My JrCOSTEP Experience With the Centers for Disease Control and Prevention’s Environmental Health Services Branch, Atlanta, Georgia, Summer 2006

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This year I was fortunate to have been selected to serve in a JrCOSTEP position through the US Public Health Service and work with the Environmental Health Services Branch (EHSB) of the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. In my roughly 3 months of active duty (May 21–August 18), I was exposed to a vast array of experiences in the field of environmental health, and I was able to gain unique and valuable hands-on work experience unlike any other. Although the process of applying for and entering into the JrCOSTEP program proved trying (to put it gently), it provided an opportunity for both personal and professional development that I would never be able to achieve in a classroom setting.

To add to my good fortune, I was able to work under the outstanding leadership of CAPT Craig Shepherd. CAPT Shepherd did an amazing job ensuring that my experience was a positive one and selling me on the benefits of the commissioned corps of the USPHS. CAPT Shepherd arranged my summer schedule and facilitated varied and interesting projects and “internships within internships” to give me a wider view of the corps and the types of environmental health positions it offers and a chance to gain some incredible field experience.

Less than a month into my assignment, CAPT Shepherd arranged for me to fly to Miami and rendezvous with members of CDC’s Vessel Sanitation Program for a week to assist them in conducting health and safety inspections on cruise ships making port calls there. This was an interesting assignment because each ship is basically a self-contained minicity with the entire spectrum of environmental health related problems including food safety, pools and spas, potable water production and wastewater disposal, and HVAC systems capable of spreading just about anything and everything all around a very isolated, close-contact environment.

In 4 days of inspections, I was able to observe and participate in collecting and testing water samples, conducting food-service inspections, crawling around in engine rooms, and poring through maintenance and reporting logs in infirmaries and control rooms. To cap off the week, I attended the educational seminar that VSP conducts for members of the cruise-line industry. Coupled with the experiences of the previous 4 days, I learned more from this 3-day classroom instruction than from a semester of classes.
After my trip to Miami, I went back to the office to help CAPT Mark Miller put together emergency disaster response kits and prepare a presentation to give at the annual National Environmental Health Association conference.

The following week I spent a couple of days working with CAPT Theresa McDarmont from the National Park Service headquarters in downtown Atlanta to get a feel for what Environmental Health Officers do with the national parks. We spent the first day in the office, where she introduced me to the various people who worked there and explained their roles and how they tied together. The next day I accompanied her on a visit out to one of the national parks, conveniently located in the heart of Atlanta.

Not too long after my time at the National Park Service headquarters, CAPT Shepherd arranged for me to spend a week working with Georgia’s DeKalb County Health Department. That week, coordinated by DeKalb County’s Gordon “Stacey” Cargal, included chances to meet with and talk to the heads of each of the branches of the health department and then to go out with field staff for some hands-on experience. The first day out, I accompanied another summer intern conducting water-quality samples on swimming pools and spas throughout the county. My experience on the cruise ships came in handy there!

The next day I went out with Stacey on some inspections of tattoo, piercing, and body “modification” studios. Later in the afternoon, I went out with Eb Adedun from the Indoor Air Quality and Hazard Analysis Branch to inspect a home where somebody had called in to complain about mold. Coming from such a dry climate, it was interesting for me to see the effects of humidity on mold growth and the effects it can have.

The following day I went out with an intern working in the vector-control program to disperse larvicide pellets, check mosquito traps, and respond to calls regarding stagnant water and mosquito problems. On my last day, I went out with Sharifa Peart on a couple of food inspections—something I almost wish I had not done. The first two inspections scored well, but the last was a follow-up visit to a restaurant that had numerous violations. In my opinion, this restaurant deserved to be shut down immediately, for more reasons than can be seen in these photos.
To get a feel for a different aspect of environmental health work in the corps, I spent 1 day the following week working with CDR Alan Parham from the Agency for Toxic Substances and Disease Registry (ATSDR) getting a feel for the type of work done in Superfund Program and Assessment Branch. This was an eye-opener for me: I had always envisioned ATSDR as a massive complex of labs where extensive toxicological testing was conducted. (My only prior knowledge of the organization was from the toxicological profiles they publish. I used the toxicological profiles regularly for coursework and research at school). As it turns out, however, ATSDR produces the toxicological profiles but does not conduct the research. To produce these documents, ATSDR assesses relevant toxicological testing and information that has been peer reviewed, compiles it, and peer reviews the end result, which becomes the toxicological profile document.

The majority of my time was spent at the office working on a number of projects. The first major project was for CAPT Shepherd. I entered inquiries that EHSB received into one main database. Database entry meant that the types of inquiries received and the responses given could be tracked. The database also logged other information about each inquiry: location, type of person making the inquiry, action taken, and where the inquiry was referred, if necessary.

The other project, for CAPT Charles Otto, was to compile a listing of the complete contact information for the health departments of every state and county or bureau in the country. Once the list was compiled, I organized them into a simple, easily navigated directory. This directory is used for inquiries that need to be referred to a health department. EHSB now has complete and easily accessible contact information to direct inquiries to the proper authorities.

To round out the summer, I spent a day with the U.S. Environmental Protection Agency’s (EPA’s) Dr. Priscilla Oliver. Dr. Oliver was a tremendous resource to me. She gave me a quick tour and briefing about the EPA and its functions, activities, and opportunities for environmental health-related professionals. She was also quite helpful in discussing possible plans for medical
school. She even introduced me to a few of her contacts in a related field and I was able to talk with them over lunch.

The next week—the last week of my time in Atlanta and with CDC—I was lucky enough to take part in a project organized by CAPT Mark Miller to collect water quality samples on the Colorado River in Grand Canyon National Park in Arizona. This was an especially exciting project for me because I had never been to Arizona to see the Grand Canyon. I flew to Phoenix and drove to Flagstaff, where I met LT Adam Kramer early the next morning for the lengthy drive out to Diamond Creek to collect samples.

The process was more or less the same for the next 3 days:

- wake up at the crack of dawn,
- drive out to the far reaches of the canyon,
- head out on the river to collect samples,
- spend a couple of hours filtering and concentrating the samples, and
- driving to get back to Flagstaff by 5:15—closing time for FedEx, where we would drop a cooler for next-day delivery to the lab back in Atlanta.

I could spend a few more pages discussing this trip, but I will insert a few photos instead. From top to bottom: collecting samples, filtering, and conducting bacteriologic testing at LT Kramer’s office.

I had a truly great experience working with CAPT Shepherd and the crew at CDC/EHSB as well as all of the other USPHS officers and civilians who helped make this an enriching and amazing summer. I gained an invaluable wealth of hands-on experience and knowledge unparalleled by any other course or summer job I ever have or ever could have taken. I cannot thank those involved enough for all of their help and support, and I will be forever appreciative of the USPHS—and CAPT Shepherd especially—for the experience and opportunity they provided.

Thanks, everyone!