

Diversity Statement

Fernanda Cruz Rios

Coming to the United States has permanently changed my perspectives on race, privilege, gender, and my own sense of identity. It is the reason I encourage people to live abroad, because it leads us to questioning insidious and invisible norms, resulting in unmatched growth. For me, personal and professional growth around diversity were deeply intertwined. I worked directly with research on diversity in industry and higher education, an interest I pursued after struggling with my own sense of identity. The story I want to tell you in this statement is how, through this continued learning, my interest became a passion, and now I cannot see my career goals separated from issues of justice, equity, diversity, and inclusion.

One of the first things I had to do upon my arrival was to check boxes. I had this experience repeatedly: trying to get paperwork done and stopping at the “what is your race” question, which was followed by a few boxes. Then “Are you Hispanic or Latino?” (yes or no). I would look at the options, confused. I was taught that we were all mixed-race in Brazil, that everyone had “a bit of White, Indigenous, and African blood in their veins.” Then I would check all these three boxes and call it a day – which later I would learn it was not only incorrect, but counterproductive for the institutions asking the question. As for the “Hispanic or Latino” question, I would mark it as a “no.” Somewhere, somehow, I had learned that since we do not speak Spanish in Brazil, we were South American but not Latino or Hispanic. Wrong again. See, back then I thought that race was a biological trait, something determined by our DNA. It was not until a few years ago that I came to understand race as a social construct – and that, therefore, I was White. Growing up in Brazil, I was always perceived as White. I have fair skin and grew up in a high-income neighborhood, which in Brazil grants you the exclusive privileges of White people. I was a White Latina after all. But one thing has never changed: since I saw the boxes for the first time, I felt like I did not belong.

During my doctorate at Arizona State University, I made friends from many different countries and ethnicities, and we would organize potlucks to learn about each other’s culture, food, and language. I have fond memories of that. Being International students, we usually had more similarities than differences. We were all trying to understand the American culture, we were all trying to fit in. We all had experienced discrimination based on our ethnicity. But I was often the only woman in these events, and I was not used to that. When I studied Architecture in Brazil, most of my colleagues were female. I experienced first-hand the hardships that come with being an underrepresented minority in my field, from microaggressions to blatant harassment and discrimination. I started to learn more about feminism and gender issues, and for a year I studied the workplace culture in the construction industry and how that affected the experiences of tradeswomen. I took a course on Women Studies and learned about the intersections of gender, race, ethnicity, and sexual orientation. That was when I found out that I was Latina, and when I understood why we cannot assume that people from the same gender, race, ethnicity, or sexual orientation share the same experiences. That became clearer when I attended to the 2016 Tradeswomen Conference in Chicago and had the life-changing opportunity of listening to tradeswomen stories. By then, my passion for diversity was ignited and I would pursue it in the years to come.

When I graduated, my advisor offered me a postdoc appointment in an ongoing project that aimed at investigating the challenges faced by Native American students in engineering. The goal was to increase the recruitment and retention of Native American students, from undergraduate to faculty positions. I was immediately interested. During a year and a half, I interviewed Native American students and 22 Deans

from Engineering colleges in the United States. I participated in roundtables organized by the Achieve60AZ initiative, a group that had the goal to improve the education pipeline in Arizona for Black, Latino, and Indigenous students. I tried to understand the concerns and solutions that *they* – the Native American stakeholders – brought to the table, without being eager to present my own ideas based on *my* perceptions of their hardships. That was another life changing experience, and I developed a strong interest for stakeholder and community engagement methods after that. From the interviews with the Deans, I understood how the *institutions* perceived the problems of recruitment and retention of Native American students and faculty. I then developed a framework with strategies that the universities can take to increase recruitment and retention of Native American students.

I learned a lot from my first postdoc. I learned that every Dean I talked to seemed eager to improve recruitment and retention of Native American faculty, but most of them did not know what they were doing wrong. I learned that placing all underrepresented minorities under the same “diversity umbrella” has made Native Americans (and in lesser extent, African American and Latinx groups) “invisible” in engineering education. The recruitment of White female faculty and students has been somewhat more successful, which helped to drive the “diversity” numbers up, regardless of the recruitment of other minority groups. I learned about other ways in which universities have been failing Native Americans and potentially other underrepresented populations. For example, very few Deans had heard of associations like the American Indian Science and Engineering Society (AISES), which means that the search committees most likely do not target Native American applicants appropriately when posting job openings. I’ve learned about many other challenges and a few promising efforts, like cluster hiring, target hiring, and mentorship programs.

And finally, I was left with a few lingering questions. How can we create diverse search committees and diversity committees without overburdening diverse faculty with more responsibilities than their peers? How can we include other types of diverse populations (e.g., neurodiverse people, nonbinary people) in our inclusion efforts? How can we share data, successes and failures with other universities and institutions? And what structural changes are needed in academia to enable more diverse and inclusive higher education communities?

This last question is extremely important, and one that I asked myself after my second postdoc. In this instance, I was not working directly with diversity and inclusion, but I was part of a large research team for the first time. We were more than 20 researchers from different races, ethnicities, nationalities, and very different fields: anthropology, engineering, sustainability, chemistry, political science, and economics. We ranged from undergraduate students to full Professors, which means that our age and level of experience also varied largely. And we were trying to do convergent research together. We were forced to have difficult conversations and be open and vulnerable about our worldviews and values. We discussed how these values and experiences might impact our research questions, and our work. In my limited experience, this is not common practice in academia (especially in STEM), but it should be. Our research group accomplished many things together in a limited time, but we did not publish as many articles as planned. Unfortunately, the “publish or perish” paradigm demands a large quantity of publications as evidence of scientific progress. However, when a diverse and multidisciplinary group attempts to “fuse” ideas together in convergent research, the publication pace will likely be slower. When presenting research to a diverse audience, you need to be ready for questions that you would never think of, not only from a different discipline, but from a different perspective entirely. As one of the professors shared with the group: if done right, this process takes more time and effort than doing research with a more “homogeneous” team who share similar experiences. However, diverse research teams produce more powerful results than teams who stay in their silos. For inclusive research to persist, different performance evaluation metrics need to be implemented, as they are directly connected with the incentives that drive how work is performed.

Current diversity and inclusion efforts are falling short not for lack of good intentions, but because academia needs to undergo structural and cultural changes. I want to drive this change. I believe that by fighting for diversity in higher education, we are contributing to (re)distributing *power*. Education is power. Researchers, teachers, engineers, lawyers, medical doctors and nurses, social scientists: they are all in a position of power, the power of representing and defending the interests of their communities. For example, if there are not enough Native American engineers, there will be no efforts to solve engineering problems that are unique to Indigenous lands. If there are not enough African American medical doctors and nurses, Black women in labor will continue to experience obstetric violence caused by widespread medical racism. In conclusion, promoting diversity in higher education is critical to building a fair, equitable, and just world – which is as deeply connected with my personal values as is sustainable engineering, my chosen professional field. Maybe I will never feel like I belong to a particular ethnical group, but if I can help creating an environment where others feel like they belong and can contribute with their perspective instead of just fitting in, then I will fight for that.