ENS Zach Zmudka Jr. COSTEP Summer 2013 Illinois State University Aberdeen Area, Rosebud Service Unit Rosebud, South Dakota

My name is Zach Zmudka; I am a student at Illinois State University pursuing my degree in Environmental Health Science. In order to obtain this degree, my university requires that all students complete a professional practice internship course, and the Jr. COSTEP program was an ideal opportunity to complete this graduation requirement. I first heard about the Jr. COSTEP program from one of my professors, retired USPHS CAPT, George Byrns. During our time together, he frequently spoke about the rewarding opportunities the Indian Health Service had provided him over his career. After hearing these stories I knew that the Jr. COSTEP opportunity was one the one I must pursue.



After being lucky enough to be selected for a Jr. COSTEP position, I was assigned to the Rosebud Service Unit Office of Environmental Health, Rosebud, SD. Since I am an avid outdoorsman, this location turned out to be ideal. Traveling to Rosebud, South Dakota placed me nearly one thousand miles away from home and anything I found familiar. I really had no idea what to expect. Upon arrival it was very exciting to meet my preceptor Mr. Charles Mack, Sr Environmental Health Specialist, and the rest of the Office of Environmental Health & Engineering (OEH&E) staff. At the outset of my COSTEP Mr. Mack went the extra mile to make sure I received a complete orientation, provided all the tools to be successful and was

comfortable. I even had my own office and computer which I totally didn't expect.

On a reservation of nearly one million acres and a tribal enrollment of approximately twenty-four thousand members, there was plenty of work to keep me busy. From the first day, I had opportunities to participate in a variety of public health activities, including: food service surveys, severe injury surveillance activities, indoor air quality assessments, and healthy homes surveys just to name a few. With the Service Unit serving such a large number of people there were ample opportunities for me to begin utilizing some of the environmental health knowledge I had obtained throughout the years. Going to people's homes to assess air quality issues allowed me to use what I had learned in my indoor air quality courses and better prepared me for similar scenarios in my career. Working extensively on the Service Units Severe Injury Surveillance System provided me with valuable quantitative data analysis experience. My time spent working for the Indian Health Service has strengthened my environmental health professional skill sets and I believe this will pay dividends in the immediate future.

One of my most satisfying experiences was working a case involving an elevated blood lead level in a child. As part of the Head Start enrollment process, children are provided a preliminary health screen, and one of those screens happens to be for lead. In this case, a routine screening identified a child with elevated blood lead levels. The case was referred to the Environmental Health program for investigation and follow-up. A thorough investigation at the home revealed that the likely source of the lead was a metal water spigot the child frequently drank from while playing outside. When tested,



the spigot was positive for lead. It felt great to be part of isolating an important health issue so it could be corrected early on and the lead poisoning issue could be addressed.

There are not many ways that I can think of an internship opportunity that would allow me to experience so many different aspects of the environmental health field. It was interesting to learn many things about the Lakota culture and to be assigned to such an interesting place. The COSTEP experience also has shown me that I have made the correct career choice and that in this field you can impact lives in such a positive way. If you are looking to have an experience that you will never forget while gaining excellent hands on experience, I strongly recommend looking into a Jr. COSTEP internship with the United States Public Health Service.

