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In the spring of 2014, I spent 9 weeks attending clinical elective programs as a visiting medical student at the Johns Hopkins Hospital. The rotations I was on were otolaryngology-head and neck surgery and neurology. The Johns Hopkins Hospital is the world's greatest hospital, renowned for excellent patient-centered healthcare, medical education and biomedical research. It was truly an honor to be able to work with some of the smartest and most outstanding people in the world at the Johns Hopkins Hospital. I would like to express my deepest gratitude to the Johns Hopkins Hospital, the Johns Hopkins School of Medicine and National Yang Ming University for providing me with this incredible opportunity. This journey could not have been possible without your supports. I learned so much and was so deeply inspired that I can't wait to share with you what I saw and what I experienced.



the world-renowned Johns Hopkins Hospital

Clinical clerkship in general otolaryngology-head and neck surgery



with my ENT course director, Dr. Alexander Hillel, in the Weinberg operation room

My first stop at Hopkins was being on ENT service. The program was well-organized, consisting of four one-week rotations on four different subspecialties, including otology, sinolaryngology, head and neck surgery and pediatric otolaryngology. Dr. Alexander Hillel, the course director, was very friendly and eager to help me with my learning. Well before the rotation even started, he emailed me a quiz that aimed to guide me through key topics for each service, which was very helpful.

While on otology service, I was fortunate to meet Dr. Howard Francis, a great surgeon and professor, who deeply inspired me. When I was at his outpatient clinic, he encouraged me to take histories from the patients, perform physical examinations on my own and report back to him what I found and what I thought. He then evaluated the patients once again with me observing alongside. Thereafter, he spent a great deal of time teaching me how to evaluate patients, how to skillfully use otoscopes, and how to read audiograms. When I was in the operation room observing his surgery, he kept updating me on what they were doing and asking me if I had any questions. In the interim of different operations, he would grab a piece of paper, explaining to me in great detail with sketches the next operation. I felt very grateful for the time he devoted to educating me.



with Dr. Howard Francis, my great mentor, in the JHOC operation room

I also enjoyed head & neck surgery rotation very much. A typical day of the service consisted of rounding with the residents (Dr. David Smith, Dr. Bryan Ward and Dr. Nyall London) at 6:00 in the morning and then scrubbing in for surgeries after surgeries. One of the most memorable experiences in the operation room was scrubbing in on Dr. Jeremy Richmond's surgeries. He would conduct neck dissection skillfully and at the same time ask me to name the vessels, muscles, and nerves exposed. The complicated anatomy of head and neck seemed less daunting and became very intriguing after several dissections.

All in all, I enjoyed every minute on ENT service as the entire team – from the attending physicians to the fellows to the residents to the nurse practitioners – was extremely friendly and taught me a great deal. Additionally, the learning experience integrated consolidation of otolaryngology book knowledge, refinement of clinical skills and hands-on approaches.

Clinical elective in adult neurology

My second rotation was working with the adult neurology team. Every morning I went to the neuroscience unit at about 6:30 to pre-round to see what happened overnight and if there was any new patient admitted. Afterwards, I attended the morning report of which the topics differed every day, inclusive of pediatric neurology case presentations, diagnosis conundrum, neuroradiology, and adult neurology case presentations. It was fantastic to be able to engage in heated discussions with the residents and other medical students and to learn from each other

about how they approach clinical issues. Through the provocative discussions during morning report, I was able to hone such skills as logical thinking, lesion localization and making differential diagnoses which are the core essence of neurology.

After morning reports, the whole team, including an attending physician, a fellow, a senior resident, several junior residents and medical students, started rounding. We first of all gathered at the station and presented the patients whom we were following. We then racked our brains making assessments and formulating plans. Afterwards medical students and residents led the whole team to examine the patients and explaining to the patients their conditions and the current plans while the rest of the team stood on the side, correcting the way we performed neurological examinations and helping with the explanations.

From the very first day, they treated me as an active member of the team. They assigned two to three patients for me to follow and I would take histories, perform physical and neurological examinations by myself and then report back to the team on rounds during which I would be able to make assessment and formulate plans. I loved being counted on to provide up-to-date information about the patients. I also enjoyed reading the latest articles, bringing up what I learned and applying it to the patients after discussing with my seniors.



with Dr. Lindsey Hayes and Dr. Ahmad Elashery in the Brain Rescue Unit

The attending physicians, fellows and residents on neurology service cared much about my learning and were very passionate about educating me. When I was on stroke service, on rounds, the senior resident, Dr. Lindsey Hayes, would present the histories of new patients along with the results of neurological examinations and asked me to localize the lesions. Afterwards, attending physicians (Dr. Argye Hillis, and Dr. Elisabeth Marsh) and fellows (Dr. Jennifer Dearborn, and Dr. R. Ronald Faigle) would pull up images of the brains to verify my assumptions and taught me how to read the images. When we had time in the afternoon, the amiable and knowledgeable Dr. Lindsey Hayes would teach me some practical topics, such as principles of localization and regimens of antiplatelet and anticoagulant agents, which was extremely helpful. I also learned a lot from medicine rotators from the Osler medicine program and from other affiliated hospitals. They asked me to pick up a medicine topic everyday that I would like to learn and they would teach me. I felt incredibly

blessed to be able to learn from these brilliant people and thankful for their time and patience.

Overall, this was an amazing experience as I learned something new every minute on neurology service from establishing rapport with patients, to performing skilled neurological examinations, to image interpretation, to cutting-edge neuroscience research. Moreover, becoming friends with other medical students and senior doctors and working as an active team member with them were great memories to cherish for a lifetime.



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