

Heather DiLallo

Graduation Year: Sophomore

College: Engineering

Major(s): Chemical Engineering

Minors(s): Theology

Scholar Group Membership: N/A

Did you received other funding for this project?: Liu Institute for Asia and Asian Studies

Could you have completed this project without CUSE funding? No

More details on CUSE funding assistance?

Project Title: Utilizing Science to Promote Human Development

Project Location: China

ND Faculty Mentor: Dr. Toni Barstis

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, 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]: Very Much

[Gain a more nuanced view of local, national, or global communities]: Very Much

[Improve your written and verbal communications skills]:Yes

Tell us about your experience.

I traveled to two diverse regions in China for 10 days to collect samples of albendazole, an anti-worming medication, to test for quality control with Paper Analytical Devices. Through these 10 days, I spoke with several medical professionals and locals, learning more about the situation of medicine in China. I collected 54 samples of albendazole from 54 different pharmacies in both rural and urban areas. Once I returned to the US, I tested all samples with Paper Analytical Devices and High Performance Liquid Chromatography, learning that most of the samples were within the allowed limits, while some were questionable.

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

This was my first trip to Asia and I learned so much about Chinese culture even in such a short span of time. I had negative expectations about Chinese medications, due to the reputation of China being the leading manufacturer of counterfeit medicine. It was interesting to see how similar and yet dissimilar pharmacies in China are compared to the US. My collaborators were able to learn about the PADs Project and the new ways that Saint Mary's and Notre Dame are

trying to meet the WHO's expectations, while also communicating with me about the current situation of medicine in China.

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

This research will be used by myself and fellow researchers to present at the American Chemical Society's national meeting in Spring 2018. Additionally, I plan on publishing a paper in a scientific journal as well as using this for my senior comprehensive project in chemistry.

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

I would encourage other students to never think that they are too young or have too little experience to conduct research. Everyone should apply for as many sources of funding as they can and remember how incredible the Notre Dame community is and how supportive it can be, especially when it comes to research.

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.
hdilallo@nd.edu
