Visiting the Department of Dermatology, Thomas Jefferson University, Philadelphia, USA

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Sirkku Peltonen from the Department of Dermatology at University of Turku, visited the Department of Dermatology at Thomas Jefferson University, Philadelphia, USA, in 15 August to 9 November 2007.

Philadelphia is one of the oldest cities in the USA, "the Birthplace of the Nation", with numerous historic sites intimately connected with US independence. Philadelphia is located within a 1-hour train trip from New York, and within a 2-hour journey from Washington DC, which makes it very convenient for visitors from Europe. Approximately 5 million people live in the Philadelphia metropolitan area, and the city itself has four medical schools with departments of dermatology. Thomas Jefferson University was founded as Jefferson Medical College in 1824, and is one of the oldest medical schools in the country. Nowadays, Thomas Jefferson University is composed of Jefferson Medical College, Thomas Jefferson University Hospital, the College of Graduate Studies, and the College of Allied Health Sciences. The campus is situated in the city centre: the historic area is to be found within a couple of blocks of Jefferson in the east, while the west and north sides of the campus touch the business area (Fig. 1). Hundreds of blocks of traditional row-houses spread to the south of the University (Fig. 2). Philadelphia soon feels comfortable to a European visitor because of its historic background as an old English and Scandinavian settlement. With its narrow streets, it is ideal for walking, while public transport is available and easy to use.

The Department of Dermatology has two parts with separate facilities: the outpatient clinic and the research laboratories, which both are led by Professor Jouni Uitto, who has been the Chairman of the Department since 1987. The clinical side is run by the Jefferson Dermatology Associates, which employs 10 specialists in dermatology. Dermatosurgery is a subspecialty of dermatology in the USA. In Jefferson, the dermatosurgical unit, with two specialists, one or two nurses, one technician and two rotating residents, is responsible for operative dermatology. They perform most skin cancer operations using Mohs' technique. This requires the presence of a laboratory technician to cut and stain the cryosections during the operation. The operating doctor evaluates the sections under a microscope to determine whether the tumour borders have

Fig. 1. Thomas Jefferson University campus is located in downtown Philadelphia, as seen from the Bluemle Life Sciences Building. The older research building Jefferson Alumni Hall on the left, the Hamilton Building for the medical school, which was opened in October 2007, dormitory, library and a 20-storey dormitory surround the central square.

Fig. 2. Traditional row-houses border the University campus in the south. Sun is shining brightly in early November in the city, which is located on approximately the same latitude as Istanbul.

been reached, or if the operation needs to be extended. The Department provides training positions for 4 residents yearly, and since the specialization lasts for 3 years, 12 residents are continuously in training. The training includes clinical work under the close supervision of the specialists. The clinic has 10 examination rooms around a hall with an open office in the middle (Fig. 3). Each specialist works with 2–3 residents simultaneously. The residents interview and examine the patients in the examination rooms, and then come to the hall to ask the specialist to join them in the examination room. The residents present the cases to the specialists, who then make the diagnosis and plan treatments. In this way each resident has a chance to see rare or interesting diagnoses of the other specialists and the residents and all doctors can informally consult each other during the work. Compared with Scandinavia, the residents are given full responsibility for patient care several years later. The residents also rotate in the dermatosurgical unit one month a year and they attend dermatopathology training for 6 months over the 3-year training period, in order to be able to run their own practice independently in the future. The training provides several weekly opportunities for gathering in the classroom: e.g. dermatopathology seminars around the large teaching microscope, clinical meetings, journal clubs, seminar series on structure and function of the skin (Fig. 4). Each year every resident prepares a few seminar presentations and case reports for his or her colleagues. Hosting visitors is part of the daily life of the clinic, and in the USA the culture of friendly small talk makes it easy for a visitor to join the team.

Fig. 4. Residents gather several times a week for meetings and seminars. A large, 21-head teaching microscope gives every resident an opportunity to observe the sections during dermatopathology meetings.

Through the Jefferson Center for International Dermatology, visitors from several countries have joined the clinical staff for periods varying from a few days to some months. However, a doctor not licensed to practice in the USA is not allowed to participate directly in patient care. The visitor's role is thus more one of an observer, but knowing the long-lasting research interest and expertise of the Chairman (see below), the clinic provides opportunities to see patients with rare heritable skin diseases.

Fig. 3. Clinical facilities have examination rooms around a hall, which is separated from the patient waiting area. This is a place for discussions and spontaneous consultations between specialists and residents during their clinical work.

Fig. 5. Research laboratories have an international staff. Professor Jouni Uitto having a weekly meeting with a group working on pseudoxanthoma elasticum.

The research laboratories of the Department of Dermatology and Cutaneous Biology are in the Bluemle Life Sciences Building, located three blocks from the clinic. The Department currently has 11 faculty members, who usually have 1–3 postdoctoral fellows working in their laboratories. There is no doubt that the Department is one of the top dermatology laboratories in the world. It is especially recognized for finding genes for epidermolysis bullosa and pseudoxanthoma elasticum. Nowadays, the research topics include heritable diseases with skin manifestations, such as pseudoxanthoma elasticum; autoimmune blistering diseases; various topics of cancer biology; and gene therapies. Most of the senior scientists as well as postdoctoral fellows in the Department have come from Europe or Asia, thus the atmosphere is international (Fig. 5), and English is spoken with many different accents. Hosting visiting scientists is also very familiar to the research staff, and well-equipped laboratories provide an opportunity to join the teams of skilful scientists for a shorter or longer period.

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