

## **David Bodansky: BSSH Travelling Fellowship report**

### **Information about Scholar and fellowship**

I am an Orthopaedic Hand Fellow, David Bodansky from the United Kingdom. I completed my registrar training in Liverpool in the UK and then spent six months at Wrightington in hand and wrist surgery. Thereafter, I undertook an AO Trauma Fellowship in Toronto in Canada at Sunnybrook Medical Centre.

I sought to visit some centres in the USA over a period of six weeks, before returning to a further hand and wrist Fellowship at Chelsea and Westminster Hospital in London. I arranged to visit Dr Mark Baratz at the University of Pittsburgh Medical Centre, Pennsylvania, and Dr Steve Moran at the Mayo Clinic, in Rochester Minnesota.

### **Pittsburgh**

Pittsburgh is at the confluence of three rivers known as the 'Pitt Point', with more bridges than Venice and is overlooked by Mount Washington (figure 1). Previously famous for its steel mills, Pittsburgh has recently reinvented itself as a biotechnology hub.

### **Pittsburgh Fellowship observations**

This is one of the top ranked US hand fellowships, which is large, with seven fellows. There is a hand and upper extremity syllabus set out across the year, and each week, they have a lecture at 6am on Wednesday, linked to a cadaveric dissection on a Thursday evening followed by dinner.

The fellows rotate around different fellowship supervisors every two months to build a broad experience. In addition, they have group activities every month, such as picnics and go to Steelers American Football games within season.

I was able to join the fellows for two of their cadaveric dissections, understanding their approach to extensor and flexor tendon injuries and afterwards, joined them at dinner. I learnt their use of the Modified Tajima and Tsugo constructs for tendon repairs.

### **Visitation**

I spent two weeks with Dr Baratz and his team at the University of Pittsburgh Medical Center.

On my first day, I joined Dr Baratz in clinic, where he sees 80-90 patients in a day. His clinic model is to run four rooms, with physician associates or trainees seeing the patient first and presenting to him, before he steps in to review each patient. On a Monday, he builds in a 90-minute lunch break, and he stops off at his farm as he drives between two different clinic sites. He invites his fellows and any guests to join him riding around his farm and also holding a chicken! (see figures 2 and 3). Dr Baratz explains that a break is crucial in preventing burn out and supporting the longevity of his career. In addition, one of Dr Baratz's interests is green surgery and the reduction in operating room waste.

I was able to observe seven operating lists, where it is typical for an attending to run two operating rooms, with 8-15 cases in a day. The first case starts at 07:30 and the list aims to finish by 15:30. There was a wide range of elective and trauma cases. In particular, I saw the endoscopic carpal tunnel release technique, where particular care was taken to use a rasp to clean the transverse carpal ligament, as it is important to identify the distal margin of the ligament before incising it.

For a trapeziectomy, Dr Baratz gains purchase in the trapezium by inserting a corkscrew from a shoulder set into the trapezium and then excises it in one piece by freeing it from the deep capsule with a McGlamrey. He then does a ligament reconstruction with the dorsal slip of the APL.

We discussed the management of Dupuytren's disease and the option of using the 'Digit Widget' for challenging case and the use of skin grafts from the hypothenar eminence. In addition, I saw the Belski closed reduction and percutaneous pinning technique for a P1 fracture.

I had the opportunity to discuss the capsular based vascularised distal radius graft for scaphoid non-union and the allograft interposition for DRUJ arthrosis with Dr Dean Soteranos, who popularised these techniques (figure 4). He later invited me to his restaurant, on Mount Washington which overlooked the Pittsburgh skyline (figure 1). I observed Dr Chris Schmidt undertake his anconeus flap, for posterolateral elbow coverage and lateral epicondylitis after steroid injections had caused adipose necrosis.

After a superb two weeks in Pittsburgh, I moved onto Rochester, Minnesota, to visit the Mayo Clinic (figure 5).

## **Mayo clinic**

### **Mayo Fellowship observations**

Rochester is a town of 100,000 in the mid-west, 90 minutes from Minneapolis. William Worrall Mayo moved to America from Manchester in the UK in 1846 and decided to settle in Rochester in 1864, when he was appointed as a surgeon for the Union army which had its draft centre in Rochester during the American Civil War. WW Mayo started a doctors' partnership which flourished and has now become a large organisation, with other centres in Florida and Arizona and London, UK (figure 6).

Visiting Rochester in August was temperate, with long warm days of 25C. However, Rochester is known for its long winters and the town centre has skywalks and subways to connect carparks and the buildings so residents do not need to go outside.

### **Mayo Fellowship observations**

The Mayo hand Fellowship is highly sought after with plastic and orthopaedic fellows rotating between orthopaedics and plastics: both disciplines leave with a comprehensive ortho-plastic experience, for example, in distal radius fracture and replant microsurgery.

### **Visitation**

I spent most of my time with Dr Steve Moran, who is President elect of the ASSH. Here, I saw four medial femoral condyle free transfers to the wrist, for scaphoid non-unions and for Keinbock's. One of these was a medial femoral trochlea, to restore the cartilage of the proximal pole of scaphoid. I was invited to present at their weekly morning hand round, where I spoke about my recently accepted paper on boxers' injuries and in addition, the SWIFTT trial from the UK.

I had the opportunity to spend time with Dr Bishop and Dr Shin, observing their brachial plexus work and see a free fibula for a humerus non-union. I also spent time with Dr Sanj Kakar, originally from the UK, learning about his approach to ulnar sided wrist pain and dry wrist arthroscopy (figure 7). In addition, I heard about his use of a hamate non-vascularised graft for proximal scaphoid non-unions and the use of 3D printing to understand whether the hamate would be suitable for transfer (figures 8 and 9).

I had the opportunity to observe the modified thread carpal tunnel release, where a thread is passed above and then back below the transverse carpal ligament under ultrasound. Care is

taken to ensure that the recurrent motor branch and a Berrettini anatomical variant anastomosis are not compromised, before the thread is pulled like a jiggly saw, cutting the ligament. Described advantages are that the patient can return to work later the same day, however the incidence of pillar pain has not been decreased.

### **Overall impression**

This was a hugely formative experience in my transition to independent practice as a hand and wrist surgeon and over the six weeks, I took 137 pages of photos and notes from my time at the Mayo Clinic and Pittsburgh. My personal expectations were to have the opportunity to discuss technical points with a mentor who could offer me the benefits of their experience and the opportunity to build connections for future collaboration. In addition, I was curious to talk through the differences and similarities of training and practice in the UK and USA. I have had the privilege to meet leaders in the field and build connections that will stand me in good stead for the future. I am immensely grateful to the BSSH for their generous support to allow me to visit these centres and bring back what I've learnt to enrich my practice as a hand surgeon in the UK.

## Figures



*Figure 1: View of the Pittsburgh skyline from Mount Washington*



*Figure 2: Driving around Dr Baratz's farm on a lunch break between clinics*



*Figure 3: Visiting Dr Baratz's farm between clinics*



*Figure 4: Visiting Dr Soteranos*



*Figure 5: Visiting Dr Baratz*



*Figure 6: One of the original Mayo brother's clinic rooms*



*Figure 7: visiting Dr Kakar*



*Figure 8: 3D printed wrist model to understand hamate morphology to consider a graft*





*Figure 9: individual scaphoid and hamate graft to understand how they might fit together*