



Journal of the
SURGICAL HUMANITIES

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Journal of the
SURGICAL HUMANITIES

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COVER PAGE

Portrait of Wilder Graves Penfield

Iris Hauser

*We thank the artist Iris Hauser for the
image of the original piece of art and the
description of the painting.*

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*Portrait of Wilder Graves Penfield
by Iris Hauser (Detail)*

■ EDITORIAL

Francis Christian, FRCSEd, FRCSC
Department of Surgery
University of Saskatchewan



In Aldous Huxley's original sci-fi novel, "Brave New World," (1931) the government makes the drug "soma" freely available to its population. "Soma" has a multitude of effects, including the ability to make people forget about their troubles for a while and to carry on with their superficial lives as if nothing untoward could ever affect their lives again ... until of course, the time approaches for the next dose of soma and the next ... and ever more quantities of "soma" are needed, with the dysfunction in society reaching a rising crescendo of despair.

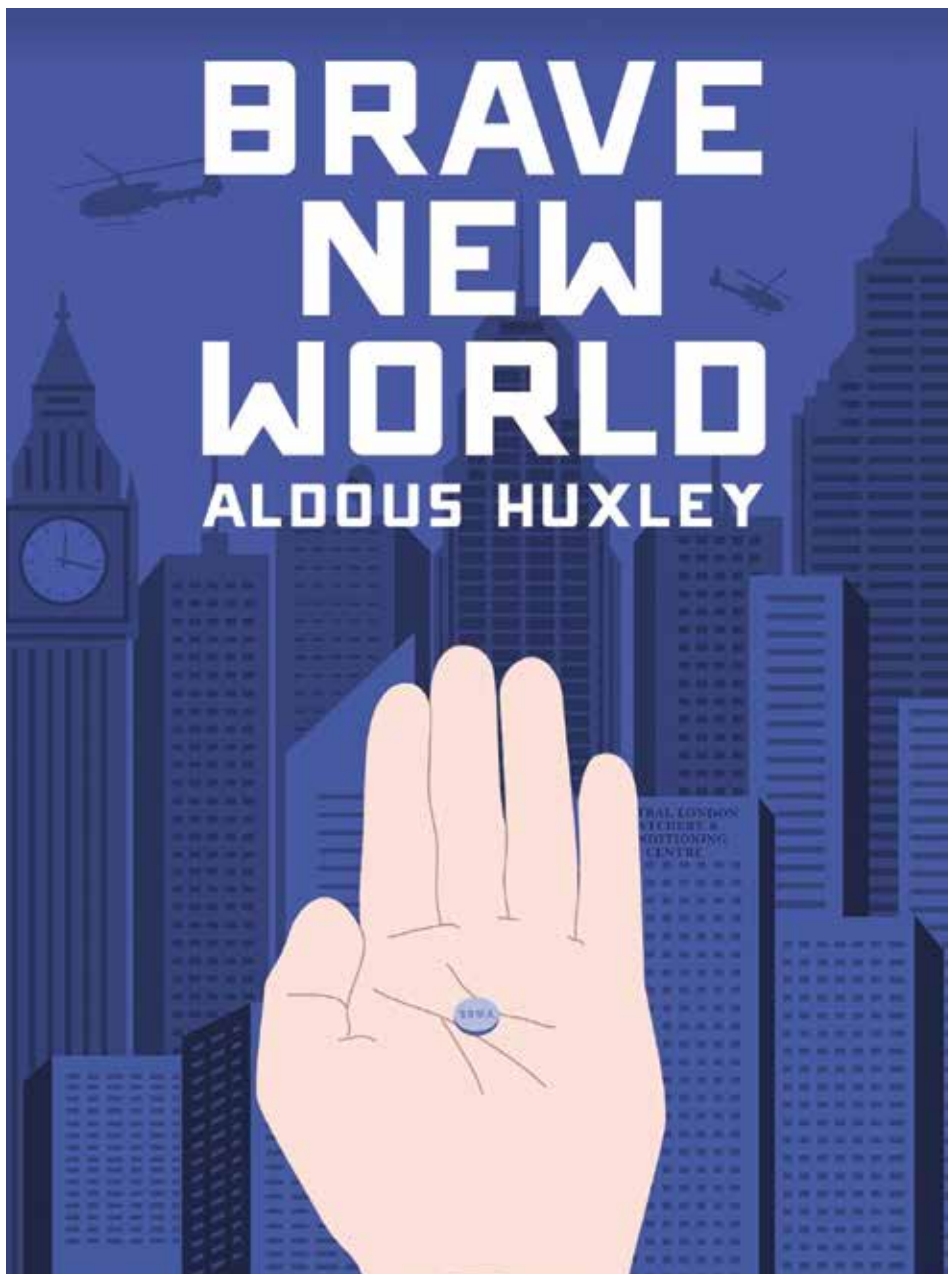
This Journal shall not speculate - as several experts and the popular press have done - as to how accurately Huxley's frightening world can be extrapolated and applied to modern times, with widespread uses of allegedly equivalent drugs. But there is no doubt whatsoever that "soma's" chilling ability to induce a state of repetitive, predestined behavior can be mimicked by

the pervasive use of search engine generated patterns of algorithmic behavior by modern man. The "directors" in the government of the "Brave New World" have another specific goal - that of eliminating, through the use of "soma" the time between desire and fulfilment. Predictably, the "fulfilled" desire then induces a sense of superficial joy that precludes further inquiry or even the proper use of logic.

As men and women of science it would be folly for us to denigrate the enormous benefits to mankind that have flowed from the free exchange of information on the internet. Its inestimable benefits to science, however, cannot automatically be assumed to apply in the same way to the humanities and the arts. Pop culture has the ability to heavily influence the search engine - and the pleasure this apparently gives millions of people every day cannot be wished away or judged. But if we are to measure art by

the simple rubric of enduring value through the ages, how much of the pop culture that is consumed in the twenty first century through the search engine and online encyclopedias will endure?

A careful, detailed, examination of our own history is essential to our survival. It is not only the fictional "soma" that has achieved the objective of mass control of nations by making its people forget their history. The erstwhile Soviet Union forbade its citizens to remember or celebrate key areas of Russia's history and the "soma" of communism and mass thought control was achieved through torture, imprisonment and summary executions. The remembered Russian heroes who engineered the fall of communism are not its scientists - but rather its poets, priests and novelists, from Boris Pasternak, and Mikhail Bulgakov to Alexander Solzhenitsyn and Joseph Brodsky; their common "crime" was recalling culture, faith and the past to



millions under the yoke of totalitarianism.

It has been said that Sir Joseph Lister's discovery of antisepsis is of such fundamental historical importance as to rise to the level of dividing the whole field of surgery into surgery before Lister ... and ... surgery after Lister, in the same manner that we divide all of human history itself into BC and AD. It must behoove every person, even remotely connected with the practice of medicine therefore,

to know about Joseph Lister's life and times and his great discovery.

The history of Joseph Lister's association with Edinburgh and its Royal College of Surgeons is the subject of the College librarian Steven Kerr's elegantly crafted historical essay in this issue of the Journal of The Surgical Humanities. Through Steven Kerr's essay (pages 10-25), readers of the Journal will have access to unique images and exhibits from the preserved archives and portraits of the

College and will be able to relive Lister's eventful times anew.

Fr. Andre Pollicie's fascinating, hopeful account of the work of STR8 UP in persuading members of gangs to abandon their gang lifestyles and "master their own destiny," (pages 38-43) is of direct relevance to the work of the physician and surgeon and in particular, the trauma surgeon. There is an explosion of gang related trauma in our inner cities and we cannot remain isolated from the causes of gang violence and its remedies; such an inquiry is also an exercise of fundamental, deductive logic about causes and effects.

An underlying principle and pillar of Fr. Pollicie's work with STR8 UP is the attempt to reconnect motivated gang members to the rich traditions of their historical pasts through the ancient, indigenous device of the medicine wheel. Art, poetry and literature then help ex-gang members to forge a new destiny for their lives. The triumphs of modern trauma and intensive care give gang members, even grievously injured ones, their physical lives back. But, as Louis Riel once said, "My people will sleep for a hundred years and when they awake, it will be the artists who will give them their spirits back."

Francis Christian
Editor-in-Chief

■ WILDER PENFIELD of Montreal: BRAIN CARTOGRAPHER

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Training and Travels: USA, England, Spain and Germany

Wilder Graves Penfield was born in Spokane, Washington, in 1891. He did his premedical degree in literature at Princeton where he was a top student. By a meritorious Rhode scholarship he was accepted for admission at Oxford in 1915, where he completed a bachelor's degree in sciences. In 1915 he began an extraordinary medical career in England, where illustrious doctors surrounded him. From the mastermind of Sir William Osler he gained inspiration and the sympathetic approach. From Sir Charles Sherrington, he learned to observe and document experimental findings. It was then that he decided to become a surgeon that specialized in the brain, or as Cushing would say, he was "a neurologist who did his own operating." In 1917, he returned to the United States and completed his medical degree at Johns Hopkins University. He was surgical intern at the Peter Bent Brigham Hospital in Boston, serving as assistant to Harvey Cushing. Then he returned to the National Hospital at Queen

Square in London where he developed a special interest in epilepsy while doing a fellowship in clinical neurology and neurosurgery (Figure 1).

In 1921 he completed his fellowship at London and back in the United States, began to work as an associate surgeon at the New York Neurological Institute and developed his surgical skills under Allen Whipple. In 1922 Penfield began to do experimental work in animals in order to study the healing process of cerebral tissues. In his attempt to stain brain scars to identify the cause of posttraumatic epilepsy, he was disappointed because of the failure to stain the non-neuronal cells of the brain. Penfield thought these cells were crucial to elucidate why a healing scar leads to epilepsy. So he decided to travel to Madrid to learn the techniques from the masters in this field, Cajal and Rio Hortega. During his visit Penfield completed the characterization of the "third element" of Cajal (non-astrocyte glial cells) with the help of his Spanish mentor.

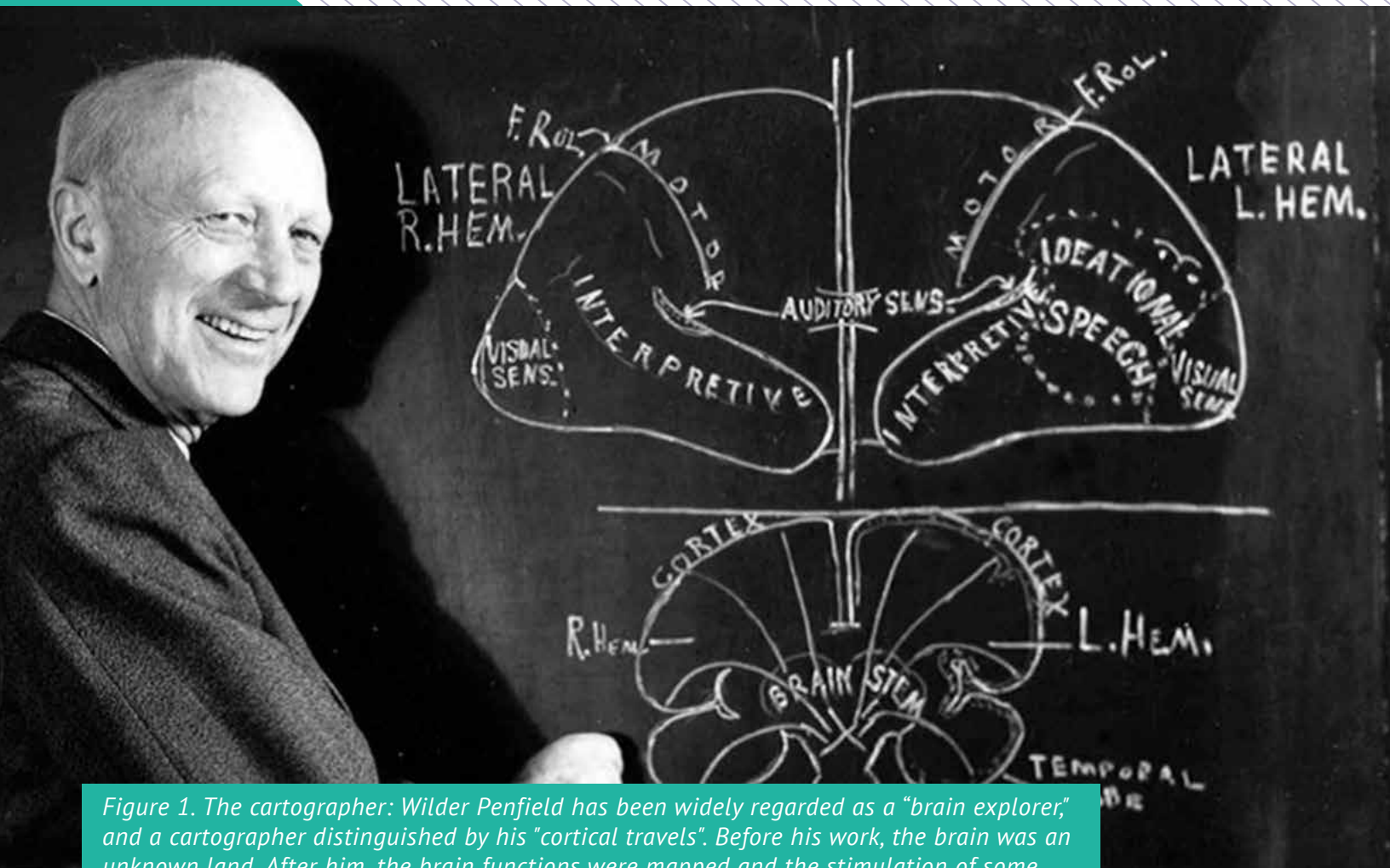


Figure 1. The cartographer: Wilder Penfield has been widely regarded as a “brain explorer,” and a cartographer distinguished by his “cortical travels”. Before his work, the brain was an unknown land. After him, the brain functions were mapped and the stimulation of some specific areas could evoke the deepest emotions and recall precise personal experiences, including emotions, sounds, and smells.

In 1927 Penfield spent 6 months in Breslau with the German neurosurgeon Otrid Foerster and learned his technique of electrical stimulation of the cortex in patients awake under local anesthesia. This method became an invaluable tool in Penfield’s hands. It was then that Penfield came to realize that surgical excision of a brain lesion, after careful mapping of the motor cortex, could relieve a patient of focal epilepsy without adding to neurological deficit. By 1928, Penfield and his surgical partner, William Cone, performed their first operation in New York, utilizing the “Foerster method”. The patient, a young man previously treated for a head injury, had as many as 20 seizures each day and improved after surgery.

Move to Montreal and the “Montreal Procedure”

At the end of 1928 Penfield accepted an invitation to move to Montreal. In 1934 he founded and became the first director of the

Montreal Neurological Institute (MNI). Whilst in Montreal, Penfield created a surgical approach that became known as the “Montreal Procedure”. He developed his method while his patients were fully conscious. Using local anesthetics he removed the skullcap to expose the brain. When he stimulated certain areas of the brain, the patients would be able to provide him feedback on what they were experiencing at that very moment, and through this he could isolate the damaged part of the brain (Figure 2). He developed surgical treatment for epilepsy based on this knowledge. The procedure involved removing a portion of the temporal lobe. It was eventually adopted throughout the world for its success in relieving patients of temporal lobe seizures. Interestingly, this surgical procedure also opened a window to the mind, giving him a glimpse of how dreaming occurs, how memory works, and where speech comprehension resides. Penfield continued his research with Herbert



Figure 2. Epilepsy surgery: The operating theatre at the Montreal Neurological Institute, circa 1958. Wilder Penfield (center left) operating, is assisted by Herbert Jasper (upper left, in the glazed gallery studying the electrocorticogram). The epilepsy patient is awake under local anesthesia, in order to identify the epileptic focus by brain mapping.

The patient is supported in the lateral position with pillows held in place by a plexiglass backrest, which is clamped to the operating table. The sterile drapes are arranged to give the patient a large field of view, reducing the risk of claustrophobia. The window at left allows the photographer to have full exposure of the operative room through a mirror held by a boom rising at forty-five degrees from the side of the window (Wilder Penfield MNI Archive, 1954).

Jasper. Dr. Jasper, who had come to Montreal in 1938, introduced Penfield to the use of electroencephalography to locate the origin of epileptic seizures. Using a series of electrodes attached to the skull, an electroencephalogram could measure the electrical output of the brain. Because abnormal tissue gives off different patterns than healthy tissue, a surgeon could target unhealthy tissue for removal to relieve seizures. Penfield retired from the McGill medical faculty in 1954, but remained director until 1960. Wilder Penfield died in 1976 at the age of 85 marking the end of a brilliant era in Canadian neurology, neurosurgery and basic science.

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Iris Hauser is a Canadian artist and painter. She is best known for her use of narrative and symbolism within portrait paintings and works primarily with oil paints. Hauser was born in Cranbrook, BC in 1956. At age 10, the family returned to her father's hometown in Victoria, BC. Art studies brought her to Nova Scotia (1975), Saskatoon (1977-79) and Germany (1979-80), and in 1980 she moved to Saskatoon to take up permanent residence. Hauser has taught art at the Mendel Art Gallery in Saskatoon and at the University of Saskatchewan's Certificate of Art and Design program. She has served on the board of Canadian Artists Representation/ Front des Artistes Canadiens, Saskatchewan and served as a juror for the Organization of Saskatchewan Arts Councils. Her work has been collected by many patrons, including the Canada Council Art Bank, the Saskatchewan Arts Board, the University of Regina, the Kenderdine Art gallery and the Mendel Art Gallery, and has been exhibited extensively in solo and group exhibitions in public and private galleries throughout western Canada and abroad. Recent paintings may be viewed at irishauser.ca.



Cover art:

PORTRAIT OF WILDER GRAVES PENFIELD

By Iris Hauser

I have posed Dr. Penfield in the center, between two views of operating theatres: to the left, the MNI where Dr. Penfield did his groundbreaking research into mapping the brain from 1934 to 1954. On the right, the current operating theatre at the Royal University hospital/Sask Epilepsy Program in Saskatoon with the surgical team depicted (Cover image). In the foreground, Dr. Penfield is presented as though about to give a public presentation, with images from his publications fanned across a carved stone dais. From the left to right there are four visible documents. The first one is a surgical sketch after a craniotomy; the second one depicts the homunculus creature discovered and published by Penfield, the third one shows the homunculus location over the brain gyrus of both hemispheres, and the last one represents an original sketch of the cortical functional areas of the non-dominant hemisphere. The tabletop rests on a carved stone ram's skull (the astrological sign symbolizing the brain), beside a brass plaque naming the MNI, with Penfield's name and birth and death dates carved into the stone. On the tabletop are two bronze casts of the skull, which were made during Penfield's tenure at the MNI. To the left are a few books and journals written by Dr. Penfield, including his novel "The Torch", and a bible to represent his religious conviction. The books are supported by a bookend in the shape of a dragon, referencing his important work in China. Dr. Penfield sports a maple leaf pin that is the symbol of membership in the Order of Canada.

"Sir, I request the honour of..." JOSEPH LISTER & EDINBURGH

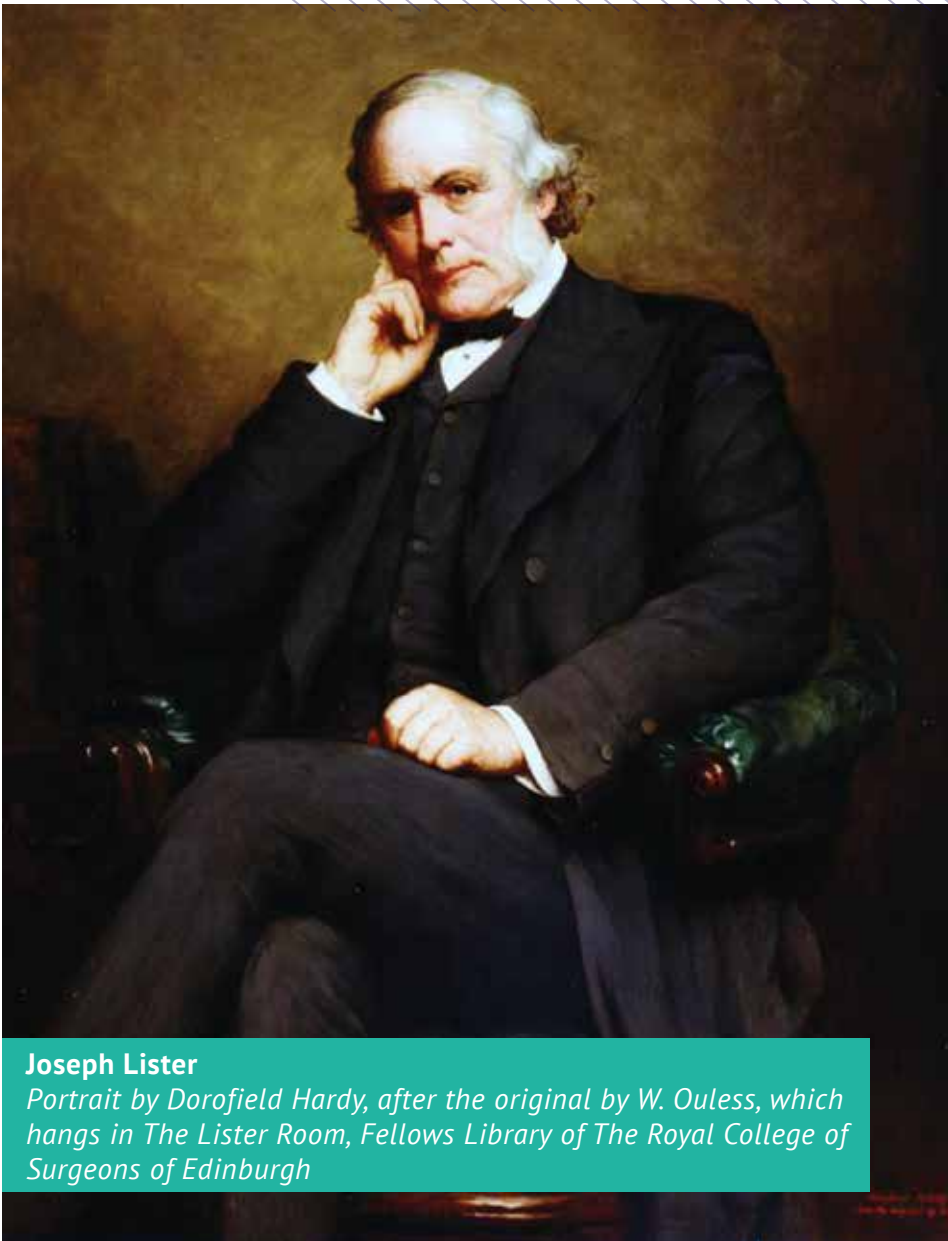
Steven Kerr, Librarian
The Royal College of Surgeons of Edinburgh

Since our sixteenth-century origins, The Royal College of Surgeons of Edinburgh has awarded its principal qualification - College Fellowship - to over 46,000 male and female surgeons in over 100 countries across the globe. In addition, since 1671 almost 500 Honorary Fellows, from all walks of life, have been admitted to the Fellows Roll. However, only two people have been elected "ordinary" Fellows before going on to receive Honorary Fellowship, and the association with the city of Edinburgh of the first of these surgeons – Joseph Lister – forms the basis for this article. It is, of course, impossible in any project of limited size to do justice to the achievements

of a man whom this author has heard described as having "saved more lives than were killed in all the world's wars put together." Hyperbole perhaps, but there can be little argument that Lister's initiation of the antiseptic era must rank – alongside James Young Simpson's efforts in the field of anaesthesia and Alexander Fleming's work with antibiotic substances – as one of the most significant contributions to medicine.

Although we Scots often like to claim the man and his achievements as one of our own, Lister (unlike Simpson and Fleming) was born south of the border, in Upton, Essex on 5th April 1827. Joseph was the fourth child of seven of

Joseph Jackson Lister (a wine merchant and microscopist) and his wife, Isabella (née Harris). It is worth noting that since the early eighteenth century, the Lister family had been members of the "Religious Society of Friends", the Christian denomination known popularly as "Quakers". To a Quaker, the pursuit of earnest endeavor and hard work was to meet the will of God, so it is hardly surprising that the young Lister devoted himself greatly to academic pursuits, excelling in natural history as well as the collection, preparation and dissection of specimens. His father's success in the wine trade meant that the family were financially secure, but Joseph was schooled at home until the age of 11, at his parents' Queen Anne



Joseph Lister

Portrait by Dorofield Hardy, after the original by W. Oules, which hangs in The Lister Room, Fellows Library of The Royal College of Surgeons of Edinburgh

mansion, Upton House. He then attended two Quaker schools, first at Hitchin and then Grove House School in Tottenham, where he decided to pursue a career in medicine. Lister went to University College London (UCL) in the spring of 1844, obtaining his B.A. three years later. However, a period of ill health and a crisis of confidence, most likely related to the death (most probably from a brain tumour) in 1846 of his brother John, meant that Lister did not resume studies until 1849. Nevertheless, on

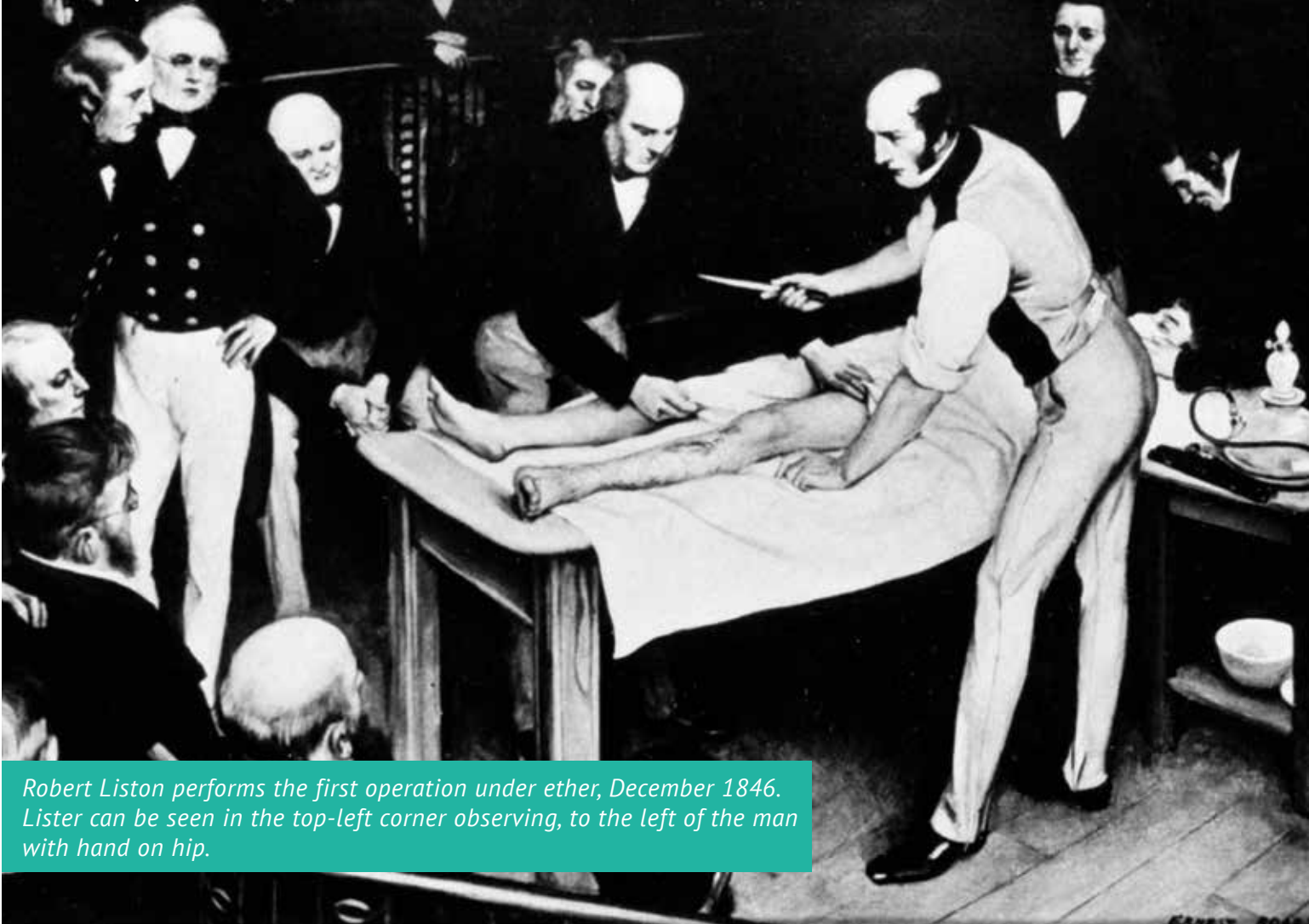
re-commencing them he went on to win medals in anatomy, surgery and medicine, as well as becoming President of the UCL students' medical society. He graduated MB in 1852 and took on the role of House Surgeon at University College London.

Although based in the English capital, it was almost certainly during this period that Lister became strongly influenced by Edinburgh-trained surgeons. In 1846 he witnessed Robert Liston perform the first major operation under general

anaesthesia (ether), but more significantly was tutored by UCL's Professor of Physiology, William Sharpey. Sharpey, a native of Montrose, had graduated from the University of Edinburgh before travelling to Paris, where he met another Edinburgh student who was to have the greatest influence on the life and work of Joseph Lister – James Syme. Some years later in his role at UCL, Sharpey - always keen to encourage his students to broaden their perspectives and surgical experience - advised the young Lister to visit Edinburgh, and witness first-hand the work of Syme, even writing a letter of introduction to Syme on Lister's behalf. So it was that Lister, in September 1853, one year after becoming a Fellow of The Royal College of Surgeons of England, travelled north.

James Syme

There can be few medical names so closely associated with Scotland's capital city than that of James Syme. Born on Princes Street, Edinburgh's main thoroughfare, in 1799, Syme initially took art classes at the University of Edinburgh before studying anatomy under Robert Liston. Syme's relationship with Liston was frequently quarrelsome (as, it must be said, it was with a great many of Syme's peers who took issue with his often waspish approach) but even when only in his 20s it became clear that Syme was a surgeon of unparalleled skill. By 1833, he was appointed Professor of Clinical Surgery at



Robert Liston performs the first operation under ether, December 1846. Lister can be seen in the top-left corner observing, to the left of the man with hand on hip.

Edinburgh University, and after Liston's death in 1847, Syme travelled to London to assume his vacated Chair of Clinical Surgery at University College London. He was to hold the position for only five months however, before returning to the Edinburgh Chair. He served as President of The Royal College of Surgeons of Edinburgh from 1849 to 1851, and was also Surgeon to Queen Victoria.

As well as being arguably the foremost British surgeon of his time, James Syme was an extraordinarily inventive man. For example, at the tender age of 18 he had discovered

an India rubber solvent and a process by which it could be injected into cloth, thus making it waterproof. Unfortunately for Syme, Glasgow chemist Charles Macintosh was first to patent the idea, thus becoming world-famous as the creator of the "rubber Mac".

Arrival in Edinburgh

It wasn't Lister's intention to make his stay in Edinburgh an extended one – initially planning only a few weeks. As events transpired however, he was to remain in the city for seven years. Doubtless the opportunity to work at length with the great Syme played

the major role in his deciding to stay in Edinburgh. However, it is likely that the changes underway in the city itself at that time also played a part.

Although a small city, with a population only around 200,000 in the early 1850s, Edinburgh had benefited greatly from the new transport system offered by the rail links created during the previous decade. Scotland's capital was now joined by rail to Glasgow, Carlisle, Berwick and further south. Most significantly, a journey to London – previously only possible via a nine-day coach journey - could now be

completed in a single day. At the same time, medical teaching in Edinburgh was thriving. Edinburgh University (the third oldest in Britain) was home to a flourishing medical school, partly because - unlike other Scottish universities - religion was not a condition of admission. In addition, universities in Scotland were not considered the preserve of the wealthy. Another benefit could be found in the fact that Edinburgh's medical teaching facilities in the city were centrally concentrated, with the University Medical School only a few hundred yards from the city's Royal Infirmary. This in turn was a short distance from Surgeons' Hall, designed by William Henry Playfair, and which had been the home of The Royal College of Surgeons of Edinburgh since 1832. In addition, dozens of private extra-mural medical schools

had been established in the surrounding areas of the city's "Old Town".

Presenting himself to Syme with Sharpey's letter, Lister quickly established a relationship of mutual trust and respect with the older surgeon. To Lister, Syme represented authority and assuredness in surgery, writing to his sister Mary in London early in his stay, "Syme has his own views based on great experience with a sound judgement and a very original mind." For his part, Syme was so impressed by Lister that he quickly appointed him "Supernumerary Clerk" in the Royal Infirmary - a role conceived by Syme with duties equivalent to a House Surgeon - in order to employ the young man not yet licensed to practice in Scotland in some capacity, before appointing him to the House Surgeon in January 1854. In addition, Lister became assistant to Syme at his private hospital in Minto House, Chambers Street. Such was the high regard that Lister held for Syme, the fact that he already held the prestigious FRCSEng did not deter him from accepting such relatively junior roles. It is worth noting though, that the license issues meant it was Syme who carried out almost all of the actual surgery at this time.

The two men also became close on a personal level, with Lister often visiting Syme at his home in The Grange in Edinburgh (somewhat appropriately now the site of the Astley Ainsley rehabilitation hospital in the

city). Perhaps partly due to his Quaker upbringing, some have portrayed Lister as a sombre, almost dour figure. Indeed, John Rudd Leeson, who was to serve as Dresser and House Surgeon to Lister in Edinburgh in the 1870s, wrote of him, "I never saw him elevated or knew him laugh...over him hung a cloud of seriousness tinged with sadness that tempered all he did, an overwhelming sense of responsibility that lay like a burden upon his soul." A tall, well-built man, always carefully and neatly-dressed, it is fair to say that Lister maintained a certain air of solemnity throughout his life, but as a younger man in 1850s Edinburgh he was not without friends among his young surgical colleagues in Syme's wards, with whom he enjoyed regular climbs of Arthur's Seat, the legendary peak which overlooks the capital. Despite these social occasions, there is little doubt that these young men held a distinct reverence for Lister, whom they referred to as "The Chief" (Syme, however, was "The Master").

By the autumn of 1854, Lister - although fond of Edinburgh - was missing his home city of London. Opportunities to return to work there were presented to him by the Royal Free Hospital and The Society of Friends, who had opened a new infirmary in Poplar. However, fate was to intervene when Richard James Mackenzie, was killed in the Crimea. Mackenzie - considered Syme's most brilliant protégé prior to Lister's



James Syme

Portrait by Sir George Reid, held in The Royal College of Surgeons of Edinburgh

arrival in Edinburgh – had been appointed Assistant Surgeon to Edinburgh Royal Infirmary at the age of only 29, and had enhanced his reputation further by writing extensively on excision of the knee joint and a modification of Syme's own amputation procedure. Volunteering for army service in 1854, Mackenzie served at the bloody Battle of Alma in September that year, performing 27 major operations. Sadly, he contracted cholera in the days following the battle, and within a week had died.

RJ Mackenzie's passing created a vacancy at Edinburgh Royal Infirmary that appealed to Lister, who asked for Syme's support in his application. The older surgeon was initially reticent about doing so, believing his protégé's talents would be best served in London or the continent, but eventually changed his mind and backed Lister's application. Professionally, Syme no doubt recognised that the younger surgeon that he was so fond of would have next to no chance of landing the post without his recommendation, but it is very likely that by this time he was aware of how close Lister had become to Agnes – James Syme's daughter.

Agnes Syme

Agnes Syme was born on 23rd November 1834, one of nine children born to James Syme and Anne Willis. Sadly, by the time Agnes was six, her mother and seven of her siblings had died, leaving only Agnes and her younger sister Lucy. Syme was to remarry, but neither Agnes nor Lucy were to become close to the two half-brothers and one half-sister that resulted.

Although he had only worked with Syme for a few months, by early 1854 Lister's fondness of Agnes by that time was evident to all, although his descriptions of her could at times be almost comically reserved, as evidenced by his description of her in a letter to his brother-in-law:



Agnes Lister (Welcome Trust)

"...in the case of my precious Agnes the outward appearance as I have often said before is not at all showy, but there is in her countenance an ever varying expression that artlessly displays a peculiarly guileless, honest, unaffected and modest spirit..."

SCHEDULE OF MARRIAGE (C).
Pursuant to Act 17 & 18 VICTORIE, Cap. 80, Sec. XLVI.

When, where, and how married.	Signature of Parties.	Age.	Residence.	Rank or Profession, and Condition (whether Bachelor or Widower, Spinster or Widow.)	Name, Rank, and Profession of Father, Name, and Maiden Surname of Mother.	Signature of Officiating Minister and Witnesses.
the twenty-third of April 1856. Millbank House Edinburgh	Joseph Lister	29	3 Rutland Road Edinburgh	Surgeon Bachelor	Joseph Jackson Doctor Marie Merckert	James Lister Anne Willis
	Agnes Syme	21	Millbank House Edinburgh	Spinster	James Syme Anne Willis	James Lister Anne Willis

The above Marriage was Registered by me at Edinburgh, on the 25th day of April 1856. Joseph Lister

1856 marriage certificate for Joseph and Agnes Lister



Surgical Residents at the Royal Infirmary of Edinburgh, 1853. Lister seated in the centre of the front-row.

John Beddoe *John King* George Hogarth Pringle *Patrick Heron Watson*
Lister *David Christison* Alexander Struthers

Such a description of someone Lister loved dearly seems almost fitting for a man of such clinical exactitude, but there was no doubt that he had fallen for Agnes. Indeed, word seems to have reached Lister’s parents of the burgeoning relationship, when Joseph Jackson Lister wrote warningly to his son:

“Thy dear mother tells me she has been persuading thee not to allow thy other engagms to absorb thee too entirely...I do not know how some apprehensions of hers that I told thee of have been awakened, and I try to assure her they are groundless, that most probably no thought has

entered thy mind to warrant them or thy judgement would at once have dismissed it as incongruous...it may be well to be on thy guard that in the friendly intercourse to which thou art kindly invited, nothing in thy deportment may give any ground for suspicion that thou has an intention beyond it.”

Regardless of his parents concern the courtship continued, and by early 1856 a wedding date of April 23 had been set. The Quaker language is evident in his father’s writing, and the family religion presented a problem for Joseph and Agnes. For any Quaker to “marry out” would require their

resignation from the faith, or expulsion from it was likely. So it was that Lister – with some sadness – left his family’s church and joined the Scottish Episcopal Church (although it is interesting to note that he himself continued to retain certain Quaker characteristics for the rest of his life, such as referring to family as “thee” or “thou” in writing and speaking).

The wedding took place in Syme’s home Millbank, in the Morningside area of Edinburgh, and the couple honeymooned for four months, including visits to the most prominent medical schools in Europe, interviewing attending professors and their

hospitals. They returned to the home Lister had purchased on 11 Rutland Street, a granite Georgian terraced house.

Although the marriage produced no children, Joseph and Agnes enjoyed a happy, devoted life together. They continued to travel extensively throughout Britain and Europe, collecting flowers, studying wildlife and keeping diaries on the subjects. Somewhat unfairly, Agnes is often described as merely Lister's "scribe" or "secretary". In fact, Agnes had long assisted Syme and the many visitors who visited her father's laboratory and went on to participate fully in Lister's experiments and dissections, working the same hours as her husband before documenting and sketching his work. It was recognised that for all his scientific brilliance, Lister had trouble expressing himself, and Agnes' letters and diaries frequently demonstrate her linguistic skills in the scientific writing that underpin his work.

Fellowship of The Royal College of Surgeons of Edinburgh

Although he had held the FRCSEng for well over a year, as mentioned this technically did not license Lister to practice in Scotland in 1855. Thus in the spring of that year he petitioned to be elected a Fellow of The Royal College of Surgeons of Edinburgh. The oldest surgical corporation of its kind in the world, RCSEd has its formal foundation in 1505, when the Surgeons and

Barbers of Edinburgh were formally incorporated as a Craft of the Burgh. A "Seal of Cause" (a charter of privileges) was granted to them by the Town Council of Edinburgh on 1st July that year, and ratified by King James IV in 1506, granting them exclusive rights to perform surgery, and to have the powers to prosecute individuals who operated outside these boundaries. The Seal of Cause also specified that any surgeon practicing their craft should be literate; have full knowledge of anatomy and surgical procedures; and that this knowledge should be thoroughly tested at the end of apprenticeship.

As the Incorporation grew throughout the seventeenth century, the barber-surgeons would meet in various locations around Edinburgh - rented rooms in Dickson's Close; in

the aisles of St Giles Cathedral, or in the home of Deacon (President) at the time. In 1697, their first purpose-built Surgeons' Hall was completed, having been designed by the architect James Smith. The new building contained a 'Great Hall', a library, a laboratory and an anatomy theatre (for which they were granted additional cadavers for teaching purposes). Public dissections were held there once a year. By 1722 the surgeons had separated from the barbers and had undertaken the task of establishing Edinburgh as the dominant centre of surgical teaching. In 1778, King George III granted a new charter giving the surgeons the title "The Royal College of Surgeons of the City of Edinburgh".

By the beginning of the nineteenth century, the existing Surgeon's Hall had become



Playfair Building to The Royal College of Surgeons of Edinburgh (RCSEd Records)

A.I.
 Royal Infirmary
 Mar 15th 55

Sir

I request the
 honour of becoming a
 Fellow of the Royal
 College of Surgeons of
 Edinburgh,

I have the honour to be
 Yours obediently
 Joseph Lister F.R.C.S. *London*

To The President of the Royal
 College of Surgeons

The College's new home formally opened in July 1832.

It must be said that Lister applied to become a Fellow of the College during a somewhat controversial period in the RCSEd Fellowship's history. Five years earlier, in 1850, the decision had been taken by the College to discontinue a separate examination for Fellowship candidates, requiring them only to have the degree-level College Licentiatehip (LRCSEd) and then allowing eligible candidates to petition for election by vote of Fellows. There can be little question that most of the surgeons admitted to Fellowship during that time were of high calibre - indeed, it has been argued that the old system of admission by examination had actually deterred surgeons of such quality from becoming Fellows, and it was only the abolition of this system that led to men like Lister using the FRCSEd post nominal. However, this policy of less than rigorous admission procedures for College Fellows was to draw widespread criticism over the years (a policy that even raised political eyebrows, given the esteem in which RCSEd Fellowship was held) and so it was little surprise

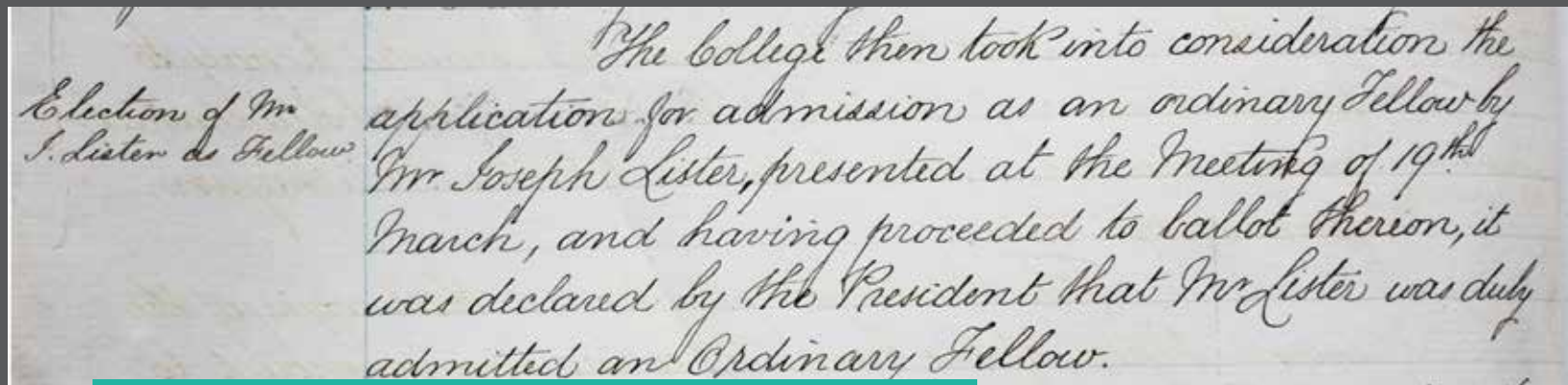
Edinburgh
 Decr 14th 1855.

We beg to recommend
 W. Joseph Lister as a can-
 didate for the Fellowship of
 the Royal College of Sur-
 geons of Edinburgh.

James Syme
 James Simson

↑1855 letter from Joseph Lister to The Royal College of Surgeons of Edinburgh, requesting he be admitted as an Ordinary Fellow. (RCSEd Records)
 →1855 letter from James Syme and James Simson, recommending Lister be elected to Fellowship (RCSEd Records)

inadequate, partly due to the need to provide suitable accommodation for a large collection of pathological specimens being presented to them by anatomist John Barclay. A site was acquired by the purchase of a riding school (The Royal Academy for Teaching Exercise) in Nicolson Street. William Henry Playfair (1790-1857), the foremost Scottish architect of that era, was commissioned to design a building containing a Meeting Hall, Barclayan Hall for the specimens (which included a full size elephant and rider), Lecture Room and Library.



Minutes of The Royal College of Surgeons of Edinburgh, 20 April 1855, noting Lister's election as an Ordinary Fellow (RCSEd Records)

when a separate Fellowship examination was reinstated in October 1885.

Thus Lister's formal application to become a Fellow of the world's oldest surgical college was a simple, even nondescript procedure. On March 14th 1855 a letter was written to the College President at the time, Archibald Inglis, from James Syme and James Simson "begging to recommend Mr Joseph Lister as a candidate for the Fellowship of the Royal College of Surgeons of Edinburgh". This was followed the next day by Lister himself writing to Inglis, simply writing, "Sir, I request the honour of becoming a Fellow of the Royal College of Surgeons of Edinburgh". Minutes from the Meeting of The Royal College of Surgeons of Edinburgh of 19th March confirm Lister's application "was appointed to be taken into final consideration at a future meeting at least a month hence". That meeting was held on the 20th of the following month when, no Fellow having objected to his application (which had been posted for

consideration in the Library as stipulated in the College Laws) Joseph Lister was duly admitted as a Fellow. His College Roll Number was 445.

Work in Edinburgh

In the mid-nineteenth century Edinburgh Royal Infirmary admitted around 4400 patients annually, although records show that in 1854 only 245 individuals had been treated in surgical wards. The average time a surgical patient remained in hospital was seven weeks. Wards were small, dark, crowded and, most of all, unclean. Nursing care was elementary; surgeons did not wear gloves or masks; their instruments were often carried in the pockets of their long coats, their needles in their coat lapels. Due to these conditions, surgery was avoided whenever possible and it was exceptional for more than a single operation to be performed each day, and those carried out were attended by the whole of a surgeon's staff. Much of Lister's early work there constituted the surgery of simple and compound fracture. Opening the abdomen, chest

or skull was too hazardous to be considered but Lister did operate on aneurysms, hernias and occasional cases of skin and other tumours. With hospital gangrene and erysipelas (streptococcal infection) also prevalent, there was an ever present risk to patients as infection spread easily in the small, crowded wards of this time.

Lister was known as a thorough and methodical (if not technically outstanding) surgeon. He was, however, renowned for developing new techniques to improve upon orthodox methods and the well-being of his patients. One of his more impressive operations was on treating caries of the wrist. It had long been thought that the wrist had to be amputated because of the deterioration of the bones, but Lister devised an operation that reduced the need for amputation, and enabled the patient to retain their limb. To him, new research was the essence of effective teaching, and regardless of his abilities in the operating theatre, his skill in the lecture theatre was to become unmatched. It was

teaching in this manner that was to dominate the latter half of the 1850s for Lister.

By this time, his career during his first spell in Edinburgh was arguably at its high point. Newly-elected an RCSEd Fellow, running a respected (if not massively busy) consulting room in Rutland Street, Lister began preparing a course of lectures in surgery in the extra-mural medical school in High School Yards. Before commencing, he spent a month in Paris studying inflammation, which was the subject of his first lecture, held on 7th November 1855. It has to be said that the lectures got off to a fairly ignominious start, with only seven tickets initially taken, but those that did attend were enthused by Lister's teaching, and the lecture formed the basis of his paper "On the Early Stages of Inflammation" which he went on to present to the Royal Society of London in 1857. The work described the skin-tone changes in certain frogs due to varying concentration and diffusion of pigment granules (Lister having been of the belief that the early stages of inflammation in all species was misunderstood).

In November 1856 Lister, newly married and settled in his role at Edinburgh Royal Infirmary, commenced his second series of extra-mural lectures. Again numbers were initially low, but as Lister's reputation continued to grow, so these increased. By 1858 he was regarded as one

of the foremost authorities on inflammation, publishing no less than seven papers on the subject that year alone. As the decade grew to a close however, Lister – despite having been re-elected Assistant Surgeon to the Royal Infirmary of Edinburgh in November 1858 – had begun to feel constrained with his lot in Edinburgh, and sought a Surgical Professorship. The opportunity for this presented itself in the summer of 1859 when Professor James Lawrie, who held the Chair of Surgery in Glasgow University, retired due to ill-health. The successful candidate of seven who applied for the position (five from Glasgow; two from Edinburgh) Lister was appointed Regius Professor of Surgery in Scotland's largest city in January 1860.

Glasgow

Concentrating as it does on Lister's connections with Scotland's capital, it is not the intention of this piece to provide yet another detailed account of Lister's epoch-making work while Professor of Surgery in Glasgow. There exist a myriad of more eloquent articles, books, documentaries, even poems inspired by his seminal innovation, but a brief outline of the discovery is appropriate.

Appointed Surgeon to Glasgow Royal Infirmary, and enthused by Pasteur's work on purification and by

applying carbolic acid (rather than heat or air filtration as Pasteur described) to wounds, in Glasgow Lister was to initiate the era of antiseptics. Querying as to why patients with simple fractures generally recovered whereas those with compound fractures more frequently died, Lister began to apply dressings containing carbolic acid to the sites of broken skin caused by compound fractures. His reasoning was explained when he was to later write:

"In the course of the year 1864 I was much struck with an account of the remarkable effects produced by carbolic acid upon the sewage of the town of Carlisle, the admixture of a very small proportion not only preventing all odour



*Joseph Lister, c1855
(RCSEd Records)*



Lister's antiseptic spray in operative use

from the lands irrigated with the refuse material, but, as it was stated, destroying the entozoan which usually infest cattle fed upon such pastures... Carbolic acid proved in various ways well adapted for the purpose. It exercises a local sedative influence upon the sensory nerves; and hence is not only almost painless in its immediate action on a raw surface, but speedily renders a wound previously painful entirely free from uneasiness. When employed in compound fracture its caustic properties are mitigated so as to be unobjectionable by admixture with the blood, with which it forms a tenacious mass that hardens into a dense crust, which long retains its antiseptic virtue..."

It is interesting that the same year as his observations in Carlisle, an opportunity to return to Edinburgh had arisen when James Miller died, vacating the post of Professor of Systematic Surgery in Edinburgh. Lister applied for the role, confident of success, but was to lose out to James Spence. Disappointed, he threw himself into greater research on suppuration, and within half a decade, Lister's work had transformed the wards at Glasgow Royal Infirmary from some of the most unhealthy in the country to models of cleanliness, with post-operation mortality rates reduced 46% to 15%. By October 1866, Lister was testing his theories on the condition of abscess. As

large-scale draining of these was often life-threatening, Lister made openings under the protection of carbolised oil with a covering of lint, to protect the skin from the irritant properties of the carbolic acid. In April 1867, Lister applied these carbolised dressings to incised, surgical wounds for the first time. He published findings his work between March and July 1867 in the *Lancet*, in a paper entitled "On a New Method of Treating Compound Fracture and Abscess etc. with Observations on the Conditions of Suppuration."

By the end of the decade Lister's methodical approach was to bring a second major contribution to surgical practice in the development of his first sterile absorbable catgut ligature. Catgut was readily available, used as it was to string musical instruments. Lister's catgut suture, when soaked with carbolic solution, greatly reduced incidence of surgical sepsis. This catgut was to be the source of great controversy in 1869, however, when the aforementioned Spence – despite being an outspoken opponent of Lister's antiseptic theories – attempted to use the ligature in an operation. The patient died, with Spence blaming the catgut in a subsequent *Lancet* article. Spence's assisting surgeon in the operation Edward Lawrie (coincidentally also House Surgeon to James Syme), perhaps unwisely responded in the *Lancet*, suggesting that in actual fact the fault lay

with Spence who had failed to carry out the catgut procedure according to Lister's teaching. Outraged, Spence demanded action be taken against Lawrie, who was thus dismissed from the Infirmary.

Return to Edinburgh

In April 1869 James Syme, mourning the passing of his second wife two months earlier, suffered a stroke from which he was to never fully recover. Although concerned for his friend, mentor and father-in-law, Lister needed little persuasion to apply for the Chair of Clinical Surgery that Syme had held for over twenty years, but was now forced to relinquish. Duly elected to the post in August 1869, Lister travelled back to Edinburgh with Agnes. Sadly, his own father died the following month, at the age of eighty-four.

After a period of living in rented accommodation in Abercromby Place, the Listers purchased a home for (in Joseph's own words), "a most enormous sum" in Charlotte Square. The house, with superb views of Princes Street Gardens and the Castle, was sufficiently large for entertaining his many students and other guests, while accommodating room for Lister to continue his scientific experiments, concentrating mainly on sepsis. His first lecture, on the "Germ Theory of Disease" was attended by a full house of students, in contrast to the poorly-attended lectures from his first period in the capital. The students (who were also keen to pay tribute to the

departing Syme) were aware they were in the presence of greatness, and greeted the lecture with rapturous applause. The scene was to be repeated at each lecture, which Lister could now afford to give only twice a week, compared to the daily lectures he presented in Glasgow.

After his teaching, Lister's routine would take him to the Royal Infirmary around midday, and it was at this time that the meticulous nature of his personality would become evident. Even the most minor of dressings, if not prepared by Lister's own hand, had to be prepared under his personal supervision. As a result his planned timetable of duties would soon become almost meaningless, as warmly described by Agnes in a letter to her sister-in-law:

"Joseph has only just come home from the hospital at 4.15 and we are going to have lunch. He has to perform two amputations at the Infirmary and on coming home finds people waiting for him. He has an operation in private at 4.30 and three patients to see afterwards. So it has been a busy day..."

The fact that Lister's operations often ran late was no deterrence to his patients. His private practice during his second period in Edinburgh dwarfed any other time in his career. In addition, he continued apace with his research work, honing existing

techniques and developing new theories. He found that a 1% solution of carbolic acid could be effectively applied by means of a spray, disinfecting not only the wound itself but the environment, instruments and dressings surrounding it. Despite his popularity as a surgeon however, it would be wrong to suggest that Lister's research innovations - although established as scientifically sound by the mid-1870s - had been met with universal approval. Mention has already been made of the irascible James Spence, and presumably Lister cared little about the old-school Edinburgh surgeons who would joke with their students that they should shut the window of the lecture theatre "in case one of Mr Lister's wee beasties might escape", but it's hard not to imagine his being a little wounded by the harsh criticism his work with carbolic acid received in 1867 from the legendary Sir James Young Simpson, pioneer of anaesthesia. Simpson argued in the *Lancet* and the *Edinburgh Daily Review* that Jules Lemaire of Paris was the first to use the acid in a surgical setting, and that Lister had merely brought the method to a wider UK audience. Lister's response was to suggest that he was not familiar with Lemaire's work, but also argued that he was not claiming to be the first to use carbolic acid in surgery, but was utilising "methods of its employment with the view of protecting the reparatory process from disturbance by external

agency." It is a little ironic to see Simpson place himself at the forefront of opposition to a medical breakthrough of such importance, given the hostility he himself had encountered when introducing the anaesthetic properties of chloroform – hostility that only abated when Queen Victoria herself gave birth to her eighth child (Prince Leopold) under its effects. That said, it is also worth noting that in his time Simpson had quarrelled extensively with James Syme.

The largest pocket of resistance to Lister's new theories, however, was to be found in London. Therefore when in 1877, Sir William Fergusson (Professor of Clinical Surgery at King's College Hospital) died, Lister was pleased when they approached him as replacement. The thought that this giant in his field could be persuaded to leave Edinburgh for England horrified medical students in the Scottish capital, and some 700 of them signed an eloquently-written petition urging him to stay. The document concluded as follows:

"The welfare of our school is so intimately bound up with your presence that its withdrawal must be an irreparable loss. We are far from disparaging that field to which you may be called, but we would venture to submit that nowhere will you find a more numerous and devoted band of followers than those who now count it their greatest privilege to listen to your teaching. While we entirely

disclaim all idea of interfering with that which you alone have a right to decide, we would yet earnestly hope that you may long remain in that position you so greatly adorn and that the day may never come when your name will cease to be associated with that of the Edinburgh Medical School."

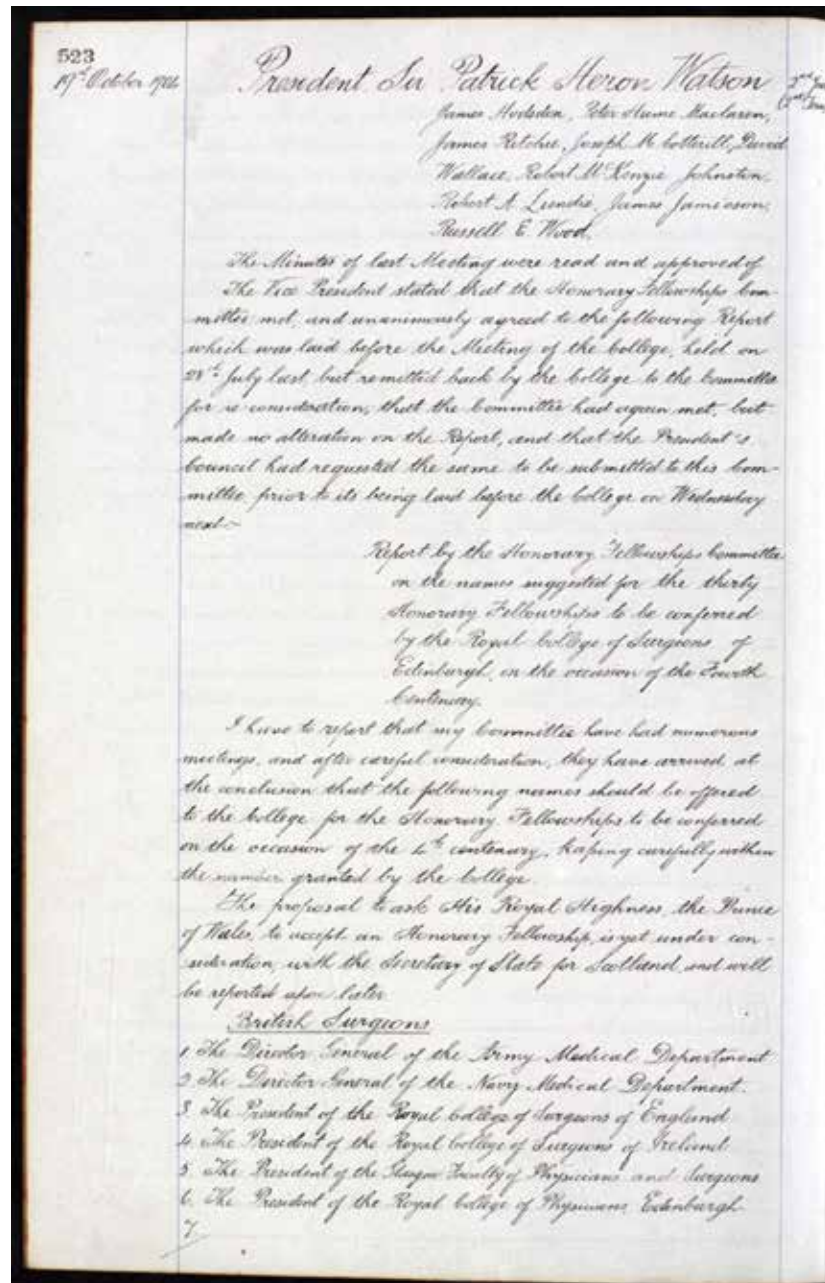
Moved by their sentiment, Lister met with his students, expressing his affection for Edinburgh and the clinical teaching in methods in the city. However, he also felt that with Syme having been dead for some seven years and the overwhelming acceptance of Listerian principles in Edinburgh and Glasgow, there was little more that could be accomplished north of the border.

The London clinical fraternity on the other hand had in the main stubbornly avoided his research, and Lister felt this presented him with irresistible opportunities

to teach, demonstrate and prove his theories. Thus in June 1877 he and Agnes left Edinburgh once more.

London

If Lister believed his arrival in London would be greeted with rapturous approval, he was disappointed. His first public lecture as a Professor there, on "The Nature of Fermentation", was met largely with indifference, and subsequent lectures were not well attended, often attracting no more than



a dozen students. His previous criticisms of London teaching methods had also not gone unnoticed in England. Now in his fifties, his reputation still carried weight though, and his surgical experience was to shine through in the operating room. As his successes there increased, so too did his influence to match that which he had attained in Glasgow and Edinburgh. By the end of the 1870s, his methods and theories had gained full acceptance in London.

By this time honours were bestowed on him frequently. Most major UK Universities conferred honorary doctorates (as did those in Toronto and Montreal), while in 1883 he was made a Baronet by Queen Victoria, to whom he had been appointed Surgeon in Ordinary in 1878. Victoria thought highly of Lister, who some years ago had drained a royal abscess from her at Balmoral. Indeed, many believed he would have received Baronetcy some years earlier, had he not rebuffed

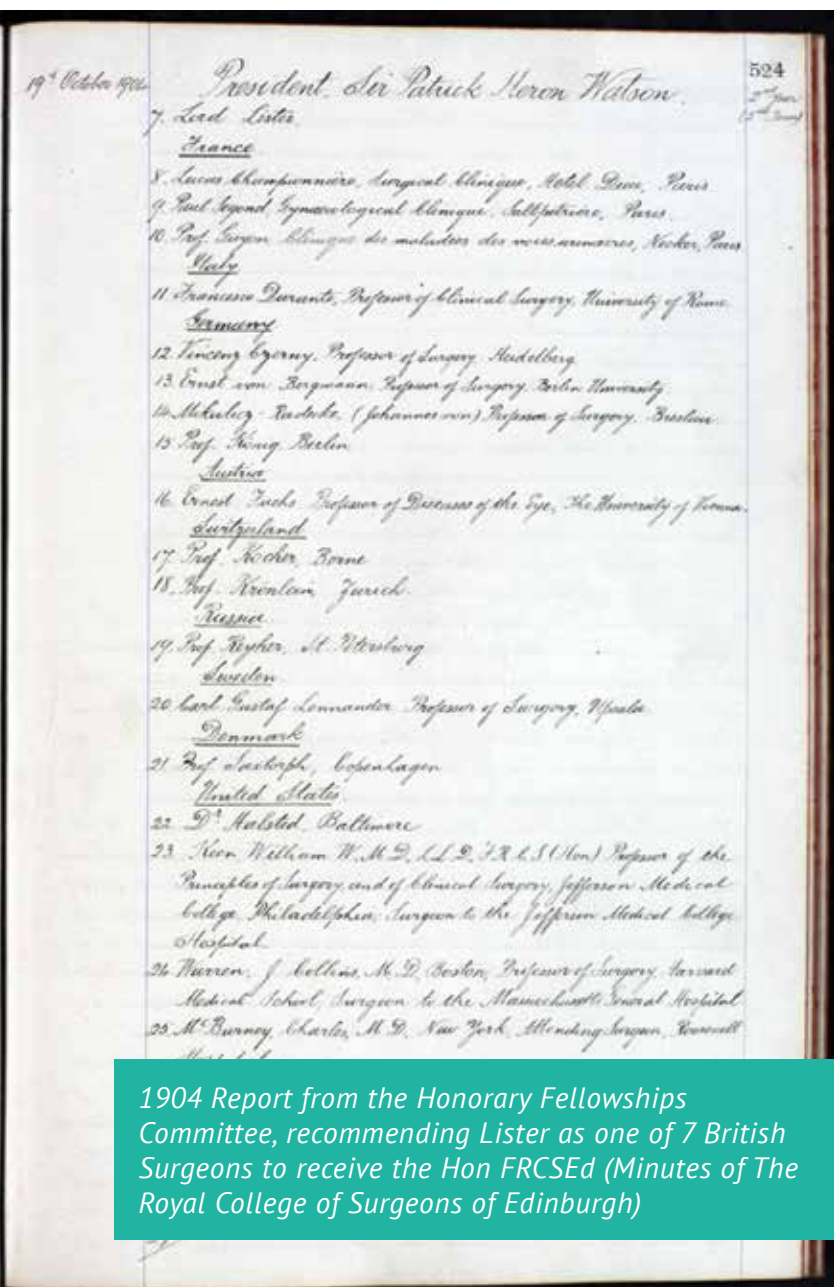
that for all the tributes Lister himself received throughout his life, none gave him more pleasure than when he spoke at the celebration of Pasteur's seventieth birthday in Paris in 1892.

By that year however, Lister's health was beginning to fade, and he retired from practice at King's College Hospital. In 1893, he and Agnes holidayed in Italy. Sadly, Agnes, who had left the UK with a severe cold, developed pneumonia on the trip and died within a week. Lister would never truly recover from this devastating loss. He continued to write and perform many of the duties asked of him for the rest of the decade (including being the first surgeon to be elevated to the Peerage in 1897, and gaining Freedom of the City of Edinburgh in June the following year), but he was to cut an increasingly lonely figure, and by the dawn of the twentieth century had withdrawn almost entirely from public appearances. A stroke at the age of seventy-six caused his health to deteriorate further. But the medical world continued to recognise the debt owed to Lord Lister.

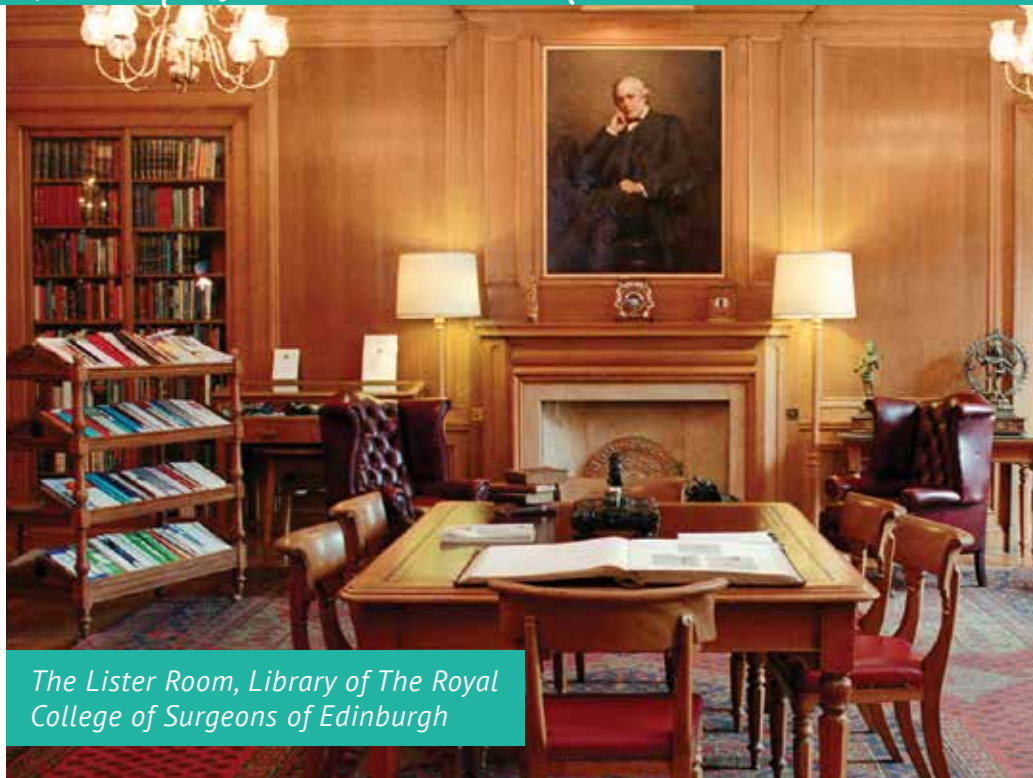
Honorary Fellowship of The Royal College of Surgeons of Edinburgh

In June 1671 it was decided by the Incorporation of Surgeons and Barbers of Edinburgh (the body which would eventually become known as The Royal College of Surgeons of Edinburgh) to award honorary

the Queen's request for support for legislation proposed by the Royal Society for the Prevention of Cruelty to Animals to limit vivisection. Two years prior to the Baronetcy the people of France awarded Lister the prestigious Bondet Prize for his application of the principles of Pasteur, whose work he admired so much. Indeed, many believe



1904 Report from the Honorary Fellowships Committee, recommending Lister as one of 7 British Surgeons to receive the Hon FRCSEd (Minutes of The Royal College of Surgeons of Edinburgh)



The Lister Room, Library of The Royal College of Surgeons of Edinburgh

Henry Parkes - who had received Fellowship by examination in 1907 and whose astounding work as Director of Medical Services for the New Zealand Expeditionary Force during World War I led to his receiving Honorary Fellowship in 1919 - has achieved the same "double".

Joseph Lister's name continued to be revered, and honours continued to be bestowed on him in his twilight years. London and Glasgow joined Edinburgh in making him a Freeman

"freedoms" to individuals of political or social note who could help to boost the reputation of the Incorporation and assist it in any political struggles. The first recipient was Andrew Ramsay, Lord Provost of Edinburgh, on 17 October 1671. By 1905 however, only thirty-three more had been admitted in this way, and none since it was conferred on Andrew Smith, Director General of the Army and Ordnance Medical Department, in 1856. Of course, being founded in 1505 meant RCSEd was to celebrate its 400th anniversary in 1905, which seemed an appropriate date for new Honorary Fellowships to be conferred. Preparations began well in advance, with an Honorary Fellows Committee approved by College President Patrick Heron Watson. Their report to RCSEd Council on 19th October 1904 recommended thirty Honorary

Fellowships from nine European countries, the USA, Canada and Australia. Of the seven individuals proposed from the United Kingdom, six were awarded to men who happened to hold a prestigious position at the time (namely Director-General of the Army and Naval Medical Departments, and Presidents of the other medical Royal Colleges). In the College Minutes, only one was listed by name. No mention was made of the fact that Lister was to become the first surgical Fellow to also receive Honorary Fellowship, but by this time, Lister's achievements were so elevated above those of his peers it is likely no further explanation other than his name was necessary.

Honorary Fellowship was bestowed on Lord Lister on 20th July 1905, fifty years after he was first elected FRCSEd. Only New Zealander William

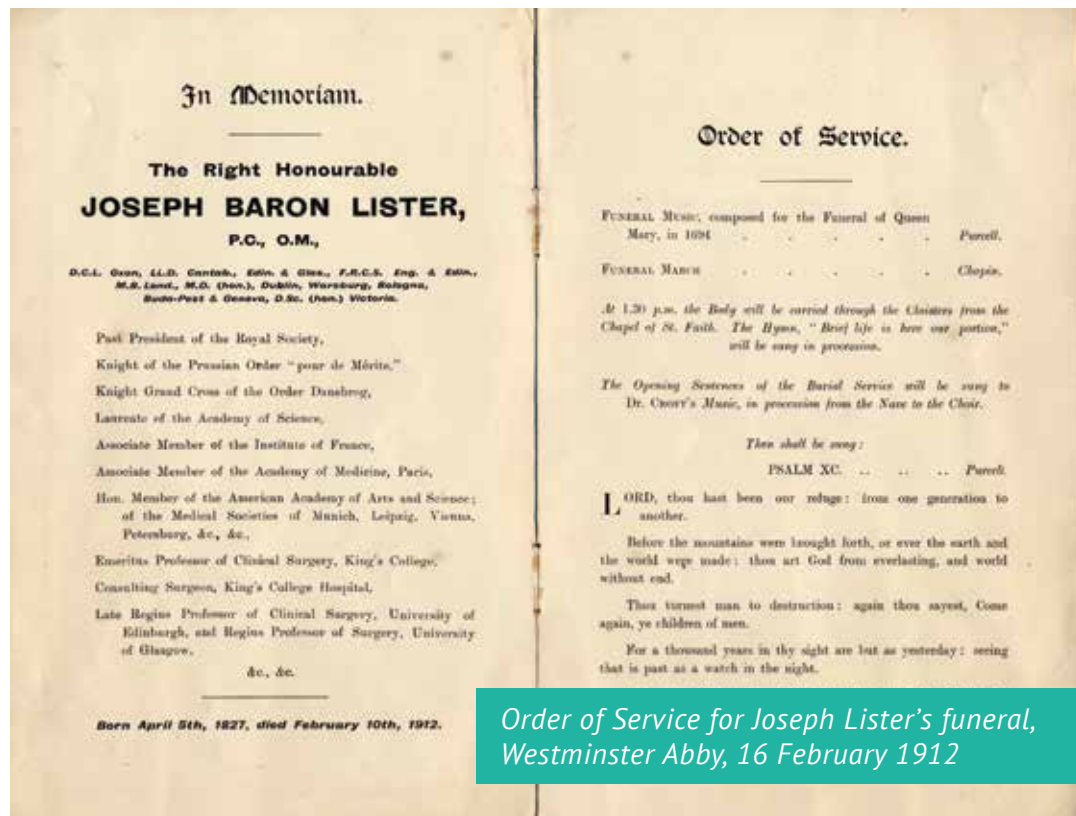
of their city in 1907 and 1908 respectively. However, now in his eighties it was clear his health was failing, and he was unable to travel to Glasgow for the commemoration. That same year in a letter to his friend, Edinburgh surgeon John Chiene, Lister mentioned his health which was "in truth very infirm, and on that account I must ask you to excuse a most inadequate reply to your very kind letter."

In 1909 Lister had moved to the Kent coast, where he passed away on 10th February 1912 of pneumonia - the same illness that had taken his beloved Agnes. It was somewhat appropriate that in his last years he was cared for by Agnes' sister, Miss Lucy Syme.

Legacy

The name of Lister has, of course, become synonymous with medical and surgical

excellence (and - in brands like Listerine mouthwash - antiseptic cleanliness). The number of worldwide commemorations of Lister number far too many to be listed here, but an indication of the esteem in which he was held can be found in the number of times his name is utilised here at The Royal College of Surgeons of Edinburgh. The same Library Reading Room in which his 1855 application for Fellowship was displayed is now named 'The Lister Room'; the nationwide Lister Surgical Skills Competition gives aspiring surgeons in their final year of UK medical school an opportunity to compete in surgical challenges against their peers from across the UK. In the 1980s, the College established Lister



Order of Service for Joseph Lister's funeral, Westminster Abbey, 16 February 1912

Professorships, recognising original research carried out by younger surgeons as part of their training, and when, in 2013 Surgeons' Hall Museum – the UK's largest collection of surgical pathology artefacts – was redeveloped in a hugely successful multi-million pound

undertaking, "The Lister Project" seemed the natural name for the venture. Joseph Lister's body may lie alongside Agnes in Hampstead Cemetery, but his name and achievements are immortalised in this and all similar institutions.



Steven Kerr is Librarian of The Royal College of Surgeons of Edinburgh. The College Library team provides clinical information services to the College's 25,000 Fellows and Members across the globe, as well as thousands of historical enquiries from researchers, academics and the media each year. Steven was born in Edinburgh, raised in Earlston in the Scottish Borders, and studied Librarianship at The Robert Gordon University in Aberdeen (having been told by his mother that she thought it would be suitable vocation for him!) He graduated with a B.A in the subject in 1996, and following a four year spell working in a private pharmaceutical research library, he joined RCSEd in the summer of 2000.

Steven's interests include cinema, reading and theatre. However, his foremost obsession is football (the European version) and in particular a lifelong love-affair with Rangers FC, despite their numerous attempts to break his heart in recent years. He lives in East Lothian with his wife, Nicola.

Oslerium

*Every issue of
“Surgical Humanities”
carries an excerpt from
the works of the
pre-eminent
Canadian physician
Sir William Osler
(1849-1919).*

The life of William Osler in itself provides a fundamental justification for an education and engagement in the surgical humanities. Osler’s medical textbook, “Principles and Practice of Medicine” (first published 1892) widely used as a standard and acclaimed though it was during his lifetime, has largely been forgotten, or remembered only in relation to his other achievements. But in the other great body of his work - his speeches, his essays and his commentaries on the profession, on the business of daily living, on professionalism, on our profession’s imperative for humane practice and on the wisdom of our forbears - he has achieved immortality.

Osler’s father the Rev. Featherstone Osler was a missionary sent from Cornwall, England, to the backwoods of Ontario. William Osler was born in Bond Head, Upper Canada (now Ontario) to Featherstone and Ellen Osler on the 12th of July, 1849.

This was a remote town in an already remote country at the



About

SIR WILLIAM OSLER

time, and Osler was sent for his schooling to Trinity College School, an independent school for boys in Port Hope, Ontario. In the fall of 1868, Osler enrolled in the Toronto School of Medicine, but soon transferred to McGill, because it had better clinical opportunities. He graduated from the McGill University School of Medicine in 1872 and taking advantage of an older brother's generosity, Osler spent the next two years studying in Europe and visiting the great clinics and hospitals of Berlin, Vienna and London.

Upon his return to Canada, he was appointed to the faculty of McGill University and spent the next five years teaching physiology and pathology in the winter term and clinical medicine in the summer. In 1884, Osler was appointed to the staff of the University of Pennsylvania as Professor of clinical medicine and this was the start of a 21 year period of work and achievement in the United States. His appointment to the founding professorship and staff of the new John Hopkins Medical School in Baltimore in 1888 marked the

beginning of a very fruitful association with the "Big Four" - the pathologist William Welch, surgeon William Halstead, gynecologist Howard Kelly (and Osler himself).

Together, the "big four" would introduce far reaching changes in medical education that are still felt today - the clinical clerkship for medical students and the residency system of training were both products of this association. About this time, Osler also began a series of brilliant speeches and addresses whose impact would be felt far beyond the audiences for whom they were intended. The "Principles and Practice of Medicine," a monumental treatise, was published in 1892.

William Osler and Grace Revere were married in 1892. Their only child, Revere Osler was killed in action in Belgium during one of the many disastrous and ill-fated campaigns of the first world war.

In 1905, Osler was offered the prestigious Regius professorship of Medicine in Oxford, England, and the

Oslers made the last move of their eventful lives, across the Atlantic, once more, to England. Another distinguished period of William's career followed - he was knighted and continued to write and deliver memorable addresses to distinguished audiences and societies.

Sir William Osler died of pneumonia in 1919, a complication of the influenza pandemic of 1918-1920.

Harvey Cushing, the pioneer neurosurgeon and Osler's biographer called him, "one of the most greatly beloved physicians of all time."

Sources:

"Osler - A Life in Medicine" by Michael Bliss. Hardcover, by University of Toronto Press, 1999. Also available for Kindle.

Note:

Sir William's brother, Edmund Osler (who was a railway baron) has a living connection with Saskatchewan - the town of Osler (about 20 min North of Saskatoon) is named for him; and there is an "Osler Street" close to the Royal University Hospital.

Throughout his illustrious career, Osler distinguished himself from most of his peers by the universal, broad and truly international approach he had to medicine and its practice around the world.

Chauvinism, as Osler defines it, is the very opposite of the essential humility and receptiveness that made this universal approach possible – an approach that recognized our common humanity and the close fraternity of physicians, no matter their nationality.

“Chauvinism in Medicine” was addressed to the participants of the 1902 meeting of the Canadian Medical Association in Toronto.

Of course in Osler’s time, when travel and its means were much more limited, it was mostly of Europe and its many different medical traditions that North American physicians possessed any degree of familiarity. This is reflected in Osler address, where he invokes the great contributors to medical science that Western Europe made in the 19th century.

But in spite of having lived in the age of colonialism, where students were taught that all knowledge and all science began with Greece, Osler acknowledges the great advances made by Islamic (“Arabian”) medicine in the middle ages as well as the “Alexandrian and Byzantine” schools. Readers will remember that the histories of Chinese and Indian systems of medicine were only systematically documented in the West during the 20th century and especially during its latter half.

In an age that revelled in and celebrated various degrees of anti-Semitism, Osler’s recognition of our common humanity and appreciation for the achievements of other nationalities and races, extended to his Jewish colleagues as well. Surrounded as he was by prejudice and bigotry, he wrote two very appreciative essays – “Letter from Berlin” and “Israel and Medicine” – that celebrated the achievements of the Jewish people and physicians and condemned all forms of anti-Semitism.

It is generally regarded as something of a mystery as to how Osler from rural, small-town, Bondhead, Ontario, the son of missionary parents from England, grew up with such a generous view of other people and the world in defiance of the age in which he lived. If we believe with Wordsworth that the “child is



father of the man,” perhaps these were attitudes he learned, together with his siblings, from his parents.

In this, the second part of the address, Osler fiercely denounces the inability of one country – i.e. Canada or the United States - to have one uniform licensing body that will enable a physician to practice in any province or state. This “miserable chauvinism” that Osler describes, alas, still exists in Canada and our neighbour to the South – 116 years after Sir William so eloquently spoke about it!

F.C.

■ CHAUVINISM IN MEDICINE

Part 2

Sir William Osler

PROVINCIALISM IN MEDICINE

While we may congratulate ourselves that the worst aspects of nationalism in medicine are disappearing before the broader culture and the more intimate knowledge brought by ever-increasing intercourse, yet in English-speaking countries conditions have favoured the growth of a very unpleasant sub-variety, which may be called provincialism or sectionalism. In one sense the profession of this continent is singularly homogeneous. A young man may be prepared for his medical course in Louisiana and enter McGill College, or he may enter Dalhousie College, 'Halifax, from the State of Oregon, and in either case he will not feel strange or among strangers so soon as he has got accustomed to his environment. In collegiate life there is a frequent interchange

of teachers and professors between all parts of the country. To better his brains the scholar goes freely where he wishes – to Harvard, McGill, Yale, or Johns Hopkins; there are no restrictions. The various medical societies of the two countries are, without exception, open to the members of the profession at large. The President of the Association of American Physicians this year (Dr. James Stewart), is a resident of this city, which gave also last year I believe, presidents to two of the special societies. The chief journals are supported by men of all sections. The text-books and manuals are everywhere in common; there is, in fact, a remarkable homogeneity in the English-speaking profession, not only on this continent but throughout the world. Naturally, in widely scattered communities sectionalism – a feeling or conviction that the

part is greater than the whole – does exist, but it is diminishing, and one great function of the national associations is to foster a spirit of harmony and brotherhood among the scattered units of these broad lands. But we suffer sadly from a provincialism which has gradually enthralled us, and which sprang originally from an attempt to relieve conditions insupportable in themselves. I have praised the unity of the profession of this continent, in so many respects remarkable, and yet in another respect it is the most heterogeneous ever known. Democracy in full circle touches tyranny, and as Milton remarks, the greatest proclaimers of liberty may become its greatest engrossers (or enslavers). The tyranny of labour unions, of trusts, and of an irresponsible press may bear as heavily on the people as autocracy in its worst form.

And, strange irony of fate! the democracy of Provincial and State Boards has imposed in a few years a yoke more grievous than that which afflicts our brethren in Great Britain, which took generations to forge. The delightful freedom of intercourse of which I spoke, while wide and generous, is limited to intellectual and social life, and on the practical side, not only are genial and courteous facilities lacking, but

... the bars of a rigid provincialism are put up, fencing each State as with a Chinese wall.

the bars of a rigid provincialism are put up, fencing each State as with a Chinese wall. In the Dominion of Canada there are eight portals of entry to the profession, in the United States almost as many as there are States, in the United Kingdom nineteen, I believe, but in the latter the license of anyone of these bodies entitled a man to registration anywhere in the kingdom. Democracy in full circle has reached on this hemisphere a much worse condition than that in which the conservatism of many generations has entangled the profession of Great Britain. Upon the origin and growth of the Provincial and State Boards I do not propose to touch. The ideal has been reached so far

as organization is concerned, when the profession elects its own Parliament, to which is committed the control of all matters relating to the license. The recognition, in some form, of this democratic principle, has been one great means of elevating the standard of medical education, and in a majority of the States of the Union it has secured a minimum period of four years of study, and a State Examination for License to Practise. All this is as it should be. But it is high time that the profession realized the anomaly of eight boards in the Dominion and some scores in the United States. One can condone the iniquity in the latter country more readily than in Canada, in which the boards have existed for a longer period, and where there has been a greater uniformity in the medical curriculum. After all these years that a young man, a graduate of Toronto and a registered practitioner in Ontario, cannot practise in the Province of Quebec, his own country, without submitting to vexatious penalties of mind and pocket, or that a graduate from Montreal and a registered

But it is high time that the profession realized the anomaly of eight boards in the Dominion and some scores in the United States.

practitioner of this province cannot go to Manitoba, his own country again, and take up his life's work without additional payments and penalties, is, I maintain, an outrage; it is provincialism run riot. That this pestiferous condition should exist throughout the various provinces of this Dominion and so many States of the Union, illustrates what I have said of the tyranny of democracy and how great enslavers of liberty its chief proclaimers may be. That the cure of this vicious state has to be sought in Dominion bills and National examining boards, indicates into what debasing depths of narrow provincialism we have sunk. The solution seems to be so simple, particularly in this country, with its uniformity of methods of teaching and length of curriculum. A generous spirit that will give to local laws a liberal interpretation, that limits its hostility to ignorance and viciousness, that has regard as much or more for the good of the guild as a whole as for the profession of any province – could such a spirit brood over the waters, the raging waves of discord would soon be stilled. With the attitude of mind of the general practitioner in each province rests the solution of the problem. Approach it in a friendly and gracious spirit and the difficulties which seem so hard will melt away. Approach it in a Chauvinistic mood, fully convinced that the superior and unparalleled conditions of your province will be jeopardized by reciprocity or by Federal legislation, and

the present antiquated and disgraceful system must await for its removal the awakening of a younger and more intelligent generation.

It would ill become me to pass from this subject – familiar to me from my student days from the interest taken in it by that far-sighted and noble-minded man, Dr. Palmer Howard – it would ill become me, I say, not to pay a tribute of words to Dr. Roddick for the zeal and persistence with which he has laboured to promote union in the compound, comminuted fracture of the profession of this Dominion. My feeling on the subject of international, intercolonial, and interprovincial registration is this – a man who presents evidence of proper training, who is a registered practitioner in his own country and who brings credentials of good standing at



William Osler working at his desk

the time of departure, should be welcomed as a brother, treated as such in any country, and registered upon payment of the usual fee. The ungenerous treatment of English physicians in Switzerland, France, and Italy, and the chaotic state of

internecine warfare existing on this continent, indicate how far a miserable Chauvinism can corrupt the great and gracious ways which should characterize a liberal profession.

... to be continued

After all these years that a young man, a graduate of Toronto and a registered practitioner in Ontario, cannot practise in the Province of Quebec, his own country, without submitting to vexatious penalties of mind and pocket, or that a graduate from Montreal and a registered practitioner of this province cannot go to Manitoba, his own country again, and take up his life's work without additional payments and penalties, is, I maintain, an outrage; it is provincialism run riot.

Ron's Column

■ THE HAND TIE

Ronald Nguyen Haisen
3rd Year Medical Student
College of Medicine
University of Saskatchewan

I got the call in the early morning.

“The patient is about to deliver.”

I was at St. Joseph’s hospital in Estevan, and I slowly made my way from my hospital room to the delivery room, dragging my feet across the floor, blinking hard and often so that the picture in front of me would be more crisp. I had never seen a baby before. I had never heard the cries during and after the birth, but I thought it would most certainly wake me up.

I entered the room and I saw a woman completely naked, chewing on ice chips, clenching the bed railing as she underwent another contraction. Her partner was off to the side, and at first, I thought it was a little strange that he was so distant, but when he went to the washroom and returned with a pale face and a dribble of saliva hanging along the edges of his lips, I understood a little better.

Nine months of a bump into a breathing being.

When it came time to delivery, I came closer to the woman, assisting the physician that was delivering this baby. The woman had her legs bent towards her, and with the contractions coming in hard and closer together, she tried her best to breathe through the pain and not scream from the top of her lungs. I tried my best attempt at encouraging her and coaching her through this process, but after a few trials, I was the one who grew tired and felt like my words were not helping very much.

Some time passed, with more contractions and laboured breathing and ice chips placed inside the woman’s mouth, and I thought this baby would never come. Then, suddenly, the baby’s head crowned, and it seemed to come out in a manner of seconds. The cord was pulled over his neck, the baby was placed upon the mother’s chest, then the cords were clamped and cut, and the blood was sent out for investigations. I had the responsibility of delivering the placenta, and so I held onto the cord that felt like a slippery, rubber rope and pulled with the tension that the physician advised so that it would not rupture. The placenta eventually delivered, and I was amazed at the branching vessels, like that of a great tree, that sustained life for nine months.

There was a tear though, and the physician got the suture and started to work on repairing the tear. He worked diligently and quickly, and I tried to watch as closely as I could during these early hours.

Then, during the middle of the procedure, the physician turns to me and asks me to hand

tie. He knew that I aspired to become a surgeon and so he was right to me ask to do so, but the problem was that I didn't know how. He was okay with that and tried to teach me, but I could not get it. I placed my fingers over the suture, tried to slip the thread through the hole he pointed towards, but I could not get it through. He even placed his hands over mine, and for a brief moment, it seemed like a knot would form, but it didn't. He eventually gave up on this endeavour and closed the wound himself. Afterwards, he gave me a piece of suture to practice on, and I practiced the hand tie on a doorknob throughout the night and into the next morning. I'd put my hands over top, twisting them around, threading it through the hole I've created, but it still would not come. It would come after a good sleep, I thought, but in the morning, trying to remember each step that the physician went through and grasping my fingers as I thought I saw the physician do, I tried to create the knot. It still would not come.

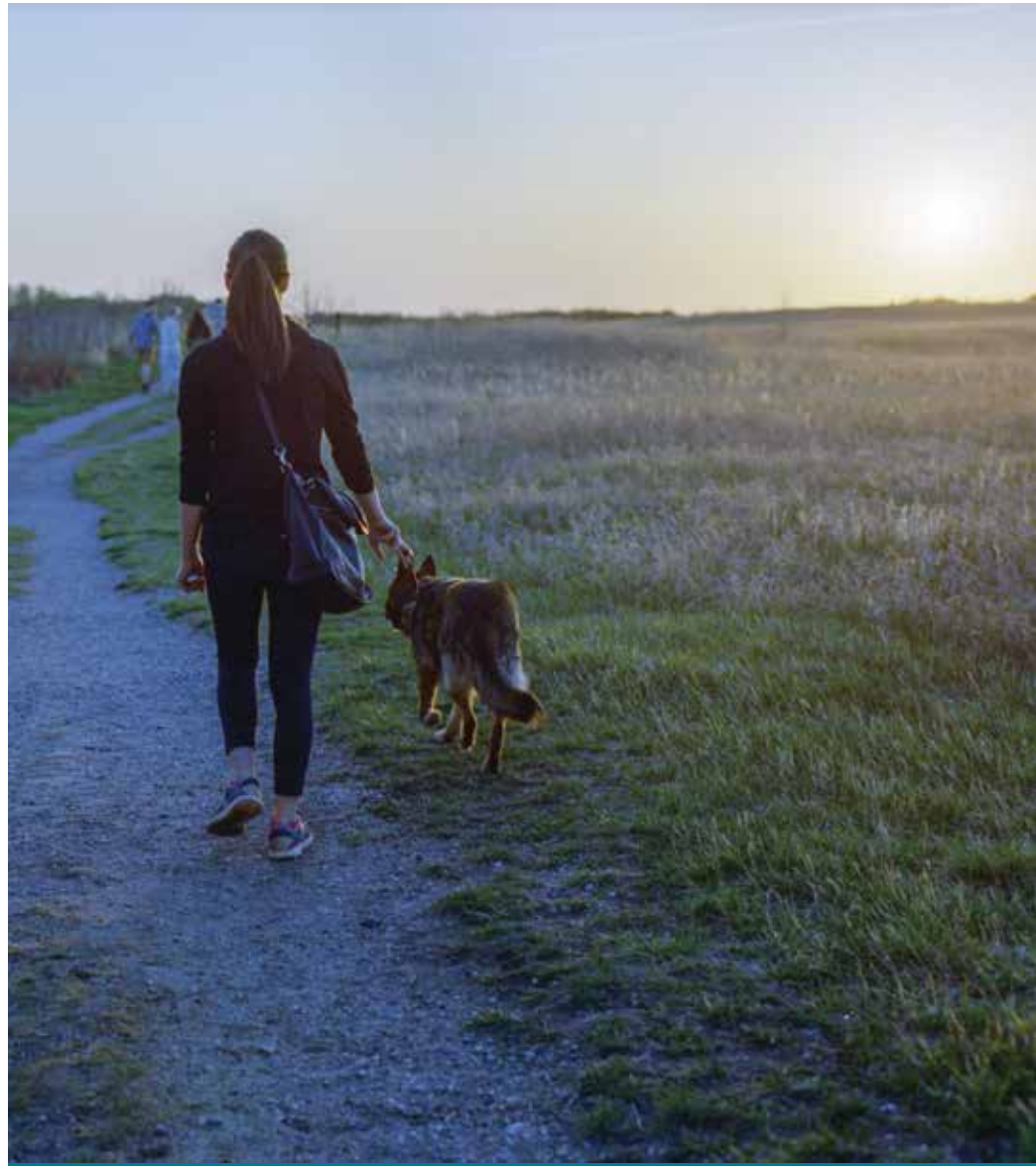
As I left the room to drive back to Saskatoon that day, I left the two ends dangling on that doorknob.

When I was a boy, I had great faith in the world. I believed that if one was good and kind and honest, one would reap the rewards that life had to offer you, as far as one would work hard for them. I believed that life was logical, and that one's life and its outcome could only

be determined by the will and effort that one invoked upon it. One could not depend on others, nor powers of a higher being, but only upon one's self and one's self only to achieve their goals. I believed that the world was always fair and that it worked out accordingly, with good always triumphing over

any hesitation, only with certainty, and with each answer, an underlying hope.

Then, one day, it seemed like a fire walked into my life, splitting the seams of all the assumptions I had for the world and undid the ties that bound my thoughts. This fire



evil, the hard working and those with truth in their hearts being the ones to decide matters. I believed in these things like I believed in the word of my Father, who responded to each of my many questions without

spread throughout my life like a wildfire onto the forest brush, driven by the wind and fuelled by the remaining debris left upon the forest floor. The inferno fell upon me with a tremendous heat, blinding my

eyes with smoke, bringing me down to my knees, hiding away from the fury that wrangled my surroundings. In the inferno, one does not see nor truly act, but closes their eyes and depresses themselves into the ground.

That fire formed a hole in the ground and then delivered me into a world that I didn't know existed. The underbelly of the world, where all the evils that I only had heard of, manifested in front of my eyes. I saw suffering, the pain of the people, and the desperation of the lives that they often lead. I saw a world that casted them off into a corner, often borne into this realm being blind and deaf and dumb, and that through this depravity, these people will never find their way out from this space. They will remain here, the suffering, with no logic or reason as to why they should be there.

My belief in the world extinguished. I had no hope for happiness, I only had questions. How could this all be? How can this world exist and who let it exist? How can there be such a great evil? How can such suffering abide? How could the world take away the ones we loved, like my two closest childhood heroes, without any real explanation?

As the words of my Father no longer rang true to me, I searched for answers, for meaning. In books and tomes, in philosophy and science, there would be the answers to

my questions, I thought. Those answers would return me to my world again.

No fire lasts forever though, and suddenly one day, as if like I woke up from a terrible dream, I returned to the world I once knew. I returned to the world of green grass and the rumbling sound of lawnmowers. The world of sprinklers and sunlight trickling through floating beads of waters to form brilliant rainbows. I returned to the world of freshly painted white fences and the prim houses that they would surround.

Almost everything appeared exactly like it did in the past, except something was slightly off. The images of this world would move slightly differently or twitch in a way you didn't notice before.

Then sometimes, I would notice a charred edge that wasn't there before. Then, when I picked at that burnt flap, I saw the rotten core that I had remembered from before and that I thought I could forget but I could never truly erase from my memory.

This new world, this existence,

it was mine, but it was not. It is the not the world that I remembered, the life I remembered, the one that I hoped and dreamed for. It was a doppelgänger, a twin world that I wanted to escape from, but I was stuck. The roads and



routes that I remembered to change things, to make yourself and the world around you better, led me back to the place I was before. Sometimes I saw the terrible things along these routes and they would haunt me, but more often, I would see a light that looked a little

brighter in my sight. I thought I might get a little further on this route and that it will lead me somewhere, but it doesn't. I was back in the same place, in the same locked room, and it feels like I will never escape this place, that I will never return to

power, and so I wandered through this world, half dumb and half asleep. I would wait and wait, for that moment, for that special impulse to follow, for that sliver of truth and knowledge, to wake up to my own world, to my own life.

desires for my life, faith that it would all come true as it had up to that point. I believed in the world and what I felt like it could promise me.

Although my dream of entering medical school had been achieved, something happened, something terrible, and the way I saw myself and the world was changed forever. My life felt like that tale of Orpheus and Eurydice, where Orpheus can bring back his dead wife from the underworld into the world again, on the condition that he does not turn to look back at any point along this trek. Then, as he has one foot out of the underworld, he loses his faith, turns back and loses her forever.

That feeling of tragic loss, of a faith that was just not strong enough to last, that's how I had felt for so long. I just wanted things to work out again, for the thread to slip through and to tie down. I wanted something real and true, something that would last. I didn't want to wait anymore for something to happen, for the pain and disappointment to continue. I wanted to be free, without any doubts, without any fears. I wanted to have that belief again, like I believed in my Father. I wanted to return home, to a place where I belonged.

I don't think I'm the only one with this feeling. I was born in the early 1990s, and I could remember the dream of the '90s. That dream of my generation, the one that our parents hoped for, that we

It feels like the prairie road in winter, with endless and uninterrupted miles of plain and flat fields draped in white snow, never to end. All the towns seem the same, and I would feel like I would never reach my destination. In the winter, only the sky changes, the beautiful sky during the early sunset, with its brilliant streaks of varying shades of blue and purple and pink, that quickly disappear into the night.

I wish I could describe this feeling better. My own description has been heavily inspired by the cinematic genius of David Lynch and Terrence Malick, and

I'll leave it up to them to help fill in the details if you so wish to know more. All I truly know is that it has been a long six years, when all of this started with medical school. My life up to that point was easy, without much suffering and with plenty of love. I had dreams and

the world that you once knew. This is purgatory, which is far worse than the inferno, and no matter how much I calculated and analyzed, I ended up back in that locked room. In the end, the only thing that felt real and true were impulses, as if a message from a higher



would all become educated, that we would learn how to love and not hate, to create a world that was different and better from the one that ravaged so many lives earlier in the century. That dream would come true on the belief that if we worked hard, if we acted with kindness and in truth, with the right people in the right positions, that we would have a better world. But we don't have a better world. We have a different world, different from what we expected. We continue to have strife in this world, megalomaniacal leaders that are concerned with their own place in history rather than the people they are supposed to take care of. We don't have the jobs we wanted, the lives we wanted. I can't give an answer as to why the world is like this, but I feel that people have lost faith, for themselves and for this world, and I share that feeling with them.

It was at the end of February, on the verge of spring that I found my faith in a church, during a funeral service.

It was an impulsive decision. I did not know the person very well. She was the grandmother of one of my closest friends, and I had only met her a handful of times. That being said, each time I met her, she was full of grace and warmth, with a simplicity and serenity that I feel I can't truly describe. I thought it was only appropriate to pay my respects to a person who had given me both delicious food and gracious hospitality.

I was one of the last people to enter the church and I sat down on the last pew bench on the back, one amongst the filled church. I always knew that my friend had a large family, but it seemed like most of the people were not relatives.

The service started a few words from family members, before the Reverend asked for the people in the church to join in as a chorus on a selection of traditional Cantonese songs. As I listened to these songs, a feeling of belonging, of being at home came over me, as I had heard these songs in my childhood and knew the melodies to these songs. I did not know the words, but there was something incredible seeing everyone come together, to sing these old songs that brought great comfort in dire times.

After the songs, the service proceeded to the speeches from family members and close friends, all telling tales of this woman that repeated the kindness and warmth that I experienced, as well as the devotion she had for her family and for her religion. These speeches would be both in Cantonese and in English, and when the speech was given in Cantonese, I would read her short biography on the back of the pamphlet. This woman was born in the Republic of China, with her father being one of the Generals in the army. She had married a Reverend, survived the perils of the Cultural Revolution, before

settling in Hong Kong. When it finally came to a slideshow that showed pictures from her life, from a young woman to her deathbed, I thought of how her life had turned out. She was a simple woman, not to say she was not smart or intelligent, but simple in the way that there was not much to living a true life beyond acting with kindness and warmth, with devotion and grace. The quality of mercy was above all things, and her faith to God was unquestioned. For her simplicity, it seemed like God was not simple to her. God was complex and mysterious and to be revisited again and again.

As these stories went on, as the beautiful cello played by my close friend to accompany the slideshow, I looked up to the great wood cross that was towered above all of us. I was not a Christian and was not well-versed in the Bible, but I thought of a line from the Book of Job.

"Where were you when I laid the earth's foundation? Tell me, if you understand."

On the road back, a sense of wonder fell over me. I smiled as I drove back, as I heard the words of my Father again and I felt that I understood faith now. I understood it as I understood this highway, the same one I would travel back to Saskatoon from Estevan. I understood Truth not as an end point, but as a path, as a light. The same light that I saw when I stopped by on the side of the road once

on my way back to Estevan, the last beam of the early setting sun that still shone through the broken fences and illuminated the dead stalks of wheat that sunk into the Prairie snow. The same light that brought forth the brilliant golden hour colours of the sky, of cobalt and magenta and violet with streaks of mauve pink, the background to white clouds that moved on paths that I couldn't truly know. I thought of my life like these white clouds, continuing to move even after the golden hour and the sunset has passed. I thought of all the little events that occurred during these troubling years, the things that didn't go as I had wanted and all the things that I thought were failures, brought forth people like Dr. C and Dr. M that gave me the opportunities to resurrect me from these failures and to lead forth a life with the things that I needed and had truly wanted all along.

I thought of how true faith was understanding that the world was beyond my understanding, beyond my control, that one must wade into the unknown

if one wishes to lead the life of truth. Faith is truly a leap, and this understanding of truth and faith and the world cannot be found in one person, but in people, in all people, and to live and trust in them. A person has to live beyond one's self to find truth and faith and meaning.

As I entered town, with that wonder and awe still in my heart, I followed my last impulse for the day. I did not go home as I had originally planned, but I decided to go to my favourite coffee shop. I don't know why I decided to go there at that particular time, or why I happened to be there at all, but something happened, something wonderful, and the way I saw myself and the world changed forever...

A few weeks later, I was in the operating room with a gynecologist and the senior resident that was working with her on a hysterectomy. The senior resident, who knew all the theory and workings of the operation they were working on, encountered the IP ligament and understood

that a major vessel ran near it. The anatomy surrounding it was more difficult than usual and the gynecologist told her to place her laparoscopic instrument very close to the IP ligament and to cauterize it. The senior resident was reluctant, stating that she would be more comfortable working around it and not near it. The gynecologist repeated herself to cauterize the area. The resident once again stated that she didn't think it was possible and that she was afraid she would injure the vessel. The gynecologist finally said, 'You have to trust me, okay? You have to trust me.' The resident finally cauterized through the area and the vessel was not injured and the procedure carried on routinely.

When the procedure ended, I had the opportunity to close the wounds with a hand tie. As beautiful as the divine second andante movement of Mozart's Piano Concerto No. 21, the ends finally came together, the string threaded through, the knot finally tied down.



Ronald Nguyen Haisen is a third year medical student at the College of Medicine, University of Saskatchewan. He was born and raised in Calgary, Alberta, but has called Saskatoon his home for the past six years. His first publication, a short story entitled 'Something Happening Somewhere', was printed in *unsettled* magazine.

Poetry Corner



■ STR8-UP

FROM DESPAIR TO HOPE: Inside the movement helping gang members

By Fr. Andre Pollievre

History and beginnings

In the mid 1990s, street gangs became an increasing reality in Saskatoon and gang recruitment on the street and within the provincial jail was rampant.

The coordinating chaplain at the Saskatoon Correctional Centre (SCC) introduced a program for inmates who expressed positive attitudes and values, which included participation in speaking engagements, workshops and presentations in schools, treatment centres and youth groups. The presentations were centred around these inmates' experiences.

In the fall of 2002, two gang members who had both been involved in the program at the SCC, had approached the chaplain and confided their desire to leave their respective gangs. One's partner had been

killed by a rival gang and the other had two younger brothers who were following in his deadly footsteps. They then became the first two individuals to leave their gang and work with the chaplain on the streets of Saskatoon.

STR8 UP (pronounced, "straight up") was conceived at the request, initiative and involvement of active gang members wanting support to abandon an organization that for them, had become abusive, dysfunctional and alienating.

Since those early days, STR8 UP has delivered more than 2,000 presentations, healing and sharing circles and workshops for numerous treatment centres, schools, reserves, churches, provincial and federal prisons and young offender centres. More than 450 individuals have associated themselves with STR8 UP who have abandoned

membership in their respective gangs. Many members have attended parenting classes, returned to school or university, enrolled in various trade programs, completed rehabilitation and addiction recovery programs and received counselling and psychiatric assistance. The pursuit of their personal goals enabled them to discover that to help themselves, they had to help others. The search for healthy relationships enabled them to abandon the unhealthy ones, occasionally even with family members.

In 2013, STR8 UP established its Board of Directors and soon after, became a registered, non-profit organization and received its registered charitable status in 2014.

<http://str8-up.ca>

Mission and Guiding Principles

Our mission statement is “STR8 UP assists young men and women to master their own destiny in liberating themselves from gangs and criminal lifestyles.”

- In STR8 UP we reject the labels “good” or “bad.” Members’ behaviours may be labeled as such, but this cannot be extrapolated to the members themselves as human beings; their realities that have led to their addictions and dysfunction require a different interpretation.

- We believe some individuals are on a life journey that is positive and healthy, while others are on a journey that is a painful disease, both of which might possibly find their origins at conception and during childhood. Children are not born with a gun or knife in their hand. Many, if not all have experienced abandonment, abuse, violence and racism. These latter people are often labelled, judged and condemned, punished. Yet, these individuals are called to healing, recovery and wellness.

- The journey to hope and healing must begin where members find themselves, not from where they wish to be or where someone else wishes them to be. Healing is a process, not an event. Addicts are locked into their addiction, not only by their hurting past but also their hopeless view of the future. By being free to control their

own journey and not having impossible expectations placed on them or be controlled by others, their goals become realistic and attainable.

- An important focus of STR8 UP is about relationships. Young people who are often mistreated, abandoned and rejected, enter a shattered world. Their medication for these are their various addictions; and one of the basic characteristic of addictions is isolation from oneself and from others and from one’s Sacred Mystery. When they enter into the journey of healing, they alone enter – but they cannot journey alone.

- The healing journey is a long and difficulty process. It is a journey of 10,000 little steps with every little step a success. Members’ sense of hopelessness dissipates as focus is placed on the progress and success of each member.

- STR8 UP is a SPIRITUAL BASED PROGRAM. Some members are mainstream or born-again Christians, some are atheists or agnostics. Many are strongly committed to Indigenous culture, traditions and ceremonies. STR8 UP believes that every human being is a spiritual person. Is our spirituality positive and life giving ... or is it negative, self-destructive and alienating? Our members realize their recovery is dependent on a positive spiritual life. Recovery is first of all a search for honesty, truth speaking and thinking; the arch

foe of honesty is denial and deceit. The second spiritual reality is that of humility – the opposite is arrogance. Members must remove themselves from being the centre of the universe and drop the street attitude that they are able to do anything they want to anybody they want, whenever and however they want.

- To begin this journey, it is necessary to possess a vision of new changes and possibilities. For our members, this vision is the possibility of becoming a LOVING PARENT, a FAITHFUL PARTNER and a RESPONSIBLE CITIZEN. At STR8 UP we have realized that these are true possibilities, well within their grasp. Through the shadow of their past, they are able to grasp the present and achieve their dreams for tomorrow.

- The STR8 UP healing model is the INDIGENOUS MEDICINE WHEEL, which teaches us that as human beings we need to nurture, develop and sustain the four aspects of our nature – physical, emotional, mental and spiritual. Using the Medicine Wheel model, we can identify the benefits of a healthy pregnancy and a wholesome childhood upbringing; as well, the debilitating damages of an abusive, shattered childhood. The Medicine Wheel becomes the model for a healthy transformation from pain, sickness, abandonment and victimization to one of self-respect, acceptance, wholesomeness and wellness.



Motivation for leaving gang

Members have seen too many of their friends and relatives shot, stabbed, commit suicide, overdose or die in car accident. They themselves have been stabbed, shot or had various other violent experiences.

Having joined their gang at a young age and now often in their early 20s, they are sick and tired – tired of jails and police, tired of conflicts, despair and violence, tired of an empty and futile life. They are searching for something better.

They are now moms and dads, have a partner and a family. They do not wish for their sons and daughters to be brought up in the same manner as they were.

Many wish to give back to their community what they took from it. They wish to be a positive presence rather than the negative one that characterized their gang life.

Let me quote from one of their autobiographies: “All this pain that I carry, the pain of my violent childhood, the pain of all the isolation and years

behind bars, the pain of missing my children and being a part of their life, the pain of losing my street brothers to the penitentiary or death, the pain to my family and parents ... all this pain won't be for naught if I can save the life of one child. I can never repair the damage done by my actions, but with STR8 UP, I can use the rest of my life and my story to help stop the damage.”

STR8 UP does not actively recruit, promote or advertise itself to active gang members, nor is it at war with gangs. Many STR8 UP members have family still active in gangs: parents, brothers and sisters, their own sons and daughters and other relatives.

We expect that when one becomes a STR8 UP member, he or she accepts all other members; regardless of the rivalry and conflicts of the past, they must be ready to shake hands with all other members of STR8 UP.

Members are not expected or asked to inform police of past activities with gangs, or provide names of individuals involved in their past gang life. Any disclosure of this type would endanger not only themselves but other members as well.



Indian Princess

Indian princess, you look beautiful in your jingle dress,
You take my mind back to the old days
To when we listened to our Elders, and followed the old ways
To when we pounded the drums to Mother Earth's heartbeat
Instead of losing our people to life on the streets
Before the systems failed us and we fell between the cracks
Before they took our language and never gave it back
Before our lives revolved around using alcohol and drugs
When our kids were kids, not gangsters or thugs
When being a man meant protecting the tribe
Not beating his wife and getting drunk or high.

Indian princess, we were meant for more than this
More than dying of AIDS or hepatitis
More than being just numbers and statistics;
But Indian princess, it's not too late
To save our children and change our fate
But first, we must let go of the pain and let go of the hate,
We must move on and forgive the wrongs
And teach our children that being tough does not mean being strong
That strength comes from the good inside
And they must use that good to protect the tribe.

by Nicholas Giroux

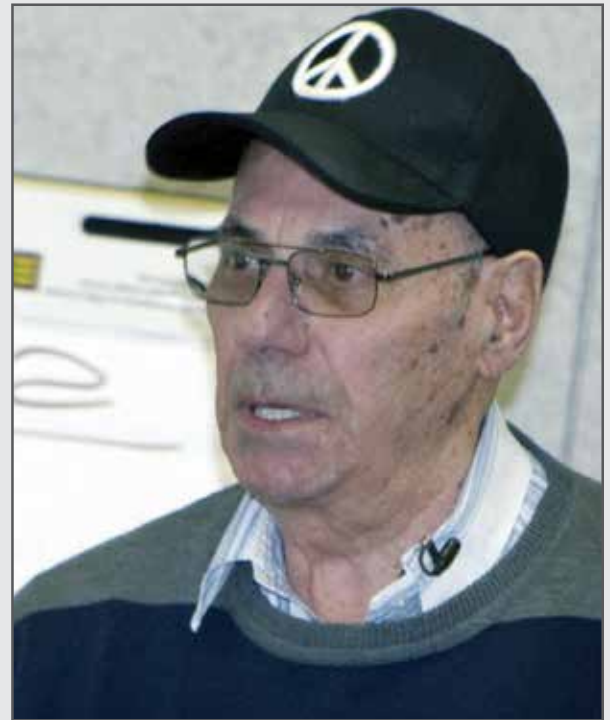
STR8-UP ACHIEVEMENTS IN LITERATURE AND ART

Literature: STR8 UP and its members have together, written a number of books. The first book, “STR8 UP and Gangs: the Untold Stories” (McNallyRobinson, 2012; available at: <https://www.mcnallyrobinson.com>) contains the true life stories of thirteen young men, who have chosen to share their hearts, their pain, hopes and successes to reach at-risk youth before they become involved in gang life. In doing so, the members who wrote this book not only reach the youth they seek to help, they educate the general public about gangs while empowering themselves. They describe their childhood experiences of abuse, violence and addictions, which ultimately were gateways to their entry into gang life and activities.

A second book, “STR8 UP, Stories of Courage,” (Hear my Heart Books Inc.2015; available at: <https://hearmyheartbooks.myshopify.com/products/str8up-stories-of-courage>) is a follow-up to the first book and highlights the journeys of recovering gang members. Section three of this book contains poems written by several recovering STR8 UP members).

Videos: Several videos have been produced featuring members sharing their stories to educate youth and to anyone wanting to know “how come” these joined a gang ... to later decide to leave the gang. In one video, members sing a song they wrote and composed, asking the question: “Where are the mothers?”

Art: An art display of poetry, visuals and short stories dealing with dads incarcerated and the consequences of how this affected their children, was featured at SCYAP Art Centre in fall 2017. The exhibit was entitled: “Dads behind bars – a project featuring the work of STR8 UP members created while incarcerated in the Saskatoon Correctional Centre.”



About Fr. Andre Pollievre

Fr. Andre was trained in the area of adult education. After attending four universities, he was involved in adult education programs in Saskatoon. He also worked five years for Arctic Cooperatives where he developed and implemented training programs for Inuit and Dene management trainees in native owned cooperative enterprises. In the mid 1980s, he joined the staff at Joe Duquette High School, now named Oskayak, where he was a teacher, counselor and chaplain for 10 years. Following that, he became coordinating chaplain at the Saskatoon Correctional Centre for seven years. Since 2002 and presently, he has been a street worker and founder of the organization named STR8 UP, which is a group of ex-gang members recovering from street gang domination.

In 2008, he was awarded the Order of Canada.

ZHIVAGO: The Doctor in Literature

The doctor not only writes poetry, novels, essays and short stories - he or she also lives in them. This column celebrates works of literature that celebrate (or denigrate) a physician and his or her work and times. Its authors will only uncommonly be physicians - it would surely be a fallacious presumption to assume that only a doctor can comment on his or her own life and manners.

The title is from Russian novelist Boris Pasternak's immortal, lyrical novel, "Dr. Zhivago." The film, bearing the same name was directed by David Lean and starred Omar Sharif and Julie Christie.

The Editor

In 2015, we were graciously granted permission to serialize the life story and memoir of one of the preeminent surgeons of our time, Professor R.M. Kirk - and the Spring 2015 issue of this Journal carried Chapter 1 of his life story .

Raymond Maurice Kirk ("Jerry" Kirk to his friends) is perhaps best known to most surgeons and surgical trainees throughout the world on account of "Kirk's General Surgical Operations" - the textbook of operative General Surgery that has been the standard in Britain and in many other parts of the English speaking world. Now into its 6th Edition (2013), it is available in both print form and (as some of our residents know) for the iPad as well.

His other books are almost equally well known and Prof. Kirk's elegant, practical and pithy writing style and editorship are widely recognized and admired.

Professor Kirk's career as Consultant academic Surgeon was spent almost continuously at the Royal Free Hospital and Medical School in London. Many innovators and pioneers in medicine and surgery worked in the ferment of intellectual activity that was the Royal Free (including the pioneer hepatologist Sheila Sherlock) and Prof. Kirk made widely recognized contributions to surgery of the stomach and esophagus. During the seven years that he was Editor of the Annals of the Royal College of Surgeons of England, the journal rose even further in standing and ranking among the surgical journals of the world.

The story of how Jerry met Peggy is contained in the "life story" and will appear in due course, in the pages of this journal. Jerry and Peggy live in Hampstead, London, not far from where that other English surgeon John Keats lived and wrote his immortal, "Ode to A Nightingale."

The Editor is deeply grateful to Jerry for the privilege of allowing this Journal to carry serialized excerpts of his life story. And now for a continuation of Jerry's story, Chapter 7, in his own words ...

LIFE STORY

*Excerpts from the memoirs
of R. M. Kirk*

Chapter 7

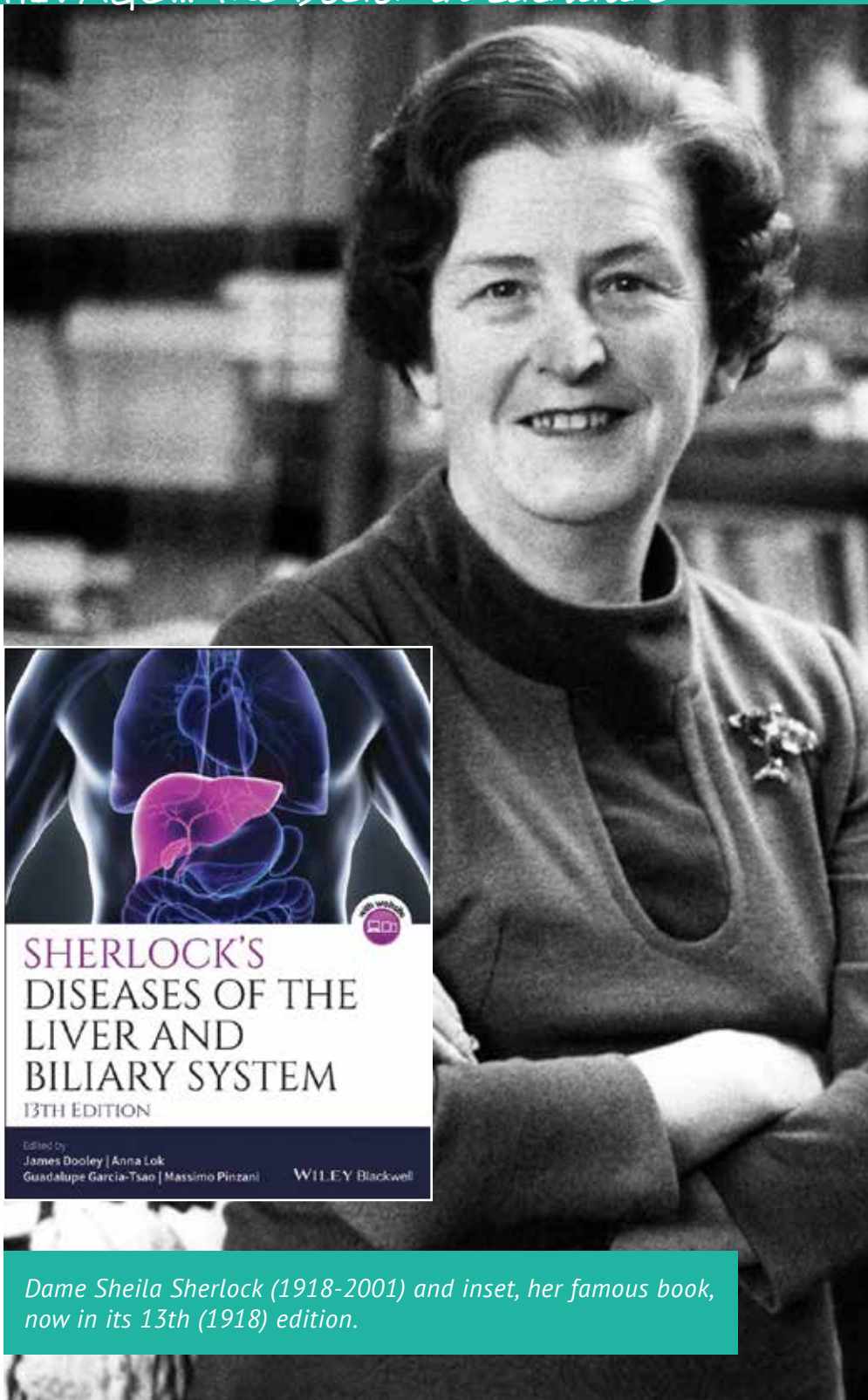


I returned to Charing Cross Hospital to work as an assistant with the superb master surgeon, Norman Tanner. He had initially worked only at a London County Council (LCC) hospital, St James, in Balham, south of the River Thames. Deafness precluded him from joining the Royal Army Medical Service (RAMC) during the war. There was an epidemic of wartime peptic ulceration. Tanner developed a standardized operative technique for dealing with perforated, bleeding or intractable ulcers which could be safely followed by surgeons of merely average competency, producing outstanding results. He attracted surgeons from all over the world to visit his elderly, sparsely-equipped hospital. Initially, Tanner's assistants arrived by word of mouth, mainly from Old Commonwealth countries. English graduates thought themselves too superior to work at a mere LCC hospital.

My friend Michael Madigan from Adelaide came back to Britain to pursue a surgical career. He had survived the war as a navigator and bomb-aimer in Lancaster bombers and then qualified back at home in medicine. When he visited Tanner's operating theatre he was instantly and generously invited to 'scrub-up' and assist. Tanner was recognized as a master, not by a

committee but by the length of the waiting queue of eager trainees. Because he could not hear spoken names, Tanner called everyone, 'Doc.' Norman Tanner was eventually invited on to the staff of the teaching hospital at Charing Cross. His simple advice was, 'Get it right first time, Doc.' I have spent many remorseful nights awake, regretting not having lived up to that mantra.

I started on the clinical investigations to fill the requirements for my thesis on lymphoedema (L lympho = water + G oedema = swelling). At that time Charing Cross did not have a single plastic surgeon on the staff and I was given, by default, complete freedom to deal with burns, skin tumours and breast reductions. By chance one patient was sent to me with a swollen leg from such gross lymphoedema that she could not walk. Having read the surgical literature but never having seen the operation devised by a British surgeon Charles, I embarked on what was a flaying of the leg – removal of the skin and underlying tissue down to the muscle, followed by the application of skin grafts. With a few defects, the grafts survived but her leg looked like a patch quilt. I told her I needed to carry out a few cosmetic procedures. She would have nothing of this but insisted on



Society of Medicine library. The equipment I needed had to be manufactured or assembled by me. The hospital equipment manager was wonderfully helpful in loaning and giving me my requirements. He had previously worked at the London Hospital (now Royal London) and had created for Sir Henry Souttar a flexible tube for insertion within a malignant but inoperable oesophageal stricture, to allow fluid and finely minced solid to reach the stomach. Souttar was famous for performing the first successful splitting of a strictured heart valve – a mitral valvotomy – and to me also, for removing my mother-in-law's gallbladder.

I gained a final training appointment at the Royal Free Hospital, the first hospital in England to accept women for clinical teaching. It was also famous for offering sick patients admission regardless of their financial state – hence 'Free.' In recognition, Queen Victoria gave it on her accession, the accolade of a 'Royal' title. I had first heard of it as a student at Charing Cross Hospital. One of the gynaecologists, a

bachelor, introduced his first teaching session by announcing that there was a hospital in London where all the doctors were women. He held up his hands as he reported, with eyes staring in breathless horror, 'They examine men – and even pass catheters on them!' His voice changed to one of determined rejection as he drew himself up to state, 'All through the War I kept a card in

walking out. 'You cannot go out with the leg looking like that!' She cheerfully replied that she could wear lisle stockings ('Lisle,' a former spelling of the French city Lille produces an opaque stocking). I never saw her again. My success in treating her stimulated me to devise and measure factors producing lymphoedema. Every possible Saturday was spent in the Royal

Dame Sheila Sherlock (1918-2001) and inset, her famous book, now in its 13th (1918) edition.

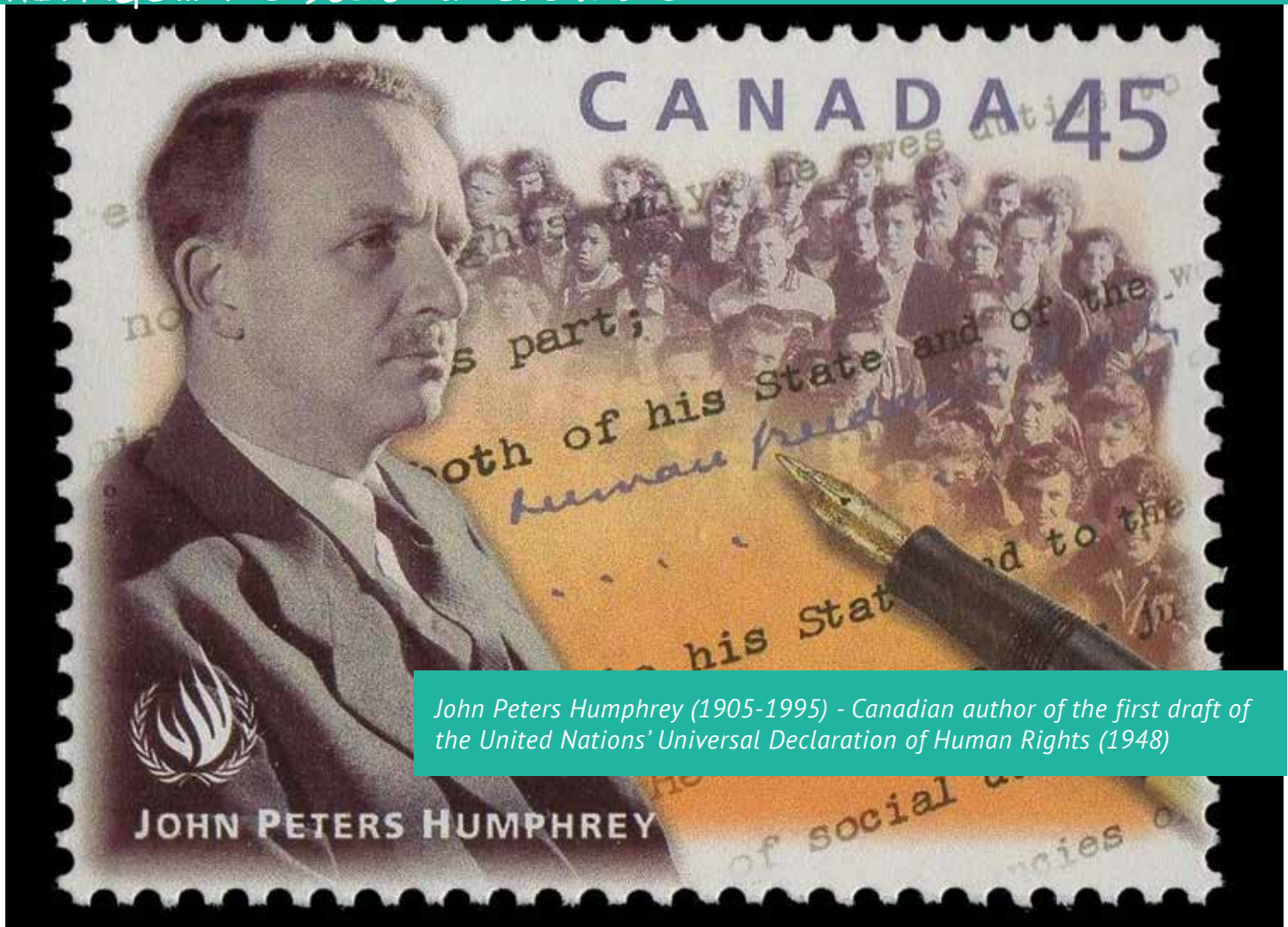
my breast pocket stating, "If found as a casualty, do not send me to the Royal Free Hospital." He did not feel the need to justify himself in examining women. This was just as the National Health Service was being implemented. Very soon, all teaching hospitals were made to accept women students.

The most famous surgeon at the Royal Free had been an international expert in thyroid surgery who was said to have a penchant for pretty red-haired lady house-surgeons. When one of them did not answer her night calls she received a letter from the hospitals administrators stating that unless she mended her ways, her appointment would be withdrawn. The surgeon walked into the House Governor's office the next morning and presented his letter of resignation, stating that he would withdraw it when the hospital authorities rescinded their threat to his house surgeon. Such was his standing that she was immediately reinstated. George, large and imposing, of Scandinavian ancestry, was usually amiable but had an occasionally explosive personality. He could have been the model for the character of Sir Lancelot Spratt, played by James Robertson Justice, in a comedy film called, 'Doctor in the House.' His wife, a cardiologist and Dean of the Medical School, could reduce a man to his knees at ten paces with the shard-like cut-glass voice with which she punctured one's self confidence. Together they formed the two legs of a Colossus astride the Hospital and Medical School. A third pre-eminent personality was the Professor of Medicine, later Dame, Sheila Sherlock.

It was alleged that Sheila Sherlock's appointment was fiercely resisted by some of the female consultant who feared the competition. This may have been malicious gossip but they had need to face the competition which earned her an international reputation. Rodney Maingot the former senior surgeon and notable surgical author was still active, with a lucrative private practice. He had operated on Aneurin Bevan (1897-1960) a prominent Labour government Health Minister, the architect of the National Health Service which took over responsibility

for the whole service on 5th July 1948. He was no longer fully able to undertake the challenges referred to him. He continued to use the registrars (unpaid), in his private clinic. He called me to assist him and when the operation became too difficult, left me to continue with, 'Jerry, I am gasping for a cigarette. I shall let you deal with the remainder.' At this time Peggy was pregnant with our younger daughter. Having read the 1954 report on the incidence of lung cancer in doctors who smoked cigarettes by Richard Doll and Bradford Hill, we had just made a firm commitment to stop smoking. Normally I should immediately reach for a cigarette on leaving the operating theatre but when I saw Rodney, just about to light a cigarette which would soon join the pile of stubs in the ash tray, I was fortified in my resolve to refuse when he offered one to me. My stimulus to refuse the proffered cigarette, in lieu of an assistant's fee, was a more valuable gift. Peggy and I never smoked again.

Many senior surgical trainees spent at least a year abroad, usually in America. My age, following 4 years wartime service, made it advisable to seek an early consultant post. We had three children. Valentine, our elder daughter was now 5, our son Jeremy was 4 and our younger daughter Louise was 1. We lived in a block of flats so the elder two were able to make friends and play with the children of other families in the block. Living in a modest two bedroom flat was crowded and we needed to seek a house. Peggy had ceased to work while the children were small but intended to return to her medical career. She would eventually enter the community medical service and achieve success as a Consultant Audiological Physician, running a community adult and children's service in Tottenham, North London. When she eventually retired she was presented with a beautiful engraved silver tray. I was moved to hear her speech. She referred to Helen Keller from Connecticut (1880-1968) who suffered a severe illness at the age of 19 months which left her blind and deaf. Thanks to a devoted, loving tutor, she gained an education, a degree of BA and became a prolific author. When asked which she considered the greater loss between her



John Peters Humphrey (1905-1995) - Canadian author of the first draft of the United Nations' Universal Declaration of Human Rights (1948)

two disabilities she stated that blindness cut her off from things but deafness cut her from contact with people. I write this just a few days after watching our younger daughter Louise, on the television news, who, stimulated by Peggy studied to become an audiological scientist. She recently organized the fitting of cochlear implants for a brave girl Malala, who in Pakistan was shot in the head for insisting on attending school to become educated against the demands of religious extremists. She was shown switching on cochlear implants that had been inserted for a patient whose eyesight was failing and who had been deaf for 40 years – the recipient's delight was overwhelming.

Consultant Surgeon

My initial appointment as consultant surgeon was in 1961, at Willesden in West London. My colleague was George Qvist. When I applied, I was invited to an informal meeting with the

members of the consultant staff – cynically labelled, 'Trial by sherry and Twiglets.' The senior physician approached me, carrying in one hand a tumbler of whisky. The other hand held a cigarette between the nicotine-stained index and middle fingers. As he questioned me he shook out a succession of pills, flushing them down with a swig of whisky. 'Kirk, do you intend to go into private practice?' I had not contemplated the possibility. He then assailed me with his situation. He claimed to have the largest private physician's practice in London. He had just recovered from a massive coronary thrombosis which required hospitalization. 'Kirk, as I lay in bed I thought of my ongoing expenses – the suite of rooms in Harley House, the two receptionists, two secretaries, two cars and two chauffeurs. I was so horrified that I nearly had another 'coronary' thinking about it.' At that time we were unaware of the effects of smoking on the vascular system. Despite later warnings, the

physician continued to smoke heavily. He died 10 years later, not from carcinoma of the lung but from coronary artery disease. I am unsure how much his personal story affected me but from the first, I was reluctant to attract private practice.

In retrospect I recognize the changes that were taking place throughout my career in the relationship within the population and between doctors and patients. My generation tended to resist them, falling back onto the tradition in force when we entered the profession and the indoctrination we absorbed from our teachers. There were a number of reasons for change. After two World Wars, separated by only 21 years, many within the population were reluctant to accept the pre-war restraints that had been exerted on ordinary people. We had taken part in a period of deprivation, fear, the loss of loved ones, injury, on the promise of victory

over hated regimes. A plangent cry was, 'We won the War.' Many felt, complacently, that the World owed us a living. Changes were driven by catching up with deferred intentions and with fresh, emerging trends. A powerful force was the Declaration of Human Rights in 1948 by the United Nations. They asserted that there were inalienable entitlements due from society to every individual. This virtually stood on its head the previous pre-eminence of the State and the duty imposed by it, on the individuals living within it. Running in parallel was the increasing availability of information. University education, previously limited to a privileged group in society became available to a larger section. The later appearance and development of electronically stored and distributed information was comparable to our present-day conception of the 'Big Bang' universe.

To be continued...



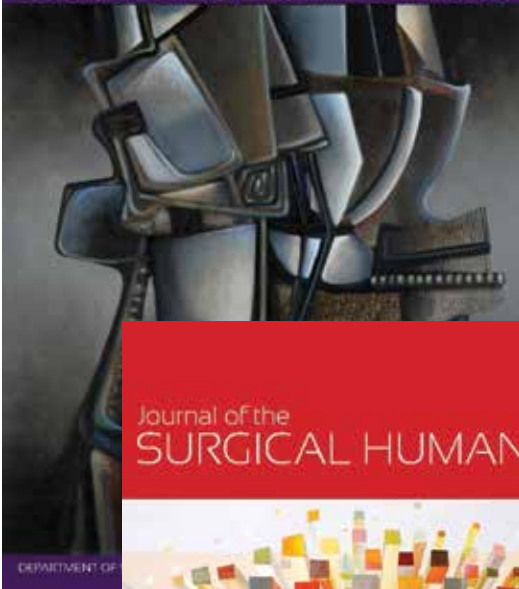
Eleanor Roosevelt holding the United Nations' Universal Declaration of Human Rights (1948)

Submission Guidelines

Journal of the
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Submissions to the Journal will be accepted in two categories:

- Written Work: poetry, essays and historical vignettes.
- Visual and Musical Work: submissions in digital reproductions, of paintings, photographs, music and sculpture.

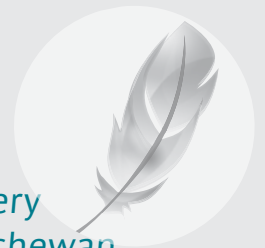
All submissions must be accompanied by a cover letter in Microsoft (MS) Word format, with a short (300 words) biography of the author, name, address and telephone number.

All submissions should be sent in by email to

surgical.humanities@usask.ca

If you wish to submit by traditional mail, please address your submission to:

The Editor,
Surgical Humanities
Department of Surgery
University of Saskatchewan
Saskatoon, SK S7N 0W8



SUBMISSION GUIDELINES

WRITTEN WORK

- May include poetry, short stories, essays or historical vignettes.
- Submissions must not exceed 5,000 words.
- All email submissions of written work must be in MS Word format, double spaced, 12-point font, with title and page numbers clearly marked.
- The work submitted should not have been published previously.

PAINTING

- Photographic digital reproductions of the painting submitted must be in high definition JPEG or TIFF formats (300 dpi or above).
- 3 photographs must be submitted:
 - the painting as a whole;
 - an illustrative inset/detail of the painting; and
 - a photograph of the artist at work.
- Each photograph must carry a title - captions are optional. Titles and captions can be submitted in a separate, MS Word document.
- An essay of approximately 1000 words must accompany the submission, in MS Word format, with a description of the painting and its story/meaning, as seen by the artist.

PHOTOGRAPHY

- Up to 4 photographs may be submitted at a time, each of high definition, in JPEG or TIFF formats (300 dpi or higher).
- The photographs may be linked by a similar theme, but this is not essential.
- Each photograph must be titled appropriately - captions are optional; titles and captions may be submitted separately, in MS Word format.
- An essay of approximately 1000 words to accompany the photographs must be submitted separately, in MS Word format. The essay can address the photographs, or be a story of the photographer's life and motivations.

SCULPTURE AND CRAFTWORK

- Photographic digital reproductions of the sculpture or craftwork submitted must be in high definition JPEG or TIFF images (300 dpi or above).
- A total of 4 photographs must be submitted:
 - The sculpture/craftwork captured in at least 3 angles, each photograph addressing a different angle
 - A photograph of the artist at work.
- Each photograph must carry a title - captions are optional. Titles and captions can be submitted in a separate, MS Word document.
- An essay of approximately 1000 words must accompany the submission, in MS Word format, with a description of the sculpture/craftwork and its story/meaning, as seen by the artist.

PERFORMANCE

- Music may be of any genre, provided the performer recognizes his/her performance as a serious art form.
- Submissions must be accompanied by an essay of approximately 1000 words on the performance itself or on the importance of music in the performer's life. A YouTube link to the performer must be clearly included in the essay.

COMPOSITION

- The composition may be in any genre of music, with the composer's musical score sheet, in musical notation, forming the centrepiece of the submission.
- The musical score sheet need not be in classical music notation - but the reader must be able to reproduce the music by following the score sheet.
- Singer-songwriters can submit their compositions, with the music in musical notation and the words of the song accompanying the notation/chords.
- Submissions must be accompanied by an essay of approximately 1000 words on the composition itself or on the importance of music in the performer's life. A YouTube link to the composition being performed must be clearly included in the essay.

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