

Royal College of Physicians & Surgeons of Glasgow

College Travelling Fellowship 2015

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Background

During my ST8 year of my pan-Scotland surgical rotation in Plastic Surgery, I was keen to focus my sub-specialty training on Hand Surgery as well as microsurgical extremity reconstruction. Having previously performed postgraduate research in Canada, I applied to attend the Dalhousie University Dept. of Plastic Surgery under the supervision of Professor Steven F. Morris, who specialises in Hand and microsurgical, perforator-based reconstruction.

Nova Scotia

Nova Scotia is one of three Maritime Provinces that form part of the Atlantic Canada coastline. Its provincial capital Halifax, with a population of 300,000, is a vibrant global city and a major economic centre in eastern Canada. The city has two universities: Dalhousie and Saint Mary's University. Dalhousie University houses the medical school, which trains students within the hospital campuses of Halifax Infirmary, Victoria General, Abbey Lane Veterans Memorial and Isaac Walter Kids Hospitals.

Halifax has a huge and significant history as an early European settlement by the French and then the British. Many of the British fortifications since the 1749 colonisation are still visible today, such as the magnificent Citadel Hill overlooking the city.



Canadian Healthcare

There are several differences in the Canadian public healthcare system to the NHS. The funding is provincially based and all residents require a health card to be treated. Physicians and departments claim treatment against a provincial insurer, making the work “fee per service”. Private healthcare makes up a small percentage of services and is similar to the UK in that regard. Canadians in professional jobs often have supplemental health insurance through their employer giving them subsidised access to paramedical services such as prescription medication, dental, optometry and physiotherapy.

Fellowship Preparation

The process of applying for a work permit as well as approval of medical credentials takes around 6 months and should be factored into your timing for a fellowship. Each province has slightly different rules regarding licence reciprocation. This was overseen by the College of Physicians & Surgeons of Nova Scotia (CPSNS) and not by the Medical Council of Canada (MCC). Details on applying for a work permit can be found on the government website www.cic.gc.ca.

Fellowship Experience

Having not had any interaction with previous fellows I was not sure what to expect on my arrival but found the Plastic Surgery division a very friendly and collegial unit. The division is made up of 7 staff (consultant) surgeons at Halifax Infirmary and 2 staff at the IWK children's hospital. There are 11 residents in total with several residents 'off-service' rotating through other specialties. The division meet regularly every Wednesday morning for teaching rounds and there is well-organised consultant-led didactic teaching every Wednesday afternoon, followed by a social get-together. I found this a great opportunity to get to know all the residents and to find out about the city. In addition to the didactic teaching, the division met every month for a journal club, as well as several annual practical skills courses, such as a cadaveric flap course, microvascular anastomosis skills, and hand fracture management.

I worked mainly under the tuition and supervision of Professor Morris during my time at Halifax Infirmary. Professor Morris has been at the Dalhousie University division for over 20 years as Professor of Surgery, Anatomy and Neurobiology. His postgraduate training includes the surgical scientist programme at the University of Toronto; Hand fellowship at the Kleinert Institute in Louisville and working with the forefather of modern microsurgery, Ian Taylor, on a microsurgery fellowship in Melbourne.

Professor Morris' interests lie with surgical flap physiology; skin and soft tissue vascular anatomy and perforator flaps. He has published extensively within these areas and written many popular textbooks including his reclassification of perforator flap nomenclature and updated description of the neurovascular territories of the skin and muscles.

Working with Professor Morris was a little intimidating at first but I soon found him to be a down-to-earth friendly character and a fountain of knowledge and experience when it came to everyday plastic surgical pathology.

My clinical experience involved a large volume of operating and outpatient clinics where I saw a range of elective / traumatic hand pathology as well as general skin oncology and microsurgical reconstructive challenges. My typical week involved 2 outpatient theatre sessions, 2 clinics and 1-2 full days of main operating room experience. Most elective hand pathology (Dupuytren's; peripheral compressive neuropathy; tendonopathies; skin oncology) was performed in outpatient operating under local anaesthesia with the "wide-awake" surgery mantra. Large microsurgical reconstructive cases as well as

bony hand surgery was carried in the main operating room with a continuous regional anaesthesia service provided Monday – Friday.



The Dalhousie Plastic Surgery Residents 'after' the annual flap course



Professor Steve Morris, Professor Claudio Angrigiani, myself and fellow resident Josh Gillis at the Duke Perforator Course in North Carolina.

Research

During my 10 months in Halifax I was able to carry out a short anatomical project investigating the anatomical variance of the vasculature of the posterior thigh, in particular, documenting the perforating branches of the popliteal artery in the distal thigh. This was performed in the cadaveric lab at Dalhousie University, using fresh frozen cadavers injected with lead-oxide/gelatin mixture. Whole body CT scans were performed and surface-rendered 3-Dimensional images created of the posterior thigh vasculature to further study the perforators.

In addition to cadaveric research I mentored a medical student in conducting a retrospective review of free flap reconstructive surgery in the Plastic Surgery unit.

Courses / Conferences

I was fortunate to be able to attend the annual Canadian Society of Plastic Surgery conference on Vancouver Island in June to present my cadaveric research. This is an international 4-day conference with opportunities to meet fellow Plastic surgeons from all corners of Canada. In addition I attended the Duke University Cadaveric dissection course at Durham, North Carolina, focussing on perforator-based flap reconstruction.

Summary

I am extremely grateful to the Royal College of Physicians & Surgeons of Glasgow for the generous grant, which assisted with my travel expenses and resgistration for the Canadian conference. I would heartily recommend this fellowship experience to any Plastic Surgery trainees with an interest in microvascular reconstruction or Hand surgery. In addition, east coast Canada is a fantastic place to visit, especially if you are a fan of seafood!