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JRCOSTEP Summer 2018
University of Washington
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My name is Kate Tokareva and I am an incoming senior at the University of Washington, pursuing a Bachelor of Science in Environmental Health. I first learned about the JRCOSTEP opportunity through a fellow classmate and was immediately drawn to it by the prospect of hands-on experience with environmental health. The opportunity to challenge myself by moving to a completely new place over the summer was appealing too. These past two months I was stationed at the Indian Health Service (IHS), Tucson Area Office and served the Pascua Yaqui Tribe. I worked primarily with LT Christopher Caler who was also my preceptor.



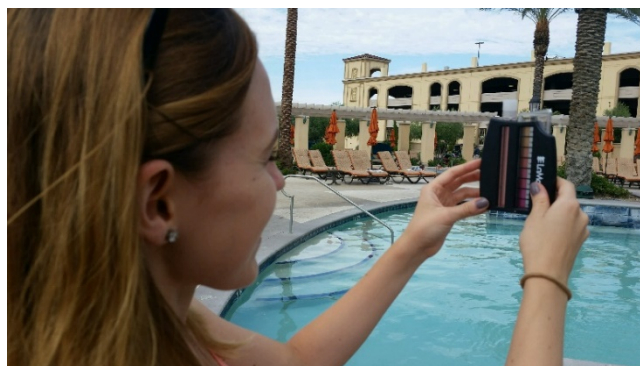
Deploying mosquito traps



Analyzing/sorting mosquito samples

My main, and arguably favorite, project over the summer was mosquito-borne disease surveillance, mainly for West Nile virus. This consisted of going into the field and deploying mosquito traps weekly, collecting and analyzing those samples, and running West Nile virus tests on species of interest. Back in the office, I analyzed the data and created a new report template to help visualize weekly temporal and spatial trends of mosquitoes. The report also contained recommendations for public health action based on the data. This information was then communicated to the tribal health department in an effort to increase awareness and public health preparedness surrounding mosquito-borne diseases throughout the summer months. Besides the mosquito reports, I was also able to assist in updating educational brochures on rabies, Rocky Mountain spotted fever, and car seat safety for the tribal health department. Through these tasks I learned the value of reporting information in a concise yet understandable way.

I was also able to participate in a slew of other environmental health-related activities, including food safety surveys, home safety surveys, various trainings, and educational outreach. I enjoyed that my work schedule consisted of a healthy balance of work inside the office and out in the field. Although my work week usually had some structure to it, for example with weekly mosquito surveillance and monitoring, oftentimes each week ended up having a different theme. Some weeks were more focused on meetings,



Conducting a pool survey

trainings, and table-top exercises, whereas others were heavy on inspections and report writing. One of my favorite activities from the summer was being able to participate in a table top exercise on tuberculosis preparedness as the IHS representative with various other public health stakeholders ranging from epidemiologists to public health nurses. I also thoroughly enjoyed having the opportunity to participate in food, beverage, and pool inspections of various facilities.

Although much of what I learned on the job matched my expectations from what I learned in the classroom setting, one thing I was surprised to learn was the IHS approach towards inspections and surveys. Unlike regulatory agencies such as the FDA or EPA, IHS focuses more on consulting rather than enforcing, as well as encouraging tribes to take ownership of their environmental and public health services.

I found the experience of moving to a new city to be challenging but also incredibly rewarding. Prior to this externship, I'd never had the opportunity to move to a new city where I didn't know a single person. I enjoyed my time working for the Indian Health Service, but outside of work I also got to experience a taste of everything that Tucson had to offer, from hiking local trails to enjoying the art and music scene. I took advantage of every weekend I had to explore different parts of Tucson and even made weekend trips to nearby cities such as Flagstaff and Sedona. Through this experience I gained deep insight into environmental health practice in the field at the federal level. I am extremely thankful to both the Tucson Area and the Pascua Yaqui Tribe for welcoming me with open arms and making sure I had a positive experience.

I would also like to thank LT Caler for his constant support and dedication to ensuring I got to experience both routine and complex environmental health issues. Although I was nervous coming into this externship initially, I can confidently say I would do it all over again in a heartbeat and highly recommend this opportunity to anyone looking for environmental health work.



Visiting the Grand Canyon



Hiking in Saguaro National Park