As the Assistant Curator of Arachnology at the California Academy of Sciences, Dr. Lauren Esposito has the important task of caring for and managing a diverse collection of specimens preserved in the academy’s collection. In addition to this, she studies scorpions, their venom, and closely related spiders to learn what organisms might be distantly related in different geological regions. Despite this being her technical title, Dr. Esposito takes on much more responsibility than just looking over spider and scorpion specimens. Her research allows her to travel, discover new species, teach in diverse communities, and conduct research in and out of a lab environment. Existing on the planet for approximately 400 million years, Dr. Esposito believes studying these unpopular organisms can answer many questions scientists still have and help humans make more informed decisions about how to protect the environment.

Dr. Esposito spends her spare time working to remove some barriers around public access to science tools and education through Island and Seas, a conservation and education-focused non-profit, and the visibility campaign 500 Queer Scientists, which focuses on sharing stories from LGBTQ+ scientists. Both groups seek to educate, inspire, and encourage growth in the science community. In recognition of her commitment to these topics, Dr. Esposito was awarded the 2019 Walt Westman Award from Out to Innovate.
Ben Barres first showed an interest in mathematics and science early on. Growing up as a female, Dr. Barres was repeatedly denied access to courses in science and engineering because of being female. It was not until he could join a summer science program with no gender restrictions at Columbia University in NYC that he finally found entry into the field. Eventually, he got degrees at impressive institutions, including his bachelor’s in biology at MIT, a medical degree at Dartmouth College, his neurology residency at Weill Cornell Medicine in NYC, and a doctorate at Harvard Medical School. Dr. Barres settled on his interest in the interactions between neurons and glial cells in the nervous system throughout his education and is known to have been fascinated by his research. He was the first openly transgender scientist in the Academy of Sciences before passing away just four years later.

Discussing Dr. Barres’ story would be incomplete without mentioning his choice to transition in 1997 at 43 years old. He had already established a career, made discoveries, and published important papers under the name he was assigned at birth, but he knew it was the right decision for him. Afterward, he noticed that people unaware of his transition treated him with greater respect, and the disparity in treatment led to deep considerations about why people seemed to treat him so differently. His paper, “Does Gender Matter?” sought to address these experiences and compare them with what other scientists suggested explained the discrimination.
Formerly known as the National Organization of Gay and Lesbian Scientists and Technical Professionals, Out to Innovate is a group of LGBTQ+ (and ally) scientists who seek to support other LGBTQ+ individuals in STEM. This can be in the form of advocacy, peer support, networking, and professional development, or include educating communities about scientific, technical, and medical concerns of LGBTQ+ people. In addition to the many programs they offer, Out to Innovate also has recognition awards and scholarship programs to help celebrate and support community members. Last year alone, Out to Innovate delivered four recognition awards and fifteen scholarships—hinting at just a small part of their work towards providing education and opportunities for members of the LGBTQ+ community.
Dr. Prescod-Weinstein’s book tackles some of the most difficult topics of cosmology and particle physics through her lens as a black, queer scientist. The Disordered Cosmos takes time to explain the complexities of physics in approachable language, but does not forget to describe the discrimination that many scientists experience as they try to chase their passions. Dr. Prescod-Weinstein seeks to not only inspire interest in the subject she loves, but also to spread awareness that social dynamics in the workplace can provide unexpected challenges that can limit scientific advancements.