ If these graduates persist to become postdoctoral fellows, few continue on to secure academic jobs.⁴ The ACS recently reported that at 50 doctorate-granting institutions in the United States that spend the most on chemistry research, the racial and ethnic diversity of chemistry faculty has changed by less than 1% since 2011.⁴ The percentages of racially and ethnically diverse faculty are abysmal, a mere 5.2% in 2018 compared to 4.4% in 2011.⁴ What is worse is that these numbers include all faculty from underrepresented groups, including American Indian/Alaskan Native, Black, Latinx, and multiracial, which make up more than one-third of the United States population.⁵ To correct this inequity, graduating more chemistry majors from underrepresented backgrounds would increase their representation in graduate school as well as in positions in higher education and industry. Increasing graduation rates is the first step, but creating inclusive environments is paramount to increasing representation in lifelong careers in science.

To increase the diversity in our labs and work environ-
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ments long-term, we have to practice the act of inclusion. Diversity and inclusion go hand in hand; inclusion creates the space for others to feel comfortable being themselves and diversity is the result. Some may say they do not mind having diversity initiatives in the workplace. However, “not minding” is the same as tolerating, maintaining the status quo. To be inclusive means to constantly challenge stereotypes and assumptions, listen to others, speak up when you witness discrimination, be open-minded, initiate uncomfortable conversations, think about why certain issues make you feel uncomfortable, recognize your privilege, and work to educate yourself. The act of inclusion is about being more intentional, self-aware, and aware of others. It requires having compassion for other journeys traveled and consistently advocating for others who are not in positions of power to make sure they have a seat at the table. Sometimes the act of inclusion also requires courage, and those in positions of privilege should exercise their power to act. Inclusion is about making sure that everyone feels valued.

We often surround ourselves with individuals in which we share commonalities, such as behavioral, cultural, and moral standards, and forget to consider those who are not in our social circles. It is from these circles that we define ourselves and gain confidence in who we are. Individuals on the fringes of those circles looking in likely feel uncomfortable in that space. To enter these spaces, there are certain social codes one has to know. For those on the outside, it can be exhausting trying to code-switch to be accepted. For example, some people feel excluded when attending conferences and realizing a significant portion of the social capital in science

is built around drinking at bars after conference sessions. If you do not drink alcohol, you are not going to enjoy or participate in these activities. Thus, we need to organize a variety of workplace or conference activities to give everyone an opportunity to participate. This is why we also need organizing committees and labs composed of people from diverse backgrounds to think of new ways of engaging everyone. We all have unconscious biases or blind spots, but just like when driving, we need to continuously check them so we do not hurt anyone or ourselves.

We need to create safe work environments that celebrate all people. To do so, we can start by assessing our laboratory cultures, identifying different ways of supporting all laboratory members, seeking out additional mentoring for those who might be struggling, and discussing strategies to minimize those who may feel excluded and unsafe in the lab environment. The act of inclusion is iterative and must be reassessed to ensure a productive work environment. For those of you running labs with students or postdoctoral fellows from underrepresented backgrounds, you have a huge opportunity to make a difference by creating a supportive environment that ensures their success and encourages them to persist toward careers in chemistry. If you have a colleague who is an untenured faculty member from a racial and ethnic group underrepresented in STEM, reach out to them and see how you can support them and their scholarship through tenure. Many of these underrepresented scientists are code-switching to be a part of predominantly white institutions, where they lack role models or people in positions of power

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who look like them. It is such an excluding experience and the reason why the act of inclusion is critical for our persistence.

In the introductory chemistry laboratory courses at Smith College, we spend the first lab discussing group norms and usually learn that many students dislike working in groups. We ask the students to share 1) the strengths they bring to the group and 2) what they hope to get from the group. From these discussions, it becomes apparent why students dislike working in groups. Almost all of the students say they want a group that respects, values, and supports them. They want groups that communicate well, do not dwell on their weaknesses, check in on them, are open-minded, collaborative,

reliable, welcoming, and promote positivity. We try to establish group norms early in students' scientific careers and keep checking in with students during the semester to remind them of how they want to be treated. However, while we try to instill these values within our students early on in their scientific training, we, the educators and scientists, need to practice what we preach. It is time that group norms are discussed and implemented in the workplace to set the tone and encourage a greater sense of belonging. To learn more about inclusion, please read references 6–8. These simple acts of kindness make people feel appreciated and valued and will help recruit and retain all students. Because at the end of the day, we *all* want to feel respected and valued. ■

LITERATURE CITED

- ¹ Widener, A. The leaky pipeline for Black academic chemists. *Chem Eng News*, **2020**, 98, 22.
- ² University of Washington. Passing challenging introductory chemistry course gives biggest boost to underrepresented students. *ScienceDaily*, 10 June **2020**. www.sciencedaily.com/releases/2020/06/200610152013.htm [accessed 13 Nov 2020]
- ³ Arnaud, C. H. Freshman chemistry is an exit point for many underrepresented STEM students study shows. *Chem Eng News*, **2020**, 98, 23.
- ⁴ Downey-Mavromitis, A. Racial and ethnic diversity of US chemistry faculty has changed little since 2011. *Chem Eng News*, **2020**, 98, 43.
- ⁵ U.S. Census Bureau, **2019**. www.census.gov [accessed 13 Nov 2020]
- ⁶ Urbina-Blanco, C. A. et al. A diverse view to catalyse change. *Nat Chem*. **2020**, 12, 773–776.
- ⁷ Shukla, P. Diversity, equity, and inclusion in science: a reading list. *Medium*, 2 Apr **2017**. medium.com/@priyology/diversity-inclusion-in-science-a-reading-list-a45cea40b972 [accessed 13 Nov 2020]
- ⁸ Terry, K., Powell, R., Chen, S. How LGBT+ scientists would like to be included and welcomed in STEM workplaces. *Nature*, **2020**, 586, 813–816.