## Dalton Price's Final Report for the Jessica Jennifer Cohen Foundation

Internship with the World Health Organization's Eastern Mediterranean Regional Office

At the start of my internship with the World Health Organization's Eastern Mediterranean Regional Office, I worked desk-side and learned a plethora of information about antibiotic resistance in the MENA region. The many hours and late nights at the office allowed me to dive into the research; conduct a literature review; plan for World Antibiotic Awareness Week 2019; and focus on the theoretical aspects of a program called Tailoring Antimicrobial Resistance Programs (TAP), which is a detailed strategy to influence the behavior of individuals implicated in antibiotic resistance — notably patients, pharmacists, and physicians.

However, unlike most interns, I was fortunate to go beyond my desk and see how antibiotic resistance actually manifests in a clinical setting. I was first able to go to a local university health system in Cairo, get a tour of the pediatric hospital, and conduct interviews with 7 different physicians in the pediatric intensive care unit (including the director of the entire pediatric hospital!). This experience was sobering to say the least. I always knew that antibiotic resistance was an issue, but you don't realize how big of an issue it is until you actually see it at the bedside. There were children dying left and right, and I heard many horror stories of children coming in with MRSA resistant to all antibiotics or a child being treated with antibiotics for the flu and then dying from another infection that was acquired in the hospital. It made me more passionate about antibiotic resistance and helped me see why it is considered the greatest infectious threat we face today.



Photo taken while touring the pediatric unit of the hospital

After this on-the-ground experience, I was then flown to Jordan to implement an intervention in primary healthcare centers in the capital. Besides being a great opportunity to travel to another country, I had the chance to hear about physicians' experiences, both positive and negative, when dealing with patients who want antibiotics. Importantly, I was able to see the challenges we face in trying implement a public health intervention. There were a number of logistical and bureaucratic challenges, but overall my partner and I were successful. The physicians are currently putting the changes into practice, and I will receive the data in the coming weeks. I'm ecstatic to see if our work led to measurable behavior change and, in turn, a safer future for Jordanians!



Photo of my presentation about preliminary data results and future monitoring and evaluation

Among the many things I noticed during my time with the WHO, one particular thing stood out: a very structured way for addressing public health problems. It felt that we were always trying to treat the symptoms of an issue, not the root cause. This approach would expectedly pose problems and create inefficiencies. For example, in my work on antibiotic resistance, I wondered why we were always targeting the individual and not the pharmaceutical companies that would aggressively market to physicians or the financial structures that incentivize pharmacists to give more antibiotics to patients. It seemed that these issues were always too bold, political, or bureaucratic to address. And this made me think. A lot.

Recognizing the challenge that a large, international organization like the WHO would face if leaving the root problems unaddressed, I decided to explore this further. My coursework in anthropology pushes me to think about the complexity of issues, the symptoms and root causes jointly, and so my first step was to speak with fellow anthropologists working in public health. One anthropologist told me that this was the exact reason there are so few anthropologists in these operational spaces outside of academia. He said that anthropologists complicate the problem to an extent that non-social scientists do not want to touch. Further, few social

scientists are brought to the table. Another anthropologist pointed out an artificial – though significant – divide she sees in these spaces. She distinguished applied anthropology and critical anthropology. Applied anthropology is essentially what I did this past summer, working with community engagement and qualitative research data. Critical anthropology, on the other hand, grapples with the root causes of the issues and more often occurs in academia. This divide was very apparent to me upon my arrival to WHO, but I never had words to describe the distinction (applied vs. critical). And so, in pursuit of better understanding this wired thinking at the WHO and its limitations, I've decided to pursue my senior thesis on the topic! I look forward to exploring this topic more and learning about how I can hopefully shift this interventional paradigm used in public health presently.

With many incredible experiences – and frustrating experiences that turned into incredible opportunities (my thesis!) – my internship at the WHO was unparalleled. For that, I genuinely thank the Jessica Jennifer Cohen Foundation and their investment in me.



Photo at a farewell party my friends in Cairo threw for me