LABORATORY REFLECTIONS Pay It Forward

The Toll of Preconceived Notions

Nadia Ayala-Lopez^a and Zahra Shajani-Yi^{b,*}

The scientific and medical communities stand to benefit from a diverse and inclusive community composed of a range of experiences; however, women, workers with children, and minorities still face both direct and unconscious bias. Microaggressions are a barrier that can be "detrimental to psychological well-being, mobility across science contexts, pressure to prove ability and competence, and contribute to a sense of social isolation" (1). Two laboratorians in varying career stages have agreed to share their experiences as women and minorities in a short Q&A session.

HOW DO YOU FEEL THAT BEING A MINORITY HAS AFFECTED YOU?

Shajani-Yi: I was raised in western Canada and at a young age was not consciously aware that I was a minority. I was also raised to believe that I could accomplish anything, regardless of my gender or race. It was only recently when I started experiencing microaggressions more consistently that I realized that the way I perceived myself was not necessarily how others perceived me. It is difficult to describe how shocked and unmoored I felt when I discovered that my identity could be reduced to my race or gender. It made me reevaluate and question all the experiences I had growing up. I experienced a range of emotions: anger, frustration, and sadness. I felt burdened with the belief that I was no longer able to be myself, but that all of my actions would represent a wider group of people. For decades, I have heard various versions of "my grandmother/grandfather/parent/sibling/aunt/uncle did not like/trust all people who were until they met you." The saddest times are when I worry that my children will be judged by something other than their character. That thought is so distressing that I feel paralyzed. Somedays, I am just utterly exhausted by it.

Ayala-Lopez: Being born in Mexico, I did not have an example to follow of how to proceed in my education in the United States or a similar career path to follow. I did not know what questions I should be asking school counselors or what opportunities would be available to me. I sometimes felt misunderstood and like an outsider while having to consistently outperform my male peers in order to be taken seriously. It was not until graduate school that I learned of the term "microaggressions," which applied to the situations I had experienced. In a way, these experiences freed me from worrying about what others thought and developed a "thick skin." Those coping mechanisms were helpful for my survival. However, to thrive it was necessary to get rid of them as to be a good mentor and leader requires the ability to be vulnerable and to

^aDepartment of Pathology, John Hopkins School of Medicine, Baltimore, MD; ^bDepartment of Pathology, Microbiology, and Immunology, Vanderbilt University School of Medicine and Vanderbilt University Medical Center, Nashville, TN.

^{*}Address correspondence to this author at: Laboratory Corporation of America Holdings, San Diego, CA 92128. E-mail zahra.s.yi@outlook.com. Received June 5, 2020; accepted July 7, 2020.

DOI: 10.1093/jalm/jfaa131

 $[\]ensuremath{\mathbb{C}}$ American Association for Clinical Chemistry 2020. All rights reserved.

For permissions, please email: journals.permissions@oup.com.

express oneself. Thankfully, I found amazing women mentors who understood the difficulties I faced as they had gone through them themselves. My PhD mentor finally broke through my hard exterior. As a proud woman, mom, and scientist, she always tells her students they are "humans first and scientists second." The compassion she shows her students reminded me of why I decided to go into science in the first place.

WHAT TYPES OF MICROAGGRESSION HAVE YOU OBSERVED?

Shajani-Yi: I have observed during my career as a scientist and clinical chemist that an unconscious bias exists toward minorities, women, and professionals who have families. I have noticed that the benchmarks set for female trainees and faculty are higher, and that women are relegated to more secretarial roles. In many cases I think this takes place unconsciously. As a graduate student, I heard on multiple occasions, female faculty members being described as "difficult" or "aggressive" for having the same expectations as male faculty members. I am still embarassed that as a graduate student 15 years ago I had the perception that faculty and students with families were not as committed to their work because they left work earlier. In hindsight, I unconsciously began moderating my own behavior and became less direct with my requests. Now, I make a conscious effort to be direct and not soften my requests or alter my behavior. I wish we could all do this; however, on an individual level, it can be challenging due to the potential consequences for promotion and advancement, particularly in academic environments. Over time, as I started sharing these experiences, I discovered that they were not uncommon. It was oddly reassuring to hear that other colleagues had similar experiences as it reinforced that these events were not due to me, but it was also disheartening to hear how often this occurred.

I have been asked by colleagues in the past why I wore my white coat all the time. I used to joke it was because they have pockets, (which is true) but I also wore it as armor. When I wore the white coat, I felt that my role was established, and that I was viewed by my profession first, rather than by my ethnicity or gender. At one position, I would sometimes receive hostile glances in the elevators and cafeteria, and I noticed that these incidents were reduced when I wore my white coat. Despite this, one day I was getting on the elevator at the hospital where I worked at the time (in my white coat) and a woman asked her son to push the button for "the pretty woman." I was not referred to as "the doctor" or even "the pretty doctor." I know it was meant as a compliment, but it reminded me that small comments when stacked up can alter how we judge someone. That young boy saw a woman described by her looks instead of her profession.

I have heard words that bother me such as "ethnic" or being referred to as "hey pretty lady" or "sweetie" and it has been a struggle determining how to best handle those situations. I have no issue speaking up if a comment is made that is intentionally trying to make me feel uncomfortable or undermine me; however, it is the comments that are not meant to be hurtful that I find the most difficult to address. It always felt like a balancing act as I walked through a flowchart in my mind. Is this a friend or trainee? If yes, speak up. Is this someone who will determine if I get promoted to the next academic rank, a senior colleague, someone who will get offended or was this said in a group setting? If yes, proceed with caution. I wonder (a) if I will offend the person who made the comment, (b) if speaking up will even make a difference, and (c) if I am going to end up harming my career. If this is a group setting, should I have the conversation in private or will my silence be seen as tacit approval? If trainees are present and I remain quiet what type of example am I setting? I have tried to speak up, and although not all of these conversations have been pleasant, the moments that I regret are the instances where I remained silent. Despite these interactions, I think there has been an improvement in the last 20 years on what actions are considered acceptable. I recall times approximately 15 years ago when a speaker could give a presentation and show an image or comic that, if shown now, would have many of my colleagues, regardless of gender, speak up.

Ayala-Lopez: My undergraduate class in my Clinical Laboratory Science program was incredibly diverse and representative of many cultures, ages, genders, races, and ethnicities. The chair of the department has been purposeful in her career to establish inclusive environments and cultural competency in laboratory professionals (2). She showed us where the bar should be for professionalism and ethics, how we should treat others and how we should expect to be treated; however, I was reminded when attending scientific meetings that this bubble of acceptance and respect was not the norm everywhere, which is unfortunate because attending scientific meetings is a great way to grow your career. They are where I meet the most colleagues, but also where I experience the most microaggressions, such as being ignored in a group when it is mostly men or being talked down to about my own topic by those assuming that I know little. These experiences made me fearful of networking in the past. Four years out of my PhD, these types of experience still occur, however, I do not let the bad experiences stand in the way of meeting colleagues. I try to be a helpful bystander when I observe these situations happening to others, but my mind is always on what more could I be doing.

WHAT IMPACT HAS IT HAD TO SEE YOUR DEMOGRAPHIC REPRESENTED IN LEADERSHIP POSITIONS?

Shajani-Yi: There was an interaction early on in my career that had a profound influence on me.

When I started my clinical chemistry fellowship, I was conscious at the time that I was the only female trainee with children in our department. One morning at work, I noticed that one of my daughters had smeared some peanut butter on my blouse. I went to the restroom and while I was frantically trying to remove the stain, the chair of our department entered. She smiled and recalled how when her children were that age, they were always putting "goobers and stuff" all over her and we proceeded to discuss our families. In that moment, she removed any semblance of guilt that I held. I now purposefully share that I have a family with my trainees and colleagues, with the purpose of promoting a more inclusive work environment. I realize now how much having her as department chair affected me. It demonstrated to me that one could be both a strong respected leader and be kind and human; that these traits were complimentary and not mutually exclusive. While in fellowship, I interacted with several incredible female faculty members who, despite being in other subdisciplines, took the time to teach me and offer advice. I am just now realizing that these formidable women have been my role models and shaped the type of colleague and mentor that I try to be.

Ayala-Lopez: During my PhD, my department held a faculty search to hire new faculty and ultimately, offered the positions to the two best suited candidates for the department and not the most "accomplished" or well-known. They were full of new ideas, energy, and were interested in being good mentors. They also both happened to be women. In particular, I was there to see the junior faculty member move into her brand-new lab and experience with her what settling into a new role as a Primary Investigator would be like. Seeing her accepted into the department made me feel that not only different people would be accepted and welcome there but new ideas would be as well. Seeing her success, I felt more confidence as a scientist and was empowered to share my viewpoints and respectfully disagree with other scientists. Seeing someone that looked and acted similar to me being accepted, it built a bridge between my identity as a person and my identity as a scientist, they no longer had to be separated. I didn't have to live a double life; I could just be myself.

IN YOUR OPINION, WHAT ACTIONS WOULD HELP REDUCE THE EFFECTS OF CONSCIOUS AND UNCONSCIOUS BIAS?

Shajani-Yi: On an individual level, I think the first step would be acknowledging that all of us have biases. We can then reduce the impact of these biases by examining their origins and recognizing how they affect our behavior. On an organizational level, leaders have an immense influence on setting the tone and culture in the workplace. By speaking up, being authentic and clear about the values of the organization they both promote inclusivity for those who are marginalized and set clear standards for everyone. I like to believe that most people will rise to those standards. Finally, everyone can support inclusivity by modeling the behavior we expect from others and speaking up for others, even when it is uncomfortable.

Ayala-Lopez: Learning about microaggressions and learning how to be culturally competent is the first step. Leaders and organizations can also work to actively understand how implicit biases lead to microaggressions and the harm that microaggressions cause on someone's selfesteem and self-efficacy. Training on equity, diversity, and inclusion can equip staff, managers, and leaders with the knowledge to identify a noninclusive practice and the tools to address issues effectively. Key to this self-reflection are the people that make up the organization themselves. Listen to their ideas and empathize with the difficulties they have faced. Organizations can devote resources to evaluating and establishing cultural competency in order to accept and value the differences between people and to learn how to work effectively across cultures (*3*). Lastly, as my PhD mentor did, be there for your colleagues and mentees to show them you value them for who they are, that they are "humans first."

WHAT ADVICE WOULD YOU GIVE YOURSELF TEN YEARS AGO?

Shajani-Yi: To try to be the best, true version of yourself. To remember that kindness and strength are not mutually exclusive. To offer support and be a voice for those who cannot, and to never allow yourself to feel guilty or have doubt for speaking up.

Ayala-Lopez: Everything that makes you is unique and special. Be yourself completely and unapologetically. Your experiences and unique perspective will enrich your career, enable you to support others, and help you be a better mentor. Also, recognize that it is okay to be vulnerable and to seek help. The moment you do you will meet amazing colleagues who will support you and you will begin to build lasting friendships.

Author Contributions: All authors confirmed they have contributed to the intellectual content of this paper and have met the following 4 requirements: (a) significant contributions to the conception and design, acquisition of data, or analysis and interpretation of data; (b) drafting or revising the article for intellectual content; (c) final approval of the published article; and (d) agreement to be accountable for all aspects of the article thus ensuring that questions related to the accuracy or integrity of any part of the article are appropriately investigated and resolved.

Authors' Disclosures or Potential Conflicts of Interest No authors declared any potential conflicts of interest.

REFERENCES

- Anderson AJ, Sánchez B, Reyna C, Rasgado-Flores H. 'It just weighs in the back of your mind': microaggressions in science. J Women Minor Sci Eng 2020;26:1–30.
- Conway-Klaassen J, Maness L. Developing cultural competency in laboratory practice. Clin Lab Sci 2017;30: 43–50.
- **3.** Maness L, Conway-Klaassen J. Best practices for maintaining diverse laboratories. Clin Lab Sci 2017;30: 51–4.

.....