

Royal College of Physicians and Surgeons of Glasgow Travelling Fellowship

Visit to Chang Gung Memorial Hospital, Taipei (4 weeks), Tokyo University Hospital (2 weeks) and the Bernie O'Brien Microsurgical Institute, Melbourne (1 week)

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As a final year plastic surgery trainee I have a special interest in reconstructive microsurgery. I have been fortunate enough to have spent the majority of my training at the internationally renowned Canniesburn Plastic Surgery Unit, Glasgow and have therefore had extensive exposure to free tissue transfer. When deciding upon where to spend time for a travelling fellowship I was keen to visit particularly world-renowned Surgeons, in order both to learn new techniques and cement international relationships. I chose to spend 4 weeks visiting Prof Fu Chan Wei at the Chang Gung Memorial Hospital in Taipei, 2 weeks visiting Professor Koshima at the University of Tokyo Hospital and Professor Wayne Morrison at the Bernie O'Brien Institute of Microsurgery in Melbourne.

Chang Gung Memorial Hospital, Taipei

Taipei is the capital city of Taiwan, in the Republic of China. It is a city of approximately 6 million people and is served by only one large Plastic Surgery Unit located at the Chang Gung Memorial Hospital in Linkou. The Unit is divided into different divisions and the one I went to visit was the Division of Microsurgery. The department has an international reputation in Microvascular Reconstruction, especially in Perforator flap surgery. The Unit has previously published series including over 500 Antero-lateral thigh perforator flap procedures and leads the world in demonstrating the use of these muscle-sparing flaps. The main interests of the Unit are Head and Neck Cancer, brachial plexus surgery, breast reconstruction and lower limb trauma reconstruction.

As an Observer I was privileged to be able to go between theatres and witness the reconstructions being performed by the different microsurgical teams. It was common for one team of Professor, two attending, a fellow and resident to undertake 5 free tissue transfers in a single day, something unheard of in the UK.

The day would normally start with a meeting at 7am, before theatre commencing at 8, six days a week, the Wednesday and Saturday morning meetings being conducted in English. Although I attended all the morning meetings my Mandarin was certainly inferior to my hosts English. The Department takes many fellows and visitors from around the World and therefore the Taiwanese Surgeons make special effort to speak in English whenever possible and believe that this improves their ability to go abroad and present at international meetings. Whilst I was in Taiwan there were four fellows from the United States, two from the UK, one from Spain and visitors from Argentina, Romania and Japan. I made many good friends and look forward to seeing them again in International meetings.

During my stay I saw 56 free tissue transfers, mainly for head and neck cancer and mainly perforator flaps. I learned a lot about maximizing the efficiency of a free tissue transfer, decision making and the scope to which modern free tissue transfer techniques can be used.

My Supervisor in Taipei was Professor Fu Chan Wei, a Head and Neck Surgeon and an internationally renowned Microsurgeon. He had previously visited Glasgow to lecture at the International Perforator Course in 2000 and was keen to pass on his knowledge and an excellent teacher.

University of Tokyo Medical School

Following Taipei I travelled to Tokyo to visit Professor Isao Koshima. Professor Koshima was one of the Originators of the Perforator Flap Concept and the first person to describe the Deep inferior Epigastric Artery Perforator flap, now a common flap for breast Reconstruction. The University of Tokyo is Japans Premier University and the Department of Plastic Surgery is regarded as one of the World's best. My Japanese hosts were very hospitable and gave me relatively cheap accommodation within the University, much cheaper than staying anywhere else in Tokyo.

Professor Koshima also visited Glasgow for the 2000 Perforator Course and speaks fondly of his time there. He was very knowledgeable, especially on the history of plastic surgery and talking to him was a pleasure. Every day we would discuss techniques and indications over lunch or dinner and he would demonstrate new procedures in theatre and made a special point to show me his results in the outpatient clinic. I was particularly keen to see his lymphatico-venous anastomoses for the treatment of lymphodeama. This is a technique he has perfected and many of the instruments he uses were specially designed by himself. The technique involves performing multiple anastomoses between the non functional lymphatic system and numerous venules along the limb. The technique involves three surgeons working simultaneously using three different microscopes to anastomose vessels less than 1mm, using specially developed 12/0 sutures. I was impressed with the technique and the results. Professor Koshima says that if he can operate on a patient within 3 months of the onset of the lymphodeama he can potentially reverse the condition, within 6 months and he can stabilize the limb and after that point the lymphatic changes are too severe to reverse.

Professor Koshima is one of the great innovators in Plastic Surgery with many original techniques to his name. It was a pleasure to discuss Plastic Surgery with him and inspirational to see that he still has many new ideas he is trying and willing to share them with his trainees.

The Bernie O'Brien Institute of Microsurgery, Melbourne.

The third stop on my fellowship was to visit the Bernie O'Brien Research Centre in Melbourne, Australia. Named after one of the innovators of the world's first free flap the Centre conducts research into aspects of free tissue transfer, tissue engineering and adipose derived regenerative cell use.

The Research centre is on four floors, with research labs, handling facilities, operating suite and conference facilities. Although in a separate building it adjoins St Vincent's University Hospital and many of the academic staff hold appointments in the hospital. I was fortunate to be able to

witness the research being undertaken and also attend theatre, outpatient clinic and lectures. My supervisor at the department was Professor Wayne Morrison, well known for both his microsurgery and his basic research in the field. As a trainee Professor Morrison spent year training in Glasgow and was keen to discuss his patients and talk through treatment options with me. I learnt a lot about the decision making and philosophy he adopts.

Acknowledgement

I wish to thank the Surgeons and departments I have visited during my fellowship for making my time extremely valuable and enjoyable. I also wish to thank the Royal College of Physicians and Surgeons of Glasgow for their award of a bursary to allow me to undertake my fellowship.

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