Adventures in a Lithuanian Hospital: Pathway to a Future Decision

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Paulius Kuprys '12 (left) stands with two doctors of the Vilnius University Hospital Santariškių Clinic microbiology lab in Lithuania.

"Uh oh, it's MRSA," said the microbiologist as he showed me the antibiotic inhibition zones on a bacterial plate. I was in Lithuania in the midst of a two month internship that would give me insight into my future life.

Six months before I departed for Lithuania, I applied to the LISS program. The LISS program provides students from Lithuanian descent with the opportunity to complete an internship in a vast number of occupations in Lithuania. I was extremely happy when I heard that I was accepted and that I was to complete an internship in a hospital because of my interest in becoming a doctor.

Not many details were given about my internship assignment, so I was not sure what to expect. I was sent an email telling me that I would be interning in the diagnostic laboratory of Vilnius University Hospital Santariškių Clinic. Would I be conducting research? Would I be examining patients' samples? How much interaction would I have with real doctors?

Over fifty American students and one Canadian student were enrolled in the LISS program. We all lived in a hotel located in an area of Vilnius, the capital city of Lithuania, that is termed "New Town." The arrangements were extremely comfortable considering we did not have to pay for this housing and the city center was about a fifteen minute walk away. I had two roommates: I was good friends with one and the other one I did not know, but we soon became good friends.

On our first day, my friends and I clambered out of the early morning bus, crowded with commuters, as we arrived at our destination. A massive complex of buildings stood before us housing numerous health care departments. We made our way to the administrative office in order to find our assignments. I was dismayed to learn that my advisor was unavailable for the first day, but I tagged along with my friend to the infection control ward. We spoke with the head of the department and then we were whisked off to the stomach surgery ward for a tour. After a few minutes of explaining the important sections and areas in the department, we were asked whether we wanted to see a surgery. My friend and I looked at each other in disbelief and both of us tripped over words in an attempt to say "yes." After donning scrubs and washing our hands we entered the operating room. The surgeons greeted us as we walked into the operating room. I was surprised at how friendly the surgeons were, explaining in great detail what they were doing as they cauterized and sewed in order to remove a section of intestine. At times they even gave us a better angle to view the procedure. As the surgeons worked they seemed calm and collected; not what I expected to see in an operation room. This was only my first day, I thought to myself as I returned to my hotel, excited for the prospect of tomorrow.

In the following weeks I spent most of my time in the microbiology lab learning about infectious bacteria. Each morning, as I walked into the lab, my nostrils became filled with the smell of bacterial ferments. Interestingly, I became so acquainted with the bacteria that I was able to discern some bacteria, such as Pseudomonas which has a sweet smell, by a quick whiff of the bacterial plate. I would sit with the doctors in the microbiology lab as we examined bacterial growth on plates from a patient's sample. Often times this would require me to make my own slides in order to decipher bacterial elements, such as the shape and staining of the bacteria. The morning was always hectic in the microbiology lab because surgeons called nonstop asking for the results of the tests. "Is it MRSA?," they would ask frantically. MRSA stands for methicillin-resistant Staphylococcus aureus, which means that the bacterium S. aureus has developed immunity to all methicillin and methicillin derivative pharmaceuticals. MRSA infections have become increasingly problematic as they are particularly virulent and difficult to treat. For such an infection, the microbiologists often prescribed Vancomycin, a very potent antibiotic and sometimes the only useful antibiotic against the bacterium. After the hectic period passed the microbiologists and I would sit down for a nice coffee break in the lounge. Occasionally, a lady would come around to the lounge and sell homemade cheese. This often prompted many other employees to come to the lounge in the hopes of buying some of the fresh cheese, which I found to be quite delicious after I bought some myself.

Throughout the two months, I observed surgeries, deciphered bacterial growth, made rounds with doctors and surgeons, and performed Polymerase Chain Reaction experiments with viruses, which examines the DNA found in a patient's sample to determine if a virus is present, just to name a few. All of these experiences were amazing, but they were all overshadowed by a single aspect: the ability to talk to doctors and surgeons about their jobs.

The fact that I was able to talk one on one with doctors, let alone heads of departments, left me a little star struck. I attended rounds in the intensive care unit with the heads of various departments as they decided what to do with the sickest of the hospital's patients. It was remarkable to see the diagnostic processes these doctors used unraveling before me. Each of them seemed like a huge bank of medical information as they prescribed treatments and pharmaceuticals for the patients without second guessing themselves. I was humbled to be in their presence. Although both the jobs of the microbiologist and the doctor are necessary for the patient's survival, I found that completely different dynamics governed each of them. Microbiologists were usually secluded to their laboratory, examining patients' samples, while doctors were examining patients' directly, making crucial decisions on the treatment

of patients. The health and well-being of the patients were ultimately in the hands of the doctor. I felt this weight of this responsibility each time I accompanied the doctor as he examined patients.

This internship played an essential role in strengthening my resolve to become a doctor. I was able to see a hospital from different aspects and gain the perspective of real doctors on their own work. The numerous connections I made and the experiences I had all will have such a large impact not only on my educational future, but also on the rest of my life.

Dedicated to Birute Bublys (1950-2010), founder of the LISS Program