ENS Katherine Miller JRCOSTEP Summer 2019 State University of New York Rhinelander District Office Rhinelander, Wisconsin

My name is Katherine Miller and I am currently a student at State University of New York- College of Environmental Science and Forestry (SUNY- ESF). I am going into my senior year in August 2019, with plans to



graduate in May 2020 with a Bachelors of Science in Environmental Health Science. Since ESF's Environmental Health Science program is accredited, I am required to have a minimum of 160 hours of internship/professional experience to graduate (I have far surpassed this requirement). I heard of this internship through a few of my engineering friends who have done it in the past, and had told me of the Environmental Health component. It had been on my radar to apply when I attended a presentation done by CDR Elena Vaouli. After her presentation, I began the application process.

A few months after applying, I got a call from the Indian Health Service (IHS), Bemidji Area, Rhinelander District Office in Rhinelander, WI. I spoke with my preceptor, LTJG Garrett Steiner, and was told of all the things with which this office was involved and of my JRCOSTEP assignment. A few months later, I began the drive from Syracuse, NY to Rhinelander. An interesting thing to note about moving to Wisconsin for the summer is that I am originally from Oneida, NY, and Rhinelander is in Oneida County. Upon doing some research of the Oneida Nation, I was able to find out that this tribe was originally from my region and was relocated after the Revolutionary War to Wisconsin.

The Rhinelander District Office is part of the Bemidji Area IHS, which serves tribes throughout Wisconsin, Michigan, and Minnesota. LTJG Garrett Steiner works with tribes in Wisconsin and Michigan.

Throughout my JRCOSTEP, I was able to deepen my education and expand my perspective. A large part of what I learned was food safety by traveling to different tribal establishments, mostly casinos, and doing routine food inspections. We also went to Powwows and conducted inspections of temporary food establishments. Prior to this internship, I had very little experience with food safety. Now, through inspections such as these, I became well versed with the 2017 FDA Food Code, as well as the IHS's Web-based Environmental Health Reporting System.



Another large component of my JRCOSTEP was vector surveillance. This was something I had no idea I was interested in until I came here. For this component, we collected ticks and mosquitoes on tribal land throughout Michigan and Wisconsin; looking mostly for deer ticks, a known vector of Lyme disease. I learned how to drag for ticks, how to identify them, and the dangers that they hold. Once collected, the ticks were sent to a lab for pathogen testing. We worked with mosquitoes as well. We would collect and identify them to see if there was a need to test them for diseases. I learned all about the Jamestown Canyon virus, an issue with high frequency in one tribe in Wisconsin. I sat in on a meeting with different public health stakeholders to discuss the virus and what could be done to help minimize the chances of infection. I had the opportunity to work with two graduate students from the University of Wisconsin-Madison in vector surveillance. We also set up a relationship with a tribal community college so they could do their own vector surveillance with their students. It was so interesting to make connections with individuals I would never have had the opportunity to meet had I not done this JRCOSTEP.

This experience also helped me improve my communication skills; a skill that I will use for the rest of my life. It also exposed me to new cultures and histories different from my own. This is something unique to this internship, and I am so grateful I was able to take part.



My favorite part of this internship was the travel. Before coming to Wisconsin, I had never been west of Erie, PA. After this summer, I was able to experience so many new places such as the Upper Peninsula, Nicolet National Forest, and Chicago, IL. I had always wanted to see Chicago, so this was very exciting.

I am so grateful for my time with IHS. I am so thankful for all the wonderful experiences I had this summer. Although there were challenges, these challenges helped me foster new knowledge and grow. I will be forever appreciative of this experience, and would recommend anyone who is interested in public health to do this internship.



