

Dominic Acri

Graduation Year: Sophomore

College: Science

Major(s): Neuroscience and Behavior, FTT (Theatre)

Minors(s): na

Scholar Group Membership: Balfour-Hesburgh and MSPS Scholar

Did you received other funding for this project?: Balfour-Hesburgh

Could you have completed this project without CUSE funding? No

More details on CUSE funding assistance? My personal and family resources would not have permitted me to complete a 10 week laboratory research internship. I required the CUSE internship for housing and food.

Project Title: Diel Flight Activity of Wild Caught Anopheles Farauti s.s. and Anopheles hinesorum malaria mosquitoes from northern Queensland, Australia

Project Location: University of Notre Dame

ND Faculty Mentor: Dr. Giles Duffield

Project Type: Research

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

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]: Yes

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

[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.

During my ten weeks at Notre Dame, I was able to see a different side of campus. Although I was acclimated to Notre Dame's academic climate, my research opened my eyes to Notre Dame's faculty climate. As I discern graduate school, it was important for me to realize what working 40 hours a week in academic research contains. Using raw data, previously collected in Australia by Dr. Duffield, I spent my summer producing a narrative about the implication that mosquito vectors, specifically of the An. farauti complex, have for the region of Queensland. Although the findings are unpublished at the moment, I am continually working with Prof. Duffield to publish a paper about the differences in flight activity (approximating for biting activity and vector capacity) between two main species that are prevalent in northern Australia. After being able to work full-time on a project that I contribute to part-time during the academic year, I am fairly confident that I will be pursuing graduate school programs in the neuro-behavioral field.

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

Although I worked with a Postdoctoral scholar, a graduate student, and a lab technician during the academic year, this summer I was able to work directly with Prof. Duffield. This experience gave me a greater insight into what working as a graduate student would entail and I was able to assist other students with their projects in the laboratory. The atmosphere in the lab during the summer was goal oriented, with my goal being to publish a paper on my project. Although I was able to help with some data analysis, technical issues, and writing for other scholars, my main contribution to the laboratory will be the paper that should soon be published.

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

The opportunity to work directly with a professor is one that is not afforded to all undergraduate students. My circumstance allowed me to work on projects without having to work through a graduate student or postdoc. Since my current plans include graduate school, I enjoyed the challenge of working with more responsibility than most undergraduate students. In addition, I also presented a poster on my project at the REU summer conference and was very pleased with the outcome; my project and findings were consistent with another REU student doing similar research and other professors who work on this specific vector species. In the future I plan to apply what I have learned when I apply for fellowships, grants, and graduate school.

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

For other students working on similar projects:

If you don't know something, ask your fellow students, graduate student, postdoc, and professors in that order.

When trying to publish a paper, look at the journal you are interested in and check what format they accept.

When working on ND's campus, look out for all the resources that are available to you over the summer. They can really help.

Never give up when you think your research has failed. When you can't find significance in scientific research, that doesn't mean that your findings aren't important.

