

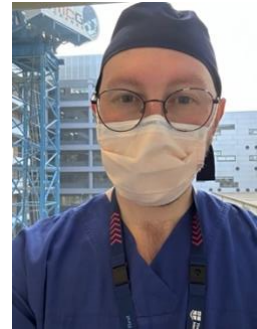
SBNS Elective Report

Glenn Calvert

Queen's University Belfast, UK

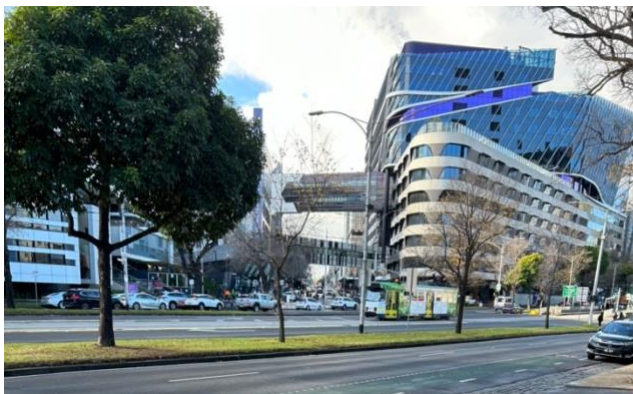
Royal Melbourne Hospital, Australia

1st July – 2nd August 2024



Motivation

My motivation in choosing to undertake my medical elective at the Royal Melbourne Hospital (RMH) was threefold. In the first instance, the RMH offers an extensive range of neurosurgical services, allowing one to benefit from the full gamut of neurosurgical practice. The second is that it is a world-renowned centre with a reputation for excellence in areas of research in which I am especially passionate. This was evident in a recent study (Mitchell *et al.*, 2023, JAMA Neurol.) that marries my interests in functional and endovascular neurosurgery, in which endovascular implantation of recording electrodes enabled paralysed users to utilise a brain-computer interface to control a digital device (e.g., to send emails and shop online). The final reason was, of course, that of the positive testimonies from previous students, particularly that of Neda Oskooee who kindly answered all of my questions prior to applying.



Experience

Each day commenced by “pre-rounding” with the registrar following handover at 0615 – an early (and often cold!) start in the midst of the Melbourne winter. This was followed by the “ward round proper” at 0700 which was consultant-led. My experience was that despite the early start, the pre-round was generally worth attending as there is far greater scope for teaching. By contrast, the ward round which follows is usually quick and very crowded.

On Monday, the ward round is followed by a unit meeting at 0730 where new referrals are discussed, followed by a review of morbidities and mortalities from the previous week. At 0830, the neuro-oncology multidisciplinary meeting (MDM) takes place in the radiology department. This is a great opportunity to develop your skills in neuroimaging interpretation

and learn about MRI sequences you never knew existed. The MDM is succeeded by clinics which run throughout the day (AM and PM), including a neurofibromatosis clinic which runs once per month. Each student is paired (i.e., one-to-one) with a registrar, fellow, or consultant. Although I am not one to play favourites, the fellows were especially great teachers, particularly Jann Wojak and Sonia Hasdeu. Between the morning and afternoon clinics, there is ample opportunity to attend the weekly neuroradiology meeting, where the radiologists demystify the weird and wonderful cases forwarded by each of the neurology, stroke, and neurosurgery teams.

For much of the remainder of the week, students have free rein to attend whatever piques their interests. Invariably, most of us go to theatres – there are two in operation each day. The RMH is a busy unit, often with several elective students at a time. You therefore need to take initiative if you wish to scrub. Your experience could range from cutting sutures to debulking/biopsying a parafalcine meningioma! Overall, I was involved in more than fifty cases. My personal favourites were an awake craniotomy with resection of a paracentral glioma that included monitoring of motor-evoked potentials, a superficial temporary artery to middle cerebral artery bypass, and a transventricular endoscopic biopsy of a pineal mass – by far the most beautiful anatomy I saw! During the week, there are two educational sessions which are worth attending. The first is a registrar teaching session on Wednesdays at 0730 – these are rather high-level, so it can sometimes be challenging to follow along. The second is a resident teaching session on Fridays at 1300 – the level here is much more appropriate for final year students. Oh, and lunch is provided!



Recommendations

The neurosurgical unit at RMH is nothing short of remarkable. As I mentioned earlier, it offers the opportunity to experience the full gamut of neurosurgical practice. Before arriving, it is worth revising your understanding of different neuroimaging modalities and your knowledge of intracranial pressure waveforms so that you can hit the ground running. A solid grounding in neuroanatomy goes without saying. Outside of the hospital, there is an almost endless number of activities to enjoy. Catch a rugby game, an AFL match played by rules you don't

understand, or my personal favourite – a chronic addiction to real life Mario Kart, despite losing regularly to my friend Sheya.

I am immensely grateful to the staff at the RMH for agreeing to host me, and to the wonderful folks at SBNS for their financial support! If you have any questions about undertaking your elective in RMH, I am happy to be contacted! (E: gcalvert03@qub.ac.uk)