

ELAINA ACEVES

Diversity Statement

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I am the first woman in my family who has decided to obtain a graduate degree. However, once I was accepted into graduate school as a Hispanic woman, I realized I was an oddity. While in the master's program at Fresno State, only one other Hispanic woman graduated with a mathematics degree and she took three times as long as I did because she had to work and raise her children while trying to get her degree. At the University of Iowa, I have been the only Hispanic woman in the mathematics program for the past two years. These kinds of stories are common because so few students get the financial support and mentoring they need to succeed. The AMS annual survey of the 2017-2018 new doctorate recipients reported that 1,960 doctoral degrees were awarded in the mathematical sciences; only fourteen of these degrees were awarded to Hispanic females and only twenty-two were awarded to women of color.

Dr. Caprau, my master's thesis advisor, found me as an undergraduate, recognized my potential, and encouraged me to further my education into a STEM field. I hope to continue to do the same in a faculty position. With the support of programs like GAANN and the Sloan Center, I have been able to continue my education and work toward my goal of becoming a professor who finds students, gets them involved in mathematical research, and informs them of the excellent funding opportunities that they can take advantage of to succeed. To work towards this endeavor, I have already begun gaining mentoring and outreach experience during my graduate career.

While at Fresno State, I taught college algebra in the Early Start and Summer Bridge Program during the summer and the comparable classes during the fall and spring semesters. Summer Bridge students are first-generation and economically disadvantaged students who are highly motivated to succeed at the university level. I structured my class so that the beginning of the class was focused on students working on warm-up problems. This allowed me to see everyone's progress as they worked on the problems and to give any one-on-one help to students who needed it who normally weren't confident enough to ask questions in front of the class. During the lesson, I also ensured that every student participated at least once in the

discussion. My standard teaching practice is to try to get the most out of class time because most students are unable to come to office hours because of other classes, responsibilities at home, or overlapping with work. During my time as a coordinator, I restructured the schedule for both Math 1RA and Math 1RB to allow more time for subjects that I have found students needed more time to grasp and to remove sections that were not relevant for their future mathematics courses.

As a woman in mathematics, I feel that it is important to encourage more women and other minorities to consider mathematics as a career that they can contribute to and succeed in. At both Fresno State and the University of Iowa I have participated in Sonia Kovalevsky (SK) Day: an event to nurture young women's enthusiasm for mathematics while in middle or high school. Although some of the students I spoke with were skeptical at first, they appreciated having the opportunity to see math as more than repetitive computations they do in class, but rather a broad subject with multiple facets to explore. After the experience, some students were excited to come the next year, started actively looking at colleges, and considered majors like engineering, computer science, or mathematical education. I will continue to participate in activities like SK Day, or help create them, to encourage women and other underrepresented students to pursue careers in STEM.

At the University of Iowa, I participated in the Building University of Iowa Leadership for Diversity (BUILD) initiative, which is a program dedicated to informing UI faculty and staff how to make a welcoming and inclusive environment for all. These workshops reinforced my commitment to being a faculty member whose priority is to establish diversity, equity, and inclusion in the classroom. One way that I can do this is by making all of the documents for the course accessible and only providing links to accessible websites for student use. Our students are becoming more diverse in their academics, socioeconomic status, culture, gender, sexual orientation, disabilities, and more. We need to ensure that we are providing a quality education to all of these students and retaining these students so that they can graduate and succeed in their respective fields, especially in mathematics. As a faculty member, I hope to be a role model and mentor to many students and steadily increase the diversity of future mathematics professionals to create a more welcoming environment for all students.