

Chris Talbot – Personal History & Diversity Statement, UC-Davis Population Biology PhD

Background:

My first lesson in rapid environmental change came at age four. After our eviction, my family began migrating from couch to couch. I adapted to housing and food insecurity, continuous theft by my father as he pawned our belongings to pay for his next high, and transfers from one school district to another as we evaded him.

Luckily, amidst the chaos, I found refuges that nurtured my growth and offered stability, allowing me to persist through tough times. The local zoo emphasized the beauty and value of the natural world, instilling in me a commitment to environmental stewardship and a fascination with nature. The band room offered a community and a team, developing my interpersonal skills and offering a support network. An old hand-me-down laptop introduced me to programming, laying the foundation for my computational skills and igniting my love for problem-solving. As I overcame my adverse childhood, I became a master of adaptation to change. It's fitting, then, that I would find my calling studying *biological adaptation to rapid change*.

Trajectory Leading to Graduate School:

In high school, my refuges failed to keep me grounded when my father took his life. After dropping out and working grueling and unfulfilling jobs, I returned to school. As a low-income first-generation student, I learned to navigate academia without familial support.

I completed an Associate's degree focused on computer science, but I wanted to align my career goals with my care for nature. I declared a major in Ecology, Evolution, and Biodiversity at the University of Michigan, seeking to leverage my quantitative skills to solve environmental issues. Through research experience, I found ways to do so and discovered a passion for scientific inquiry. With the support of my mentors, I explored various facets of biological and computational research, developing broad, interdisciplinary skills and interests. I've since narrowed my research interests to population genetics, a field I believe best marries my computational and environmental skills and interests.

Reflecting on my journey, I recognize that my adverse experiences have strengthened my resilience and determination, taught me the importance of aligning my work with my passions, and ultimately led me to a path where I can contribute meaningfully to science and society. I'm excited to pursue a career that satisfies my intellectual curiosity while keeping a broader purpose in mind.

Community & Diversity:

Diversity in academia prevents research bias, drives innovation, and enriches communities. While there is a long history of wealthy, white men dominating academic circles, diversity initiatives have shown slow but steady success in improving this problem. Yet, income diversity in higher education has stagnated or, in some cases, even worsened. As a PhD student, I plan to address this by including undergraduates in my research process. By seeking funding to

pay research assistants, I will provide access to academia to students who may otherwise be unable to afford to volunteer for research experience. Providing low-income students a path to academia will pave the way for greater community engagement and trust in science.

As an undergraduate, I sought to facilitate diverse communities of belonging through volunteer opportunities and at work. I've tutored adult learners in math and language arts in community college, led field trips for various age groups and economic backgrounds at Matthaei Botanical Gardens, and mentored community college transfer students at Michigan. As a PhD student at UC-Davis, I would continue identifying ways to engage the broader community with science, potentially through collaborations with the Botanical Conservatory, local museums, or teaching opportunities. I look forward to fostering vibrant, inclusive environments at UC-Davis while studying rapid environmental change, something close to my heart.