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Current Grade/Appointment: Year 6 (final year clinical student), University of Cambridge

Report:

Having found a passion for Ophthalmology, I was keen to explore it within a new setting, seeking out novel experiences that could be transferrable to the UK. Since I had never seen the West Coast, I self-organised placements with individual doctors there. Wanting to broaden my experiences, develop my confidence and skillsets, I organised four weeks of research in San Diego and a three-week clinical placement in Los Angeles which proved wholesome!

Part I: San Diego

I joined Professor Kang Zhang at the University of California San Diego. Fortunately, I was able to be efficient and contributed to a clinical project on Optical Coherence Tomography (OCT) analysis and use in training artificial intelligence. Prof Zhang commended my attention to detail and keenness to learn, quickly mastering image grading and clinical diagnostics to a level similar to that of Ophthalmology trainees. Never did I imagine I would be trusted as a reliable mentor for other undergraduate volunteers! I was made to feel a key player and put forward important ideas in lab meetings. Prof Zhang has agreed for me to continue offering assistance, and it is my aim to see it to its completion in a publication. Apart from research, I also took the initiative to join in retinal clinic, to provide a clinical context for the many diagnoses I worked on such as age-related macular degeneration and diabetic retinopathy.

My weeks also proved well-timed! Arriving just in time for Big Bay Boom celebrations on July 4th, our lab's annual beach party, and the annual Comic-Con International! I am ever-indebted to the various groups of friends made who generously brought me on all sorts of food adventures and hikes.

Part 2: Los Angeles

Next, I joined Dr Sandy Zhang-Nunes, Oculofacial plastic director at University of South California Roski Eye Institute. Throughout my time, I not only shadowed her team in clinic, on-consult and in theatre, but also attended events for residents, including daily pre-rounds and lectures. After some days of observing, I was quickly put through the paces with more practical experiences and was trusted to lead consultations under supervision in history-taking and carrying out investigative work-up including measuring intraocular pressure, checking eye motility and pupillary responses. Through this, I received much first-hand practice of using the slit lamp biomicroscope as well as the 90-Dioptre lens and the indirect ophthalmoscope to check the retina, and to a level similar to a first-year resident. I had similar experiences in the Operating Room. Keen to be as hands-on as possible, I would put myself forward to scrub in and assist. In the short span of 3 weeks, I was able to gain the confidence of my supervisor who, at the start merely let me prod at anatomy, begun letting me assist with holding retractors and applying suction, to quickly letting me make incisions and put in sutures (both simple interrupted and more advanced vertical mattress). Working at LA County hospital let me see cases at much later stages than would normally present in the UK, and other diagnoses virtually non-existent in the UK such as trachoma. I was fortunate also to contribute to an e-book chapter on ptosis surgery, learning to edit surgical videos.

It was intriguing to learn about the differences and constraints facing the healthcare system there, and in turn, to better appreciate what we have in the UK. Insurance was a hot-button issue, and it was eye-opening to learn even hospitals could sometimes be the culprit by ordering unnecessary therapy. Despite such scepticism, an incident made a positive impact on me, and at the same time, showed me how healthcare professionals had to work within such systems. Dr Zhang-Nunes saw an elderly gentleman for an urgent consultation for reduced vision. His CT scan showed a sinus mucocoele compressing against his orbit. His descriptions of his care pathway so far was shocking, since it began over a year ago and yet, he had not been referred to an orbital specialist. She concluded that intravenous steroids needed to be started ASAP to help reduce size, and an emergency admission was ordered, in order to bypass any delay in insurance authorisation for intravenous therapy at home. It was inspiring to see the compassion she had in personally making sure this was followed through, despite taking until 10pm. What was more was that she went in the next day to check on the patient, and on his insurance authorisation, which took more administrative calls. Fortunately, two days after this, he was scheduled for an urgent endoscopic drainage that was successful. Overall I greatly enjoyed this placement. Being attached to a single professional allowed close mentoring and it was a blessing working with Dr Zhang-Nunes who really looked out for my learning.

Because of the many friends I had made, times outside of work were filled with tours around the city and explorations of wilderness. I even made it North to San Francisco! If I had to select however, my single

most memorable adventure would be driving 250 miles to and hiking in Yosemite National Park over a weekend!

One of the few shortcomings of this elective was that my experiences were mostly, though not exclusively, based around the specific subspecialties of my supervisors. Nonetheless, this did not disallow me from enjoying my elective and learning as much as I could. Furthermore, shadowing on-call Ophthalmologists helped balance this.

Despite travelling solo, I have no regrets as I believe putting myself out of my comfort zone contributed to my overall experiences. This turned out to be such a heart-warming trip exceeding all expectations. I left with a heavy heart. Apart from gaining academic and clinical exposure, learning new skills and further cementing my passion for this field, I forged not only cherished memories from my travels but also dozens of friendships (my airBnB hosts and placement supervisors included!).

Finally, I would like to acknowledge all who have contributed to making this elective possible. These include my supervisors Prof Kang Zhang and Dr Sandy Zhang-Nunes and their respective teams. Moreover, I am ever-grateful for the generous funding received from the Royal College of Ophthalmologists Patrick Trevor Roper Undergraduate Travel Award, as well as other sources of financial support including the British Medical and Dental Students' Trust, The Lord Mayor's 800th Anniversary Award, and a travel grant from my college, Trinity Hall.



Annual Zhang lab beach party at La Jolla Shores, with the traditional competitive 'Olympic-styled' relay events.



Learning about the Mexican–American War of 1846-48 at Old Town State Historical Park.



Disc golf – a San Diego-favourite!



Being half an hour from the border, San Diego is famous for Mexican cuisine and boy did I have my fill! At Oscar's Seafood Tacos.



Having some Thai lunch with new Church friends, at Sab-E-Lee Restaurant.



Torrey Pines State Park and beach.



Enthusiastically attending the Botox and Filler course, on the day of my flight back to the UK!



Being trained to administer Botox injections.



Making new and lasting friendships from the Alhambra Bible Study Group.



Basking in the wonderful weather and taking in the unbelievable sights at Yosemite Valley.



Amazing views at Glacier Point, Yosemite National Park.



Visiting the Endeavour Space Orbiter in real-life!