Summer Internship Report 2017

Haley Tucker, C’19
Hometown: New Orleans, Louisiana

Research Assistantship: Whale Research at the University of West Indies
Barbados, West Indies

Provide an overview of the organization/research project and a summary of your responsibilities, tasks, and/or projects.

We worked with Professor Emma Smith at the University of the West Indies. We took whale meat samples that we previously cut up with Professor Fielding last semester and performed the DNA extraction process on them. We successfully completed the process and ended with the proper DNA results. We also dissected sail fish guts, two marlin fish, three turtles, and a baby dolphin in attempt to determine the means of their death by testing them for mercury, plastic toxins and other pollutants. We were also fortunate enough to assist the Barbados Sea Turtle Project in tagging and collecting data from over 20 sea turtles that they quickly caught and released on the boat that day. We ended our internship with starting a sea turtle and fish egg study by mixing the eggs in order to properly test them after we left.

During your internship, what did you accomplish or how did you make a difference? In what ways did you grow in your professional and technical skills?

I feel I accomplished many of things. We were able to properly complete the extremely long and tedious process of DNA extraction. I personally properly dissected more than one animal without any assistance or any background in the lab. We all were able to provide great help and aid to the Barbados Sea Turtle Project seeing that they were low on staff that day too. Overall I think the work that we did was very important to the well being and prosperity of Barbados economy and most importantly ecosystem. While doing all of that I learned more than ever before in this field seeing that all the work was very hands on and independent.

Describe a problem that you helped to solve at your internship. What skills or knowledge from your education at Sewanee helped you address the problem?
We were able to use our background with the whale meat while performing the DNA extraction to really understand what we were doing. My background in the course molecular genetics last semester really came into play during this process as well. All my courses in Environmental science really helped us understand and appreciate all the pollutant and toxin work that we helped out with during the dissections and sea turtle data collecting.

**In what way were your teamwork skills strengthened?**

There were many times were the three of us were stuck alone during some assignment and would come across some issue, whether it be lack of resources or accidental mistakes. We all had to come together and decide how to address it. There was one time during the DNA extraction where we were left alone while Professor Smith had to deal with some urgent tissue and one of the small droppers accidentally cracked and left some particles of glass in our sample. We all had to come together and decide whether to still run the UV test on it or not and we ended up making the right decision in running the test because at the end of the day they were able to take the results and decipher it with the glass still in it.

**How did your internship affect your career plans?**

I went into this internship as a declared Environment and Sustainability major and no background in chemistry or marine biology, but I came out of this internship with a newfound love for the lab and marine biology that I definitely want to explore more of. This internship also strengthened my interest and desire to succeed in my major, Environment and Sustainability.

**In what ways did your internship cause you to encounter people of different backgrounds from your own? What steps did you take to communicate effectively with such persons? What did you learn from such persons' perspectives?**

This internship was so much different than anything I've done or heard of. We were on this small island for over two weeks with only public transportation and living far form any of the resorts that you see online. We had to communicate with all the local Bajan people all in their comfort zones which was sometimes extremely difficult for us, but after the initial timidness it was always completely fine especially after they found out we were here working and living in the dorms. I think a lot of people respected us more than the average vacationer which was refreshing and make things a lot easier for us. We also worked along all these local islanders who grew up studying things so bizarre to us but still within our fields, like sea turtles for instance! That was all amazing to see the environment from their perspectives and their ways/priorities regarding sustainability.

**Words of advice for future interns (housing, transportation, etc.)?**

Use the public buses! They are a lot easier than anything else.

**Words of thanks to your internship funding donors:**

Professor Emma Smith was eye-opening, engaging, brilliant and one of the best professors I have ever had the privilege to work with. I owe all the knowledge and experience that I am coming home with to her.