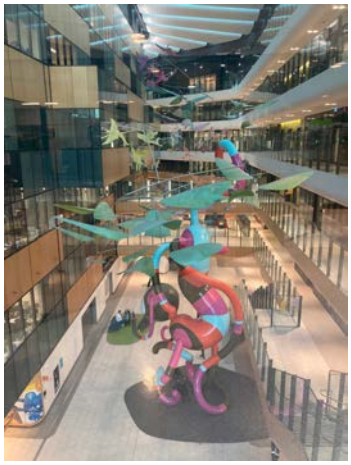
BSSH The British Society for Surgery of the Hand

EDUCATION & TRAINING COMMITTEE

Education and Travel Bursary Report



RCH, Melbourne

Country visited: **Australia**
City: **Melbourne and Brisbane**
Hospital: **Paediatric Plastic Surgery**, **Royal Children's Hospital Melbourne and Plastic & Reconstructive Surgery, Princess Alexandra Hospital Brisbane**
Dates: **April-May 2025**

PAH, Brisbane

Overview:

RCH

The paediatric upper limb and microsurgery team lead the way in innovation and are not afraid to perform the surgeries required by their patients, no matter how small the patients and their vessels are! They reconstruct a wide variety of pathology from birth brachial plexus to reconstruction post oncological resection to congenital hand differences. Whilst there I attended hand clinics and specialised brachial plexus clinics. Operatively, surgeries included exploration of brachial plexus, excision of neuroma and nerve transfers (SAN to SSN, Oberlin transfer (FCU Fascicle of ulnar nerve to biceps) + long head triceps to axillary) for a baby with a C5-C6 birth brachial plexus injury and a free functional gracilis flap to a young child who had a deep peroneal nerve tumour previously excised. There was a large nerve gap therefore fascicles to peroneus brevis were isolated using a nerve stimulator and a nerve transfer performed to innervate the gracilis. Recipient vessels were the anterior tibial vessels given that there had already been almost total atrophy of the muscles of the anterior compartment of the leg due to the deep peroneal nerve lesion which had been present for a significant duration before referral to RCH.

The weekly audit meeting was extremely educational given the focus on outcomes, complications and providing the highest quality of care. It was also very educational for trainees as they were asked questions. I was invited to attend one of the weekly teaching sessions for the trainees which was of an extremely high standard.

Supervisors: Prof David McCombe, Mr Dan Wilks

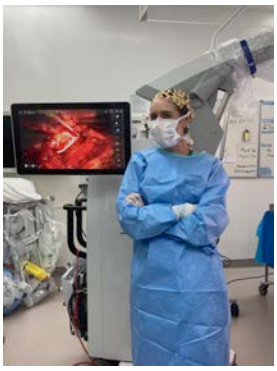
PAH

I was initially enticed to visit the Princess Alexandra Hospital in Brisbane after attending a conference where Dr Michael Wagels described his work on scaffold guided tissue regeneration in long bone defects using PCL (Polycaprolactone) scaffolds. I was able to see the scaffolds in use first-hand both in clinic and in theatre. I was not expecting to also meet such a skilled team of plastic and reconstructive surgeons covering a wide variety of plastic surgery.

Grand rounds once weekly were an excellent opportunity to gain input into patient care from the large experienced team and were also useful educational opportunities for teaching the trainees.

I attended multiple clinics and surgical cases. In clinic I was exposed to new techniques including an excellent distractor splint which worked well for cases that I would have had to place a surgical distracting ex-fix. I saw outcomes of free thenar flaps for fingertip loss.

One particular patient that was extremely educational was a young man who had previously had a traumatic subtotal amputation at distal forearm level. He had a flow through free ALT flap to revascularise the radial artery at the time of injury. He had lost his distal ulna during the trauma and had required a PRC and now had significant ulnar deviation of the wrist. He had amazing hand function however the wrist deviation was inhibiting good wrist extension and therefore grip. It was also an aesthetic concern for the patient. We discussed a medullary rod from metacarpal to radius and a medial femoral condyle free flap. It is an extremely complex case as we must consider the effect of lengthening the forearm (ulnarly) vs shortening (radially) on the tendons and the complex balance of the biomechanics of the hand and wrist, as well as replacing the tissues which have been lost.



In theatre, I observed many interesting cases including TMR and RPNI for a transhumeral amputation with chronic pain, a free radial forearm flap on a patient with 4 previous free flaps, and a pedicled radial forearm flap for exposed elbow arthroplasty.

Supervisors: Dr Michael Wagels, Dr Matt Cheng

Best things: **Training – I witnessed trainers and trainees of the highest caliber. Trainers supervised and advised their trainees whilst encouraging them to excel. Trainees were extremely hard-**

working, knowledgeable and skillful. I am confident that a fellowship in these departments would surpass expectations.
Problems: **Nil - both departments had the most welcoming and helpful teams, including admin teams.**
Accommodation: **Self-provided Airbnb/hotel**
Anecdote: “A symphony can still be made from broken pianos.” “You can do this, just enjoy!”
Would you recommend? **110% yes!**

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