

Townes Bouchard-Dean
Summer 2016

Alpha Sigma Foundation Summer Enrichment Scholarship Final Report

This summer I was in Chapel Hill doing research and undergoing EMT training. Both activities were very gratifying while being quite different.

The research I participated in was very interesting; I worked under Dr. Joel Parker at the Lineberger Comprehensive Cancer Center studying the association between germline mutations and tumor aggression. My project assessed the relationship between heritable genetic variations and differing cancer outcomes. For example, two people with the same cancer type resulting from the same gene mutation may have dramatically different outcomes because of differing hereditary predispositions. This research is very computational, which has been valuable to learn and practice. I've enjoyed our lab and the work that we've produced thus far; it has been a very enlightening experience. I look forward to building off of my summer project for what will hopefully become a senior thesis.

Training to become an Emergency Medical Technician was an extremely rewarding experience. The class at Durham Tech was very hands-on and revealed to me a side of medicine to which I previously had no access. I learned a great deal in class and was given the chance to practice my skills during clinical shifts at emergency departments and EMS organizations in the area. I learned treatment methods in class, performed ventilations on a cardiac arrest patient in the back of an ambulance, led patient assessments in the Duke ER, and much more. I had very little knowledge about emergency medicine prior to this course and found the process extremely rewarding. This is the most hands-on level of medicine I can perform at my age and level of training, so it was really cool to gain this education. My clinical shifts made me feel more useful

than almost any activity I have ever participated in. The class has certainly encouraged my desire to practice medicine and my appreciation for patient care. I will take the state certification exam this fall and look forward to volunteering/working as an EMT this year and beyond.

The scholarship covered the cost of tuition and supplies for the EMT class, which was extremely appreciated since my work at Lineberger was unpaid. In this way, the scholarship allowed my involvement in both endeavors this summer, which were very fulfilling. I especially appreciate the Foundation's support because I know this was not a prototypical use of the summer enrichment fund. I did not travel far away; in fact I lived only two blocks from the Lodge. The activities that I was able to participate in this summer were not as stereotypically life-changing as those in which many brothers usually partake. For example, the photos I've attached don't necessarily depict that I accomplished anything particularly interesting because any documentation of me doing anything cool in lab or throughout the EMT program would be protected by HIPPA or our lab policies. That being said, I am very glad I was able to receive funding in order to do things that both directly impacted and informed my intended career in addition to providing me a great deal of knowledge and experience that I can bring back to the Lodge. I learned about the Durham Tech EMT program and became interested in undergraduate research because of older brothers who had done similar things before me. I look forward to both using the substantive skills I developed this summer and mentoring the next generation of the Lodge as my experience might encourage the involvement of younger brothers.



Duke University Emergency Department, where I worked clinical shifts for my EMT course.



Orange County EMS Medic 3, where I worked clinical shifts for my EMT course.



Durham Technical Community College Orange County Campus, where I took classes for my EMT course.



Marsico Hall, where I did research with the Lineberger Comprehensive Cancer Center.



Working at the Lineberger Comprehensive Cancer Center.



Doing clinical shifts for my EMT course.