College of
AGRICULTURE, FORESTRY
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Striving for diversity, equity, and inclusion in academic pursuits is necessary to be a successful modern scientist. It is solely my responsibility to prioritize these efforts in my research, teaching, and outreach. Unfortunately, the current academic system was built on exclusion and has maintained barriers to entry for too many groups. Recognizing this history, I strive to create an equitable, student-centered, and inclusive environment in all spaces I am involved in.

Through my teaching efforts, I have found it impossible to know the full background of your students. Being clear and consistent with your assignments, and requirements and providing the resources required to complete them should always be the instructor's responsibility, not the student's. This has become even more important since the beginning of the SARS-COV2 pandemic. Providing both online and in-person options to ensure equitable access to resources required for my courses, especially labs that previously required hands-on aspects became one of my highest priorities. Creating an environment where students feel comfortable asking questions and creating memorable and significant learning opportunities requires me to prepare many variations of each activity I use in the classroom. The Plant Taxonomy course I taught during my PhD traditionally began with a tour of the Plant Biology Teaching Collection where students were exposed to a multitude of beautiful and unique species. During this tour, students completed a worksheet that encouraged reflection on why specific plants were highlighted within the collection. To make this portion of the course more accessible, I offered it as an in-person tour and pre-recorded, subtitled video tour. I then redesigned the worksheet to include sample images in a digital slideshow, sample pages from books explaining the significance of the highlighted plants, and more clearly written questions.

Creating an equitable and student-centered learning environment also means providing an emotionally safe space in which students can learn. I strive to be as open, honest, and transparent with my students as possible. During the first day of class, I always tell my students that my number one priority is that they remain healthy and safe when in my classroom both physically and mentally. I share my own history and experience with mental health, and I try and make it clear how important it is that they take care of themselves first and foremost. I give them my contact information and encourage them to reach out if they are ever struggling. I know firsthand how difficult maintaining a healthy work-life balance is, and I have dedicated myself to being there for my students whenever possible.

My approach to outreach and education is grounded in fostering the next generation of scientists by sharing my experiences and research in an approachable and fun way. I have spoken to middle school students about carnivorous plants and their adaptations, zoomed with homeschooled children to teach plant cell structures, and have a social media presence where I strive to amplify BIPOC scientists–especially during academic conferences I attend. I aim to work with underrepresented groups in my research and encourage those I work with to voice their opinions and have constructive discussions on difficult issues related to our research. I believe this is best exemplified through my work with 3D printed tools for biological science. My postdoctoral fellowship in the Rife Lab at Clemson University has allowed me to expand the audience for my 3D printed tools to plant scientists and breeders on a global scale as a part of the Innovation Lab for Crop Improvement (ILCI). The tools we are developing are already being used globally (US, Africa, Asia, and Latin America) and we are working with scientists in developing countries to create the infrastructure (makerspaces) and training modules (online) necessary to enable them to create, prototype, and iterate their own tools.

It is my personal mission to inspire my students to be the best they can be by taking care of themselves, inspiring them to pursue their passions by sharing my own, and providing them with ample resources to set them up for success both in my classes and in life. I hope to inspire and teach my students as well as learn from them and their experiences to improve my own approach to teaching. Learning and self-improvement is a collaboration with my students, and I aim to do everything I can to be the best role model and mentor possible for every student.