

Experience from a Visit Abroad

Report From a Visit to the Mayo Clinic, Rochester, Minnesota

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In August 2004, I had the opportunity to visit Mayo Clinic in Rochester, Minnesota for 2 days (Fig.1). It was a great opportunity for me, since I have always considered Mayo to be one of the world's leading medical clinics for achievements such as the 1950 Nobel Prize in Medicine for the discovery of cortisone, awarded to two Mayo staff members: Dr Philip Hench and Dr Edward Kendall, along with the Swiss chemist Dr Tadeus Reichenstein. Thomas B Fitzpatrick, MD, was a dermatology resident and a doctoral student ("Studies on human melanogenesis") at Mayo, and the Department of Dermatology is proud of its association with this luminary in dermatology.

Minnesota is a small state in the USA with 5 million inhabitants. Many people live in the Minneapolis and St Paul region, approximately 2 million. These two cities are located only 11 km from each other (Twin Cities). Rochester (85,000 inhabitants) is located 100 km from Twin Cities. Many Scandinavian immigrants settled down in Minnesota because of the four-season climate and the excellent farmland. The Scandinavian influence in this state



Fig. 1. Mayo Clinic campus, Downtown, Rochester.

is strong, and the Swedish Institute, a large museum in Minneapolis, is well worth a visit.

In this land of farms, Dr William Worrall Mayo, a surgeon who had emigrated from England, started to gradually evolve the Mayo Clinic in 1864. His two sons, William J and Charles H, also became doctors and joined their father's practice. After a tornado swept through Rochester in 1883, leaving in its wake many deaths and injuries, the first hospital was built.

The Mayo Clinic today is a charitable non-for-profit organisation based in Rochester with branches in Jacksonville in Florida and Scottsdale in Arizona. The clinic is supported by patients, employees, alumni, foundations, corporations and other friends. In 2003, 132,000 benefactors gave USD 136 million to Mayo. The staff consists of 47,000 employees,

including 3,000 staff physicians and scientists and 2,000 residents and fellows. The father Mayo and his sons have still a strong impact on the clinic. Through growth and change, the Mayo Clinic remains committed to its guiding principles as articulated by William Worrall Mayo: "No one is big enough to be independent of others" and by William J Mayo: "The best interest of the patients is the only interest to be considered".

When I arrived at Rochester International Airport I noted that the Mayo Clinic had a large information centre for taking care of all patients coming to Rochester. Many patients come from other parts of the country or from abroad, and stay in Rochester for a few days. Usually, patients have not been seen by other doctors than the doctors at the Mayo Clinic, and if they are, they ask the doctor to send a copy of the records to the Mayo Clinic.



Fig. 2. Plummer building.



Fig. 3. Plummer building. Mayo Hall, the main reading room on the 12th floor.

When first arriving, you get the impression that the Mayo Clinic is the whole city. A number of large clinic buildings and two large hospitals with approximately 2,000 beds make up the whole city centre. In between these buildings, approximately 20 large hotels are located. All the hospitals, clinic buildings and most of the hotels are connected with each other by a huge subway system. On the subway level a large number of restaurants and shops are located, and also a large patient education centre. The clinic buildings are from different time periods, from the beautiful Plummer building (Figs. 2-3) with a carillon with 23 bells, historic library and Mayo museum, to the ultra modern Gonda building (Figs. 4-5).

As a Visiting Professor at the Department of Dermatology I was on a very tight schedule. At 7.15 am I was escorted by Dr Russel, the resident

in chief, to an open session with the dermatology residents. He told me that dermatology is the top speciality of all residencies in the USA, the next popular is orthopaedic surgery. The least popular is general practitioner. The Department of Dermatology has seven positions available each year and they have more than 500 applications for them. The first year is clinically-based training in internal medicine, followed by a three-year dermatology residency program. This includes both extensive clinical training in dermatology, but also an opportunity to conduct clinical and basic laboratory research. After the residency, there is a possibility to apply for a one-year fellow-position. There are three fellow programs in the USA; dermatological surgery, histopathology and paediatric dermatology. Of these, Mayo has the two first.

Suddenly I was face to face with 22 residents and 7 fellows for the open session. I was not prepared for this meeting and I thought to myself, "Now I am in big trouble!" However, I was wrong. The residents and fellows had studied and reviewed the papers I had written during the years in different areas of dermatology, and they seemed to know the papers better than I myself do. It was really an interesting scientific discussion with many questions and suggestions.

After that I met with Dr Mark Davis, the Visiting Professor Coordinator, for information about the department. He is originally from Ireland and educated at the Royal College of Surgeons in Ireland, Dublin. Interestingly enough, I happened to start my medical studies in Ireland and spent one year at the same college, and so did my daughter 30 years later. No wonder we had a lot to talk about!



Fig. 4. Gonda building.



Fig. 5. Gonda building. Lobby.

The Department of Dermatology at Mayo Clinic in Rochester is divided into three divisions; clinical dermatology, laboratory dermatology and dermatological surgery. The number of staff physicians is approximately 30. The inpatient practice is only 11 beds in a unit shared with Family Medicine. Consequently, the outpatient practice is much bigger. It has about 80 examination and operating rooms. Surgical procedures make up a large part of the outpatient practice: Mohs micrographic surgery, skin cancer excision, and reconstructive surgery as well as cosmetic surgery and hair transplantations. There is no need of a letter of referral from a doctor. The average number of outpatients per day is 315, and the number of Mohs procedures is 21. The dermatopathology and the immunopathology laboratories process on average 439 specimens per day. All specimens are examined by a group of dermatopathologists

using a large multi-microscope. All processed specimens are placed in the doctors' pigeon holes on a daily basis to be examined by the dermatologist before the dermatopathologists look at them. In the corridors outside the examination rooms they have a system of coloured lamps in order for the doctors to signal different types of needs to the staff. All male doctors were dressed in suits and ties, and all female doctors were dressed in skirts and blouses, except when doing surgery. This is quite different from the policy of my hospital. When in contact with patients we have to wear special hospital clothing for hygienic reasons.

Now it was time for me to give a lecture: "Skin Signs of Internal Malignancy" during the lunch hour. The doctors received a lunch box in the lecture hall. My talk was sent by cable to the other two Mayo Clinics

in Florida and Arizona, where the doctors could interact directly with me.

One of my main interests is epidemiology, and the Mayo Clinic is famous for their epidemiology projects. They have a large multidisciplinary Department of Epidemiology, and I therefore met with Dr Steven Jacobsen, head of the department. As early as 1907, a dossier concept of medical records was introduced, wherein all data about a specific patient were contained in a single file, linked to a unique Mayo Clinic identification number. This tradition has continued, and today, the dossiers for each of the more than 5 million patients who have ever been examined at Mayo Clinic in Rochester are maintained in a central repository and tracked by computerised bar-codes. Less than 500 patient histories have been lost since the unit records were

initiated almost 100 years ago. They showed me a huge room with a large number of researchers sitting with boxes with records doing epidemiological research. One project concerning the epidemiology of melanoma in collaboration with the Department of Dermatology was presented to me.

I also met with other doctors of the staff. The head, Dr Randall Roenigk, son of Dr Henry H Roenigk, another luminary in dermatology, informed me about the clinic. In my opinion, he should be very proud. My warmest thanks and best regards to

him and his colleagues and staff at the Department of Dermatology, Mayo Clinic, Rochester.

The last day I had the opportunity to have an art and architecture tour of the Mayo campus. I have become interested in old books, especially in incunables (books printed before 1501), maybe because my wife is a librarian at the Karolinska Institute. I brought with me a large number of postcards with illustrations from the best old books of my own university historical library (Hagströmer Biblioteket). Subsequently, I

expressed my wish to see what old books they had at Mayo Clinic. The History of Medicine Library was then shown to me. It is not open for the public because of the expensive and fragile books. To my surprise, every original book from which I had postcard illustrations could be found in the Mayo library, which was very impressive!

After leaving Rochester, I was overwhelmed by the many new impressions and by the friendliness and hospitality of the colleagues of Mayo Clinic.