

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