

Christine Mayuga

Graduation Year: Junior

College: Arts & Letters, Science

Major(s): Science-Business

Minors(s): Poverty Studies and Science, Technology, and Values

Scholar Group Membership: No

Did you received other funding for this project?: No

Could you have completed this project without CUSE funding? No

More details on CUSE funding assistance?

Project Title: Characterizing growth phenotypes among recently lab-adapted isolates of malarial parasites arising from an area of emerging drug resistance

Project Location: University of Notre Dame

ND Faculty Mentor: Michael Ferdig

Project Type: Research

Why did you undertake this project/experience? Deepen your knowledge of a topic or issue, Research/experience necessary for senior thesis or capstone project, Prepare for professional school (MD, MBA, JD), 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]: Yes

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

Tell us about your experience.

This summer, I conducted an independent research study in which I grew three lines of malarial parasites in human blood and examined the growth patterns of the parasites at 12-hour time points. In order to do this, I took blood smears and looked at the slides under a microscope in order to obtain parasitemia counts. From the experience, I learned how to design my own study with a specific time frame and budget. I enhanced my skills in developing protocols and data analysis.

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

My CUSE project gave me confidence as a researcher to step out of my comfort zone and make my own decisions in the lab. I learned how to familiarize myself with the lab community by participating in the chores and upkeep of the lab.

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

I plan to use the scientific knowledge I learned about malaria, one of the most rampant rare diseases in third world countries in my future endeavors after graduation. I would like to spend some time volunteering in a health clinic in an underserved community and having a background in malaria and knowing the obstacles we face treating it will be very useful in establishing relationships with patients afflicted with the disease.

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

I would advise students to not be afraid to take risks with their projects. Initially, I wasn't sure what direction I wanted to take with this project so I ended up taking a lot of extra data points that I hadn't previously planned on and it ended up working out well.

I acknowledge that this form has been filled out truthfully and to the best of my ability. I understand that this information will be shared with many different CUSE constituencies. As such, I have provided as much useful information as I was able. I understand that CUSE will not complete my award disbursement until this form is successfully completed. If I have any questions or concerns, I will contact CUSE before submitting this form. To illustrate that you understand all of these points, please enter your Notre Dame email in the box below.
cmayuga@nd.edu