

Matthew Williams

Graduation Year: Junior

College: Arts & Letters

Major(s): Anthropology

Minors(s): Business Economics

Scholar Group Membership: No

Did you received other funding for this project?: The College of Science: Department of Biological Sciences

Could you have completed this project without CUSE funding? No

More details on CUSE funding assistance? I would have had to take out a loan, so I am extremely grateful to all at CUSE for providing an alternative way to find the necessary funds which allowed me to focus on the trip without having to worry about how I was going to pay for it.

Project Title: Galapagos Evolutionary Biology Practicum

Project Location: Santa Cruz Island, Galapagos Archipelago, Ecuador

ND Faculty Mentor: Gary Lamberti and Malcolm Fraser

Project Type: Research, Service-Learning

Why did you undertake this project/experience? Deepen your knowledge of a topic or issue, Prepare for graduate school (MA or PhD), Prepare for national fellowships, Career discernment and/or preparation, Internationalize your Notre Dame experience

Did your funded experience help you:

[Deepen your understanding of your coursework or field of study]: Very Much

[Discern your interests and post-bac goals]: Very Much

[Become confident in your ability to set and achieve your goals]: Yes

[Gain a more nuanced view of local, national, or global communities]: A Little

[Improve your written and verbal communications skills]:Very Much

Tell us about your experience.

Each day we traveled to a different island in the archipelago with our Naturalist Guide Luis. He would teach us about that island's flora and fauna. Meanwhile, I worked on a research paper regarding sexual selection amongst birds, focusing on the peculiar case of Galapagos Lava Herons.

Most of the activities we did were observational, but they included snorkeling and diving, hiking, and walking. We saw birds, fish, marine mammals, and everything in between, all while learning about their evolutionary histories from Luis.

This honestly made the week long practicum feel like a whole semester's worth of material, but instead of being delivered on powerpoint slides it was happening all around us. This opportunity to learn about and see simultaneously was unlike anything I have ever experienced educationally.

Describe the impact this project had, both on you as a student-scholar and on the people you worked with.

The practicum was an evolutionary biologist's dream. I got to witness adaptive radiation, sexual selection, and speciation, three topics I have been learning about and discussing both inside and outside of the classroom, happening in real time.

This was the goal, to take the topics I love beyond the classroom and walk the same ground that Charles Darwin himself walked. Having now done so, I am both amazed with his mind and with the islands. They truly are a natural lab, demonstrating evolution at work for all to see.

For me, this practicum supplemented my education in a truly remarkable way. I could not dream of a better way to learn about evolution, and while I spent the whole trip writing, reading, and thinking, not a moment of it felt like work. It has filled my mind with hundreds of new writing ideas and examples to call upon for them.

Describe how this experience is connected to your plans as a student or future professional.

I hope to apply for national fellowships next year and then attend graduate school to pursue a PhD in evolutionary anthropology or something similar. This trip was pivotal in helping me to develop my understanding of the evolutionary mechanisms responsible for shaping different species.

It is one thing to read books and learn from professors, but eventually you need to see the evolutionary forces at work to cross an educational Rubicon and really begin thinking on the next plane. For me, this trip did that, and since arriving back on campus I have recognized my modes of thinking to be far more developed than they were when I left.

The trip also instilled in me a refreshed sense of wonder with regards to nature and life itself. It made me realize that there is inspiration and meaning all around us, and when you need an example to explain something or you have a question with the way things work, the first step is just looking around you and patiently observing the forces at work.

What advice would you give other students who are planning to pursue similar projects?

Begin with curiosity. Pick a question that keeps you up at night, or a topic that you cannot stop thinking about, and design a project that will help to satisfy that curiosity. In your application, express this and be very clear about how the project you are proposing will supplement your education in a way that a normal class could never do. These two things are the key to a successful application and project.

