



THE OSLER LIBRARY NEWSLETTER

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Osler Library of the History of Medicine, McGill University, Montréal (Québec) Canada

In This Issue

This issue features the Annual Appeal to the Friends of the Osler Library. Hopefully, it and the other articles will give you some idea of the activities going on here thanks to your ongoing support. The class visits, the additions to our collection, the visiting researchers, the online resources, the publications and the exhibitions are some of the direct and indirect results of your generosity. On behalf of a great many people we thank you.

This issue opens by describing a very special day at the Library. Outgoing Principal Heather Munroe-Blum was very touched by the generous gesture made by a number of the library's supporters, including the Friends. We are blessed with a world class collection, but this means that filling in holes can be very costly. The issue also includes reports from three of the four graduate students whose research trip was sponsored by the Research Travel Grant and the Nickerson Fellowship. It is delightful to be able to support the work of these emerging scholars. We also have notices of two books published by the Osler Library and our current exhibition. Osler Library Curator Joseph W. Lella has written a thoughtful piece comparing the lives of two sons of the manse, William Osler and Norman Bethune.

We hope you enjoy the newsletter.



Rare Eighteenth Century Anatomical Atlas Donated to Celebrate Outgoing Principal

On Tuesday, April 30th, the Osler Library had the privilege of hosting a significant event honouring outgoing McGill Principal Heather Munroe-Blum. That afternoon, Principal Munroe-Blum was presented with a rare and historically important work that was purchased, restored, and donated to the Osler Library through the generous support of a number of people in recognition of her decade-long career at McGill as Principal and Vice-Chancellor. McGill University Chancellor Mr. H. Arnold Steinberg and University Provost Professor Anthony C. Masi joined Osler Library Curators, faculty members, students and friends for a celebratory afternoon at the library as Principal Munroe-Blum graciously acknowledged the gift of the *Exposition anatomique de la structure du corps human* by Jacques Fabien Gautier d'Agoty to the library in her name.

The *Exposition anatomique* was published in France in 1759. Its creator, d'Agoty (1716-1785), was an artist who trained in colour printing with Jacob Christoph Le Blon (1670-1741), a German painter and engraver who first developed the technique of colour mezzotint printing. Mezzotint is the name of a particular intaglio printing technique that is able to create dramatic shadow and depth in the printed image. In this process, a design is incised onto a surface, usually a metal plate, and then the negative space in the image on the plate is roughened up and pitted with a tool called a rocker. The resulting image is created by the ink in the grooves. Half-tones and shading are achieved by the gradations of the pitted surface. Le Blon's colour mezzotint process involved making multiple engraved plates, one for each colour of ink, and then overlaying them. His original technique involved the use of red, blue, and yellow inks to create a range of colours. He later added a fourth layer of black, which is responsible for the richness of colours found in the *Exposition anatomique*. Inspired by his master, d'Agoty took up the difficult and elaborate project of printing a complete, life-sized anatomy in colour. The resulting book is an elephant folio with nineteen pages of text and twenty colour mezzotint plates.

With the acquisition of the *Exposition anatomique*, the Osler Library joins the ranks of only a handful of libraries that hold copies. These include institutions such as the Bibliothèque nationale de France, Yale University, Harvard University, and the University of Edinburgh. The Osler copy is the only known one in Canada. We are extremely grateful to the several generous donors who made this splendid gesture possible and enabled us to add this extraordinary work to our collection, where we are pleased to report it has already garnered much interest from researchers and students:



Head Librarian Chris Lyons presents the *Exposition Anatomique* to outgoing Principal Heather Munroe-Blum

Mr. H. Arnold Steinberg, Dr. C. Colleen Cook on behalf of the McGill Library, Dr. Rolando Del Maestro, Dr. David Eidelman on behalf of the Faculty of Medicine, Dr. William H. Feindel, the Friends of the Osler Library, Dr. Dwight Emmerson Moulin and Dr. Seang Lin Tan.



Principal Heather Munroe-Blum flanked by Chancellor Mr. H. Arnold Steinberg and Dr. Rolando Del Maestro (left) and Honorary Osler Librarian Dr. William Feindel, Dr. Colleen Cook, Mrs. Sheila Goldbloom, Mr. Robert Rabinovitch, Mr. Christopher Lyons and Dr. Richard Cruess (right)

Dr. Dimitrije Pivnicki Award in Neuro History

We are pleased to announce that the Osler Library and the Montreal Neurological Institute and Hospital are offering a new award to support research in the field of neuropsychiatry and neuro-history. The Dr. Dimitrije Pivnicki Award in Neuro-History was established in 2012 by the family and friends of Dr. Pivnicki (1918-2007), who practiced and taught psychiatry at the Allen Memorial Institute of McGill University from 1956 to 1996. With degrees in law and medicine, he had a wide and eclectic interest in classic and modern languages and literature, and a keen appreciation of the history of neuropsychiatry, an area of scholarship that will be advanced by this award.

The award will allow a student or scholar to carry out research utilizing the rich archival and monographic holdings at McGill University, such as the Penfield Archive in the Osler Library, and other resources available at the Osler Library, the Montreal Neurological Institute and the McGill University Archives. The Osler Library's collections are listed in the McGill Library Catalogue and the Osler Library Archives Collection website.

The award is open to students at McGill University as well as external students and researchers. This award compliments the Mary Louise Nickerson Fellowship in Neuro History (see <http://www.mcgill.ca/library/branches/osler/nickerson>). More information can be found on the Dr. Dimitrije Pivnicki Award in Neuro-History website <http://www.mcgill.ca/library/branches/osler/pivnicki>

Osler and Bethune: “Sons of the Manse” and their “Angelical Conjunction of Medicine and Divinity” by Joseph W. Lella

This paper was originally given at the American Osler Society's 42nd Annual Meeting, Chapel Hill, North Carolina, 2012. On an earlier vacation trip in Southern Ontario I stopped off at the Norman Bethune National Historic Site in Gravenhurst. The site is at Bethune's birthplace, his father's manse when he ministered to a Presbyterian congregation there. I was struck by the site's physical and spiritual proximity to the place where William Osler was born. A 90-mile line from Bond Head, Ontario, connects the birthplaces of these men, perhaps the world's most famous English-speaking physicians. Born 41 years earlier, Osler (1849-1919) lived 21 years longer than Bethune (1890-1939) because of the very different lives they led.

Commemorative plaques celebrate them: Willie Osler, the son of a local Anglican clergyman, “revolutionized methods of medical instruction” and is “known as the father of clinical medicine.” Norman (Beth) Bethune, an innovative surgeon, organized mobile blood transfusions during the Spanish Civil War, then in China, where he “worked tirelessly... with the ... National Revolutionary Army [and was] buried in the Mausoleum of Martyrs.” Not mentioned is Bethune's father, who was a fiery evangelical minister, out to convert the world to Christ, nor the fact that Bethune became a militant Communist.

It is on similarities and differences in paternal heritage and their impacts on Osler and Bethune's lives that hang our tale. Some researchers say that ministers' sons, sons of the manse (a reverend's residence), tend to become either “devils” (imps) or “angels” (*putti*)¹ because of the expectations laid on them.

Which was Willie? Or Beth? And what of the “angelical conjunction of medicine and divinity” that Osler commented on (after Cotton Mather)?²

Early Life of William Osler

Willie was the son of an established Anglican manse, his father, Featherstone, was a traditional pastor whose large family moved only once, from Bond Head to Dundas, Ontario. After 19 years in Bond Head, the Reverend had exhausted himself tending a widely scattered flock, often giving “medical advice.” They were reachable often by horseback alone over muddy, sometimes impassable roads. In Bond Head, Featherstone and his wife Ellen knew that their children could not receive the education that they would wish. Their living circumstances had improved (from a mud, dirt-floor out building to a large, house with a garden) but though dedicated to serving their flock (perhaps too much so) they tired of a place so peripheral to the more urbane society they wanted for their children. Featherstone asked for a transfer. His Bishop arranged a church in Dundas, a larger community with a better school for young



The Rectory at Dundas, Ontario. Black and white photograph after 1849, CUS_031-015A_P, William Osler Photo Collection, Osler Library.

children and social connections for all nine of them. The Oslers gained a more respectable home at the center of a larger and wealthier Anglican community. Canon Osler and his wife would remain there for the rest of their lives. Several of their sons would make “their clan,” as Bliss has said, “the highest achieving family in nineteenth century Canada.”³

The Oslers’ rise to distinction was not solely due to hard work. Willie’s grandfather, an English shopkeeper in Falmouth, wanted his sons to increase or least sustain the family’s status and character.⁴ He insisted they get a good education and helped pay for it. He also cultivated “useful connections.” Of course, he valued hard work too. Reverend Featherstone was a product of this ethic, and so were his sons.

Early on William wished to become a minister. “Matins and evensong,” he intimated, “sang the larger hope of humanity into [my] young [soul].”⁵ His lively spirit bridled at the Sunday discipline.⁶ Though inclined to outlandish pranks (his devilish imp?), Willie absorbed the language and spirit of the King James Bible, as well as the ordered habits of the institutional church.

As a young man, his goal changed to medicine, the profession of Uncle Edward—the pride of his father’s family. Early mentors were well connected, science-oriented churchmen. He imbibed a love of science compatible with medicine and religion from his priest-teacher W.A. Johnson at Trinity College School, a private Anglican establishment.

Johnson’s friend James Bovell, a physician become minister, was Willie’s medical school mentor at the University of Toronto. Later he transferred to the more professionally and scientifically beneficial McGill University. Even there, still under Johnson’s influence, he regularly worshiped at St. John’s Anglo-Catholic Church rather than a more “evangelical” one like his fathers’.

His childhood and adolescence progressed smoothly from a socially secure, early and “proper” nest, through “proper” schools where he excelled, into “proper” universities where he excelled even more. And throughout his life, as Michael Bliss observed, “No one could hear him talk for five

minutes...[without knowing] from his biblical language, allusions and Christian imagery that he had a religious cast of mind, even if not rigidly adhering to a particular creed.”⁷ He was still a child of the manse.

Early Life of Norman Bethune

In contrast, Beth was the son of a more radical, lower church Presbyterian minister who moved his family from place to place, largely among small, Ontario towns. Malcolm Bethune preached service to all and a repressive morality that congregations seemed to find harsh. This helped keep him “on the road.” Finances were always tight. Beth often worked to help support the family and at times they took in boarders.

As he matured, Norman found his father’s rules and morals “unbearable.” They were often in bitter conflict. Despite this, he did become familiar with the Bible and absorbed its emphasis on serving the needy. An acquaintance “during his early teens remembered him as ‘lively, intensely religious, and ... vehemently rebellious.’ ... Later in life, he abandoned his ... Christianity, [but still held to a] ... black-and white view of the world ... the duty to destroy evil ... to assist the sick ... and the underprivileged.” Service and rebellion (angels and devils) remained the poles of his being throughout his life.⁸

Norman was educated in local public schools and worked summers as a young man in lumber camps. He loved their rough life and manners, the outdoors, and hard physical labor. In 1905, the family settled, for 3 years, in Owen Sound (their tenth residence in fourteen years) where Norman benefited from the excellent, public, Owen Sound Vocational and Collegiate Institute, “a higher quality of education than he had ever had.”⁹ Norman responded. He graduated with honors in 1907, a remarkable achievement since he “spent little time on his studies” ... because of “extra-curricular activities and hobbies [student government, basketball, collecting insects, scientific experiments at home]”¹⁰ But there was always conflict with parents. Norman left home after graduation. “His mother lamented long afterward: ‘He was my bad boy—a pain in the neck when he was home and a pain in the heart when he was away.’”¹¹ This refrain could have been echoed later in life by a series of women friends.

Following in the footsteps of a grandfather, perhaps under his mother’s influence, Norman decided to become a surgeon. Despite her strictness, Norman always loved and was eager to please his mother. She “encouraged a career in medicine to express the family ideals of service... to humanity.” When Bethune was an infant, “she had placed some of his grandfather’s surgical instruments near his cradle.” When he was older “she presented them to him along with a brass nameplate bearing the inscription “Dr Norman Bethune,” that “he proudly tacked to his bedroom door.”¹²

But first, he had to study and work hard to get accepted and pay for studies at the University of Toronto and McGill. He took summer work on lake boats, on northern logging and construction sites, then as a schoolteacher holding his own among roughhouse youngsters. He even led religious services from time to time. Norman studied hard to get good

grades in medical prerequisites. He was ultimately accepted at the University of Toronto in October 1912. Before completing his degree, however, the “Great War” broke out in 1914. “Proud of his British heritage” and longing for “the thrill of adventure”, Beth joined up. A “Bethune family story,” says, “he was the eighth man in Toronto to enroll.”¹³ Late in 1915, craving action, he was assigned to a battlefield medical unit. He received a serious shrapnel injury in one leg. After treatment in England, he was declared unfit for service. Discharge papers noted an “exemplary” military character.¹⁴ In Toronto he finished medicine in a special accelerated program in December of 1916.

After a brief *locum tenens* in Ontario, he enlisted again, now in the Royal Navy as a shipboard physician. He caught the Spanish flu in 1918. In 1919 he requested demobilization and was approved. At 30 years old, he had faced and survived “the tragedy and horror of war and the greatest pandemic in modern history.” He was ready to begin his medical career in earnest.

Later Life of William Osler

Willie studied and worked at elite European, North American, and British universities. He was a “club man” and served many professional organizations with distinction. While Regius Professor of Medicine at Oxford, King George V created him Baronet. His teaching, clinical work, and writings included the widely used textbook, *The Principles and Practice of Medicine*, and historical, biographical, and “lay sermons” that saw him adopted as a mentor and lionized by students, peers, adoring patients, and public alike. His steady rise upward was filled with accomplishment. Private life was impeccably respectable. In his published lay sermons, Osler defined his medicine as analogous to the church—established worldwide (“catholic”), “holy” or ethical, and “apostolic” in continuity from its scientific and clinical founder, Hippocrates. It was a brotherhood with a noble mission.¹⁵ He has become a patron saint whose name is perpetuated by medical societies, “shrines,” schools, clinics, and hospitals. At the long apex of his career, what he would call his period of “chocolate cakes and ale,” he enjoyed a material lifestyle befitting the most revered medical practitioner of his age. Occasional practical jokes and parodies expressed whatever devilish imps his spirit harboured. Still, he remained the quintessential medical gentleman.

Hearing that his only child had been killed in 1917 on the

battlefield in World War One, Osler wrote in his daybook, “The fates do not allow [my] good fortune ...to [follow] me to the grave—call no man happy till he dies.”¹⁶ Unhappiness struck late and hard, but Osler survived it and died content in 1919, surrounded by family and close friends. The Anglican hymns of his childhood accompanied him to his grave—in all, a son of the manse.

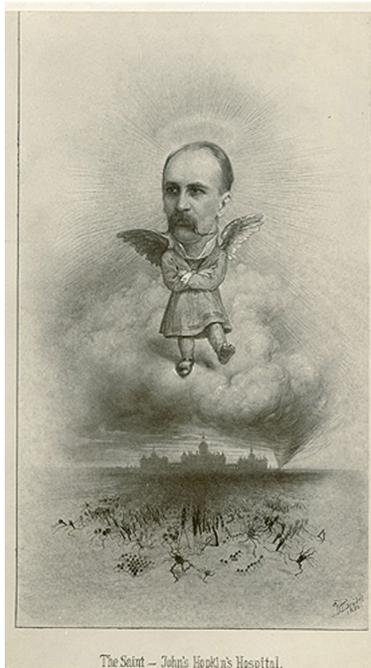
Later Life of Norman Bethune

Bethune’s surgical career began with post-graduate training and clinical work in Britain, then practice in Montreal at McGill University and other hospitals, later in Detroit, Michigan. His work was marked by contrasts. Though praised for his skill he was criticized for operating too quickly on cases that were too far-gone. “Better try than let them die” could have been his motto and service ethic. His innovations in instrumentation and technique were valued but his rebellious intolerance of superiors and egoistic manner were resented. His personal life was unconventional, marked by many moves, alcoholism, and a succession of sexual relationships. Nowhere fully at home, some saw him as plagued by the early insecurity of a life of constant movement. Throughout all this, he earned and spent significant sums and cultivated the good life, beautiful and intelligent women, good food and drink, taste and skill as a writer, speaker, and artist,

In Montreal he co-founded an art school for disadvantaged children in his own apartment. But he was restless, searching, it seems, for some over arching cause to which he could dedicate all his energies. His own tuberculosis and stay at a sanitarium prompted him to innovate in its surgical treatment but also to appreciate its social roots. After a trip to Russia, he became an advocate for publicly funded medical care in Canada. He joined the Canadian communist party.

During the Spanish Civil War, from November 3, 1936 to June 6, 1937, he raised money along with other Canadians then ran a battlefield blood transfusion service. But his personal demon, his self-centered rebelliousness, haunted him and led to conflict with Spanish and Canadian comrades. He returned to Canada and campaigned for socialized medicine. Ultimately, in January 1938, with meager financial support he went to China. As always he was impatient to be in the thick of things, now in the battle for world socialism. He joined Mao as a medical officer in the war against Japanese invaders. He had said: “My father was a Presbyterian minister [of] the... evangelical movement...their slogan was ‘the world for Christ in one generation,’ and that is my slogan.” “The world for Marx” was “in harmony with his deepest impulses.”¹⁷ Communism and China’s battle gave him goals and whatever stability he would ever achieve in life.

From January 1938 to his death on November 12, 1939, Beth worked feverishly to organize battlefield hospitals, surgery, and practical medical training for Chinese peasants. Unable to speak Chinese without an interpreter, he wrote at every possible moment: lengthy and detailed reports on his medical work, plans for their future, and



Drawing of Osler by Max Brödel, “The Saint – John’s Hopkin’s Hospital.” Black and white cartoon, 1896, CUS_046-007B_P, William Osler Photo Collection, Osler Library.

many letters, short stories, and poems. He operated at the front in primitive conditions. He was praised by all, from Mao Zedong downwards.

It is true, I am tired, but why shouldn't I be happy...? First I have important work that fully occupies every minute ... More than that—everything is given me. No wish, no desire is left unfulfilled. I am treated like a kingly comrade... among comrades to whom communism is a way of life... simple and profound, unconscious as the movements of their lungs, automatic as the beating of their hearts.¹⁸

Yet he did miss his former “bourgeois” life. Writing to a friend:

I dream of coffee, of rare roast beef, of apple pie and ice cream. Mirages of heavenly food! Books!—are books still being written? Is music still being played? Do you dance, drink beer, look at pictures? What do clean white sheets in a soft bed feel like? Do women still love to be loved?¹⁹

Beth died of an infection from operating without gloves in a cave close to the front. On his last birthday he had written: “I am very happy. I am content.”²⁰

Bethune's medicine was the scientific tool of a crusade different from his father's but similar: a crusade to achieve world revolution and an egalitarian society. Like Osler, he too became a patron saint not of his profession but of international communism, of selfless service to China. There, his legacy is celebrated by a martyr's tomb, a medical school, an important place in the national educational curriculum, and in numerous posters and paintings. In Canada he is a symbol of ties to China. Universities have honoured him posthumously. There are commemorative statues and popular books, films, and plays deal with his life. Thousands of Canadian and Chinese tourists visit his birthplace.



Bethune operating on the battlefield. Colour print ca. 1973 from the Osler Library Prints Collection, OPF000217.

Concluding Comparisons

Osler and Bethune—physicians, Canadians—were sons of different manses at different historical moments, each perhaps having different “devilish and angelic quotients.” Each assimilated a linked but different religious heritage.

Each became patron saint of a different medicine. Each received the high accolades of their chosen world—accolades that perhaps in their youth as sons of the manse (in a lesser or more conventional way) might have been expected of them, but which deep down, as loftier and less conventional, they might also have expected of themselves.

Were their conjunctions of religion with medicine “angelic?” Osler might put it in the words of St. Paul: they had “diversities of gifts but the same spirit,” a spirit of service working within them.

Do they offer us lessons? I suppose only one—to be made particular by each of us, to identify, examine, assimilate, and act upon the best our heritage has to offer.

References

Sir William Osler's religious upbringing has always seemed to me of crucial importance to an in-depth understanding of his life and work. This has been touched upon in the work of other scholars and in key passages in Osler's own writings. My 2009 Presidential Address to the American Osler Society in the guise of Sir William was a humorous but also serious expression of this insight. This talk with detailed references can be found in an earlier issue of this newsletter: “A Doctor's Religion,” *Osler Library Newsletter*, no. 113 (Spring, 2010): 5-8, online at www.mcgill.ca/files/library/OLN113.pdf. The talk and its references, with those in the reference that follows, may be considered a foundation for my treatment of Osler in the current paper. (See my contributions to an American Osler Society Symposium, “Constructing History in Biography: A Symposium On *William Osler: A Life in Medicine*,” *Bulletin of the History of Medicine* 75, no. 4 (Winter, 2001): 740-770.)

The basic facts on which the current reflections are built have been assembled primarily from those well-established in the most authoritative biographies of both Osler and Bethune: Harvey Cushing, *The Life of Sir William Osler* (Oxford: Clarendon Press, 1925); Michael Bliss, *William Osler: A Life in Medicine* (Toronto: University of Toronto Press, 1999); Roderick and Sharon Stewart, *Phoenix: The Life of Norman Bethune* (Montreal: McGill-Queen's University Press, 2011), and Larry Hannant (ed.), *Politics of Passion: Norman Bethune's Writing and Art* (Toronto: University of Toronto Press, 1998). The facts are well known and need little detailed referencing here. Sources of key elements of my interpretations are signaled in the text and can be found below.

Notes

¹Allman, T. “An Analysis of the Stereotypes of Preacher's Kids and its Application on their Spouses.” (MA diss., Graduate College of Marshall University, 2007). I am indebted to Dr. Richard Cruess for suggesting related insights from childhood memories. ²Osler quoting Cotton Mather in “Sir Thomas Browne, 1905,” in *The Collected Essays of Sir William Osler*, ed. John P. McGovern and Charles G. Roland (Birmingham, AL: Classics of Medicine Library, 1985), 3:350. ³Bliss, 28-31. ⁴Ibid., 7. ⁵Adapted from William Osler, “*Science and Immortality* (1904),” in McGovern and Roland, op. cit. vol. 1, 259. ⁶See Osler, William. “Introduction. The Collecting of a Library,” in *Bibliotheca Osleriana*, McGill-Queen's University Press, 1969. p. xxi. “Sunday reading is remembered as a trial. Even now to see a person with a novel on Sunday gives a reflex shock—a reminiscence of early training.” ⁷Bliss, 289. ⁸Stewarts, 13. ⁹Ibid., 18. ¹⁰Ibid., 18-19. ¹¹Ibid., 19. ¹²Ibid., 23. ¹³Ibid., 26. ¹⁴Ibid., 28. ¹⁵Middlebro, “Dr. William Osler: Some Reflections,” *Studies in Canadian Literature/Études en littérature canadienne* 5, no. 2 (1980). ¹⁶Cushing, Volume II, pp. 577-578. ¹⁷Stewarts, 123. ¹⁸Hannant, 285. ¹⁹Stewarts, 361. ²⁰Hannant, 329.

The Literature of Prescription: Charlotte Perkins Gilman and The Yellow Wallpaper. A Biography of Neurasthenia in the late 19th and early 20th Centuries

The Osler Library's latest exhibition, guest curated by Dr. Andrea Tone, provides a fascinating exploration of neurasthenia, a widely diagnosed but mysterious psychological illness, whose history is brought to life through materials culled from the U.S. National Library of Medicine, the Osler Library's rich repository of artifacts, and the guest curator's collection. The biography of neurasthenia is chronicled against a broader backdrop that illuminates significant developments in the rise of modern psychiatry, varied forms of patient narratives and activism, and how gendered expectations can frame, at times elusively, medical thinking, diagnosis, and care. *The Literature of Prescription* showcases the doctors who defined neurasthenia, the remedies people purchased to assuage it, and the efforts of one patient, Charlotte Perkins Gilman, to challenge the legitimacy of the disease and the therapy her doctor prescribed.

The exhibition runs from September to April, 2014 in the Osler Library and is accessible during library opening hours (9 am to 5 pm, Monday to Friday). Admission is free. This exhibition is co-sponsored by the Osler Library of the History of Medicine, McGill University, the Canada Research Chair in the Social History of Medicine, McGill University, and the United States National Library of Medicine, National Institutes of Health (loan of its travelling exhibition panels, September-November 2013).

The Literature of Prescription:
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An exhibition at the Osler Library of
the History of Medicine

SEPTEMBER 2013 TO APRIL 2014

Curated by Professor Andrea Tone, Canada Research Chair in the
Social History of Medicine, Departments of Social Studies of
Medicine, History and Classical Studies, and Psychiatry (Transcultural
Psychiatry), McGill University, and Chris Lyons, Head Librarian,
Osler Library of the History of Medicine, McGill University.

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This exhibition is co-sponsored by the Osler Library of the History of
Medicine, McGill University, the Canada Research Chair in the Social
History of Medicine, McGill University, and the United States National
Library of Medicine, National Institutes of Health (loan of its travelling
exhibition panels, September-November 2013).

William Osler Letter Index: A New Online Resource

The Osler Library is pleased to announce a new online resource now available to researchers. The William Osler Letter Index is a database that provides a quick and easy way to locate information within the material that Dr. Harvey Cushing collected for the publication of his Pulitzer-Prize winning biography of Sir William Osler. Cushing's collection of letters to and from Osler, manuscript excerpts, and research notes has long been an important feature of our archival materials and contains highly sought-after material for research. While researching *The Life of Sir William Osler*, Cushing sent out a call for those who had letters from Osler in their possession to send them to him for copying. In the end, he was able to gather together thousands of letters both to and from Osler, transcribing them and then returning the originals to their owners. He also made extensive research and biographical notes, all of which have been preserved.

A catalogue of these letters and other materials was previously only available in print at the library, but now descriptions are all online and researchers can search the database by sender, recipient, place of writing, year, and keywords in the brief abstract of each letter's contents. We have also begun adding further Osler material from other archival collections to the database. The Osler letters found in the Maude Abbott Collection (P111) and the Malloch Family Fonds (P107) are now also fully described in the database. Some headway has been made to add letters found in the Sir William Osler Collection (P100), although the vast number of these means that much remains to be done. Although the full text of letters is not available through this database, it is a tool that should greatly simplify the research process for those interested in Osler's life and interactions, and the medical life of the early twentieth century more generally.

The URL for the index is <http://osler-letters.library.mcgill.ca/>



Pox and the Pulpit: Approaching Catholicism and Smallpox Vaccination through the Osler Library By Sean P. Phillips

The fictional priest in Dr. Marc's *La Vaccine soumise aux simples lumières de la raison*, advises his doubting parishioners on the subject of smallpox vaccination. "I tell you thus," he concludes, "you will never regret that you have followed the divine precept: help yourself and I will help you!"¹ One example of a genre meant to educate general audiences as they faced public health officials operating in the rural departments of France, Marc's book also addressed the relationship between the growing infrastructure of medical practitioners and local civil officials and clergy. The local curé, in unison with the exhortations of his bishop, was expected not simply to relay public health directives from above, but also to preach from the pulpit, engage in debates with naysayers, and at times vaccinate parishioners himself. At the end of the nineteenth century, Georges Surlé would call this clerical role in preventative medicine the "soul of resistance to deadly scourges."²

I was privileged to spend four weeks this summer at the Osler Library pouring through rare print works on the propagation of the smallpox vaccine in France during the first half of the nineteenth century. This collection includes the advice literature mentioned above, along with medical dissertations, pamphlets, and government reports that describe the development of vaccination technique and engage in divisive questions of Divine Providence and the origin of disease. What unfolded to me was a story of close cooperation between clergy and the state from the earliest stages of the vaccine in France, a relationship that was punctuated at times by moments of uncertainty and misunderstanding.

Reports published by the Central Vaccine Committee, along with those of its satellite organizations established in major cities, were available to me as a starting point for my research. From 1803 until it was subsumed into the Royal Academy of Medicine in 1823, the committee was responsible for recording statistical data, coordinating the activities of its regional bodies, and propagating the vaccine. They worked closely with the Ministry of the Interior and the Ministry of Cults (responsible for religious institutions) in encouraging the country's bishops, consistories, and clergy to assist them in these efforts. The establishment of a medal to award zeal in vaccination sheds light on the extraordinary example of a number of clergymen in promoting the vaccine. Troussel, a priest in Chambray, "Touched by the disaster smallpox occasioned in his parish...transformed his home into a house of charity [and] vaccinated nearly two hundred subjects."³ The everyday role of the clergy in public health is also related in these reports, which acknowledge their function as a conduit between the medical community and the majority of cities, towns, and communes in France throughout the nineteenth century.

Another rich resource available to me at the Osler Library was the dissertations defended at the Faculty of Medicine of the University of Paris throughout the nineteenth century. It would initially seem like the medical dissertation

would not be an ideal medium for expounding on topics of theological importance. The candidates, many of them fresh from serving on vaccination committees in their home departments, brought the experience they had in convincing the incredulous about the vaccine to the composition of their dissertations by addressing concerns of divine judgment and the meaning of disease. "By relying on the benefits of Providence, we enjoy the efficacious means it puts at our disposal," writes one dissertator, "we listen to the sweet and charitable voice heard in the ears of the unfortunate in overwhelming pain, 'My son, in thy sickness be not negligent.'"⁴ The majority of dissertators characterize the vaccine as a divine gift, one in which lack of zeal in propagation is equivalent to a lack of faith.

The Osler collection also contains a number of difficult to find pamphlets and books intended to aid doctors, civil officials, and clergy in promoting the vaccine. One example describes a competition sponsored by the department of Loire-Inférieure in 1819 for a work that answers popular questions on vaccination. One of the submissions takes as its subtitle, "Vaccine, daughter of heaven! Continue to spread your blessings on earth and recognition will adorn the altars!"⁵ Acknowledging theological concepts, biblical stories, and folk remedies, these works provide keen insight into the difficulties facing those charged with spreading the vaccine. The clergy, in order to adequately respond to these obstacles, needed to be sufficiently educated on vaccination theory and technique, while also being assured of the cooperation between their ecclesiastical superiors and the state. The propagation of the vaccine by Catholic clergy in France was undertaken both as a hierarchical, cooperative act between church and state, as well as a local campaign of education and admonishment.

My time in Canada was not limited to works on the vaccine in France; I also explored the comparative aspects of vaccine propagation in Montreal and Quebec City. Consulting the holdings of the Osler Library, along with city and regional archives, the story of vaccine propagation in francophone Canada provides an interesting comparative perspective. Vaccine was introduced into Quebec in 1801 and was the subject of a concerted campaign in 1815 that included the assistance of the local parish structure. The vaccine, however, remained a subject of political contention. It was in 1885 that the greatest level of antagonism over the subject of compulsory smallpox vaccination occurred. During the riots of September 28th, 1885, the clergy of Montreal were called upon to ease the sentiments of the agitated populace. Against the complicated backdrop of conflict between anglophone and francophone Canadians, the Catholic clergy of the province were seen as an important intermediary and source of authority by both sides. Propagating the smallpox vaccine in both the Canadian and the French contexts are similar in the role clergy played locally as a source of authority and admonishment, but diverge in the larger relationship between church hierarchy and the state.

continued on pg. 11

Annual Appeal

When I think of the Osler Library I realize that, in much the same way that no person is an island, no institution becomes great solely by its own efforts. It is built by the generous gifts and efforts of countless people. Since its founding, the Osler Library, like the university itself, has been a testimony to this. In 1919 Sir William Osler bequeathed his magnificent collection of 8,000 historical medical books to McGill, his alma mater, out of his esteem for its students and practitioners. This spirit of generosity has continued throughout the years, so that today the Osler Library is one of the premier history of medicine libraries in the world and the epicenter for the study of Osler and Osleriana. Thanks to your continued support, the Osler Library has been expanding its ability to serve students, medical professionals, and scholars at McGill and around the world in myriad ways.

People are increasingly drawn to the Osler Library from diverse disciplines and institutions as we expand our collections and services to support their pedagogic, professional, and personal goals. For example, the library recently launched two initiatives aimed at the university's undergraduate medical students. Despite their very demanding programme, a number of students entered an essay contest sponsored by the Osler Library's Board of Curators and the student Osler Society. The contest gives undergraduate medical students the opportunity to explore any theme of interest to them in the history, sociology, ethics, or humanities of the health sciences. The other initiative is the Osler Fellows' Library, an undertaking with the Faculty of Medicine's Physician Apprenticeship programme. This is a collection of inspirational books selected by Osler Fellows, who are physicians that act as mentors to undergraduate medical students throughout the four years of their career. The library also supported research trips by four foreign graduate students and one historian with its Osler Library Travel Grant and Mary Louise Nickerson Fellowship programmes.

Our collection continues to grow with the help of our Friends. This has been an exceptional year for expanding our rare book holdings, the raw material for historical research. Thanks to our growing relations with antiquarian booksellers, we had the chance to acquire some very rare and interesting items. Several key purchases have built on our strong anatomical holdings. As you



Figure 1: An illustration from *Exposition anatomique de la structure du corps humain*, 1759.

may have been aware, we had a special fundraising campaign to purchase Jacques Gautier d'Agoty's 1759 elephant folio anatomical atlas, the *Exposition anatomique de la structure du corps humain en vingt planches imprimées avec leurs couleurs naturelles*, in honour of outgoing Principal Dr. Heather Munroe-Blum (Figure one). Funds provided by the Friends of the Osler Library helped to make this possible.

We also purchased the rare first issue of the first edition of Robert Hooper's *The Morbid Anatomy of the Human Brain: Being Illustrations of the Most Frequent and Important Organic Diseases to which that Viscus is Subject* (London: Longman, Rees, Orme, Brown, and Green, 1826) (Figure 2). Dr. Hooper (1773-1835) based this work on numerous autopsies performed in London over a period of thirty years. What makes this a particularly exciting acquisition is that Sir William

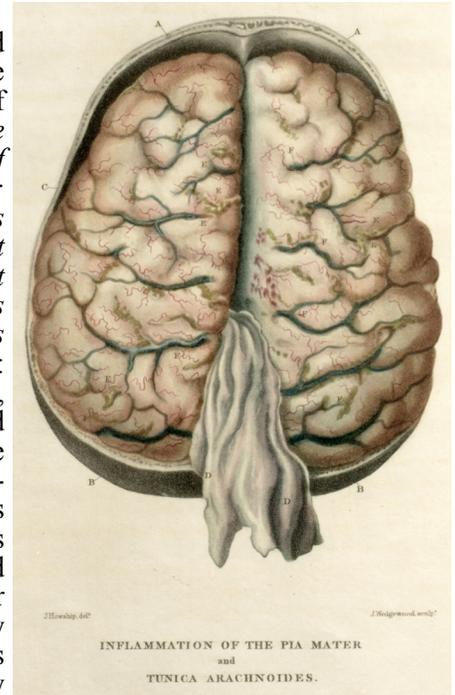


Figure 2: An illustration from Robert Hooper's *The Morbid Anatomy of the Human Brain*, 1826.

collected most of Hooper's original drawings and proofs for this work, along with other published and unpublished material of his (Bibliotheca Osleriana 7574). Researchers can now compare the original material with the first published edition of *The Morbid Anatomy of the Human Brain* to appreciate the process through which pathological information was created and communicated during this period.

One example of rare Canadiana which we acquired was Thomas B. Reed's 1827 University of Edinburgh medical dissertation on encephalitis, the *Dissertatio medica inauguralis, quaedam de phrenitis*. Reed is described as "ex Insula Terrae Novae" on the title page, meaning that he was one of the very first Newfoundlanders to study medicine at Edinburgh. There doesn't appear to be another copy of this thesis in Canada and only three other copies are known to be in existence in the United States and United Kingdom. We are very happy to bring this rare work to Canada.

The library's collection also grew through the generous donation of items. One significant gift was a collection of material from the HIV/AIDS epidemic in Canada in the 1980s and 90s given

to us by CATIE, a Toronto-based AIDS organization. The 324 items were originally collected by the Canadian HIV/AIDS Information Centre, a discontinued program of the Canadian Public Health Association. The collection consists of very obscure ephemeral publications, such as brochures, pamphlets and reports created by various organizations, and even a children's AIDS and drug prevention board game called *Quest for Life* (Figure 3) made by St. Stephen's Community House in downtown Toronto. Much of this material is not held in any other library and will allow researchers to study a variety of aspects of one of the most significant health events in late 20th century Canada.



Figure 3: *Quest for Life*, an AIDS and drug prevention board game.

A critical responsibility for any library is to ensure that its collections are catalogued. Simply put, if it isn't catalogued no one will know it exists. Thanks to our Friends, the Osler Library was able to hire students to work on two of its important collections. One was the completion of the long-held goal to make our collection of thousands of letters to and from Sir William Osler more visible. The William Osler Letter Index was launched at this year's meeting of the American Osler Society <http://osler-letters.library.mcgill.ca/>. This index lists several thousand letters and other documents collected by Harvey Cushing in the course of writing his 1925 biography *The Life of Sir William Osler* as well as other collections. Researchers have already been putting this online index to good use. Our dearly held goal is to digitize these letters, along with Osler's published and unpublished writings.

We also hired a student to catalogue our collection of medical almanacs. This is a growing collection of small booklets, mostly Canadian, dating from 1840 to 1977. Almanacs were advertisements issued by both established pharmaceutical firms and patent medicine dealers to sell their wares. They often include vivid testimonials and colourful illustrations, as well as astrological advice, dream interpretations, and jokes to add to their appeal. This collection of ephemera provides excellent examples of the popular culture of medicine (Figure 4).

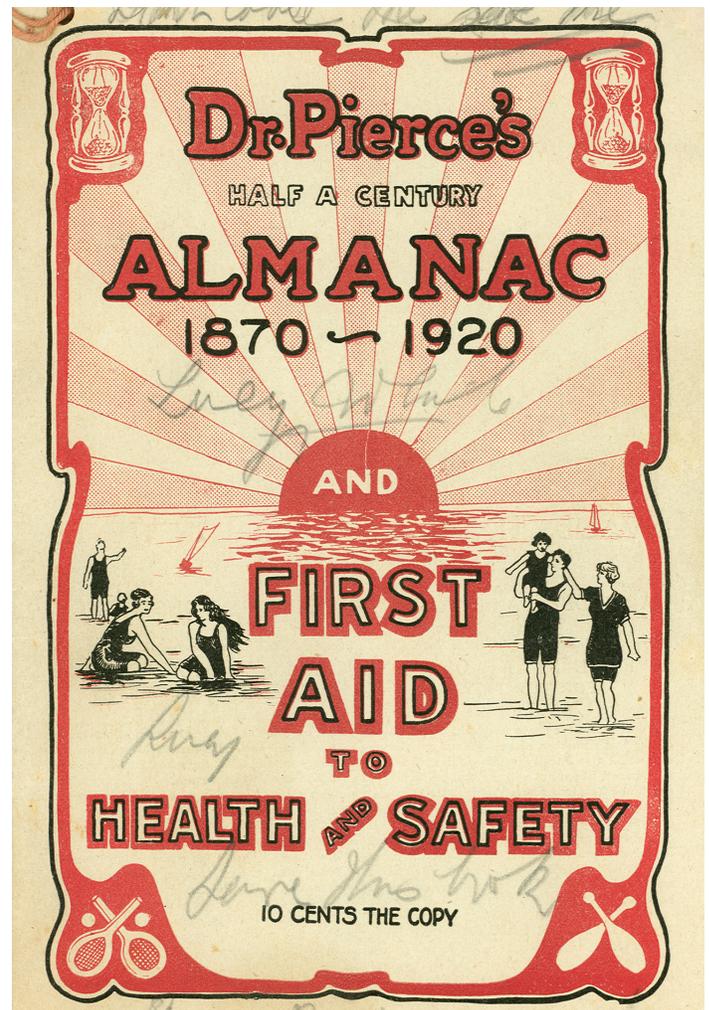


Figure 4: *Dr. Pierce's Half a Century Almanac, 1870-1920, and First Aid to Health and Safety, 1920.*

The Osler Library is dedicated as well to ensuring the long-term preservation of its collection. Each year our Friends support the restoration of significant items carried out by Ms. Terry Rutherford, an expert conservator. This past year she restored a number of works, including the diary of First World War Canadian army nurse Clare Gass. Gass served with the Number Three Canadian General Hospital, which was organized and staffed by McGill medical personnel, making it important for both Canadian and McGill medical history. The diary also has one of the earliest known recordings of Dr. John McCrae's famous war poem "In Flanders Fields." (Figure 5) which appears in her entry for October 30, 1915, over a month before it was published in *Punch* on December 8th. The diary includes a number of fascinating items inserted into it, such as cartoons, poems, letters, and even leaves. These delicate inserts, along with the book, were restored and are now kept in a specially constructed box to ensure that this document of nursing history remains accessible far into the future (Figure 6).

Another important activity supported by our Friends is our publication programme.

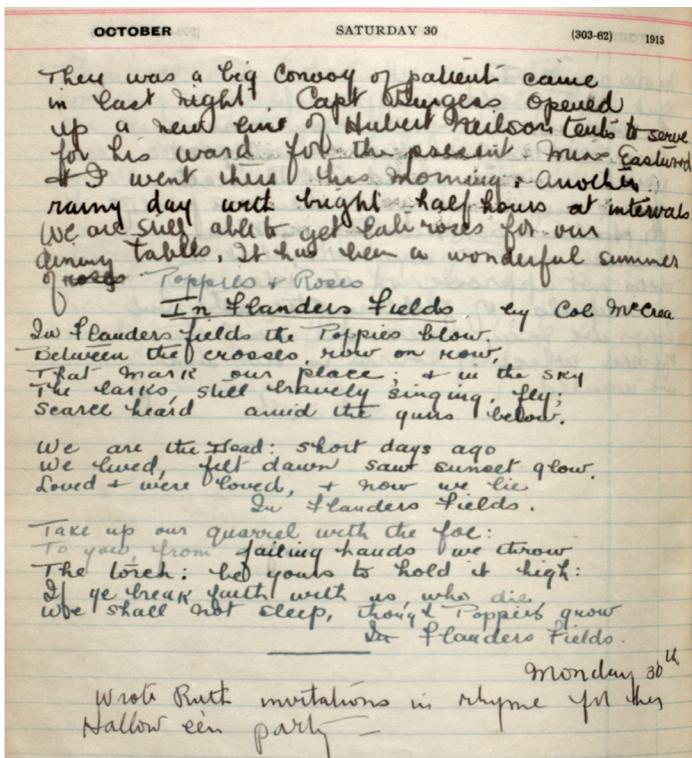


Figure 5: The Clare Gass diary showing the entry for October 30th, "In Flanders Fields."



Figure 6: The Clare Gass diary showing some of the items she inserted.

This year the Osler Library released the thirteenth volume in the *Osler Library Studies in the History of Medicine Series*, co-published by the American Osler Society. *The Lessons of Greek Medicine: William Osler's Cardinal Ethic* is an annotated version of a previously unpublished talk given by Dr. Osler at Oxford in 1910. It was edited by Dr. Richard L. Golden, who also provided considerable explanatory and contextual information. The book illuminates Dr. Osler's profound esteem for and fascination with Hellenistic medicine and thought.

The library also mounted two exhibitions showcasing our collections. *Artistic Practice Scientific Vision: British Artistic Anatomy in the Late Eighteenth and Early*

Nineteenth Century was curated by Dr. Allister Neher of Dawson College and featured a number of stunning anatomical atlases that illustrate the interaction of art and anatomy during the period. An exhibition catalogue was also produced to accompany the exhibition. This was followed by *Designing Doctors*, curated by Dr. Annmarie Adams, Director and William C. Macdonald Professor of the School of Architecture, McGill University, and member of the Osler Library Board of Curators. This exhibit featured the library's collection of architectural advice literature on hospital architecture, focusing on the development of the so-called pavillion-plan hospital, a ubiquitous typology for hospitals in the English-speaking world in the nineteenth and early twentieth centuries. Costs associated with these exhibitions were supported by our Friends, in particular Gail Beck, McGill Medicine 1978, and Andrew Fenus, McGill M.L.S. 1974.

This past year the library also launched a special campaign to build up its general endowment. The goal is to develop a secure source of annual funding which will allow the library to expand its activities. The McGill Class of Medicine 1982 in particular made a very generous class gift of over \$75,000 to this campaign. A video produced for this campaign gives a good sense of the ways in which the Osler Library serves its diverse user group. You can watch it on YouTube at <http://www.youtube.com/watch?v=jm817yZeros> (or just search for Osler Library on YouTube).

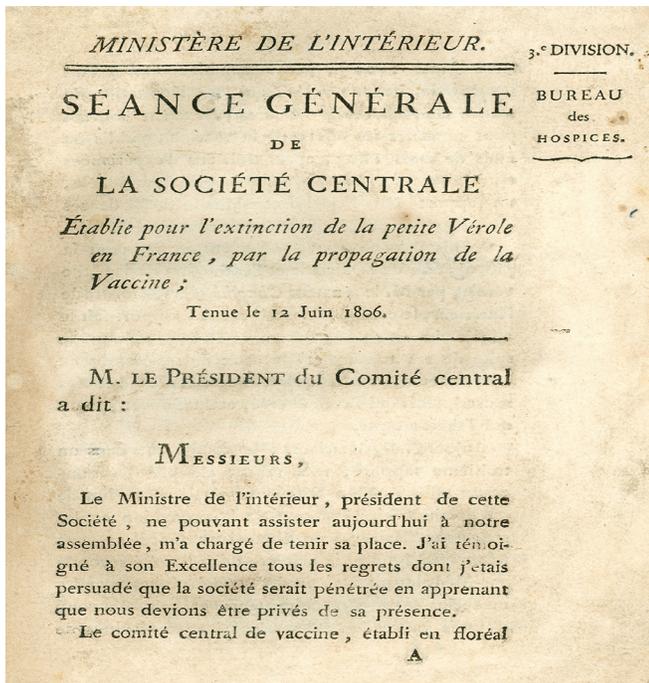


Figure 7: Visit of the McGill Class of Medicine 1982 during Homecoming, 2012.

Thanks to you, we are able to support the growing numbers of students and scholars who visit the Osler Library from McGill and beyond. They come to seek information in our collections, both real and virtual; they come to be inspired by the thoughts and lives of others, both past and present; they come to be refreshed by the beauty of our surroundings and the rarity of our holdings; and they come to be encouraged by the life and legacy of Sir William Osler.

This is what we do, thanks to you.





France. Ministère de l'intérieur. Séance générale de la Société centrale établie pour l'extinction de la petite vérole en France, par la propagation de la vaccine: tenue le 12 juin 1806.

By way of conclusion, I would like to extend my gratitude and thanks to the Osler Library of the History of Medicine, and especially Christopher Lyons, Anna Dysert, and Jacques Monet, SJ, for their kind patience and assistance during a very fruitful period of research that was also my first visit to Canada. The Osler collection is a great resource for historians of medicine not simply because of their extensive holdings in rare French medical texts, but also for the light they shed on the unique communication between public health professionals in France and Quebec. My dissertation will be greatly enriched and developed by this unique research opportunity.

References

¹ C. C. H. Marc. *La Vaccine soumise aux simples lumières de la raison* (Paris: J-B Ballière, 1836). All translations are my own unless otherwise noted.

² Georges Surbled. *La Morale dans ses rapports avec la médecine et l'hygiène, Vie organique* (Paris: Beauchesne, 1911).

³ Parra, *Rapport a M. le préfet du Cantal*, (Aurillac: 1805), 27.

⁴ Jean-Aneet-François Gouaux, *Dissertation sur la Vaccine et son utilité* (Paris: Didot Jeune, 1819), 32.

⁵ *Séance publique de la Société académique du département de la Loire-Inférieure* (Nantes: Mellinet-Malassis, 1819), 109.



How Doctors Predicted the Future: Renaissance Astrological Works in the Osler Library by Justin Rivest

Justin Rivest, a recipient of the Osler Library Travel Grant, is currently a doctoral candidate in History of Science, Medicine and Technology program at Johns Hopkins University, and holds master's and bachelor's degrees from Carleton University. His dissertation project focuses on secret remedies and proprietary medicine in seventeenth-century France, but he has also cultivated an avid interest in the history of medical astrology since writing his MA thesis, which studied sixteenth-century French prognostications.

Modern readers may be surprised to learn that a library devoted to medicine would include a substantial collection of Renaissance astrological works, but in the early sixteenth century, finding medical and astrological books side-by-side was par for the course. From the twelfth through the sixteenth centuries, astrological works were regularly included in university medical curricula and many physicians considered astrological judgements to be an important diagnostic and prognostic tool. The heavens above were thought to have important influences on the earth below, including human bodies. With this in mind, it is hardly astonishing to find celestial ephemerides, the key tools of a Renaissance astrologer, or translations of the astrological treatises of the ninth-century Persian astrologer Abū Ma'sharr (called Albumasar in the Latin West) among the incunabula in the Osler Library's collection.

My own interest in Renaissance medical astrology grows out of my efforts to understand the origins of one of the earliest printed genres: the almanac. While we tend to associate almanacs with farmers and long-term weather forecasting, Renaissance readers would have been just as likely to associate them with learned physicians and medical astrology. Beyond simply forecasting the weather, fifteenth- and sixteenth-century almanacs tabulated the favourable and unfavourable days for everything from bloodletting to planting crops. They also included astrological prognostications of impending environmental, political, or social calamities, such as plague, drought, religious unrest, and war.

Thanks to the Osler Library Research Travel Grant, this summer I had the pleasure of spending two weeks working closely with astrological materials in the library's collection, with the goal of better understanding how Renaissance physicians made astrological prognostications and almanacs. Among the materials I examined were Firmin de Beauval's compilation of astrological doctrines, the *Opusculum repertorii prognosticon in mutationes aeris* (1485), which includes the Pseudo-Hippocratic *Libellus de medicorum astrologia*, and many works by Albumasar, including early printed editions of the *Introductorium in astronomiam* (1489), the *Flores astrologiae* (1488), and the magnum opus on the role of celestial influence in human history, *De magnis conjunctionibus* (1515). Many of these works are rare incunabula and were printed with exquisite care by one of the earliest scientific printers, Erhard Ratdolt,

Albumasar de magnis conjunctionibus
annoy reuolutionibus: ac eoz profe-
ctionibus: octo prinēs tractatus.



Title-page of Albumasar's *De magnis conjunctionibus* (Bibliotheca Osleriana 1760).

who specialized in mathematics, geometry, and astrology. Perhaps the most important item for my own research and for the work of a Renaissance astrologer is the library's copy of the *Ephemerides Magistri Johannis de Monte Regio*, a series of celestial ephemerides for the period from 1492 to 1506, produced by the fifteenth-century German mathematician Regiomontanus. Drawing on mathematical models of planetary motion, Regiomontanus calculated the daily positions of the two luminaries (the sun and the moon) and the five planets (Mercury, Venus, Mars, Jupiter, and Saturn) at noon decades in advance. These were tabulated on the left page of the ephemerides. Regiomontanus also included tables for converting the positions and times to various locations in Europe. Alongside the positions, he also provided their aspects, that is, their angular relationship to one another as seen from earth: conjunction (within 10°), sextile (60°), quadrature (90°), trine (120°), and opposition (180°). These were tabulated on the right pages, facing the planetary positions. This information provided the raw data for interpretation in any kind of astrological judgement: it greatly simplified the task of producing a chart, be it a birth horoscope for an individual or an annual prognostication used to predict general conditions in the coming year.

1492	Aspectus lunae ad solem & planetas.					Solem & planetas inter se				
Ann.	☉	☽	♂	♀	♃	☉	☽	♂	♀	♃
Jan.	oc	oc	oc	oc	oc	oc	oc	oc	oc	oc
1										
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Ephemerides, January 1492, (Bibliotheca Osleriana 7479).

1492	In. N. M. S. A. M. S. M. S. M. S.									
Januarius	☉	☽	♂	♀	♃	♄	♅	♆	♇	♈
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While casting a nativity horoscope could provide the physician with important information about an individual patient's humoral complexion, medical almanacs also provided physicians and barber-surgeons with medical "elections," that is, they tabulated the most propitious days for therapeutic interventions, notably bloodletting and the administration of purgatives. For instance, they advised never to let blood from a part of the body if the moon was in its associated sign (e.g. Aries for the head, Leo for the neck, Pisces for the feet) because it would draw out too much blood. All of this depended upon a series of associations between the four natural qualities (hot and cold, wet and dry), the four elements, the four humours, and the four seasons.

The prognostic abilities of some renaissance doctors extended well beyond medical-astrological elections, however. In the prognostications attached to the almanacs they would draw on the data in Regiomontanus' ephemerides to produce an annual revolution horoscope, determining which planet would exercise the most influence casting the horoscope for the "birth" of the year, held for astrological purposes to be at the moment the sun moved into the sign of Aries (that is, the spring equinox). They would also evaluate the influences of the rarer astrological events in the year, notably eclipses and planetary conjunctions. The signs of the zodiac in which astrological events occurred could deflect their influence on the earth below; for instance, conjunctions and eclipses in fiery signs like Aries, Leo, and Sagittarius might foretell unusual heat and conditions of drought. The planets might be related to given humoral imbalances, for instance, melancholy was associated with Saturn. The planets also held important associations with different occupations and classes of people. Saturn, for example, was also associated with the rich, religious men, farmers, and the elderly, so the state of Saturn in the heavens could alter their conditions on earth. These associations, dating from antiquity and the pagan gods for which the planets were named, are even now fairly intuitive: Mars was naturally associated with warriors, Venus with women and musicians, and Mercury with scholars and merchants. This complex network of associations illustrates the richness of a harmonious cosmos, designed by a provident creator to be full of such associations and sympathies.



Saturn from Albumasar's *Flores astrologiae*, (Bibliotheca Osleriana 7410).

Using the ephemerides and the astrological treatises in the Osler Library's collection, I was often able to reverse-engineer the predictions made in the printed prognostications I have examined in European libraries. As an end-product of this research I hope to publish an article on "How to Predict the Future in the Renaissance: French Almanacs and Prognostications, 1490-1550," as well as a bibliography of the almanacs I have examined. In a nutshell, I spent my time at the Osler Library working to understand how Renaissance astrologers predicted the future.

Recommended reading

For a readable introduction to renaissance astrology, see Anthony Grafton, *Cardano's Cosmos: The Worlds and Works of a Renaissance Astrologer* (Cambridge, MA: Harvard University Press, 1999).

On prognostications, see Steven Vanden Broecke, *The Limits of Influence: Pico, Louvain, and the Crisis of Renaissance Astrology* (Leiden and Boston: Brill, 2003).

For a survey of the place of astrology in medical curricula and additional bibliography, see H. Darrel Rutkin, "Astrology," in *The Cambridge History of Science*, vol. 3, *Early Modern Science*, ed. Roy Porter, Katharine Park, and Lorraine Daston (Cambridge: Cambridge University Press, 2003), 541-61.

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Regiomontanus. *Ephemerides Magistri Johannis de Montereio accuratissime calculata* [1492-1506]. Venice: Vincentius Benalius, 1492. *Bibliotheca Osleriana* 7479.



The Changing Face of Penfield's Homunculus By Zina Ward

Zina Ward, a winner of the Mary Louise Nickerson Fellowship in Neuro History, received her BA with Honors from Williams College, Massachusetts in 2012. A recipient of the Herchel Smith Fellowship for study at Cambridge University, she completed an MPhil in History & Philosophy of Science in June and is now continuing her graduate studies in Philosophy.

Almost everyone with an interest in the brain will recognise the familiar image of Penfield's homunculus: a small human figure of strange proportions draped over a coronal cross-section of the brain (Figure 2). The illustration was published by Wilder Penfield and Theodore Rasmussen in 1950 and has been constantly reproduced in medical, scientific, and popular texts ever since. The homunculus summarises decades of intraoperative research on locally anesthetised epileptics at the Montreal Neurological Institute (MNI) and elsewhere. In order to locate and excise epileptogenic foci with minimal damage, Penfield and his surgical colleagues used an electrode to stimulate the cortical surface, making note of the resulting sensations and movements. The homunculus depicts the patterns observed during this mapping of the sensorimotor cortex. The body parts are drawn roughly in the location where they were elicited on the sensorimotor strip, and their size corresponds roughly to the extent of their representation on the cortical surface.

Despite being a fixture of the neuroscientific literature, the homunculus' evolving and controversial nature is often underappreciated. In fact, Penfield published three distinct homunculi during his career, the well-known version being the middle of these, and from the outset some of Penfield's colleagues were highly critical of the images. While there have been several academic articles published in recent years about the history of the homunculus (Pogliano 2012; Snyder & Whitaker 2013) and about its flaws (Schott 1993), these have relied almost exclusively on published materials. The Penfield Archive at the Osler Library, however, contains drafts, correspondence, and sketches that allow us to look behind the scenes, providing a richer account of the origins and criticisms of this iconic image.

The very first homunculus was published in an article that Penfield coauthored with Edwin Boldrey in 1937 (Figure 1a). Penfield hired Hortense Cantlie, a medical illustrator at the Montreal General Hospital and a frequent collaborator of his, to draw the figure, which conveyed the order and relative sizes of the somatic representations. The archive reveals an early, unpublished version of this homunculus (Figure 1b) that was replaced late in the editing process. With no hint as to why the last-minute swap was made, we can only speculate as to the reasons for this homunculus' distinctive expression and differently shaped features.

The next version of the homunculus was published in 1950 in Penfield and Rasmussen's book, *The Cerebral Cortex of Man*. This time, Cantlie was told to separate the sensory

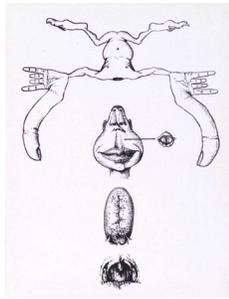
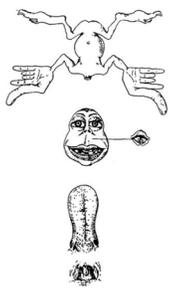


Figure 1. Homunculus from Penfield & Boldrey (1937). (a) Published version. (b) Earlier draft, from file W/P 93 in the Wilder Penfield Archive, Osler Library.

and motor halves of the homunculus to reflect the fact that sensations and movements tended to be elicited on opposite sides of the Rolandic fissure (Figure 2). Interestingly, we learn from the archive that the human figurine was an add-on to an earlier illustration of a coronal cross-section (that is, Figure 2 without the human form) published in an article by Rasmussen and Penfield in 1947. Furthermore, Penfield's correspondence reveals that the first public appearance of the homunculus in its now-familiar form was actually in *Scientific American* in an article written by Max Gray, a representative of the Rockefeller Foundation to whom Penfield had shown Cantlie's drawing. Gray's article appeared in 1948, two years before the "official" illustrations were published. Letters from the publisher at MacMillan Co. reveal that the homunculus was an immediate hit: soon after the book's appearance, requests for permission to reprint it began pouring in.

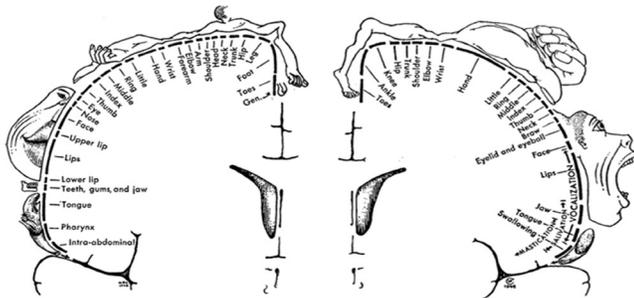


Figure 2. Homunculus from Penfield & Rasmussen (1950).

The final incarnation of the homunculus portrays not just the Rolandic sensorimotor strip but also secondary and supplementary motor and sensory areas elsewhere (Figure 3). Most commentators have assumed that Cantlie drew this version too, and that its public debut was in Penfield and Herbert Jasper's book, *Epilepsy and the Functional Anatomy of the Human Brain* in 1954. The archival material, however, indicates that the homunculus' illustrator was another long-time collaborator of Penfield's, Eleanor Swezey, and that it was initially created for Penfield's Flavelle Medalist's address in 1951. It was not published until Penfield's

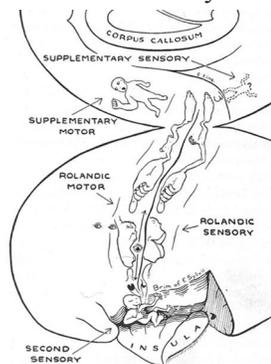


Figure 3. Homunculus (sensorimotor) from Penfield & Jasper (1954). Not pictured: thalamic homunculus.

1954 book with Jasper, which also contains a homunculus illustrating the topographic organization in the thalamus (not pictured).

In addition to correcting and filling out the chronology of the homunculus, the Penfield Archive provides a unique window onto early criticism of the image by Penfield's colleague, F. M. R. Walshe. The neurologists' professional correspondence, which spanned 1930 to 1959, is fascinating and eminently readable, thanks to their humor and erudition. In various letters Walshe called the homunculus a "deceptive monstrosity," attacking its "horrific appearance" and urging him to "slay" it. Penfield's defensive replies did nothing to ameliorate Walshe's concerns. Their correspondence ended in dramatic fashion in 1959 when the men had a falling out after Penfield accused him of "personal animosity," mentioning Walshe's ridicule of the homunculus as evidence. Many of Walshe's criticisms were recently given new life by G. D. Schott (1993), whose thorough attack on the homunculus has become the modern-day authority on the diagram's weaknesses.

This summer, with the generous support of the Mary Nickerson Fellowship in Neuro History, I have been piecing together and filling out the history of the homunculus, as well as examining and assessing the claims of its critics. I have been asking what fuelled the diagram's many revisions, how Penfield understood its purpose, and why he made particular representational choices. The answers to these questions provide the basis for a general re-assessment of the homunculus' strengths and limitations. Although it has been sharply criticised in recent years, I believe that worries about its ambiguity, artistic character, and lack of precision are overstated. The more important objections, in my opinion, are those related to Penfield's interpretation of his data. These interpretational controversies stem from a decades-old tension between "localizationists" and "diffusionists" about the fundamental organization of the brain. I am currently working to substantiate this claim and to show that by focusing on this set of concerns, we can better understand the context in which the homunculus was created and its continued relevance today.

Many thanks to Dr. Granville Nickerson for endowing the fellowship that allowed me to pursue this research and take advantage of the unique resources at the Osler Library. My sincere thanks also to Chris Lyons for welcoming me to the Osler, Duncan Cowie for helping me navigate the Penfield Archive, and Dr. William Feindel for his invaluable first-person perspective on this fascinating time at the MNI.

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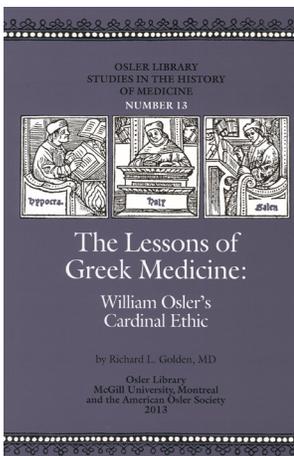
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New publication: *The Lessons of Greek Medicine: William Osler's Cardinal Ethic*

Dr. Richard Golden's sixth book with the Osler Library Studies in the History of Medicine series has recently been published. In this volume, Dr. Golden continues his efforts to edit and make available previously unpublished works by William Osler. Osler's "Lessons of Greek Medicine" was the title of a lecture originally given in 1910 at Oxford in a series organized by the Regius Professor of Greek George Gilbert Aimé Murray. In his text, Osler examines the roots of Ancient Greek medicine and seeks to identify the kernels of modern medical thought and practice found there. Dr. Golden's edition is accompanied by a set of lexical, biographical, and explanatory notes which illuminate the text and elucidate Osler's rich usage of literary, historical, and mythological references. The "Lessons" are also preceded by a thorough introduction that provides the context around the lecture and explores Osler's philhellenism.

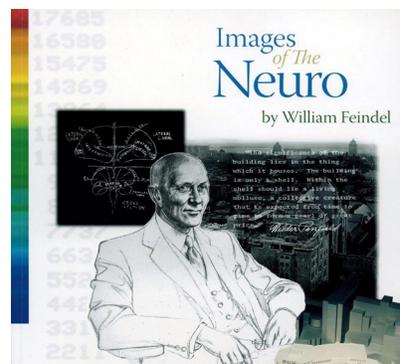


The Lessons of Greek Medicine: William Osler's Cardinal Ethic is published by the American Osler Society and the Osler Library of the History of Medicine at McGill University. This book may be purchased for \$25 in person at the Osler Library or by visiting our online shop. An order form may be downloaded at <http://www.mcgill.ca/library/branches/osler/shop> and faxed or mailed to the Osler Library. A reduced price of \$20 is available for Friends of the Osler Library.

New Publication: *Images of The Neuro*, by Dr. William Feindel

The Montreal Neurological Institute, affectionately called The Neuro, has been a measure of excellence in the fields of neurology, neurosurgery, and neuropathology since its founding by Wilder Penfield more than 80 years ago. Dr. William Feindel, Emeritus Director of The MNI and Honorary Osler Librarian, has been at The Neuro for sixty of those years, beginning his research into temporal lobe epilepsy with Penfield and becoming a key player in the introduction and development in Canada of revolutionary brain imaging technology to assist neurological diagnoses and interventions.

The twenty-five essays he has compiled for *Images of The Neuro* are his "eye witness" accounts of the people and early history of The Neuro, accompanied by a fine archive of photos taken throughout the years. He points out the key role of Sir William Osler in generating support from the Rockefellers for McGill's teaching hospitals that lead eventually to the Rockefeller Foundation grant for the Montreal Neurological Institute. In recounting the early history of The Neuro, and the contributions made to developing MRI/S and PET imaging tools, Dr. Feindel pays tribute to the close collaboration of his colleagues and the unique research environment of The Neuro. Of particular interest is how the internationally-recognized Montreal Procedure for the treatment of epilepsy came to be developed at The Neuro by Dr. Penfield and his team, on which Dr. Feindel played an active role. Also included are essays on the founder of neurology, the 17th century Oxford Professor, Thomas Willis. The book concludes with Dr. Feindel's appreciation of The Neuro's eminent founder and guide, Wilder Penfield.



Images of The Neuro is published by The Neuro History Project and the Osler Library of the History of Medicine at McGill University. This book may be purchased for \$35 in person at the Osler Library or by visiting our online shop. An order form may be downloaded at <http://www.mcgill.ca/library/branches/osler/shop> and

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The appeal to the Friends for the 2012-2013 academic year concluded on April 30, 2013. Contributions received after April 30, 2013 will be recorded in the 2014 fall issue of the *Osler Library Newsletter*.

The appeal for the 2013-2014 academic year is made in this issue, No. 119-2013.

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