

## **Advanced Medical Dermatology Fellowship Report**

### **Dr Philip Laws**

“Is there a doctor on board this flight?” I heard over the loudspeaker as I sat anticipating the start of my fellowship in Medical Dermatology. I made my way to a member of the cabin crew after pausing just long enough for a doctor more familiar with emergency situations to volunteer. As it was, the only other doctor on board was an orthopaedic registrar! We managed the patient together but unfortunately he required urgent medical attention and the flight was redirected to Keflavik airport, Iceland. Three hours later than planned, my wife and I arrived in Toronto and made our way to our new condo (flat to British people). Unfurnished flats are standard in Toronto so we were very grateful for our one bit of furniture – an airbed – which we quickly inflated in order to make the most of a good night’s sleep before I started work at Sunnybrook Hospital less than 12 hours later. In retrospect starting a fellowship the day after arriving in Toronto was not the wisest decision! Thankfully, paperwork took priority for the first few days and I was able to recover from jetlag before seeing my first patient.

The Advanced Medical Dermatology Fellowship is a well-established program based at Sunnybrook Hospital and the Women’s College Hospital, Toronto, under the supervision of Professor Neil Shear. Professor Shear, the divisional head, has a broad range of clinical interests including adverse drug reactions, complex psoriasis, immunobullous disease and cutaneous T cell lymphoma. Other clinical interests within the department include hidradenitis suppurativa, eczema and connective tissue diseases. The department has one of the largest training programs in North America with over 30 residents in training at any one time and the fellowship attracts dermatology registrars from around the world (including Israel, Ireland, France, Japan, Saudi Arabia).

#### **Clinical Experience**

Toronto has the fourth biggest population in North America and as a major provider of dermatological care Sunnybrook hospital manages a large number of complex patients with varying dermatological diseases. In particular, the clinic has a well-developed immunobullous disease service and has treated in excess of 300 patients with pemphigus vulgaris, of which approximately 170 have received rituximab. From a personal perspective working in this clinic, which would routinely include 6-8 patients with pemphigus, provided a wealth of practical experience and a greater insight into the disease course.

The Phototherapy Education and Research Centre based at the Women’s College Hospital delivers much of the cutaneous lymphoma service and is led by Professor Shear, Dr Scott Walsh and Dr Raed Alhusayen. This service manages care for a range of cutaneous T and B cell lymphomas including more than 500 patients with mycosis fungoides. These services are closely linked with oncologists and provide clinical services to patients throughout the province. The department also has a close working relationship with Professor Alain Rook and the lymphoma service based at Penn Medicine, Philadelphia. I was fortunate enough to develop my interest in cutaneous lymphoma further and spend two

weeks with Professor Rook observing the clinical trials department and the extracorporeal photophoresis service.

Management of psoriasis in recent years has developed at an exponential rate with multiple biological therapies used routinely as well as in clinical trials. The dermatology department in Toronto treats large numbers of patients with severe psoriasis and has extensive experience of the full range of systemic and biological therapies. Managing psoriasis patients in Canada proved an interesting contrast to my experience as a UK trainee, having previously worked in a tertiary service in Manchester under the supervision of Professor Griffiths. In Canada, costs of biological therapies are funded for some patients by drug insurance plans, leading to earlier use of biological therapies with some patients electing for a biological therapy as a first line agent. It will be interesting to see how clinical practice evolves with increasing numbers of biological agents and the introduction of biosimilars.

### **Dermatology Training**

Alongside my clinical experience I was able to participate in the dermatology resident training program. Educational events included a full day of training and involved a series of lectures, challenging clinical cases, dermatopathology rounds and a journal club. The Canadian dermatology residency program is more closely matched with the American system and demands large volume rote learning. The commitment to achieving success in this exam from all residents was striking and a challenge to ensure my own clinical knowledge was up to scratch.

Prior to my arrival in Toronto I had not considered how valuable observing training in Canada would be. I have an interest in medical education (having previously completed a fellowship in medical education through the North West Deanery) and plan to develop this further as a consultant. Educational needs are increasingly under pressure within the NHS as hours are reduced as a result of the European Working Time Directive and demands on clinical service increase. The high value placed on training registrars in Canada was notable and served as a personal encouragement to continue the ongoing development of dermatology training in the UK.

### **Research Experience**

During the fellowship I was encouraged to develop diverse research interests and I undertook a number of projects studying cutaneous lymphoma, immunobullous disease and adverse drug reactions. This was a richly rewarding experience through which I was able to develop collaborations with paediatric dermatologists, epidemiologists and medical oncologists. I am planning to present some of this work later in the year.

In addition to the above commitments I met weekly with Prof Shear and two other dermatology fellows to discuss a broad range of issues related to the specialty. This provided a fantastic environment to explore areas of personal interest and share ideas for further research and investigation.

While in Toronto I attended several seminars, workshops and conferences where I met with academics from Canada and the U.S. Notable meetings included the Toronto Dermatology Society Meeting, Canadian Dermatology Association Annual Meeting and the Psoriatic Arthritis Update Scientific Symposium.

### **Canadian Healthcare**

The Canadian health service is publicly funded and largely free at the point of care. However, drugs are not directly covered by this system and individuals must cover the cost personally or through a drug insurance plan. For low income families there is a government run drug insurance plan although this does not apply to the majority of patients. Many patients were not surprised to be spending hundreds of dollars to cover their medical bills. In practice this does result in patients with the best health care coverage accessing expensive drugs more rapidly. There is a certain logic to company sponsored drug plans funding a more rapid return to employment for the individual but inevitably this leads to some degree of differential treatment.

Another striking difference between Canada and the UK was patient attitude towards travelling for healthcare. Many patients in Ontario travelled hours to be seen in the dermatology department, and were remarkably happy to do so. The longest journey I am aware of was 900-miles (one way)! As a result of the large distances involved in seeing clinicians, telemedicine is a well-developed method of reviewing patients and was widely accepted by clinicians and patients alike. Despite this most clinicians request physical attendance for the initial consultation.

### **Conclusions**

My fellowship was a fantastic experience both professionally and personally. Having moved from Manchester where the weather is best described as mixed it was a pleasant change to experience truly cold winters and warm summers. Despite the North American reputation for minimal annual leave I did find time to explore the east coast of Canada and develop an appreciation for North American sport, especially ice hockey. More importantly though, the training I enjoyed while in Canada will undoubtedly serve me well in my career. I am indebted to all the patients and staff at Sunnybrook who welcomed me to the department and provided such a stimulating working environment. I am especially grateful to Professor Shear for his support and mentorship throughout my fellowship.

I have recently returned to the UK and look forward to developing a role in a medical dermatology service where I hope to continue both clinical and research interests. Within this role I plan to continue my interest in medical education for both undergraduate and postgraduate trainees. While I remain committed to the NHS and dermatological care in the UK I have enjoyed learning how care is delivered in a different country regulated under a different system. I hope I can bring some of the positive aspects of the Canadian system to my practice here in the UK.