Message from the Director

This first newsletter of the Maude Abbott Medical Museum marks two important steps in its development. The first is the beginning of the Friends of the Museum group, which I hope you will seriously consider joining. As most of you probably know, the financial resources we have to run the museum are limited. Although we have received some welcome support from the Faculty of Medicine and continue to run a very tight “fiscal ship”, there are insufficient funds to accomplish the projects which we feel should be done.

The Stephenson skeleton—discussed further on in this issue—is a good example of this. The almost 200 year-old artefact is one of the oldest objects related to McGill. The case in which it resides is dark, dirty, partially broken and missing its cornice. Moreover, some of the dust which has accumulated on the skeleton is so thick that it may well date from the early 1800s! Funds donated by the Friends of the Museum will be used to restore this unique piece so that it can be preserved for the future and acceptable for viewing by McGill students and staff as well as the general public. Raising funds from the Friends of the Museum is one of the best ways we have to enable this.

The second important step has to do with the museum space and its contents. The move of the pathology material from the Duff to the Strathcona Building was completed in the fall of 2015. Combined with the material moved the previous year as well as that from the anatomy collection and a variety of other sources, we now have over 3500 artefacts in our database. We have been able to put a small number of these on display, including our Emergency Pathology and Developmental Anomaly exhibits (the latter used by medical students as part of their embryology learning). Two new exhibits are planned for this fall (see next page). Although we have done our best to clean and modernize the cabinets in which these exhibits have been mounted, they are clearly not ideal from safety, preservation and teaching points of view. The Museum space in which the cabinets are located is also inadequate in several respects.

Thus, we have decided to proceed with a renovation project in 2017. This will include both structural alterations to the museum and the introduction of new cabinets and modern teaching aids. The work will be funded largely by generous donations from Dr. Huntingdon (“Skip”) Sheldon, former Strathcona Professor of Pathology at McGill, and the Medicine Class of 1976 (as part of their 40th anniversary gift to the Faculty). Preliminary plans for the work have been drawn up by a professional museum design firm. We plan to fine-tune them this fall with the aim of finishing the project by the end of 2017.

This is an exciting time for the “resurrected” museum in which I invite you all to participate. If you have not already done so, please accept my invitation to visit us, in person or on line at our web site (https://www.mcgill.ca/medicalmuseum). As a member of the first group to be asked, please support our mission by joining the Friends of the Museum today.

Rick Fraser, Director
New Exhibits

Sparks and Waves: Applications of Electricity and Sound in Physical Therapy

The medical use of electricity has a long history. For example, in ancient Egypt, it was believed that touching an electric eel could numb conditions such as toothache or even help ease labour pains! Later medical uses of electricity were more complicated. Nikola Tesla and Paul Oudin developed the Violet Ray in 1913. Because it seemed able to cure a variety of skin diseases and was inexpensive to produce, it was used for many applications. Unfortunately, it soon drew the attention of disreputable “healers” trying to make easy money off the vulnerable. Although initially plagued by this reputation, the usefulness of electrical currents is now well established in devices such as cardiac pacemakers and defibrillators.

The technique to create ultrasound—sound waves that have a higher pitch than humans can hear—was discovered in 1880 by Paul-Jacques and Pierre Curie when they observed the piezoelectric effect, in which pressure on a crystal resulted in an electrical current. Since the reverse was also true, they were able to create inaudible sound waves by applying an electrical current to a crystal. When applied at treatment dosages to human tissues, blood flow and tissue permeability increase, resulting in decreased pain and faster healing. A number of devices have been created to exploit these effects for therapeutic purposes.

The exhibit will display and explain the rationale of some of the sound and electricity based instruments that have been invented to treat injuries and skin ailments. The machines on display were used in the McGill School of Physical and Occupational Therapy during the mid 20th century.

Opens September 28, 2016 at the Museum

Rural Medicine in 20th Century Quebec: the Story of Dr. George Lefebvre

The practice of medicine in a rural setting can pose challenges that differ from those in the city, a feature that was probably more evident in the past. For example, travel to visit a woman in labour following a January snowstorm when a farm lane was not plowed could be difficult. This exhibit includes a number of instruments and artefacts donated to the museum by Dr. George Lefebvre, McGill Medicine 1944, who practiced in Huntingdon from 1945 to 1990. Some of his memories as a student at McGill and as a general practitioner will be available as an audiovisual display. A number of books from the Osler Library on the topic of the rural practitioner will also be on display.

Opens October 17, 2016 at the Osler Library of the History of Medicine

The Stephenson Skeleton

John Stephenson, one of the founders of McGill University and one of the first physicians at the Montreal General Hospital, was born in Montreal in 1797. His medical career began in 1815, when he was apprenticed to Dr. William Robertson (later to become the first Professor of Medicine at McGill). He traveled to Edinburgh for further training and graduated from its University in 1820. Stephenson’s graduation thesis—De Velosythesi—was a discussion of cleft palate, a condition from which he suffered.

“When I grew up, I had no trouble in eating or drinking with my body erect; it was only when I leaned forward that anything came through my nose. I was never able to drink from a spring lying down as boys often do. And there were more unpleasant difficulties. The worst was vomiting when the stomach contents would be expelled through my nose.” *

In 1819, Stephenson traveled to Paris to study with the well known surgeon Philibert-Joseph Roux. The latter, perceiving the “harshness” of Stephenson’s voice, diagnosed the presence of a palatal abnormality and proposed an operation to correct it. Although Stephenson at first demurred, he soon decided to proceed and, on September 28, Roux undertook the first documented surgical correction of cleft palate. Stephenson described his experience—carried out without anesthesia or antisepsis—in exquisite detail in his thesis.

“I adopted a sitting position which seemed best to facilitate breathing and the flow of blood out of the mouth and to get as much as possible of the very necessary light. Three interrupted sutures, stout enough to avoid laceration of the tissues, as far as possible, were introduced with two surgical needles alternatively from behind forwards, each suture being thus drawn three times. Since fingers are too short to do the work at such depth and the needles were rendered slippery by the constant flow of saliva, use was made of a stylus-like instrument, porte-aiguille in French, with which we call in English a slider to grasp the needle.” *

The operation and its sequela went so well that Stephenson was able to relate his experience to the Royal Institution of Paris 18 days later. He returned to Montreal in 1821 and established a surgical practice, which he continued until his death in 1842. He also became staff physician at the Montreal General Hospital and, along with Andrew Holmes, William Robertson and James Caldwell, began formal teaching at the Montreal Medical Institution. He was instrumental in obtaining funds for the establishment of McGill University in 1829 and later became its Registrar. Stephenson also has the distinction of being the first Professor of Anatomy at McGill. One of the oldest relics of the University related to this title is a mounted skeleton housed in an oak cabinet. Although details of the provenance of the skeleton are lacking, it was presumably acquired and prepared by Stephenson in the 1820s or 1830s.


The skeleton was recently moved from a public corridor to the Museum room. Although now safe from jostling, the cabinet is in need of repair and the skeleton has accumulated 200 years of dust! The goal of our first Friends subscription is to raise funds to make the skeleton presentable, including cleaning, cabinet repair and the installation of appropriate lighting.

*
As preparation for the move of pathological material from the Duff to the Strathcona Building in 2013, the entire collection of fluid preserved specimens was reviewed. Those specimens that had become desiccated because of fluid evaporation or had otherwise deteriorated beyond recognition were discarded. The down side of this was the deaccessioning of 200 specimens; the up side was the discovery of some interesting material which had been “buried” in the basement storage area for years.

The example shown here is a uterus from a 25 year-old woman known to have had a tumor for 5 years. The specimen shows a 13 cm leiomyoma (fibroid) with a necrotic center. It was a donation from Dr. DJ Healy, Director of the Army Medical Museum in Washington D.C., to Abbott in 1907. Following the devastating fire at the McGill Medical Building in April of that year—in which almost two thirds of the Museum’s collection was destroyed—Abbott had put out a plea for help from her connections at the recently formed International Association of Medical Museums. Overall, Dr. Healy donated almost 1500 specimens to the McGill Museum, greatly helping to reestablish its teaching collection.

BECOME A FRIEND

Membership in the Friends of the Maude Abbott Medical Museum is open to anyone who is interested in the museum and the history of medicine. Your support will allow us to preserve our rich collection and make it available to others for teaching and research. Application can be made by contacting us at medicalmuseum.med@mcgill.ca

THANK YOU!

Special thanks are due to Dr. Huntington Sheldon and McGill Medicine Class of 1976 for their generous donations to the museum.