# Impressions from Scottish Dermatology 2010

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**To explore another country's way of handling dermatology and to learn about the culture is very stimulating. You can always learn new things which inspires you in your daily work at home again. In the article below you will find out how it is to work in Scotland.**

Recently I had the privilege of being a Visiting Professor at the Edinburgh University. I was invited by Professor Jonathan Rees at the Department of Dermatology, the Royal Infirmary (Fig. 1), which is close to the old city of Edinburgh (Fig. 2). Dr Rees and his coworkers generously introduced me to their departments and shared interesting information about the current situation in the UK regarding the health care system (NHS), university teaching in general and dermatologic research in particular. The NHS and university funding streams are now undergoing major changes as a result of the big cut-backs in national budgets decided in late 2010.

## University teaching and Dermatology training in Scotland

Scotland, with a population of just over 5 million, has its own government and the laws regulating Scottish universities are often different from those in England. For example, whereas medical students in England pay about £3,000 per year in fees to the university (soon to be increased up to a maximum of £9,000), no tuition fee is charged for domestic medical students in Scotland – which is of course one, but certainly not the only reason why studying Medicine in Edinburgh is so popular! It is expected though that Scotland will soon follow England´s example and introduce fees also for Scottish students.

Dermatology training for undergraduates is confined to a compulsory 2 weeks course, which is mainly based on lectures and patient demonstrations. Although problem-based learning is practiced in Glasgow, this is not the case in Edinburgh. Some students chose to do optional activity within the field of Dermatology, e.g. a 14-week research project or spending some extra time in the clinical department. According to the Anglo-Saxon tradition, Genito-Urinary Medicine is taught separately from Dermatology.

At the post-graduate level, choosing Dermatology is quite popular among young doctors. Specialist training in Dermatology is 4 years. Mandatory training requirements are as follows: 1 year as a Foundation Year 1 Doctor, 1 year as a Foundation Year 2 Doctor, and then 2 years largely in internal medicine in which the membership of the Royal College of Physicians exam must be passed. At this stage an individual

*Fig. 1.* Professor Jonathan Rees together with Secretary Karen Muir in his office at the Lauriston Building in Edinburgh.

*Fig. 2.* Overview of the old city of Edinburgh from the castle hill.

can apply for a specialist training position in Dermatology. The number of dermatologists in UK is about the same as in Sweden, which means that with a population of about 60 million the density of dermatologists is one of the lowest in Europe. There are only about 45–55 consultant dermatologists in Scotland. Thus GPs take care of more skin patients than is usually the case in the Nordic countries. It is said that 15% of the patients who see a GP do so because of skin conditions.

## Edinburgh Royal College of Physicians and the Royal Infirmary

Edinburgh University has a long and proud history in Medicine. The Edinburgh Royal College of Physicians likes to point out that it was founded long before the Royal College of Physicians in London, and until about 1900 there were more Universities in Scotland than in the whole of England! Some of the giants in Medicine were actually teachers at the Edinburgh University and Charles Darwin was an Undergraduate. The entrance of the Edinburgh Royal College of Physicians on Queens Street (Fig. 3) is dominated by a portrait of the Gynecology Professor Simpson who was the first doctor to use chloroform for anaesthesia back in 1830. Also, at the (Old) Medical School building close to the old Royal Infirmary on Lauriston Place, the names of Hutchinson, Addison and Hodgkin all appear engraved on the walls. Just one block away from this building is the skin department housed together with the departments of Orthopedics and Ophtalmology. All other medical disciplines are located in the new Royal Infirmary, erected less than 10 years ago on the outskirts of the city.

*Fig. 3.* The Royal College of Physicians in Edinburgh.

## The Department of Dermatology in Edinburgh

The skin department, founded in 1910 by a private donation from a biscuit manufacturer, has currently a staff of about 50 persons, including 13 consultants, two of which are academics, and 5 residents. The clinic has 25,000 visits annually and 4 beds are provided all year round for dermatologic patients. Research is presently focused on computerized imaging techniques, melanomas and genodermatoses. The latter patients are seen mainly by Drs Helen Horn and Michael Tidman who told me that the Scottish Epidermolysis Bullosa Registry now includes 390 patients, most of whom are diagnosed as EB simplex. This is a high number, which if extrapolated to the Nordic countries (population: 25 millions) would correspond to over 2,000 EB patients, i.e. higher than previously estimated for Scandinavia.

The clinical training of residents is well integrated into the general dermatologic practice. For example, on Thursday afternoon (the same for most skin departments in UK), 8–10 patients with uncertain diagnoses or therapeutic problems come for a re-visit to the out-patient clinic. All participating doctors (consultants, residents and visiting dermatologists) examine the patients after having been quickly introduced about the case by the caring physician. One of the junior doctors is then asked in plenum to review the case and to propose a diagnosis, differential diagnoses, suitable tests and treatment options. Subsequently, the senior doctors discuss the apprentice's proposals, always in a very encouraging way focusing on teaching the residents. Although this concept is not genuinely different from what is practiced in many Nordic departments, the very constructive and supporting atmosphere surrounding the discussions appealed to me as exemplary.

## Visiting the Lothian area and Dundee

Lothian is the name of the county surrounding Edinburgh. It extends from the Scottish Borders in the South to the Firth of Forth in the North, and from the adjacent Glasgow area in the West to the North Sea in the East. This is the total catchment area of the Edinburgh University hospital with a population of 1 million and 70,000 dermatologic visits per year.

Travelling through beautiful Lothian, one is constantly reminded about the geologic and ancient history of Scotland. The remains of prehistoric volcano activity are conspicuous, not least close to the city centre and the Queen's official residence in Scotland (Holyrood Palace) where Arthur's Seat dominates the skyline (Fig. 4) (for wordsmiths, Arthur here has

*Fig. 4.* The sky-line of Edinburgh viewed from the Fife area in the North overlooking the Firth of Forth and Arthur´s Seat.

no relation to the English king and Knights of the Round Table, but is thought to be an Anglicisation of an older Gaelic name). Impressive old castles are numerous and in the surrounding green hills millions of sheep are feeding and breeding.

Leaving Lothian to the North there is a mere 120 km to reach Dundee. I was invited to the University of Dundee by Professor Irene Leigh (Fig. 5), Vice-Principal of the Medical School in Dundee and consultant at the Dermatology Department, Ninewells hospital. On one of my many trips to Dundee I crossed the famous Forth Railway Bridge, erected in 1893 and once the largest bridge in the world, and later passed a more unfortunate bridge crossing the Firth of Tyne close to Dundee. The remains of the old bridge, which collapsed during a storm

*Fig. 5.* Professor Irene Leigh (*right*) together with two of her collaborators at Ninewells Hospital in Dundee.

*Fig. 6.* The Welcome research institute in Dundee.

in 1868 and took a whole train and 100 people to the bottom, can still be seen below the new bridge.

The city of Dundee is not as attractive as Edinburgh, but has a well-known University hospital and impressive research institutes (Fig. 6). The research that we are pursuing together with people from Dundee concerns the etiology and treatment of keratinopathies, especially pachyonychia congenita (PC), EB simplex and epidermolytic ichthyosis. Keratin mutations underlying PC in Swedish patients are analyzed by Dr Francis Smith together with Prof Irwin McLean (Fig. 7). Furthermore, a transgene mouse model of inducible EB simplex will be used to test novel pharmacologic therapies, i.e. molecular chaperons, which we have found to be effective in protecting the cytoskeleton from stress-induced collapse in immortalized keratinocytes from patients with keratinopathies (Chamcheau, thesis, 2010).

*Fig. 7.* Professor Irwin McLean and Dr Francis Smith at the Welcome Building in Dundee.

## Concluding remarks

My impressions of Scottish dermatology department are very positive, not the least concerning their research in skin biology, imaging techniques and gene technology. By visiting two of the most prominent skin departments in Scotland it will certainly be easier to build bridges (stronger than the old Tay bridge!) between our research groups. Hopefully this will facilitate and encourage younger dermatologists to go abroad for shorter or longer periods to gather experience not only in research, but also in clinical dermatology.

Besides, visiting a beautiful country like Scotland, this trip also provides some wonderful opportunities for sightseeing, the most memorable of which for us was going to the Outer Hebrides and being able to swim in the North Atlantic Sea in bright weather for a change (Fig. 8).

*Fig. 8.* September 1, 2010 on the West-coast of Harris in the Outer Hebredies.

Last but not least, I wish to express my sincere gratitude to Jonathan Rees and his wife, the dermatological surgeon Lisa Naysmith, both Section Editors of Acta Dermato-venereologica, for their great hospitality during our stay in Scotland (Fig. 9).

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## Literature

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*Fig. 9.* Drs Carin Vahlquist, Lisa Naysmith and Jonathan Rees (*from left to right*) outside their home in Edinburgh.