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In This Issue

hile checking a reference for a chapter that he is preparing for publication, Dr. Peter T. Macklem, Emeritus Professor of Medicine, came upon some information that sent him straight to the Osler Library for verification. His finding confirms the research value of old texts!

Emeritus Librarian David S. Crawford also made an interesting discovery when preparing his article on a relatively rare ophthalmological publication of 1828. While searching for a portrait of the author, he discovered that the subject of his article was an ancestor of the late, highly regarded Montreal neurosurgeon, Dr. Joseph Stratford.

Two truly exciting conferences are reported on here, evidence of the ever-widening circle of Oslerian activities.

We publish the final instalment of "Roland's Canadian Medical History Miniatures", this item concerning Dr. John George Adami, who in 1892 accepted the Chair in Pathology at McGill. One of Adami's many achievements was to ensure the reorganization of the McGill Pathological Museum. Coincidentally, renewed interest in the Museum may yet lead to its revival.

Finally, this letter contains our annual Appeal to the Friends and will hopefully give you an idea of our achievements and of the joy we take in our work, thanks to your help.



STEPHEN HALES, AN UNRECOGNIZED GIANT OF MEDICINE BY PETER T. MACKLEM

he Reverend Stephen Hales (1677-1761) (figure 1) was a physician scientist who lived in the age of alchemy, but, unlike his compatriot, Isaac Newton, he was no alchemist. Instead of searching for gold he uncovered secrets of life in both plants and animals. Here is what he had to say about alchemists:

If those who unhappily spent their time and substance in search after...gold, had instead of the fruitless pursuit, bestowed their labour in searching after this much neglected volatile *Hermes*, who has so often escaped thro' their burst receivers in the disguise of...a mere flatulent explosive matter; they would then instead of reaping vanity, have found their researches rewarded with very considerable and useful discoveries.¹



fig. 1 Portrait of Stephen Hales, reproduced from *Some Apostles of Physiology*, William Stirling, London, 1902, p. 90.

He knew whereof he spoke because during his life he made many 'considerable and useful discoveries'. Hales credited *Hermes*, God's messenger, with revelations of the Creator's wondrous design of living things that Hales revealed by his research. His biological discoveries were many and were of the utmost importance. In this essay, I focus on his zoological discoveries. His botanical research is another story.

Hales was the first to measure blood pressure, and the reason he did it was that he believed the circulation of the blood had to follow the physical laws of fluid motion. He lived in the time of Boyle, Hook and above all Newton. They must have had a great influence on his approach to experiments which was essentially biophysical. Here is how he explained this:

As an animal body consists not only of a wonderful texture of solid parts, but also of a large proportion of Fluids, which are continually circulating and flowing, thro' an inimitable Embroidery of Blood Vessels, and other inconceivably minute Canals; And as the healthy State of an Animal principally consists, in the maintaining of a due *Equilibrium* between those Solids and Fluids, it has, ever since the important Discovery of the Circulation of the Blood, been looked upon as a Matter well worth enquiring into, to find the Force and Velocity with which these Fluids are impelled, as a likely means to give a considerable Insight into the animal OEconomy...

But as animal Canals have not, that I know of, been hitherto examined any other Way, than by the imperfect and uncertain Methods of injecting with a Syringe and blowing into them: I hope it will appear from this Specimen to be worth the while to attempt it in the following *Hydraulick* Way, which seems to me to be more accurate and certain...For since we are assured that the animal Fluids move by *Hydraulick* and *Hydrostatick* Laws, the likeliest Way therefore to succeed in our Enquiries into the Nature of their Motions, is by adapting our Experiments to those Laws.²

To measure the "force of the blood" as Hales called blood pressure he inserted tubes into arteries and veins of a variety of animals and measured how high the blood rose in the tube, as shown in figure 2. In this way he discovered that arterial pressure was much higher than venous pressure. He found that capillary diameter only allowed single red cells to pass through at a time and thought that this made the capillary resistance to flow larger than in the arteries and veins. He thought that high capillary resistance accounted for the marked fall in blood pressure between the arteries and veins. He observed that with systole the arteries distended with blood and then contracted during diastole. He pointed out that this maintained a continuous steady flow of blood through the capillaries and veins, whereas flow in the arteries was pulsatile. He recognized that as blood flowed through smaller arteries the total cross section of the vascular bed increased and therefore the linear velocity decreased.

To determine the effects of hemorrhage he progressively exsanguinated animals step by step, and measured the fall in blood pressure after each phlebotomy. He thus described hemorrhagic shock. In a horse in whom he performed this experiment he observed that as death approached "the Mare fell into cold and clammy sweats."

He correctly described closing of the mitral valve and opening of the aortic valve with systole with reopening of the mitral and closure of the aortic valves during diastole. He recognized the importance of these in preventing retrograde flow. In an exsangiunated dog whose heart was still beating he poured molten wax into the left ventricle and measured the stroke volume. When he multiplied this by the heart rate he estimated the cardiac output.

He found these experiments disagreeable and abandoned them for a while. This was no doubt because the animals were not anesthetized and naturally struggled throughout the experiment. It's a good thing he didn't have to deal with animal rights people. However he did take advantage of this to observe that "the violent straining to get loose did by the acting of most of her muscles...impel the blood from all Parts to the *vena cava* and consequently there was a greater Supply to the *Heart* which must therefore throw out more at each Pulsation, and thereby increase the force of blood in the arteries". Thus he described how muscular contraction increases venous return to the heart. He measured the effects of a large variety of materials on the vasculature to see if they caused vasoconstriction or dilatation.

By applying the laws of hydraulics and hydrodynamics to the circulatory system Hales supplied us with an enormous amount of very important new information. Indeed during his lifetime he discovered most of the basic, fundamental knowledge we still have of how the circulatory system works. But that was not all. Hales also made important contributions to our knowledge of respiration.

Hales was interested in the properties of gases and wanted to determine whether gases were released or absorbed by various experiments. In one series he placed a candle underneath an overturned glass jar which was immersed in water. He then lit the candle by using a magnifying glass to focus the sun's rays on a piece of paper wrapped around the wick, thereby igniting the candle. At first the water level in the jar went down which he attributed to heating the air in the jar. But then it rose and continued to rise for long after the candle was extinguished. He concluded that combustion used up a portion of the air.

He repeated this experiment but instead of using a lighted candle he used a small animal which he kept enclosed in the jar until it died and he observed exactly the same result as with the candle. Here is how he described this experiment:

I placed on the Pedestal, under the inverted Glass...a full grown rat. At first the Water subsided a little, which was occasioned ...by the Heat of the animal's Body. But after a few Minutes the Water began to rise, and continued rising as long as the Rat lived, which was about 14 Hours...The Quantity of...Air which was absorbed was nearly what was absorbed by a Candle in the same Vessel...³

Of course Hales did not know that air contained oxygen which was used up by combustion and taken up by respiration. Nor did he know that both combustion and respiration produced carbon dioxide which is much more water soluble than oxygen. Clearly the rise in water level was due to carbon dioxide dissolving in water. However he did realize that both combustion and respiration resulted in loss or uptake of the "vivifying spirit of air." Thus he came within a hair's breadth of realizing that metabolism and combustion are the same processes producing heat which keeps our bodies warm. This is the reason that the burning candle and the living animal produced the same result.

When Hales discovered that part of the air was taken up by the lungs, he performed an experiment on himself, in which he "made a Bladder very supple by wetting it." The bladder contained about 750 ml of air, and having blown it up he rebreathed from it. "I could only breath to and fro the Air contained in the Bladder. In less than half a Minute I found a considerable Difficulty in breathing... and at the end of the Minute, the suffocating Uneasiness was so great that I was forced to take away the Bladder from my Mouth." During this time he found that a substantial quantity of air was lost so that the wet bladder must have dissolved some of the carbon dioxide he produced while the lungs absorbed oxygen.

Realizing that it was a function of the lungs to absorb gas he made a detailed study of the lungs' anatomy. He found that the diameter of

airspaces in the lung were 250 microns, which is an accurate figure for an alveolar duct. He calculated the air-tissue surface area of the lung, to be about 290 square feet, more than 20 times greater than the surface of the body. He was far ahead of his time: it took two centuries before this measurement was repeated, He stated that air is absorbed by the blood in the lungs, "... an admirable Contrivance, there spread into a vast Expanse commensurate to a very large Surface of Air from which is parted by a very thin Partition, so very thin as thereby probably to admit the Blood and Air Particles within the reach of each others attraction, whereby a continued succession of fresh air may be absorbed by the blood. "By this experiment he not only described the lungs' essential function of gas exchange, he became the father of morphometry, or quantitative anatomy by which function is explained.

He realized that we are unable to blow out all the air in our lungs and he measured mouth pressure in humans trying to inspire or expire against a closed airway. He was the first to measure not only blood pressure, but also pressure in the pleural space surrounding the lungs in a dog and found pressure swings during breathing of 15 cm H2O, but during strong inspiratory efforts with the airway blocked pleural pressure fell by as much as -75 cm H2O. He was able to manually ventilate a dog by squeezing an air-filled bladder intermittently which he refilled with fresh air from time to time. He clearly realized from his rebreathing experiment on himself that restoring the "vivifying spirit of air" was important. He stated that the normal resting respiratory rate was 20/min. He presumably did this simply by observing how fast people breathed. His figure is probably more accurate than the currently accepted rate of 15/min measured by breathing through a mouthpiece, which is now known to affect the ventilatory pattern. He emphasized the importance of breathing "fresh" air and invented a ventilator to bring fresh air into rooms that lacked windows such as in prisons or the hold of ships.

Recently my colleagues and I thought we had made a discovery. We developed a method to measure blood shifts from the trunk to the extremities and found that when abdominal pressure was increased while breathing quietly about 70 ml of blood was expelled from the splanchnic vascular bed to the extremities. As abdominal pressure was increased the amount of blood displaced increased as well and became quite large ⁴. We thought we had discovered a previously unrecognized function of the diaphragm and abdominal muscles. Alas when we did a literature search we found what Stephen Hales had written in 1733:

Now it was observed ... that when a Dog's Belly was compressed by the Hand, the Blood would constantly rise a few inches in the tube fixed to his [carotid] Artery, and subside again when the Hand was taken off; and in like manner the increased force of the Blood in the [jugular] Veins seems to arise chiefly from the constriction of the *Abdomen*; For when we exert our strength in lifting or the like, we constantly contract the *Abdomen* when we are able by the joint Action of all its surrounding Muscles; and the Diaphragm...And while the blood is thus strongly compressed in the Veins, it must proportionably retard its passage out of the Arteries; it being

therefore accumulated, will acquire an additional Force... whereby the Blood being impelled more forcibly into the Muscles enables them to act more vigorously...the Vigour of the Blood in the Arteries and Veins is thus greatly increased by the increased Pressure on the Blood-vessels of the *Abdomen...*⁵

It is clear that Hales was describing blood shifts from the splanchnic vascular bed to the extremities and that abdominal pressure was responsible for these shifts. Hales not only recognized the importance of abdominal pressure in producing these blood shifts but also their importance in exercise performance. We were scooped by 276 years.

Hales' contributions to circulatory and respiratory physiology have had a profound impact on the practice of medicine, and as the father of morphometry he established a whole new branch of research that blossomed in the second half of the 20th century. Functional Imaging for which two Nobel prizes have been awarded was first done by Hales. In my opinion his contributions were so great that he deserves to be included in the Pantheon of Medicine along with Hippocrates, Galen, Vesalius and Harvey.

Acknowledgements: I am extremely grateful to Pamela Miller and the staff of the Osler Library of the History of medicine for their gracious assistance in preparing this essay. Without their help this article could not have been written.



fig. 2 Artist's impression (Cuzzort) of Stephen Hales measuring the blood pressure of a horse. Reproduced from *Medical Times* 72 (1944) 11.

References

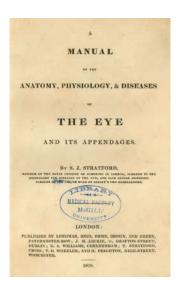
- 1. Hales S. *Vegetable Staticks*. Expt CXXI, p 180. London. Printed for W J Innys and T Woodward, 1727.
- 2. Hales S. Statical Essays: containing haemastatics or, an account of some hydraulick and hydrostatical experiments made in the blood and blood-vessels of animals. London. Printed for W J Innys and T Woodward, 1733. Introduction.
- 3. Hales S. *Vegetable Staticks*. Expt CVII, p 133. London. Printed for W J Innys and T Woodward, 1727..
- 4. Hales S. Statical Essays: containing haemastatics or, an account of some hydraulick and hydrostatical experiments made in the blood and blood-vessels of animals.. Expts VII and XXII, pp 33 and 161-3, London. Printed for W J Innys and T Woodward, 1733.
- 5. Aliverti A, Bovio D, Fullin I, Dellacà RL, Lo Mauro A, Pedotti A, Macklem PT. "The abdominal circulatory pump." *PLoS One*. 2009;4(5):e5550. Epub 2009 May 14.

Samuel John Stratford (1802–1871)

BY DAVID S. CRAWFORD

In spring 2010 the McGill University Library released a small selection of its rare (or at least old) books as digital e-books, unfortunately (and inexplicably) only accessible to those with a McGill library card. One is from the Osler Library's collection: an 1828 book that was originally given to the Medical Library by Casey Wood as part of his large ophthalmology donations. This book, by Samuel John Stratford, is entitled *A Manual of the Anatomy, Physiology & Diseases of the Eye and its Appendages*, and was published in London by Longman, Rees, Orme, Brown and Green when Stratford was only 26 years old and living in Worcester. (figure 1)

fig. 1



The book was reviewed in several journals — quite positively and at length in the *Lancet*, where the reviewer says, "Mr. Stratford's book is evidently the production of a practical man, who writes from what he has seen; hence the descriptions of the various diseases are accurate, and the plans of treatment recommended highly appropriate. The student will find it highly useful." The review goes on to anticipate a second edition (which never appeared) and hopes that it will correct "the numerous typographical errors which exist" and that the plates will be improved.2 It was also given a very positive review in North America, in the American Journal of the Medical Sciences: "His descriptions of diseases are concise and accurate, his pathology almost always correct, the treatment he recommends such as would naturally be suggested by the correct pathology, and is that which has been sanctioned by the experience of the best practitioners."3,4 There was also a short review in the [London] Literary Gazette.⁵ The book is comparatively rare only nineteen copies are listed in WorldCat, and Osler's is the lone specimen in Canada — but is not particularly expensive: a copy was recently for sale for about \$425. The author spent many years in Canada and his story is perhaps of interest.



hg. 2 Photo courtesy of Joan Holmes, descendent of Samuel John Stratford, residing in Auckland, New Zealand.

Samuel John Stratford (figure 2) was born in 1802 and received his medical education at the St. George's and Westminster hospitals in London, where he was a pupil of William Charles Bell and George James Guthrie, the founder of the eventual Royal Westminster Ophthalmic Hospital. After qualifying to practise, he became an army surgeon, from 1826 to 1828 (his actual appointment was dated 18 January 1827). In 1828, when his book was published, he is described as "Member of the Royal College of Surgeons in London, surgeon to the dispensary for diseases of the eye and late senior assistant surgeon of the 72nd or Duke of Albany's Highlanders." His book is dedicated to Guthrie and to Sir James McGregor [sic] — McGrigor was the Director-General of Army Medical Services.

Stratford came from a medical family: his grandfather was William Perfect (1737–1809), a physician renowned for his work in the treatment of the insane.⁸ and both Stratford's father and brother were also members of the Royal College of Surgeons. In 1830,

both Samuel and his brother William Henry (who had studied medicine in Dublin) emigrated to North America; Samuel wrote an article from Troy, New York in September of that year,⁹ and shortly thereafter was in Canada.

Samuel received his licence to practice in Bytown (Ottawa) in 1831, and was placed in charge of the Bytown military hospital during the cholera epidemic of 1832. In 1835 he relocated to Woodstock (near London Ontario), having received, as an ex-army officer, a land grant from Sir John Colborne, then the Lieutenant-Governor of Upper Canada. (He was granted 200 acres in Zorra Township on September 5, 1835 — Lot 6 of Concession 14.) On September 25, 1838, the Lieutenant-Governor, Sir George Arthur, appointed him as a member of the Medical Board of Upper Canada, and Samuel is listed as Coroner in Woodstock in the 1846 *Canadian Gazetteer*. ¹⁰

In June 1832 Stratford's father, John, travelled to New York on the ship Samuel Robertson and also moved to Canada. While living near Perth, Ontario, John Stratford received his certificate to practice from the Medical Board of Upper Canada on July 1, 1833. 11 He initially practised in Bytown and Brockville, later joining Samuel in Woodstock and issuing a business card that read, "Dr. Stratford, Surgeon, Accoucheur and Oculist; thirty years a member of the Royal College of Surgeons, London; twenty years in His Majesty's military service in that capacity, and many years in extensive private practice. Dr. Stratford has extended his practice to the diseases of females and children with more than ordinary success in their treatment." He was a friend and school-fellow of Christopher Widmer, the doyen of the medical establishment in Toronto, which may explain why the family moved to Canada.¹² John Stratford died in 1845; Connor reports that among his effects was "1 Manual diseases of Eye" - almost certainly a copy of his son's book.13

Unlike his brother and father, William Stratford lived in New York state for several years before moving to Canada, settling in Brantford (near Woodstock) in 1844. In 1845, when he acted as executor of his father's will, he described himself as a "chemist and druggist," and retired from business in 1875 with a "large fortune." In 1885 William's son John founded the John H. Stratford Hospital — now the Brantford General Hospital.

Samuel Stratford remained in Woodstock until about 1850, when he moved to Toronto for several eventful years. He practised at (and possibly owned) the Toronto Dispensary for Diseases of the Eye, on Church Street. (figure 3) As Canniff reports, "[he was] editor of the *Upper Canada Journal of Medical, Surgical and Physical Science*, Toronto. He lectured on Anatomy at Rolph's [medical school] for a while, and was also for a short time professor at Trinity Medical College."^{17,18}

TORONTO EVE DISPENSARY.

(SUPPORTED BY VOLUNTARY CONTRIBUTIONS.)

Hours of attendance:—From 10 to 12 o'clock, daily, Sundays excepted.

Surgeon—Dr. S. J. Stratford, M. R.C. S., London.

The Upper Canada Journal had been founded in 1851 as the official organ of Trinity Medical College; after only two years the editors (who included Osler's mentor James Bovell) passed it over to Stratford, who had earlier published articles in it on a variety of medical subjects. In the first issue that he edited (the title changing somewhat repetitiously to Upper Canada Medical Journal of Medical, Surgical and Physical Science), Stratford noted that he hoped the journal would "continue to enjoy its former measure of encouragement; and while it is declared free and independent of every sectional view and interest it is expected that it will obtain the patronage and support of all the profession, without reference to the politics of any party or faction."19 However, Stratford, who was clearly an outspoken man with opinions on almost everything, wrote and published quite inflammatory articles calling for, among other things, a merger of the two competing Toronto schools of medicine and an editorial stating that religion should only guide, not command, medical practice. He attacked the competence of some of his colleagues; at one point Trinity medical professors reacted by returning their copies of the publication, and the Board of the Toronto General Hospital passed a bylaw barring Stratford from the hospital.^{20,21}

Roland notes, "Whereas the journal initially contained interesting case reports by several physicians of Upper Canada and lengthy resumés about medical legislation, after Stratford took over the editorship, he became embroiled in controversy. For example, there was a prolonged dispute with William Rawlings Beaumont, and the editor himself provided a substantial proportion of the published material — usually a reliable sign of impending journalistic disaster." MacDermot notes that this was "an excellent publication, full of good material. But Stratford was not the right man to carry it on." This was an unfortunate result as it meant that the only medical journal being published in Upper Canada was discontinued in September 1854 and it would be fifteen years before another, the *Dominion Medical Journal*, started to publish in 1868.

Canniff and several subsequent authors report that not long after the journal ceased publication, Stratford "returned to Woodstock where he practised until about 1868."24 This is incorrect; in fact, a few months after the last issue of his journal appeared, Stratford moved to New Zealand with his wife Jane and several children, and settled in Parnell, 'Auckland's first suburb'. It did not take him long to establish a practice there and to get involved in the local scene. He placed an advertisement in the Daily Southern Cross newspaper on January 30, 1855, (figure 4) and by July 1855 he had already given a talk to the Mechanics Institute "on modern improvements in ocean navigation especially with regard to the aerial currents."25 In August 1856 he wrote a letter to the House of Representatives, discussing ways to encourage immigration to New Zealand from Canada,²⁶ and continued with this theme a couple of months later in a long letter praising Canada's efforts to attract immigrants.²⁷ His interests were varied: in September 1856 he wrote to the newspaper calling for full citizenship rights, better treatment of and education for the native Maoris. He used the example of Canada where, he notes, "... the poor negro slave of Yankee land ... is free as soon as he sets foot on British soil."28 In November that same year he wrote suggesting that New Zealand develop a silkworm industry,

noting that he had grown mulberry trees in Canada.29

Mr. Stratford. M.R.C.S., England,

Surgeon, Occulist, and Aurist, from Toronto, Canada West, and formerly of Her Majesty's 72nd regiment,

OFFERS his services to the inhabitants of Auckland and the colony of New Zealand generally Individuals who have lost an eye may have the deformity remedied, as Dr. Stamford has a choice selection of Artificial Eyes on hand.

Residence, High-street, Auckland, 2 doors from the Post Office.

Assistance to the Poor Gratis, from 9 to 10 daily.

fig. 4

By 1857 his interests turned to local politics, and he began a lengthy series of letters praising Canadian democracy in contrast to that of New Zealand. In one letter he states that he came to New Zealand "to obtain land for some of those noble fellows, that love British institutions, and hope to find them in this noble Colony."³⁰

In 1858 he was a member of the committee of the Auckland Dispensary.³¹ In April 1859, "pending legislation in this colony to regulate the medical profession," the Auckland Medical and Surgical Society approved the qualifications of twenty-three local doctors, among them Stratford.³² He continued to write to the local newspaper, including an article on diphtheria in April 1859.³³ In addition to practising medicine, he was clearly a gardening enthusiast, winning several prizes at the Auckland Horticultural Show in the 1850s and 1860s, and in 1860 he played on a local cricket team. His medical career advanced as well — later in 1860 he was credited with performing the first lithotomy on a male in New Zealand.³⁴

After some controversy about the proposed first medical act in the Province, Stratford became involved in politics. In 1861 he ran, supported by the local medical society and an editorial in the local newspaper, for the position of Superintendent. 35,36 Though he lost to the incumbent, he obtained the most votes in Auckland.³⁷ In 1863 he was appointed by the government to be the coroner for the gaol and hospital district of Auckland. In the 1860s, as the ship's doctor, he accompanied a British troopship back to Britain and returned to New Zealand through Canada, where he "spread information amongst the Canadians regarding this province."38 He never lost touch with Canada and was elected as a corresponding member of the Canadian Institute in 1857. Stratford was a founding member of the Auckland Institute in 1868 and chaired its medical section. His paper, "On the Defence of Auckland Harbour" was read, posthumously, at their meeting on November 7, 1871. "It ... excited considerable discussion, the general opinion expressed being that the series of forts would be far too costly for the resources of the colony in its present position."39

As noted above, Stratford frequently used Canada as an example of a country to be emulated by those in his new home and he continued to contribute to Canadian and UK medical journals.⁴⁰ He was elected to the Provincial Council (representing Parnell) in

1871, and dissolved his medical partnership "by mutual consent" on August 18, 1871. He died six weeks later on October 4. The *Daily Southern Cross* noted, "He had been suffering for some months past from paralysis and his death … was not therefore unexpected."⁴¹ He left a large practice to his former partner, his son-in-law Dr Frederick William Wright, (figure 5) who had married Stratford's daughter Frances at St. James Cathedral in Toronto in 1852. Samuel John Stratford is buried at St. Stephen's Church, Judges Bay, Parnell, Auckland.

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DR. F. W. WRIGHT, L.M.B., U.C. SURGEON AND ACCOUCHEUR, &c.

APPILIATED WITH Dr. S. J. STRATFORD, M.R C.S. ENGLAND,

Office, opposite Windsor Castle Hotel, PARNELL.

N.B.—Dr. F. W. having a thorough knowledge of Mechanical and Surgueal Dentisty, will devote a portion of his time to this branch of the Profession.

fig. 5

References

- 1. Benjamin, M. Dr. Casey Albert Wood and the McGill Medical Libraries. *Osler Library Newsletter*.* 1970 Dec; 5:1–3.
- 2. Reviews of books. Lancet. 1828 Oct 18; 11(268):83-7.
- 3. Bibliographical notes. *American Journal of the Medical Sciences*. 1828; Ser 1, 3:440.
- 4. Stratford's Manual of the anatomy, physiology and diseases of the eye. *Monthly Gazette of Health*. 1830; 14:620.
- 5. Review of new books. [London] Literary Gazette. 1828 Sept 27; 12(610):615.
- 6. Caddy, A. The Royal Westminster Ophthalmic Hospital and its staff in the past. *British Journal of Ophthalmology*. 1931 Sept; 15(9):498–511.
- 7. Peterkin, A. Commissioned officers in the medical services of the British Army, 1660–1960. London: Wellcome Historical Medical Library; 1968. (Publications of the Wellcome Historical Medical Library. Historical monograph series; No. 14.)
- 8. Personal Communication. Leslie Stratford Laury to David S. Crawford, July 2010.
- 9. Stratford, S. J. Case of ruptured urethra. *American Journal of the Medical Sciences*. 1830; Ser 1, 7:145–8.

- 10. Smith, W. H. Smith's Canadian gazetteer: comprising statistical and general information respecting all parts of the upper province, or Canada West Toronto: Rowsell; 1846.
- 11. Canniff, W. The Medical Profession in Upper Canada, 1783–1850. An historical narrative, with original documents relating to the profession, including some brief biographies. Toronto: W. Briggs; 1894. (Reprinted, Toronto: Hannah Institute for the History of Medicine; 1980.)
- 12. Stratford, S. J. [Correspondence]. *Upper Canada Journal of Medical, Surgical and Physical Science*.† 1854; 3(10):468–9. 13.Connor, J. J. Estate records and the history of medicine in Ontario. *Canadian Bulletin of Medical History*. 1993; 10:97–114. 14. *Ibid*.
- 15. Rose, G. M., editor. A Cyclopaedia of Canadian Biography: being chiefly men of the time: a collection of persons distinguished in professional and political life, leaders in the commerce and industry of Canada, and successful pioneers. Toronto: Rose Pub. Co.; 1886–88.
- 16. *The Brantford General Hospital, 1885–1985.* Brantford, ON: [s.n.];1985.
- 17. Stratford, S. J. Report of opthalmic [sic] diseases. *Upper Canada Journal of Medical Surgical and Physical Science*. 1851 June; 1(3):89–95.
- 18. Canniff, W. The Medical Profession in Upper Canada, 1783–1850. An historical narrative, with original documents relating to the profession, including some brief biographies. Toronto: W. Briggs; 1894. (Reprinted, Toronto: Hannah Institute for the History of Medicine; 1980.)
- 19.[Stratford, S. J.] To the readers of the Upper Canada Medical Journal. *Upper Canada Medical Journal of Medical Surgical and Physical Science*. 1853; 3(1):18–22.
- 20.Connor, J. T. H. *Doing Good: the life of Toronto's General Hospital*. Toronto; Buffalo: University of Toronto Press; 2000. 21.Toronto General Hospital [editorial, correspondence]. *Upper Canada Journal of Medical, Surgical and Physical Science*. 1854; 3(10):464–9.
- 22.Crawford, D. S. compiler. [Roland] Bibliography of Canadian Health Sciences Periodicals, 1826–1980 [electronic resource]. Montréal: [2006–]. http://internatlibs.mcgill.ca/bibliography/contents.htm
- 23. MacDermot, H. E. A Bibliography of Canadian Medical Periodicals, with annotations. Montreal: Renouf; 1934.
- 24.Canniff, W. *The Medical Profession in Upper Canada, 1783–1850. An historical narrative, with original documents relating to the profession, including some brief biographies.* Toronto: W. Briggs; 1894. (Reprinted, Toronto: Hannah Institute for the History of Medicine; 1980.)
- 25.Mechanics Institute. *Daily Southern Cross.*‡ 1855 July 6; XII(837):3.
- 26. House of Representatives. *Daily Southern Cross.* 1856 Aug 12; XIII(952):3.
- 27. Stratford, S. J. How they encourage emigration in Canada. *Daily Southern Cross.* 1856 Oct 28; XIII(974):2.
- 28.Stratford, S. J. Civilization of the Maori. *Daily Southern Cross.* 1856 Sept 9; XIII(960):3.

- 29. Stratford, S. J. Another export for New Zealand. *Daily Southern Cross*. 1856 Nov 28; XIII(983):3.
- 30. Stratford, S. J. To the editor of the Southern Cross. *Daily Southern Cross*. 1857 June 12; XIV(1039):3.
- 31. Auckland dispensary. *Daily Southern Cross.* 1858 July 9; XV(1151):4.
- 32. Auckland Medical and Surgical Society. *Daily Southern Cross*. 1859 Apr 8; XVI(1211):3.
- 33. Stratford, S. J. Diphtheria. *Daily Southern Cross*. 1859 Apr 15; XVI(1213):3.
- 34.[Untitled]. *Daily Southern Cross*. 1860 June 19; XVII(1304):2.
- 35. [Editorial]. *Daily Southern Cross*. 1861 Oct 22; XVII(1446):3.
- 36. McGauran, T. F. Election of Superintendent and the medical profession. *Daily Southern Cross*. 1861 Oct 22; XVII(1446):4.
- 37. Election of a Superintendent. *Daily Southern Cross*. 1861 Oct 25; XVII(1446): 3.
- 38. The Late Dr. Stratford. *Daily Southern Cross.* 1871 Oct 7; XXVII(4405): 3.
- 39. Transactions and Proceedings of the New Zealand Institute. Sixth Meeting, 1871 Nov 7; 4:397.
- 40. Stratford, S. J. Wound of the radial artery, secondary hemorrhage, ligature on the brachial artery, employment of the actual cautery. *Medical Chronicle*. 1856 Sept; 4(4):127–31.
- 41. The Daily Southern Cross [Announcements]. *Daily Southern Cross*. 1871 Oct 5; XXVII(4403):2.
- * Osler Library Newsletter is freely accessible at http://www.mcgill.ca/library/library-using/branches/osler-library/oslernews/† The Upper Canada Journal of Medical, Surgical and Physical Science is freely accessible at: http://canadiana.org/ECO/ItemRecord/8 05166?id=7e970e08aaefad14
- ‡ The issues of the *Daily Southern Cross* are freely accessible at http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&cl=CL1. DSC&e=-----10--1----0-all



ANNUAL APPEAL TO THE FRIENDS 2010

hat an extraordinary year the Osler Library has had since our last appeal. We have completed projects, started others, purchased our usual fascinating recent publications and some outstanding rare books and carried out stunning conservation work. We have just finished an inspiring two day workshop in which international scholars have focused their expertise on our unique 13th century Arabic manuscript generally known as *The Herbal of al-Ghafiqi*. This banner event, funded by an anonymous donation in memory of Montreal rare book collector and dealer John Mappin and the McGill Institute of Islamic Studies launches us on a new adventure in research and publication that will take several years of research and fund raising to complete.

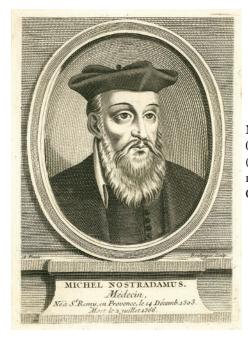
Chris Lyons, Assistant History of Medicine Librarian, organized another fruitful collaboration that involved bringing scholars from McGill's Department of Art History and Communication Studies, Dawson College and Carleton University to participate in a successful seminar entitled, *Medicine, Art and Visualization in the 19th Century*.

For many years a small committee, the Principal's Heritage Advisory Committee has been working towards making the University's outstanding collections more available for teaching and research. The Osler Library has played an active role in creating a web site that gives access to most of the University's historical collections, including nature reserves, museums, special library collections, departmental collections and the University archives. One of McGill's earliest, if not the earliest collector was Andrew Fernando Holmes, one of the four founders of the Faculty of Medicine and Head of the Medical Department and then Dean of the Faculty of Medicine from 1843 to 1860. He collected plant specimens on the Island of Montreal from 1820 to 1825 and his herbarium provides a record of the natural habitat of Montreal in the early 19th century. The site is found at: http://www.mcgill.ca/historicalcollections/

Having recently completed a major digitisation project funded by the Class of '78, the Marjory Howard Futcher Photo Collection, we are now embarking on an ambitious project to place our collection of some 2,500 medically related prints online. This includes portraits, scenes, posters and caricatures. The collection is made up of early donations principally from John Howell Evans (1870-1962), surgeon, cancer specialist and friend of Osler and Dr. Frederick Kalz, of McGill, Assistant Professor of Medicine (Dermatology) who died in 1993 at the age of 87, and more recently from Mr. William Helfand of New York. At the completion of the project, you will be able to view the images that have been carefully stored in our storage drawers for decades on your computer screen. Chelsea Clarke will be our print curator for six months. A graduate of Queen's University, Kingston and the Courtauld Institute, Chelsea is already adding to our knowledge of these collections.



Le Chirugien de Campagne, engraved by Thomas Major after a painting by David Teniers, Paris, 1747.



Nostradamus from print data base 000969, Michel de Nostredame (Nostradamus), (1503-1566) pharmacist and astrologer. Collected by Frederick Kalz.



Corvisart from print data base 00306. Jean Nicholas Corvisart, 1755-1821 Napoleon's doctor and medical reformer. Collected by Frederick Kalz.



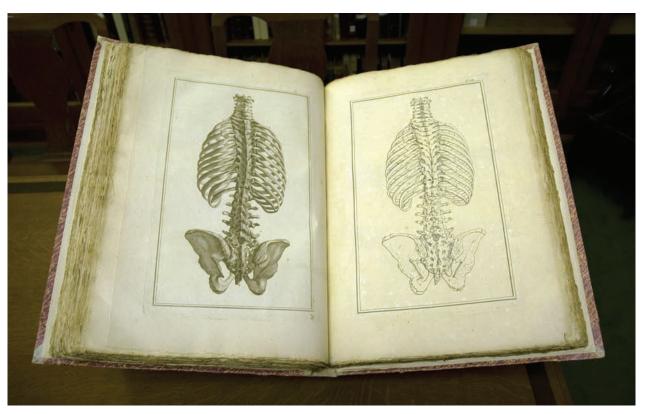
We have been fortunate this year due to significant donations from our Friends. A donation from the estate of the late Catharine Bensley, widow of Dr. Edward H. Bensley allowed us to purchase the extremely rare edition of Thomas Willis' *Cerebri Anatome: cui accessit nervorum descriptio et usus*, London: Ja. Flesher for Jo. Marty and Ja. Allestry, 1664. It is the first edition, quarto format of which very few copies are known and it completes our collection of this work. Thanks also to the generosity of Dr. William Feindel, the Osler Library has built up over the years a rich collection of Willis' works.

To mark the 65th anniversary this year of his graduation from McGill's Faculty of Medicine, esteemed Montreal paediatrician Granville Nickerson funded the purchase of the outstanding illustrated atlas of human embryology by Thomas von Soemmerring entitled, *Samuelis Thomae Soemmerring Icones Embryonum Humanorum*, published in Frankfurt by Varrentrapp and Wenner in 1799. Because they deal with the development of the embryo, these beautiful illustrations are generally regarded as complimentary to William Hunter's remarkable *The Anatomy of the Human Gravid Uterus Exhibited in Figures*, London, 1774, which is also in our collection.

Classmates Dr. William Feindel and Dr. Granville Nickerson celebrating the arrival of Soemmerring's *Icones Embryonum*.



In addition to the above acquisitions, the practised eye of Chris Lyons spotted the large folio work by Alexander Monro, primus, *Traité d'Ostéologie, Traduit de l'Anglois*...Paris 1759, a work in 2 volumes with 31 engraved plates, some of them life size. This fine book with plates by Jardinier, Aubert and Gobin is comparable to Cheselden's *Osteographia* of 1733, which we own, possibly the first publication to use a camera obscura to ensure the greatest accuracy. Recently restored thanks to the St. Andrew's Society of Montreal, *Ostéologie* is ready for consultation. The purchase of *A Collection of Rare and Early Pamphlets on Vaccination, London & elsewhere*, 1803-1809, brought us several pamphlets that we did not previously own.



Alexander Monro's Traité d'Ostéologie, Traduit de l'Anglois...Paris 1759.

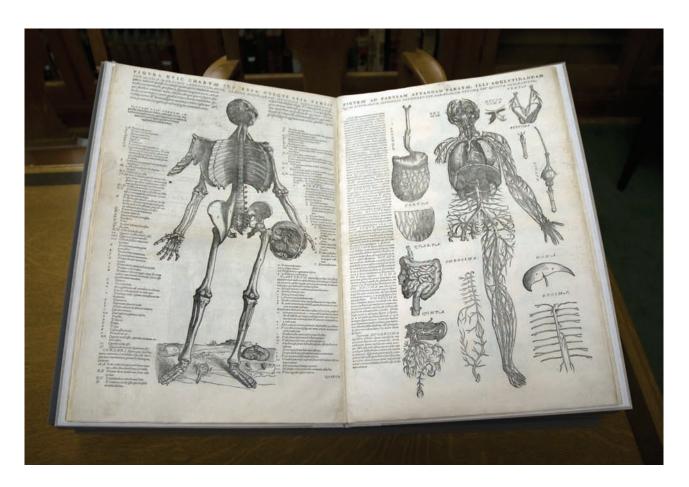


The money that you give us for conservation has resulted in the restoration of three different pieces from our collection, all with a strong association to William Osler. In 1911, Osler signed a broadside entitled "The Discovery of the Pulmonary Circulation" measuring 28 x 20 inches in an attempt to raise money for a monument to Michael Servetus. Servetus had published his theory on the circulation of the blood, in Christianismi Restitutio in 1553, 75 years before William Harvey. But Servetus seemed unable to avoid controversy and was burned at the stake, as was his book, on the order of John Calvin, due to his refusal to acknowledge the Trinity. Printed by the Oxford University Press and individually signed by Osler, only 30 copies are believed to have been published. According to Richard L. Golden and Charles G. Roland (Sir William Osler: An Annotated Bibliography with Illustrations, p.85) this is one of the rarest of Osler's publications. Our copy had been glued to a highly acidic card and over time became dirty and brittle, finally breaking in two. The broadside was painstakingly lifted off the card by a contract paper conservator, Chantal Emond, who washed the document and filled in the missing bits. It is now framed and displayed in the W.W. Francis Seminar Room. As for the monument, it was unveiled in Vienne, France on the 15th of October, 1911. The New York Times, reporting the unveiling 7 days later stated that William Osler was present, part of a committee of the medical profession that undertook to ensure adequate medical representation at the ceremony.

The discoverer of antisepsis, Joseph Lister, fared better than Michael Servetus. And although it took time to be accepted, he and his work were celebrated during his lifetime. Osler's friend, Archibald E. Malloch was the first doctor to practise antisepsis in Canada and his notebook, placed in our archives, containing notes taken while acting as Lister's houseman in Glasgow from May to November, 1868 had become brittle and loose over time. After Terry Rutherford's careful conservation, the notebook is now in sturdy condition and is ready to be consulted, thanks to your support.



The same year that Vesalius published *De Humani Corporis Fabrica*Basel, 1543, his *Epitome* was also published. This volume was composed of a series of plates from the larger work. Vesalius was convinced from the beginning that enlarged anatomical plates from *De Humani* should be published separately for teaching purposes so that they could be seen more easily in a crowded class. With the passage of time, the volumes became worn and extremely scarce. Osler's copy was in unusually poor condition, and in addition to battered pages, it had been rebound in highly acidic paper. Once again, thanks to your support, we were able to engage Terry Rutherford to repair the tears and produce a suitable binding and box. As often happens, the week after it returned, a researcher asked to consult it and was impressed by its condition.



Andreae Vesalii suorum de Humani corporis fabrica librorum epitome, Basileae, 1543.

One of our most unexpected donations came from Jane Futcher, granddaughter of Marjorie Howard Futcher and daughter of the late Palmer Futcher. Jane gave us the Bible that Revere Osler presented to his godson Bruce Futcher in 1911. Neither Bruce nor his godfather survived World War I, Revere perishing from his wounds in Belgium and Bruce in Baltimore, from Spanish influenza. But Bruce's mother kept the Bible and used it for many years. Jane felt that the Osler Library would be a suitable home for her grandmother's treasure and accompanied the gift with a note to the effect that as a child, she often wondered why her elders made so much of the Osler family. "What relevance to my sixth grade hockey team was the fact that Doccie O had given Dad his son Revere's microscope – the one my sister and I studied pond samples with? It all seemed like ancient history to me." She goes on to describe how over time she became more aware of Osler's importance to her family.

Michael Bliss's *William Osler: A Life in Medicine*, also excited my interest in Sir William. I stumbled across the book on the new arrivals shelf of my local library in Novato, CA, where I lived...I took the volume on vacation with me to Mexico in the unlikely event that I might find it amusing as I lay on the beach. How surprised I was to discover the doctor's life was more riveting than the latest Scott Turow or P.D. James, my usual beach fare....Of course the references to my grandparents and my knowledge of how close they had been to him heightened my interest.

So, now, with great respect for Dr. and Mrs. Osler and Revere, as well as for my great grandparents, grandparents, parents and Uncle Brucie, I pass this small red leather Bible on to the Osler Library at McGill, a place where I know it will find a home as loving as the one my grandmother, Marjoire Howard Futcher, gave it for fifty-seven years.

This note launches our annual appeal. It is my final appeal to you, as I will be retiring in May. This Library is unique and I will miss the collections, colleagues, researchers and especially Osler's influence that I see at work here every day. People come here for information, inspiration and even rejuvenation. Service to humanity is never far from the surface. Your support provides the continuity over the years and all of us who are privileged enough to work here, are very grateful to you.



Parrela J. Miller

Notes from the Osler Library

Dr. Jane Yeats Curator of the University of Cape Town Medical Museum was one of our Osler Library Research Travel Grant winners this year. She is working on a revision of Maude Abbott's classification system for pathology museums which she sees as a system with potential for international use. Dr. Yeats not only mined our Abbott papers, she also was able to visit McGill's pathology collections to appreciate Abbott's work first hand.

Dr. S. Nassir Ghaemi, Professory of Psychiatry and Director of the Mood Disorders Program at Tufts Medical Center in Boston, has just published a book with the Johns Hopkins University Press entitled, *The Rise and Fall of the Biopsychosocial Model: Reconciling Art and Science in Psychiatry*. Dr. Nassir writes that he is heavily indebted to Osler's work and that the publication contains an extended discussion of Osler's ideas relating to psychiatry.

ROLAND'S CANADIAN MEDICAL HISTORY MINIATURES

BY CHARLES G. ROLAND

J. G. Adami and Canadian Pathology

John George Adami (1862-1926) was born in Lancashire into a family with a long history of medical practice, beginning in Italy. Throughout his life, Adami found himself alternating between the languid and casual influence of his Mediterranean fathers and the driving work ethic that came from his English mother's side of the family.

He was educated in English public schools and at Cambridge, which he entered in 1880. Four years later he graduated in medicine and began postgraduate studies. Then, in 1889, the career almost ended. Doing autopsies on rabid deer, Adami cut himself badly. He was rushed to Paris and underwent painful treatment by Louis Pasteur -- and survived.

Later he returned to Paris to do research with Pasteur and Metchnikoff before accepting an appointment at Cambridge. But then, in 1892, he heard that a Chair in Pathology was to be established at McGill, and allowed his name to be put forward. He received the appointment and spent twenty-five happy and productive years there.

One of his many accomplishments was the organization and professionalization of the McGill Pathological Museum. This was a chaotic mess when he arrived in Montreal. Some specimens dated back to the school's founding in the 1820s; several hundred had been created by William Osler during his tenure in the 1870s and 1880s. Adami created order and logic to the collection and soon had a valuable teaching tool that was heavily used by succeeding generations of medical students and residents. Some of the early specimens are on display to this day.

Of more widespread influence were his textbooks on pathology. These were *The Principles of Pathology* (1908-09), with A.G. Nicholls, and *A Textbook of Pathology for Students of Medicine* (1912) with John McCrae. These books were used widely throughout the English-speaking world. Later, he also wrote *War Story of the Canadian Army Medical Corps* (1919).

In addition to his many professional scientific interests, of which tuberculosis was perhaps the chief, Adami also became involved, as had his predecessor before him, William Osler, in veterinarian pathology. His research into Pictou Cattle Disease led to a government appointment as bacteriologist. He became a sought-after speaker. Adami had interests beyond medicine and science. In 1916, T. Archibald Malloch was preparing, under William Osler's guidance, a publication detailing the lifelong friendship of two 17th-century men: Sir John Finch and Sir Thomas Baines. Adami, it turned out, was an expert on the pair. He offered his assistance

to Malloch – who had, incidentally, been his student at McGill.

He established and supported organizations both within McGill and outside it. In 1894 he married; unhappily, his wife was frequently ill, and died in 1916. They had two children.

Comparisons of Adami and Osler seem inevitable. Adami apparently had a sunny disposition (though one might not suspect it from his portrait), penchant for long hours of hard work, and enthusiasm for teaching as well as for every aspect of the field of pathology. They made long-lasting friendships (including with one another). Moreover, both men studied and wrote medical history. The idea for a history of the Canadian medical presence in the First World War began with a letter from Adami to Osler, a month after war was declared. And both men had a profound influence at McGill, and much more broadly with their respective textbooks. When war began in 1914, Adami joined as a private in the McGill University Battalion, an occurrence that would be remarkable today but that typified the flocking to the colours that characterized the first flush of patriotic enthusiasm. He was also on the staff of No. 3 General Hospital (McGill). By March 1915 he had soared to the rank of Lieutenant-Colonel.

When war ended, Adami felt at loose ends. He had spent the war years in England and had re-established friendships and contacts there. His wife had died in Montreal in 1916 so his reasons for returning to Montreal were diminished. Thus he was open to an invitation to become Vice-Chancellor of the University of Liverpool. However, within a few years he was seriously ill. In 1924 he was diagnosed with what was apparently a variant of leukemia, from which he died three years later. He worked hard till nearly the end.



John George Adami (1862-1926)

MEDICINE, ART AND VISUALISATION IN THE NINETEENTH CENTURY BY CHRISTOPHER LYONS



ne of the most exciting things about working at the Osler Library is seeing the variety of research being done. Our collection supports diverse research in a number of disciplines; from medicine and history to English literature and architecture. One particularly active group are art historians. Their approach brings new insights into our rich collection of historical anatomical atlases, illustrated journals and print collection (which is currently being digitised). Wishing that they could share their work with our current users, as well as those who may not be aware of the Osler Library, I was delighted that three scholars were willing to hold an afternoon of presentations, discussions and a visit to the Osler Library to see some of the original works referred to in their talks. The result, Medicine, Art and Visualisation in the Nineteenth Century, was held in the Meakins Auditorium of the McIntyre Medical Sciences Building on September 29th. A diverse group of over 60 people attended, including professors and students in art history, medicine and the Social Studies of Medicine, from McGill and beyond, as well as the general public.

The first speaker was Professor Mary Hunter, Assistant Professor in the Department of Art History and Communication Studies at McGill University. She specializes in nineteenth-century French art and visual culture, including the intersections between art and medicine, on which she has written several articles and an upcoming book tentatively entitled Medical Bodies: Art, Science and Sexuality in late Nineteenth-Century France. Last winter, Professor Hunter held several sessions of her graduate seminar Medical(izing) Bodies in Nineteenth-Century France in the Osler Library. Students studied material from our collection, including some of the prints recently donated by Mr. William Helfand (see OLN #113, spring 2010). Her talk, entitled Realisms Gone Mad: Hysterical Pictures, Performances and Procedures at the Salpêtrière Hospital, focused on the ways in which Dr. Jean-Martin Charcot and others in the French medical profession used visual imagery both to present hysteria as a legitimate illness and to promote their approach to hysteria as rational and objective. By analyzing André Brouillet's 1887 painting Une Leçon clinique à la Salpêtrière and other contemporary works such as photographs and drawings, Dr. Hunter described how these images appeared as objective depictions of reality but were in fact mediated by a number of artistic and intellectual conventions.

The second speaker, Professor Allister Neher, teaches the history of art theory and the philosophy of art for the Humanities Department of Dawson College in Montreal and has been very involved with the Osler Library. In addition to carrying out research on the intersection of science and art in anatomical images, he was the

curator of an exhibition entitled Art, Anatomy and the Representation of Knowledge in 2008 (see OLN #109, spring 2008). He has also addressed the McGill medical students' Osler Society and brought several of his classes to the Library. His presentation, Robert Knox and the Anatomy of Ideal Beauty, opened with an evocative description of the work of the "resurrectionists" – grave robbers who supplied anatomists with cadavers. He outlined how the notorious Edinburgh team of Burke and Hare went well beyond digging up corpses in supplying their client Dr. Robert Knox, who was a towering figure in both anatomy and art theory. When his connection to Burke and Hare was revealed Knox's career was irreparably damaged. Dr. Neher's talk was an attempt to get beyond Knox's notoriety and revive his contribution to anatomy and art theory, which was essentially to counter the ideas of Charles Bell and others about how to teach anatomy to artists. Specifically, he criticized realism, fearing that the use of corpses would skew the artists' vision. Instead, he felt that the focus should be on idealised bodies, such as the Venus de Milo.

The final speaker was Dr. Cindy Stelmackowich of Carleton University's School for Studies in Art and Culture. She carried out research for her 2010 PhD dissertation on a visual and discursive analysis of nineteenth century anatomical atlases using the Osler's extensive collection. As part of her work she analyzed the evolution of anatomical atlases during the first half of the nineteenth century using the books themselves, publishers' archives and other sources. This was the focus of her talk Dissected Bodies as Books: Illustrated Nineteenth Century Anatomical Atlases as Medicine's New Teaching Texts. She described how the large atlases produced in the early part of the nineteenth century, such as the multivolume Traité complet de l'anatomie de l'homme by Jean Marc Bourgery, were essentially luxury goods. Artistically pleasing, the illustrations conformed to classical ideals of beauty. These expensive publications were printed on large, high quality paper in limited editions and were purchased by well established professionals and institutions. Part of the appeal of these books may have been the desire of medical professionals to demonstrate their elevated sensibilities through the display of classical visual imagery. In contrast, a very different type of illustrated anatomical atlas emerged later in the century in the form of much smaller and less expensive books meant for students. In these volumes the utilitarian predominated over the artistic in order to present clear information about the body. The most famous example is Henry Gray's Anatomy: Descriptive and Surgical, first published in 1858. Clearly, ambitious medical publishing houses were able to produce different sorts of anatomical atlases to meet various needs within the profession.

After the talks and lively question and answer periods, a number of attendees went to the Osler Library to see some of the works discussed. Each of the speakers presented one or two works, and then guests were invited to spend time to look over and discuss each one. At the end many expressed the hope that similar events be held in the future.

al-Ghâfiqî Project Consultative Workshop 19-20 August 2010 By Faith Wallis

n 19-20 August, a select company of scholars from around the world met at McGill under the auspices of the Osler Library and the Institute of Islamic Studies for an innovative "consultative workshop". The goal of the workshop was to establish the foundations for producing a scholarly facsimile of one of the Library's most famous treasures, B.O. 7508, a 13th century illustrated copy of the first half of the Kitāb fī al-adwiyah al-mufradah (or Herbal) of Abū Ja'far Ahmad ibn Muhammad al-Ghāfiqī (d. 1165 CE). Publishing a facsimile of a manuscript may seem like a purely technical (and financial!) problem. In reality, it poses dozens of conceptual and methodological problems. Should the accompanying edition be a straightforward transcription of the text in the Osler manuscript, or should the goal be a critical edition that would compare every available copy of the text? What kind of philological expertise would be required to deal with al-Ghāfiqī's multilingual vocabulary for medicinal plants? What kind of scientific expertise would be necessary to identify them? What about the manuscript itself? Can we be certain of its date and origin? When, where, how and by whom were the illustrations made?

A project of these dimensions will require major research funding, but successful application for such funding will depend on informed answers to these fundamental questions. To that end, an ad hoc working group comprising Pamela Miller (History of Medicine Librarian, Osler Library), Prof. Jamil Ragep (Director of the Institute of Islamic Studies), Adam Gacek (Institute of Islamic Studies), and Prof. Faith Wallis (Department of Social Studies of Medicine) decided to call on the experts. By bringing them together face to face, and in the presence of the manuscript itself, the team hoped to stimulate the kind of cross-disciplinary dialogue and debate that would shine some light on the path ahead – and it was not disappointed.

The format of the workshop was a series of roundtables, structured around the key dimensions of the project. Each participant was tasked with opening a roundtable by presenting his or her reflections on one of the questions confronting the project. Adam Gacek opened the debate on the different possible editorial strategies by synthesizing our knowledge to date of the manuscripts of al-Ghāfiqī and significant works of related literature. Oliver Kahl (University of Manchester) offered an incisive analysis of the linguistic and philological issues, pointing to the difference between the core text of the herbal, which is composed in relatively unproblematic Arabic, and the multilingual etymological inventories of names for "unfamiliar" plants. Uncovering al-Ghāfiqī's source materials, and deducing how he used and transformed these materials, was the problem addressed by Leigh Chipman (Hebrew Uni-

versity). But a text like this, and a manuscript like B.O. 7508, was not created in a historic vacuum. Raphaela Veit of the University of Cologne laid the groundwork for assessing the milieu of al-Ghāfiqī's Spain on the one hand, and of the people who made and used the manuscript a century after al-Ghāfiqī's death. The world beyond the words of the herbal also comprises the reality of the plants themselves, and how al-Ghāfiqī might have encountered them. Our guides into the thickets of historical botany were the best in the field: Alain Touwaide of the Smithsonian Institute, architect of the Institute for the Preservation of Medical Traditions. and Efraim Lev (University of Haifa), who has worked on identifying plants mentioned in the documents of the Cairo Genizah. Perhaps the most difficult question of all is how to evaluate the medicinal properties of the plants mentioned in the herbal. Dr Mais Kataya, a pharmacist and historian from the University of Aleppo in Syria, offered stimulating reflections on this problem. In the end, however, the project will have to take stock of a very particular reality: the Osler manuscript itself. Jaclynne Kerner of SUNY New Paltz is one of the few art historians who have done in-depth work on Arab-Islamic scientific manuscripts. Her expert eye detected numerous puzzles and anomalies in the illustrations which suggest that the manuscript may have been worked on over many years, perhaps many centuries. Finally, the eminent historian of medicine Hisa Kuriyama (Harvard University) offered some bold suggestions for ways in which we might "publish" the project digitally, to reach audiences both within and well beyond the scholarly community.

Most of the workshop, however, was taken up with discussions and debates that brought the participants' different kinds of expertise into lively engagement. The al-Ghāfiqī team and the Osler Library is deeply grateful for their intellectual generosity and their keen interest in the project. We are now moving forward with a realistic plan for making it a reality.



Art Historian Jaclynne Kerner from Suny New Paltz examining an illustration in the manuscript.

FRIENDS OF THE OSLER LIBRARY

The Library gratefully acknowledges the support it has received from Friends, both old and new, who have responded to the appeal for funds for the 2009-2010 academic year. Over the year, 180 Friends have given a total of approximately \$22,363. Those who gave their consent to publish their names are listed below. Most of the contributions have come from Friends in Canada and the United States of America. However, very welcome contributions have also come from several other continents.

The appeal to the Friends for the 2009-2010 academic year concluded on May 31, 2010. Contributions received after May 31, 2010 will be recorded in the 2011 fall issue of the Osler Library Newsletter.

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