

DR OSLER'S

Campaign will formally open on
TUESDAY NIGHT
by a great

"SMOKER"

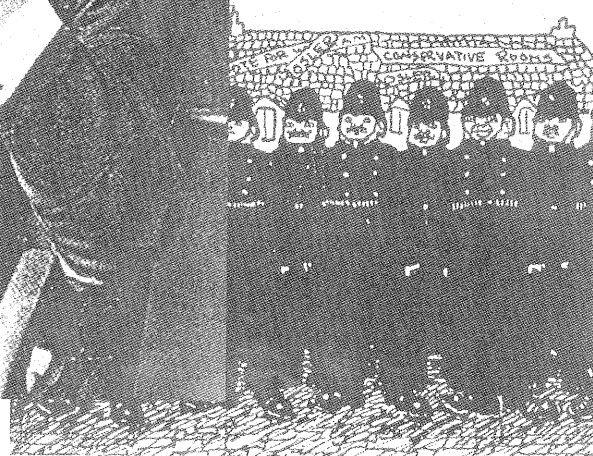
COMMITTEE ROOMS, Drummond St. Court

(Opposite Rutherford's).

At 8 p.m.



OSLER
wants to do away with
Examinations.



Thirty-Third Annual Meeting

American Osler Society

with

The Osler Club of London,

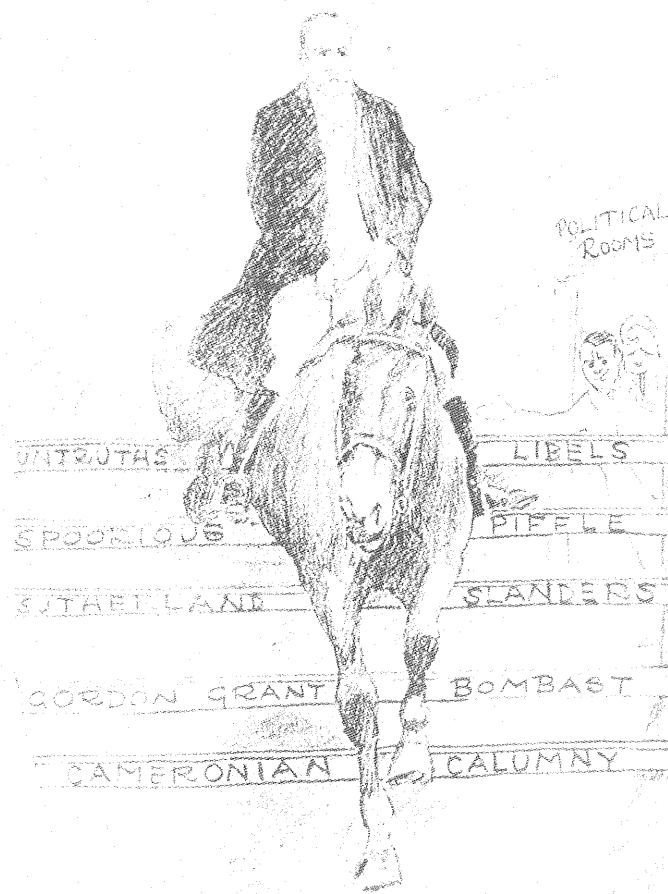
The Japan Osler Society,

and with the hospitality of

The Scottish Medical History Society

The Royal College of Physicians of Edinburgh
Edinburgh, Scotland

Wednesday to Saturday, 21 to 24 May 2003



On the Cover

The Rectorial Contest of 1908

Undergraduates of the University of Edinburgh elected every three years a Lord Rector from among the leading politicians of the day who, perceiving the contest to be a barometer of their popularity, vied for the honor with their parties' backing. Campaigns were vigorous and raucous, and it was customary for students to try to destroy their opponents' headquarters. In 1908, a group of students asked William Osler to stand for the office as an Independent. Opposing him were the Right Honorable George Wyndham of the Conservative Party and the Right Honorable Winston Churchill of the Liberal Party. Osler's campaign began with a "smoker" (cover, upper left) offering "conservative chairs to sit on ... liberal beer on draught ... liberal tumblers, liberal cigarettes, conservative fuel." The contents of the Osler committee room (lower left) suggest that this was indeed the case. Another bulletin (upper right) proclaimed that "Osler is a Man (1) of academic training, (2) of University experience, (3) of great sympathy with students, and (4) of culture, eloquence, and wide reading." In addition to wanting to do away with examinations, it was said that "OSLER has leisure; he can attend every meeting of the Court. He will do so, and fight for your interests there." Osler's supporters destroyed the Liberal Party's committee rooms but had more difficulty with the Conservatives. The Wyndhamites' stiff opposition (lower right) resulted in a battle reminiscent of "sieges in the days of walled cities" throughout election eve. Osler's supporters confidently predicted that he would ride to victory (above). This was not to be. However, with 614 votes, Osler finished a close third behind Wyndham (827) and Churchill (727), the future prime minister. Backed financially by his brother Edmund, Osler had done better than any non-political candidate in the history of the contest. The student leader of the Independent forces wrote Osler that his supporters "believed that you were their ideal Lord Rector and I was touched by the many ways they showed it. Classes, clothes, time, convenience were sacrificed; and even health, life and limb were endangered for 'the cause'." (Cushing ii, 141-142).

Corrections

1. There will be no banquet on Thursday, 22 May 2003, since we anticipate that many attendees will be recovering from jet lag.
2. The banquet at the Royal College of Physicians will be on Friday, 23 May 2003, with the reception beginning at 7:00.
3. The banquet at the Royal College of Surgeons will be on Saturday, 24 May 2003, with buses leaving from the George Intercontinental Hotel at 6:30.
4. Dr. Ralph Gordon (abstract number 21) will not be attending the meeting.

Thirty-Third Annual Meeting
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with
The Osler Club of London,
The Japan Osler Society,
and with the hospitality of
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The Royal College of Physicians of Edinburgh
Edinburgh, Scotland
Wednesday to Saturday, 21 to 24 May 2003

Some Overall Learning Objectives

1. Discuss Scottish contributions to the history of medicine including the impact of the Scottish Enlightenment on medical education and medical ethics.
2. List at least five contributions of Sir William Osler to our current understanding of medical humanism, medical competencies, and medical education.
3. Name the three principles and at least five components of the new Physicians' Charter on Professionalism, and critique the strengths and limitations of the charter.
4. Illustrate the value of medical history to the practice of medicine with at least four specific examples, and suggest ways in which physicians can contribute to serious medical historiography (as opposed to hagiography).
5. Express an opinion about whether an understanding of the medical climate of the late nineteenth and early twentieth centuries, as exemplified by William Osler's participation in the issues of his own time, will remain relevant in the twenty-first century as medical practice becomes increasingly technology-oriented.

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Wednesday, 21 May 2003

- 3:00-5:00 pm Readings (FRANCIS A. NEELON, organizer)
 The George Intercontinental Hotel
- 7:00-9:00 pm Board of Governors Meeting
 The George Intercontinental Hotel

Thursday, 22 May 2003

General Session No. 1 (LAWRENCE D. LONGO, Chair)

- 7:45 LAWRENCE D. LONGO
 Welcome and Announcements
- 8:00 NICHOLAS DEWEY
 Osler and Scotland: A Retrospective Glance
- 8:25 CHESTER R. BURNS
 William Osler's Responses to Eighteenth Century Scottish Moral Philosophy and
 Nineteenth Century American Medical Ethics
- 8:50 IAN GREGG
 A Review of Historical and Contemporary Evidence Related to Sir William Osler's
 Statement that "Death is Unknown" in Acute Attacks of Asthma and an Examination
 of its Long Term Consequences
- 9:10 JUNNOSUKE MATSUOKA
 British Influence on Japanese Medicine: Dr. Kanehiro Takaki and Dr. William Willis
- 9:30 PHILIP LEON
 Nathan Smith: Oslerian Mentor and Edinburgh Legacy
- 9:50 *COFFEE AND TEA BREAK*
- 10:20 W. BRUCE FYE
 T. Lauder Brunton: Prolific Pioneer of Cardiovascular Pharmacology
- 10:40 FRANCIS A. NEELON
 The Portable Temple of Minerva Medicine: The Semiotics of Bedside Rounding
- 11:00 LAWRENCE D. LONGO
 Presidential Address: "Lessons" from the History of Medicine? An Oslerian
 Perspective
- Noon *LUNCHEON*

General Session no. 2 (MARVIN J. STONE, Chair)

- 1:00 CLYDE PARTIN AND JOSEPH LELLA
A Talk about the Talks: Contemplation of Hundreds of Oslerian Presentations Given on Three Continents
- 1:20 ALLEN B. WEISSE
Confessions of a Semiprofessional Medical Historian
- 1:40 CHARLES T. AMBROSE
Joseph Lister and German Creosote
- 2:00 JOHN C. CARSON AND EARL F. NATION
Osler, Dock, and Major: Classic Descriptions of Disease and the Recognition of Coronary Thrombosis
- 2:20 BRUCE J. INNES
Sir William Osler, the Pathologist, and Ludwig Aschoff, the Clinician: Comparisons of their Careers and Personalities
- 2:40 *COFFEE AND TEA BREAK*
- 3:10 NEIL McINTYRE
Scottish Monuments to Doctors
- 3:30 ANAND DATE
“Life in the Tropics,” by Sir William Osler
- 3:50 RICHARD KAHN AND PATRICIA KAHN
Words, Words, Words: The Osler/Murray Connection. II.
- 4:10 AKIHIKO WATANABE
Dr. Riichiro Saiki, the Only Japanese Doctor to Have Been Taught by Dr. William Osler: What did he do After Returning Home to Kyoto, Japan?
- 4:30 DANIEL MORGAN
Benjamin Franklin and Smallpox—the Scientific Mind and Religious Retribution in Eighteenth Century America
- 4:50 JOHN A. KASTOR
Turmoil in the Governance of the Johns Hopkins Hospital and Medical School
- 5:10 *ADJOURN*
- 7:00 *RECEPTION AND BANQUET, THE ROYAL COLLEGE OF PHYSICIANS*

Friday, 23 May 2003

General Session no. 3 (CHESTER R. BURNS, Chair)

- 7:55 LAWRENCE D. LONGO
Welcome and Announcements
- 8:00 HERBERT M. SWICK, CHARLES S. BRYAN, AND LAWRENCE D. LONGO
An Oslerian Response to the Physician's Charter
- 8:50 RALPH C. GORDON
Mr. Flexner's School
- 9:10 DENNIS K. WENTZ
The Six Competencies of Medicine: Nothing New for William Osler
- 9:30 JOHN NOBLE
The Nineteenth Century Foundations of Twenty-First Century Accreditation for Hospitals and other Health Care Organizations
- 9:50 *COFFEE AND TEA BREAK*
- 10:20 ALLEN J. DENNIS AND MARY LOU DENNIS
William Charles Wells, M.D., FRS, L&E (1757-1817): Osler's "Remarkable Philosopher and Physician"
- 10:40 WILLIAM S. HAUBRICH
W.A. Newman Dorland, M.D. (1864-1956): The Man Behind the Dictionary
- 11:00 SIR RICHARD DOLL
John P. McGovern Award Lecture: The Evolution of the Controlled Clinical Trial
- Noon *LUNCHEON*

General Session No. 4 (JAMES R. HERON, Chair)

- 1:00 LAUREN KIM
William B. Bean Student Lecture: "The Best Will Breed the Rest": Implications of the American Eugenics Movement
- 1:25 JOHN T. TRUMAN
Five Letters from the Oslers to an American Student at Oxford
- 1:45 JAMES F. TOOLE
Frederick Moire Hanes

- 2:05 **SANDRA W. MOSS**
The Other Yellow Fever Experiments: For Science and Humanity
- 2:25 **ALAN MENTER**
Psoriasis: From “Leprosy” to Biologic Drug Development
- 2:40 *COFFEE AND TEA BREAK*
- 3:10 **CHARLES S. BRYAN**
Sir Andrew Clark: A Scottish Influence on Osler
- 3:30 **ROBERT R. NESBIT, JR.**
William Osler and Appendicitis
- 3:50 **MARVIN J. STONE**
Paul Ehrlich: A Pioneer in Three Disciplines
- 4:10 **CHARLES STUART ROBERTS**
The Medical Interests of William Byrd of Colonial Virginia
- 4:30 **TOSHIE KOMATSU**
How I Came Across the Books of Dr. Shigeaki Hinohara and Sir William Osler that
Changed my Life
- 4:45 **DENNIS BASTRON**
Joseph Priestly: Gas, God, and Grammar
- 5:00 **JACK B. ALPERIN, ROBERT E. BEACH, TUNG V. DINH, ALICE ANN
O'DONELL, FRANCIS B. QUINN, AND C. JOAN RICHARDSON**
The McGovern Academy of Oslerian Medicine
- 5:05 Adjourn
- 6:30 *BUSES LEAVE FOR THE ROYAL COLLEGE OF SURGEONS*
- 7:00 *RECEPTION AND BANQUET, THE ROYAL COLLEGE OF SURGEONS*

Saturday, 24 May 2003

7:30 Annual Business Meeting of the American Osler Society
(LAWRENCE D. LONGO, Presiding)

General Session No. 5 (SHIGEAKI HINOHARA, Chair)

8:10 DEE J. CANALE
The Physician as a Tragic Figure in Literature

8:35 PETER E. DANS
An American's Tribute to a Scottish Physician/Author

9:00 MICHAEL MORAN AND SAKTI DAS
William Beaumont, M.D., and the Guarded Society of Healers

9:20 CYNTHIA DEHAVEN PITCOCK
Sir William Osler, "Tuberculosisly" Bellicose: His Battle Plan for the Conquest of Tuberculosis

9:40 F. CLIFFORD ROSE
The Beginning and End of a Japanese Disease: SMON (Subacute Myelo-optic Neuropathy)

9:55 *COFFEE AND TEA BREAK*

10:25 MICHAEL EMMETT
Albuminuria—From Hippocrates to Henry Bence Jones

10:45 W. WATSON BUCHANAN
William Hunter (1718-1783): The Man Behind the Museum

11:05 KIMIE MORIYAMA
Osler and Oriental Medicine

11:25 MARK E. WEKSLER
Naming Streets for Physicians: L'Affaire Carrel

11:40 MARTIN L. DALTON
Champ Lyons, M.D.: Penicillin Pioneer

11:55 BILLY F. ANDREWS
Sir William Osler's Influence on the Development of Pediatrics

12:10 *LUNCHEON*

ADJOURN

Osler and Scotland: A Retrospective Glance

NICHOLAS DEWEY

Nicholas Dewey is a free-lance writer and lecturer in medical history. Born in London, he now divides his time between Santa Barbara, California, and Burford, Oxfordshire.

Osler's manifest attraction to Scotland would have been impacted in his early years by the hardy Scottish settlers in his home province of Ontario. Later, from a professional viewpoint, it was his admiration and respect for the high standards of teaching and research in the medical schools of the three ancient universities—Edinburgh, Glasgow and Aberdeen—that focused his interest and drew him, physically, to make the arduous journey northward on several significant occasions.

The first of these also involved a trans-Atlantic trip in the summer of 1898, when he received an honorary doctorate in letters (LL.D.) from Aberdeen. But the main purpose of this visit to Britain was to attend the B. M. A. meeting in Edinburgh, where amidst much ceremonial, he was awarded another LL.D degree.

Before his next invitation to “the Atticus of the North” in the winter of 1907 (when he gave an historical presentation to the venerable Royal Medical Society, and a paper on cerebrospinal fever to crowds of enthusiastic students), there occurred the famous incident of the chair of medicine, which fell vacant in February, 1900. There was frantic pressure to appoint Osler to what Cushing called this “blue ribbon position,” but in the end, although sorely tempted, Osler withdrew. This paper provides more details of how an attack of influenza played a role in this decision, and how Osler's physical weakness dogged his other medical visits to Scotland—in 1910, 1911 and 1919.

The story of Osler's unsuccessful candidacy for the Lord Rectorship of Edinburgh University in 1908 will also be reviewed, as will his lifelong friendship with the Scots-Canadian philanthropist Lord Strathcona, whose hospitality at his castle in the Highlands drew the whole Osler family on private visits north of the border in 1905 and 1913.

This paper is not illustrated with slides: “*Si monumentum requiris, circumspice...*” Let delegates to the meeting see the Oslerian sites for themselves!

Learning Objectives:

1. Name at three Scottish universities that influenced significantly the history of medicine and also the career trajectory of William Osler.
2. Describe William Osler's visits to Scotland, and the influence of those visits on his perspectives and on his health.
3. Review William Osler's campaign for the Lord Rectorship of Edinburgh University from the perspective of the physician's role in political campaigns.

William Osler's Responses to Eighteenth Century Scottish Moral Philosophy and Nineteenth Century American Medical Ethics

CHESTER R. BURNS

Chester R. Burns is James Wade Rockwell Professor of the History of Medicine at the University of Texas Medical Branch, Galveston. Widely published in the medical humanities, he is a former president of The Society for Health and Human Values (now The American Society for Bioethics and Humanities). He is second vice-president of the American Osler Society.

Moral philosophy was a central feature of the eighteenth century Scottish Enlightenment. Professors at Glasgow, Edinburgh and Aberdeen, such as Francis Hutcheson, David Hume, Adam Smith, Thomas Reid, and Adam Ferguson wrote books about moral philosophy that were studied by college students in Great Britain and the United States for many years. Reid was a cousin of John Gregory, the professor of medicine at the University of Edinburgh who, during the 1760s, gave the earliest lectures on medical ethics by a modern British doctor. Gregory, like Thomas Percival in Manchester, explicitly connected major precepts of moral philosophy to medical ethics.

In Philadelphia, Benjamin Rush listened to Gregory's lectures and corresponded with Thomas Percival. Rush imitated Gregory's style by delivering at least eight lectures about professional duties to medical students between 1789 and 1812. American doctors created several codes of medical ethics with precepts taken from Gregory, Percival, and Rush. These efforts culminated in the adoption of a "national" code by the American Medical Association in 1847, a code that was adopted almost verbatim by the Canadian Medical Association (CMA) in 1868.

Osler knew these codes because his valedictory address to students graduating from McGill's medical school in 1875 was organized in terms of the same categories used in framing these codes. At the annual meeting of the CMA in 1883, a speaker ridiculed its code and Osler became very angry. Although he would not tolerate any loss of respect for codified ideals, Osler must have been experiencing conflicts about the validity of codes that championed loyalty more than truth, morality more than science. Two years later, in response to difficulties planning the Ninth International Medical Congress Osler publicly rejected these codes, but he did not reject the need for moral values as well as scientific ones. He rejected the full-blown "unity of truth" model that undergirded Anglo-American moral philosophy. But, he did not reject Gregory's and Rush's perspective about an ever-changing, ever-improving medical science and their belief that this medical science did not automatically provide moral values for physicians.

Learning Objectives:

1. Trace some connections between Anglo-American moral philosophy and Anglo-American medical ethics.
2. Describe William Osler's acceptance, then rejection of the codes of ethics formulated by the American Medical Association and the Canadian Medical Association.
3. Explain some of William Osler's responses to traditions of moral philosophy and codified medical ethics.

A Review of Historical and Contemporary Evidence Relating to Sir William Osler's Statement that "Death is Unknown" in Acute Attacks of Asthma and an Examination of its Long Term Consequences

IAN GREGG

Ian Gregg is nationally and internationally known for his work on asthma and other pulmonary diseases, for which he has received numerous distinctions and prizes. He is a member of the Osler Club of London.

In the first (1892) edition of his influential textbook, *The Principles and Practice of Medicine*, Osler made the forthright statement that "death is unknown" in "attacks of true asthma." This was repeated in subsequent editions, including the posthumous ninth edition of 1920.

In 1922, Huber and Koessler [1] published a detailed account of the pathological changes of patients dying of asthma. In the tenth (1925) edition of *The Principles of Practice of Medicine*, it was acknowledged that deaths from asthma did occasionally occur.

Although many other papers reporting deaths from asthma were published during the subsequent 40 years, they did not reduce a widely held belief in the validity of Osler's authoritative dictum. This probably contributed to the surprise and unpreparedness of the medical profession during the early 1960s when it was first realized that an "epidemic" of deaths was occurring in Britain in other countries.

This paper examines Osler's contention in the light of evidence from three sources. In the first [2], contemporaneous with Osler's professional life, deaths ascribed to asthma were found to be extremely rare before the First World War. However, the other two sources [3,4] revealed that between 1790 and 1830 deaths from asthma were of common occurrence. Possible explanations will be advanced for these contrasting findings.

References:

1. Huber HL, Koessler KK. The pathology of bronchial asthma. *Arch Intern Med* 1922; 30: 689-760.
2. Annual Reports from St. Bartholomew's, St. Thomas's, and Westminster Hospitals, London.
3. London Bills of Mortality, 1670-1830.
4. London Medical Repository, edited by G. Man Burrows, W Royston, and AT Thomson, 1812-1822.

Learning Objectives:

1. Review the understanding of bronchial asthma that prevailed in the late 19th century, as reflected in William Osler's *Principles and Practice of Medicine*.
2. Examine the potential significance of Osler's views on asthma on the treatment of asthmatic patients during the first half of the twentieth century, continuing even into the 1960s.
3. Judge whether Osler's opinion that "death is unknown" in acute attacks of asthma illustrates the danger of dogmatic statements in clinical medicine, especially when issued by persons with great reputations.

British Influence on Japanese Medicine: Dr. Kanehiro Takaki and Dr. William Willis

JUNNOSUKE MATSUOKA

Junnosuke Masuoka is a native of Kyoto, Japan. He has served as chief of the radiological divisions of Kokura Memorial Hospital and Saga Prefectural Hospital, as vice-president of Kitakyushu Medical Center and Kitakyushu Agent Hospital, and as industrial health administrator of the Izutsuya Department Store.

I will report the biographies of two doctors. One is the Japanese physician Kannehiro Takaki (1849-1920), whose time frame coincides almost exactly with that of Sir William Osler (1849-1919). The other is the British physician William Willis (1837-1894), who was a graduate of the University of Edinburgh and a teacher of Dr. Takaki.

Dr. Kannehioro Takaki was born in county Miyazaki of Japan. He became a disciple of the Dutch physician Ryousaku Ishigami in 1866 at Kagoshima. After interruption of his study by the domestic Boshin war, he learned Latin, English and medicine from Dr. William Willis at Kagoshima in 1869. In 1875, Dr. Takaki left Japan to attend St. Thomas's Hospital Medical School in London a navy medical officer. There, he studied for five years and obtained many prizes. He was qualified M.R.C.S. In spite of his academic success, he thought that English medicine was based upon a religious concept of spiritual service to humanity.

When Dr. Takaki returned to Japan he founded a medical school, and then a charity hospital and nursing schools, to put into practice the precepts of his faith. His famous research on beri-beri was conducted with the same high ideals of helping mankind. "Promontory Takaki" at the British South Pole Base was named for him.

Dr. William Willis was born in County Fermanagh of Northern Ireland. He obtained his M.D. degree from the University of Edinburgh in 1859. Moving next to England he spent two years as House Physician at the well-known Middlesex Hospital in London and qualified as a M.R.C.P. London.

Dr. Willis worked in Japan from 1862 to 1877, and then joined his brother as a general practitioner in Wales. In 1882, he obtained F.R.C.S. From 1884 to 1893, he lived in Thailand as a medical doctor of the counsel general. In 1893, the year before his death, he gained the D.P.H. Dr. Willis was an excellent medical man adding to his knowledge, experience and qualifications through his career.

Dr. Willis spent the first six years of his stay in Japan as British Legation. In this time his humanistic services to the Japanese was over the common sense of Japanese people. Willis treated the wounded of both the Government and the insurgent armies. When peace came he was put in charge of a newly-built large Government Hospital and was instrumental in setting up for the Government the Tokyo Medical School which has since become the Medical School of Tokyo University. In 1870 came the invitation from General Saigo for Willis to go Kagoshima. In 1868 Willis was only 31 year of age but he was already possessed of experience far in excess of years. It is much to the credit of Japanese Government and authorities in Kagoshima that he obtained this appointment. Willis worked in Kagoshima until 1877 when General Saigo died for practical medical action and education of young people. Dr. K. Takaki was one of his excellent disciples. Dr. Willis was a great benefactor for Japan. From 1868 on, Japanese medicine was influenced primarily by the German "laboratory medicine".

We think that today what is needed to Japanese Medicine is British "practical humanistic medicine in the tradition of Sir William Osler, William Willis, and Kannehiro Takaki."

Learning Objectives:

1. Identify Kannehiro Takaki and William Willis and explain their relationship.
2. Cite the contributions of Drs. Takaki and Willis to Japanese medicine.
3. Appraise the need in Japan, and indeed throughout the world, for "practical humanistic medicine" as exemplified by William Osler, Kannehiro Takaki, and William Willis.

Nathan Smith: Oslerian Mentor and Edinburgh Legacy

PHILIP W. LEON

Philip W. Leon is Professor of American Literature at The Citadel, Charleston, South Carolina. He has made seven presentations to the American Osler Society and has written four books, including Walt Whitman and Sir William Osler: A Poet and His Physician (1995).

Although he never met Nathan Smith (1762–1829) personally, William Osler viewed him as one of his models of the medical profession. Osler described Smith as one who showed “a love of learning and above all a proper estimate of the personal character of the physician” (*Books and Men*). Addressing the Johns Hopkins Historical Club in 1901, Osler included Nathan Smith in a short list of “leading practitioners in the early years” of American medicine (“Medicine in the Nineteenth Century”). One of his greatest tributes to Smith came at the farewell dinner with medical colleagues in New York City in 1905 as he prepared to leave North America for England he said that one of his ambitions was “to make of myself a good clinical physician, to be ranked with the men who have done so much for the profession of this country—to rank in the class with Nathan Smith, Bartlett, James Jackson, Bigelow, Alonzo Clark, Metcalfe, W. W. Gerhard, Draper, Pepper, DaCosta and others. The chief desire of my life as been to become a clinician of the stamp with these great men, whose names we all revere and who did so much good work for clinical medicine” (“L’Envoi”).

Clearly, Osler had the highest regard for Nathan Smith, but who was he, and what did he contribute to American medicine? Born in Rehoboth, Massachusetts, Smith was a farmer in Vermont when he assisted Dr. Josiah Goodhue in performing an amputation. His dexterity and natural affinity for surgery impressed Dr. Goodhue who took Smith on as an apprentice for three years. In 1787 Smith began to practice medicine in Cornish, New Hampshire, but realized that he needed more training, so at age 28 he entered the Harvard Medical School where one year later he was awarded the Bachelor of Medicine degree. (Harvard would later convert this degree to an M.D.). Seeking further medical education, he sailed for Scotland in 1796 where he studied in Glasgow, Edinburgh, and London.

One year later he returned to the United States and founded Dartmouth Medical School and began to build a distinguished faculty, including Dr. Alexander Ramsey, the Scottish anatomist. In 1813 he helped found the Institute of Medicine at Yale College where he was appointed Professor of Theory and Practice of Physic, Surgery, and Obstetrics. Having founded two important medical colleges, it is astonishing that he went on to found two more: Bowdoin in Brunswick, Maine, and the Medical School of the University of Vermont in Burlington, both in 1821.

Nathan Smith began a family legacy in medicine. His four sons and six grandsons became physicians.

Learning Objectives:

1. Name four medical colleges in the United States that were founded by Nathan Smith.
2. Explain how Smith’s training in Edinburgh helped him design a medical school curriculum.
3. Critique Osler’s comment that Smith was “a good clinical physician” of the kind “who have done so much for the profession of this country,” and therefore one to be emulated.

T. Lauder Brunton: Prolific Pioneer of Cardiovascular Pharmacology

W. BRUCE FYE

W. Bruce Fye is Professor of Medicine and the History of Medicine at Mayo Medical School. He is a past president of the American Osler Society and has written more than 200 historical papers and two books. He is currently serving as president of the American College of Cardiology.

This illustrated talk will describe the career and contributions of Scottish physician and medical scientist Thomas Lauder Brunton, a founder of cardiovascular pharmacology. Born in Roxburgh, Scotland in 1844 and educated at the University of Edinburgh (B.Sc., 1867; M.D., 1868; D.Sc. 1870), Brunton is remembered mainly for introducing vasodilator therapy for angina pectoris and for catalyzing the field of experimental pharmacology. He became interested in therapeutics and experimental medicine as a medical student at Edinburgh where he won a gold medal for his thesis on digitalis.

As a house physician at the Edinburgh Royal Infirmary, Brunton noted that phlebotomy seemed to relieve angina in some patients. He thought the potent vasodilator amyl nitrite might produce the same benefit effect without the inconvenience and other disadvantages of blood letting. Brunton published his experience with amyl nitrite in *The Lancet* in 1867, and his report led to the widespread use of the drug for angina. In his study of amyl nitrite, Brunton used a Marey sphygmograph, a recent invention for recording tracings of the pulse waves and apex beat.

After completing his medical training at Edinburgh Brunton gained valuable research experience in several continental laboratories, including Carl Ludwig's Physiological Institute at Leipzig. These experiences exposed the young Scotsman to state-of-the-art physiological tools and techniques that he subsequently used in research and teaching. Reflecting the lack of full-time positions for medical scientists at the time, Brunton entered practice in London. He was appointed assistant physician and lecturer in therapeutics at St. Bartholomew's Hospital where he established a small (6 foot by 12 foot) laboratory in which he continued his pharmacological research.

Brunton was a prolific author who published almost 50 papers during the first 20 years of his career; many based on his own research. He also wrote several books, including a classic text on pharmacology and therapeutics. In 1908 Brunton published *Therapeutics of the Circulation*, a pioneering monograph based on lectures he delivered at University College, London. Illustrated with 240 woodcuts, this important book was a comprehensive review of the rapidly evolving field of cardiovascular pharmacology. Brunton was optimistic about the state of cardiac therapeutics a century ago, writing, "there is perhaps no kind of disease in which the results of treatment are so striking and encouraging as in cardiac disease." Brunton died in 1916, having helped set the stage for a series of remarkable advances in cardiovascular pharmacology during the 20th century.

Learning objectives:

1. Describe the origins of rational cardiovascular pharmacology.
2. Discuss the nature of cardiovascular research in the late 19th century.
3. Examine the importance of mentors in the training of medical scientists.

The Portable Temple of Minerva Medicine: The Semiotics of Bedside Rounding

FRANCIS A. NEELON

Francis A. Neelon is Associate Professor of Medicine at Duke University School of Medicine, from which he received the Distinguished Teacher Award in 1994. He has served as editor of the North Carolina Medical Journal. His publications include several major articles about Sir William Osler.

William Osler knew the importance of teaching at the bedside, and said he wanted his epitaph to read, “I taught students in the wards.” There is no doubt that this was Osler’s *modus operandi* (Christian says “He would go the patient’s bed ... give him a cheery greeting and, if he were a new patient, ask for his history which would then be given by the student clinical clerk”). But Osler was not the first to insist that the bedside was the proper locus of clinical teaching.

Giovanni Battista da Monte, colleague of Vesalius, began the organized practice of bedside teaching at Padua in the mid- 16th century, but it was Franciscus (de le Boe) Sylvius who first articulated in print the philosophy of bedside teaching. By his teaching practice, Sylvius turned the tiny University of Leyden into the magnetic pole of the medical world. After Sylvius died (1672) clinical teaching (and Leyden’s fame) went into eclipse until both were revived (briefly) after 1700 by Herman Boerhaave.

But Minerva (goddess of wisdom, poetry, music, war, science, and medicine) is the fickle patroness of doctors, and has never lingered long in one place. It is possible to trace the peregrinations of her temple from Padua to Leyden to Vienna, Berlin, Edinburgh, Montreal, Baltimore. At each stop there is a common sequence that begins with a profound focus on the patient as the center of teaching, of learning, of care. As long as Minerva is in residence, the locale becomes the center of the medical universe. The students burn with a rare curiosity. There are long lines of applicants, waiting for permission to enter the temple. When Minerva moves on, clinical fame and glory go with her; bedside teaching disappears; the focus of medicine shifts from patient to disease.

I believe that American medical education now shows evidence that Minerva has struck camp. No longer is the patient the center of the teacher’s gaze; Osler’s epitaph seems a quaint memory; we have forgotten what Montanus and Sylvius and Boerhaave and Osler did that warranted their lasting fame. Of course, we cannot prove cause and effect from mere association, cannot prove that a conscious decision to return instruction to the bedside would restore the central element to medical education and practice. But we ignore at our peril the testimony of history. When we dismiss the sick person from our presence, we lose contact with the very wellspring of our humanity. We lie in danger of becoming mere evidence-based treaters of disease rather than doctors who know what Peabody knew—that “the secret of the care of the patient is in caring for the patient.”

Learning Objectives:

1. Review the origins of bedside teaching and discuss the contributions of Franciscus Sylvius.
2. Trace the movement of “the Temple of Minerva Medica” from one center to another.
3. Eluciate the perils of absenting the patient from the teaching and learning of doctoring.

Presidential Address

“Lessons” from the History of Medicine? An Oslerian Perspective

LAWRENCE D. LONGO

Lawrence D. Longo is Director of the Center for Perinatal Biology at Loma Linda University School of Medicine. He is internationally known for his work in perinatal physiology, and is also well recognized as a medical historian. He is currently president of the American Osler Society.

Background. A question that has challenged scholars is what, if any, lessons can we learn from history? Because the past does not repeat itself, why bother? Commencing about a decade ago, I have queried historians, both “amateur” and “professional”, in the American Osler Society and the American Association for the History of Medicine as to the lessons to be learned. This gives rise to the question, to what extent has the historiography of medicine changed in its methodological approach, and helped us to understand the past? For Oslerians, a related question is what does William Osler have to say that speaks to these issues?

Lessons. Almost universally, the respondents affirmed that, yes, history can teach us lessons of value. These have been grouped into several broad themes: Appreciating the social context of medicine; gaining perspective of the continuity of medical thought; acknowledging the importance of change; placing primacy on the care of the patient; becoming aware of therapeutic foibles; appreciating the importance of preventive medicine; helping to prepare a mind set for discovery; placing value on virtue and character in medicine; and recognizing the interrelations of culture and medicine. I shall review some of these responses in the context of the historiography of medicine—chiefly in its evolution from mere chronological tabulation of past events and people, to the *iatrocentric* view of biography and bibliography, and to contemporary social and intellectual history. In addition, I shall examine Osler’s scholarly original research, and his use of the history of medicine to champion a “pragmatic” approach to the idea of progress.

Conclusions. Certainly, the history of medicine can teach us useful lessons. The challenge for us as Oslerians is to eschew hagiography, with excessive reverence for the “great men and their discoveries,” and to promote scholarship worthy of our namesake. A critical aspect of this endeavor is to gain a broad understanding of the past and its social and cultural milieu, from which we can draw our own lessons.

Key Words. History of medicine, historiography, lessons, values, William Osler

Learning Objectives:

1. List at least three lessons to be learned from the history of medicine.
2. Discuss the evolution of ideas in medical historiography.
3. Examine William Osler’s approach to writing the history of medicine.

A Talk about the Talks: Contemplation of Hundreds of Oslerian Presentations Given on Three Continents

CLYDE PARTIN AND JOSEPH LELLA

Clyde Partin is Assistant Professor of Medicine at Emory University School of Medicine, Atlanta, Georgia. He is especially interested in obscure phenomena and is an authority on William Osler's athletic career. Joseph Lella is a Professor in the Department of Sociology and also in the Department of History at the University of Western Ontario. He is especially interested in theater and is the author of Willie: A Dream. A Dramatic Monologue Portraying Sir William Osler (2000).

Since Sir William Osler's death in 1919, at least twenty societies bearing his name have come into existence. For meetings of three of these, the authors have had access to relatively complete lists of presentations encompassing more than 700 talks: American Osler Society (570), Osler Club of London (179), Japan Osler Society (15). Osler's heritage has been perpetuated in a variety of ways, including but not limited to these 'societies.' The lectures presented to the three societies, which we examine here, and the societies themselves (all national in scope, one continental in appeal) are vibrant and palpable expressions of his legacy.

Guided by the assumption that measurement can contribute to comprehension, we examined a number of variables and tabulated from the lists noted above. We explored a range of issues including number of presenters, favorite topics, and unusual titles. For example, from 1971 to 2002, members and guests of the American Osler Society heard 570 talks averaging 18 per year (range 2 to 49) delivered by 273 speakers. When indexed, these orations produced an astounding 638 detailed subject headings. Surely all of this is a tangible reflection of the persistent vitality of these organizations. We sorted the talks into eight broad categories. For example, just over half of the talks at the AOS meetings were about aspects of Osler's life, family, professional interests and activities. Such adulation may have puzzled Osler, yet his life provided us with a broad range and depth of medical-historical substance to ponder. One can conclude that to study Osler is to study the history of medicine itself.

We also compared thematic emphasis of the different societies. Examining the groups individually allowed us to advance some tentative conclusions about Osler's differing significance for each of these coteries and even more tentative hypothesis concerning the historical and sociocultural contextual reasons for the differences. The Osler Club of London evinced much more interest in other medical greats as well as medical aspects of literary personae. They saw Osler as the standard bearer for a distinguished British medical tradition of national and European scope and included themselves in that tradition. The Japan Osler Society concentrated on topics dealing with Osler's life, trumpeting him as a champion of philosophical humanism. All of the clubs, in reflecting on medical history and Osler's life, have constructed an Oslerian identity compatible with their original goals.

Learning Objectives:

1. Evaluate the intellectual diversity of Oslerians world-wide based on the broad spectrum of topics encountered at the meetings.
2. Examine the differences, based on the content of lectures, between the various international Oslerian societies and the medical traditions from which they came.
3. Discuss the success of the Oslerian Societies in perpetuating Oslerian ideals and promoting scholarship in the history of medicine.

Confessions of a Semiprofessional Medical Historian

ALLEN B. WEISSE

Allen B. Weisse, a cardiologist by training, resigned from his full-time position as Professor of Medicine at the New Jersey Medical School in 1997 in order to devote adequate time to his writing and historical interests. He has written five books and is currently president of the Medical History Society of New Jersey.

Osler was not only a promoter of medical history writing but, like a number of his contemporaries, an active practitioner. With the passage of time, however, and the trend toward the establishment of rigorous and specific criteria in the formation of medical history as an independent academic discipline, the role of the clinician-historian has diminished. A look at trends within the premier medical history organization of this country, the American Association for the History of Medicine (AAHM) offers a mixed picture.

Membership is still open to anyone interested in medical history and willing to pay the modest dues entailed. Although no longer the exclusive preserve of clinicians the AAHM's MDs still occupy first place as the largest subgroup of members (43%). By tradition for a number of years, the presidency alternates between MDs and professional historians. Physicians still occupy a fair number of places on AAIB4 committees (30%). On the other hand, at the 2002 annual meeting physicians constituted only 19% of those attending and presented only 11% of the 74 abstracts on the program. Also disturbing is the fact that only 14 abstract submissions were rejected, while at the *Bulletin of the History of Medicine*, the publication arm of the organization, only 20 to 25 original papers have been appearing over the last few years. All this points to a paucity of research activity among clinicians and professional historians alike.

Clinicians inclined toward the study of medical history need not be dissuaded from such efforts because of lacking academic history credentials, given their unique perspective. Examples of others writing history—medical and otherwise—without such academic credentials and producing outstanding works of scholarship should provide encouragement. Personal experience in the field has revealed that, although public acclaim is usually beyond one's reach, the satisfaction of a job well done and its recognition by one's colleagues should be reward enough.

Learning objectives:

1. Judge whether there is a need for more physician input in the field of medical history.
2. Identify some of the rules necessary for historical research.
3. Describe trends in medical history writing over the last half century.

Joseph Lister and German Creosote

CHARLES T. AMBROSE

Charles T. Ambrose is Professor of Medical Microbiology and Immunology at the University of Kentucky, Lexington, where he has won six Golden Apple Awards for excellence in teaching.

In a eulogy to Joseph Lister upon his death in 1912 Osler called him “one of the greatest benefactors of humanity.” The conquest of surgical sepsis by Lister and the earlier introduction of anaesthesia by others were the two major surgical advances of the nineteenth century. The advent of anaesthesia led to a rise in surgery but also to a concomitant increase in hospital sepsis.

Initially in Lister’s career undue attention focused on his use of carbolic acid (phenol). It was asserted that his fame was false because he had no priority in its use. But he never claimed precedent; instead he proposed a revolutionary principle — that sepsis is caused by microbial invaders of the body. In this he readily acknowledged Pasteur’s studies on fermentation and applied them to explain suppuration. Lister’s message focused on the general principle of asepsis and not on the use of some specific antiseptic agent.

Nonetheless, it’s of interest to review the antecedents of carbolic acid — i.e., creosote, bitumen, asphalt, & pitch — and to survey historically their topical uses in surgery. This story begins in the Middle East during Mesopotamian & Biblical times and moves to the classical worlds of Hippocrates and the Roman writers. In the Middle Ages wood turpentine largely replaced bitumen in its various forms for the treatment of wounds. But in the early eighteenth century the discovery of asphalt deposits in central Europe led a century later to the coal tar industry, including the by-products of creosote & carbolic acid. These were promptly examined for their medicinal properties by scores of investigators during the three decades before Lister’s first studies in Glasgow in 1865.

The final portion of this talk concerns what actually led Lister to chose initially creosote and later carbolic acid from among many other disinfectants then available. He wrote that he was prompted by an article on the use of German creosote/carbolic acid to arrest foul odours from sewage farms outside the English town of Carlisle. None of Lister’s biographers ever cited this particular article. Identifying it was one goal of this talk.

Learning objectives:

1. Discuss Lister’s real contribution to surgical asepsis: a principle rather than a particular panacea.
2. Review the long history of aromatic antiseptics/disinfectants in surgery
3. Name the article Lister likely read that led him to test creosote/carbolic acid in cases of compound fractures.

Osler, Dock, and Major: Classic Descriptions of Disease and the Recognition of Coronary Thrombosis

JOHN C. CARSON AND EARL F. NATION

John C. Carson and Earl F. Nation both live in California and are past presidents of the American Osler Society. Dr. Carson, who remains active in the practice of cardiology, is Clinical Professor of Medicine at the University of California, San Diego. Dr. Nation, who has written extensively about the history of urology, is Emeritus Professor of Surgery at the University of Southern California.

In Ralph Major's *Classic Descriptions of Disease*, George Dock is cited as having published in 1896: "The first account of a case of coronary thrombosis in America, diagnosed during life and confirmed by autopsy."

The Dock papers in the Huntington Library and the Major papers at the Kansas University Medical Center document the following:

- In 1888, Osler, John Herr Musser and Dock shared a patient in Philadelphia fulfilling the same diagnostic requirements of coronary thrombosis. The case was never recorded.
- In 1939, Frank Billings presented a lecture entitled "Historical Notes on Coronary Occlusion: from Herberden to Osler." Billings produced a letter from his 1d classmate, Irving P. Lyon, M.D., of Buffalo, New York. Lyon wrote, "So far as Osler is concerned, I never once during five years of contact as student and intern, heard him make or suggest a clinical diagnosis of acute or chronic coronary occlusion. He proceeded to describe a case seen by his father in Hartford, Connecticut in 1894 which was verified by Theodore Janeway in New York City.
- The first two editions of Major's *Classic Descriptions of Disease* use the wrong case to illustrate Dock's achievement. The record was set straight only with the third edition.

The opportunity to see Osler at work is always of interest, and the chance to follow the course of medical history and Locke's dictum that: "Truth scarce ever carried it by vote anywhere at its first appearance" is made possible through the papers of George Dock.

Learning Objectives:

1. Interpret the thoughts of Osler and his contemporaries regarding coronary thrombosis and myocardial infarction in a different light from those shown in Osler's textbook, noting especially the viewpoints outlined by Bruce Fye in *Acute Myocardial Infarction: A Historical Summary* (1990).
2. Critique whether the story presented here demonstrates the principle that "he who presents his argument most clearly is awarded the palm leaf (referring to Herrick versus Dock).
3. Decide whether our elders and betters were thrown off track (as Allen Weisse has pointed out) by their concentration on the atherosclerotic plaque rather than on the event of coronary thrombosis.

Sir William Osler, the Pathologist, and Ludwig Aschoff, the Clinician: Comparisons of their Careers and Personalities

BRUCE J. INNES

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At the dawn of the twentieth century the art and science of medicine entered an era of enlightenment and an explosion of knowledge both in Europe and the U.S.A. The modern use (1890's) of the microscope broadened the boundaries of surgery and therapeutics. The world of pathology at the cellular level began to equate the pathological cell changes with the clinical syndromes.

On returning from his postgraduate trip to Europe in 1875, Osler joined the faculty of medicine at McGill University and soon thereafter (1877) started a summer course in histology which included some pathological slides. In the succeeding years Osler performed 1,000 autopsies the data from which he meticulously recorded.

Many of the autopsy specimens became the foundation for the McGill Medical School Museum of Pathology. Osler's interest in pathology never waned. Once he arrived at John's Hopkins Medical School his attention turned to more "bedside" teaching as Welch was appointed the chief of pathology. Osler was forever searching for the clinical features relating to the microscopic disease process.

On the other side of the Atlantic a pathologist, Ludwig Aschoff, obtained an M.D. from the University of Bonn in 1889. He studied at Strasburg, Gottingen, and Marburg before he joined the faculty at the University of Frieberg in 1906. While at Frieberg he started an "Institute of Pathology". German law required that all deaths had to be autopsied. Aschoff's fame came from the discovery of "Aschoff's Bodies" in myocarditis and the "Aschoff's Node (A.V.)" in the conductive tissue of the heart. Aschoff had an intense interest in the microscopic findings seen in congestive failure.

Osler and Aschoff first met at the University of Marburg. There was an immediate mutual respect. In 1905 a huge fire at McGill destroyed a large portion of the Pathology Museum. The fire resulted in a call for help by the professor of pathology, Maude Abbot, a good friend of Osler. Dr. Abbot and others proposed "The International Academy of Pathology". Dr. Osler participated in the formulation of the society. The first meeting was in Washington, D.C. in 1907. Dr. Abbot sent out invitations to join, among which were many international pathologists. Dr. Aschoff was elected 2nd vice president in 1910. Thereafter there were yearly meetings where Aschoff and Osler were present. An annual pathology bulletin, along the lines of the German pathologists, was prepared. The first international meeting was in 1913. Aschoff was elected president and Osler was elected councillor. Because of World War I, Aschoff was never able to assume his office. After the war Aschoff traveled extensively in the U.S.A. as a visiting professor. An especially memorable paper on atherosclerosis was presented in California in 1929. Aschoff wrote a glowing reminiscence of Osler, 10 years after his death, as a contribution to Dr. Abbot's *Appreciations and Reminiscences of Sir William Osler*. In 1932 the Nazis burned the Aschoff Institute. As the 2nd war began, Aschoff retired and died in 1942.

So it was, because of Osler's 1000-plus autopsies searching for microscopic changes to account for clinical disease and Aschoff's search for clinical signs that accounted for microscopic changes, that Osler the pathologist and Aschoff the clinician were mutual admirers.

Note of interest: My father, Dr. James R.M. Innes, was a student of Aschoff at the Institute of Frieberg. This paper will include photographs and vignettes of Aschoff which have never been published.

Learning Objectives:

1. Identify the origins of the Society of Medical Museum Curators.
2. Relate the origins of "Histology" in the medical school curriculum.
3. List and explain three major contributions to clinical medicine made by Ludwig Aschoff.

Scottish Monuments to Doctors

NEIL MCINTYRE

Neil McIntyre is Emeritus Professor of Medicine at the Royal Free Hospital and School of Medicine, where he also served as Chairman of the Department of Medicine. He is internationally known for his work in hepatology and carbohydrate metabolism. He is a past president of the Osler Club of London and is an authority on statues erected in memory of physicians.

The contribution of Scottish doctors to medicine is unduly large in relation to the size of their native country. A small number have been commemorated by public monuments, not only in Scotland but also in many other countries. As well as great scientists and clinicians those honoured in this way include family doctors, and physicians who were explorers, soldiers, writers or classical scholars.

Two great names of medicine are immortalized in Scotland as full length statues. Lord Lister (1827-1912) has a beautiful statue in Kelvingrove Park, Glasgow—although neither a Scot nor a Scottish graduate. Sir James Young Simpson (1811-1870), the obstetrician who introduced chloroform as an anaesthetic, stands on Princes Street in Edinburgh. His predecessor, William Smellie (1697-1763), considered by many the greatest figure in British obstetrics, is remembered by a statue of a mother and baby at the maternity hospital in Lanark, his birthplace. The only public monument in Britain to Sir Alexander Fleming (1881-1955), arguably the Scottish doctor most deserving of public recognition, is a small bust in the little town of Darvel, near his birthplace.

The explorers are Mungo Park (1771-1806) and David Livingstone (1813-1873). Park, who explored the source of the Niger, has a statue in Selkirk. Livingstone, one of the most commemorated of all doctors, has a statue on Princes Street in Edinburgh, one in Glasgow's Cathedral Square, and at least three outside Scotland. Two soldiers are honoured by large obelisks. The one in Aberdeen to Sir James MacGrigor (1771-1858), first Surgeon-General of the British Army, was first erected at his old school, Marischal College; it now stands in Duthie Park. James Thompson (1821-1854), a lowly Assistant Surgeon who died at Balaclava, is remembered for his lone ministrations to wounded enemy soldiers during the Crimean War. His monument, put up at MacGrigor's suggestion, is on Castle Hill at Forres, near the Moray Firth.

There is a small obelisk in Banchory outside the old home of the family doctor Francis Adams (1796-1861), well known to Osler (see *The Student Life*) as a classicist famous for his translation of Hippocrates. His contemporary, David Macbeth Moir (1798-1851), author of *Mansie Waugh*, has a statue at the bridge at Musselburgh near Edinburgh. Moir's first professional publication, in 1831, was *Outlines of the Ancient History of Medicine*. The 'Border Poet', John Leyden (1775-1811), friend of Sir Walter Scott, has a monument on the village green at Denholm, near Hawick in the Borders. In Edinburgh (and in London and Switzerland) Sir Arthur Conan Doyle (1859-1930), is commemorated by a statue of his famous creation—Sherlock Holmes.

Family practitioners were honoured for different reasons: James Gorman (1832-1899) at Rutherglen, near Glasgow, was a beloved physician; John Grigor (1814-1886) a local benefactor at Nairn; while Hugh Dewar (1866-1914), has a memorial in Abercorn Park, Portobello, Edinburgh even though, in 1914, he committed suicide the day before his trial for a fatal obstetric mishap.

Learning Objectives:

1. Identify at least six statues to Scottish physicians, and explain the significance of the physicians' careers.
2. Propose an explanation for the numerous monuments to David Livingstone, "one of the most commemorated of all doctors."
3. Contrast the reasons for honouring with statues such family physicians as Gorman, Grigor, and Dewar with the reasons for honoring physicians who contributed to science, warfare, or exploration.

“Life in the Tropics,” by Sir William Osler

ANAND DATE

Anand Date is Professor of Pathology and Head of the Department of Pathology at the College of Medicine, Sultan Qaboos University, Oman. His interests include the general history of India, religions, and art, and the medical history of Osler's life and times and tropical medicine.

“Take up the White Man's burden —Have done with childish days” —Kipling

The Annual Report of the Curators of the Indian Institute for the year 1911 records that: “In the Summer Term the Regius Professor of Medicine gave a course of four lectures, for the benefit of the Indian Civil Service probationers and of the Forestry students, on: Life in the Tropics for Europeans.”

Only the first lecture dealing with “General Rules of Health” survives. It consists in the main, of 10 typed pages, with handwritten corrections by Osler. The talk began with unspecified “personal” introductory remarks, a statement about “the importance of tropical diseases” and “the conquest of the tropics by the white man.” A reasonable guess about what was said in this part of the lecture can be made keeping in mind that Osler had spent two months in Egypt earlier that year, and not long before, had given a talk on: “The Nation and the Tropics.”

The body of the lecture consists of quotations interspersed with Osler's explanations. General quotations are from sources as diverse as Plato, Holmes, Browning, Fayer and Captain Cook; some of these used by Osler in earlier writings and addresses. Medical references from Chittenden of Yale, McCay of Calcutta, Woodruff of the U.S. Army, etc, suggest that he was keeping up with his reading of the journals, notwithstanding HAL Fisher's doubts about this. Osler's remarks occupy a disproportionately small amount of the typed material. But obviously, this does not reflect actual time spent, since Osler would have expanded and elaborated his own continents extemporaneously, while giving the quotations verbatim.

Osler's style of lecturing illustrates his current fondness for simplification of difficult concepts, by making mechanical comparisons with work-a-day objects such as: automobiles (he had recently purchased a 14 horsepower Renault Landau). Although this is a very mechanistic approach to biology it would have been particularly appropriate for keeping the attention of this general audience of young administrative probationers.

His advice to these young men about living in the tropics was not controversial, but in the matter of diet, he showed how progressive he was by supporting views generally accepted today; though not at that time.

Given the setting, the audience, the era, and Osler's well known loyalty to Pax Britannica, it is not surprising that the assumptions of the “The Raj” such as “the white man's burden” and “martial races” are accepted by him unquestioningly. In addition to providing an interesting view of British imperial history, the lecture gives insights into the history of “Nutrition” and “Travel Medicine.”

Learning Objectives:

1. Discuss the context of William Osler's lecture on “General Rules of Health” for persons going to the tropics.
2. Describe how Osler simplified difficult concepts by making comparisons with work-a-day objects.
3. Determine whether Osler's advice about living in the tropics were advanced for his day.

Words, Words, Words: The Osler/Murray Connection. II.

RICHARD J. KAHN AND PATRICIA G. KAHN

Richard J. Kahn, a past president of the American Osler Society, practices internal medicine in Rockport, Maine. He holds academic rank at Dartmouth Medical School and at the University of Vermont College of Medicine. Patricia G. Kahn is director of the Niles Perkins Health Science Library, Penobscot Bay Medical Center, Rockport, Maine.

Professor James Murray, born in the small town of Denhohn, Scotland, was principal editor of the *Oxford English Dictionary* from 1879 until his death in 1915. Like Osler, Murray “in spite of the want of influential connections and early advantages, has gained for himself a scholarly reputation of a high character.” (“Edinburgh University: Graduation Ceremonial” in *The Daily Review* [Edinburgh], 23 April 1874). On observing Murray one day as he emerged from the Old Ashmolean, Osler remarked to W. W. Francis that the University paid him to keep Murray alive until the Dictionary was finished. (Cushing, ii p. 198-99) Neither Murray nor Osler lived to see the completion of the OED, the announcement of which was made on New Year’s Eve in 1927.

Did Osler assist Murray and his staff with the OED? On contacting Steven Tomlinson, Asst. Librarian, Dept. of Special Collections of Western Manuscripts at the Bodleian, we were told that the library had recently (1999) been given the ‘Dictionary’ correspondence of JAH Murray and that the collection had not yet catalogued. We examined Murray’s correspondence from 1905 to 1915 and found eight letters from Osler to Murray. At the suggestion of John and Ruth Ward we went to The Oxford University Press and examined the string-tied packets of OED quotations for Osler’s contributions and found sixteen more letters involving Osler, Murray and other editors of the OED. After briefly recounting the Oxford detective work we presented to the AOS in 2001, we will present a full account of Osler’s contributions to the OED based primarily on the Osler-Murray correspondence.

Learning Objectives:

1. List at least three ways by which William Osler may have contributed to the production of the *Oxford English Dictionary*.
2. Compare and contrast the professional lives of Sir James Murray and Sir William Osler.
3. Describe and evaluate the ongoing tension between the Oxford University Press and James Murray, the editor of the *Oxford English Dictionary*.

Dr. Riichiro Saiki, the Only Japanese Doctor to Have Been Taught by Osler: What did he do After Returning Home to Kyoto, Japan?

AKIHIKO WATANABE

Akihiko Watanabe is Lecturer and Attending Physician in the Department of Pediatrics at St. Marianna University Hospital, Kawasaki and Yokohama, Japan, and is Director of the Watanabe Pediatric Clinic. His interest in William Osler dates to his clinical fellowship at the University of Texas and M.D. Anderson Hospital in Houston, when he came across a plate entitled AEQUANIMITAS on the wall of the treatment room in the pediatric ward. The plate had been donated by Dr. Grant Taylor, a founding member of the American Osler Society.

Dr. Riichiro Saiki (1862-1953) is the only Japanese to have been taught by Dr. William Osler. After graduating from Kumamoto Medical College in Kyushu, Japan, Dr. Saiki became a naval surgeon; he was then sent by the Japanese government first to the United States and later to Europe to continue his medical studies. He entered into the Department of Medicine in his 3rd year of medical school, at the University of Pennsylvania School of Medicine in 1887, and studied under Dr. Osler and other professors. A year later, Dr. Saiki obtained a medical diploma. After receiving his medical diploma, he continued his studies in obstetrics and gynecology in Germany.

In 1891, Dr. Saiki returned to Japan where he worked at the Doshisha Hospital as an obstetrician and gynecologist; he also taught at the Kyoto Training School for Nurses. Both the hospital and the training school were founded in 1886 by the Christian educator Joh Nijima (Joseph Hardy Neesima), B.S., LL.D., a graduate of Amherst College in 1870, with the donations from the American Board of Commissioners for Foreign Missions and Kyoto volunteers. Among the first staff members, were American missionaries J.C. Berry, M.D., a graduate of the Thomas Jefferson Medical College in 1871, and Miss Linda Richards, the first trained nurse in America, taught by Florence Nightingale in 1877. Dr. Saiki was the first physician to create a structured set of fundamental guidelines in teaching the trained nurses in Japan.

Dr. Saiki was a Christian, who in his daily life, seemed to have followed Dr. Osler's examples and principles, even though he maintained a busy schedule. His motto was 'It is more blessed to give than to receive' from the Bible (Acts 20:35). He also made this the motto for the nursing school where he taught at.

In 1938, Dr. Saiki took the chair of the 36th Annual Congress of the Japan Society of Obstetrics and Gynecology. His contribution to the academic fields in Japan's Meiji era, both in the practice of medicine and the teaching of nursing, will be introduced.

Learning Objectives:

1. List Dr. Saiki's contributions to the academic fields in Japan in both the practice of medicine and the teaching of nursing.
2. Explain how Dr. Osler's examples and principles helped shape Dr. Saiki's philosophy of how he chose to live his personal life and make a lasting impression in the field of medicine for Japan.
3. Outline Dr. Saiki's educational career and how it brought him back home to work among American missionaries who worked with him in his endeavors to create a new system of medicine in Japan.

Benjamin Franklin and Smallpox—the Scientific Mind and Religious Retribution in Eighteenth Century America

DANIEL MORGAN

Daniel Morgan practices orthopedic surgery in Fremont, California. He is broadly interested in the history of medicine, the history of Europe and America, intellectual history, and bioethics.

Benjamin Franklin and smallpox were closely linked throughout the eighteenth century. The most brilliant man of his time first confronted smallpox as a printer's apprentice. The smallpox epidemic in Boston in 1721 introduced inoculation to the U.S., and the Franklins to a major theological confrontation.

Religion and smallpox continue to be intertwined even in the wake of the tragic events of September 11, 2001. In the eighteenth century God was thought to have afflicted communities with smallpox, and in the twenty-first century our greatest fear is that men acting in the name of God will afflict the world with smallpox. The course of the eighteenth century revealed smallpox to be a formidable biological weapon—it was used against hostile Indians, and it almost changed the course of our Revolutionary War. Benjamin Franklin understood the threat and the challenge and, as a good scientist, the importance of inoculation as a practical means to change the course of this scourge. With Dr. William Heberden, he promoted a guide to help the poor accomplish preventive treatment and helped to alter man's view of disease. Benjamin Franklin had a liberated mind, with exceptional curiosity and energy. His willingness to challenge authority and his skepticism about religion reinforced a sense of pragmatism and practicality, touching all phases of his life.

This paper will discuss smallpox in eighteenth century America, the history of inoculation, Benjamin Franklin's experience with smallpox and inoculation and insights about smallpox in the eighteenth century which are relevant today.

Learning Objectives:

1. Contrast the relationship between religion and smallpox during the eighteenth century with the current concerns that men acting in the name of God will reintroduce this disease.
2. Review the use of smallpox as a biological weapon during the eighteenth century.
3. Discuss Benjamin Franklin's contribution to coping with smallpox during the eighteenth century, including his views on inoculation.

Turmoil in the Governance of the Johns Hopkins Hospital and Medical School

JOHN A. KASTOR

John A. Kastor is Professor of Medicine at the University of Maryland School of Medicine, where he served 13 years as Chairman of the Department of Medicine. He has written numerous articles and three books, of which the latest two deal with recent turmoil in academic medical centers.

In August of 1867, the General Assembly of the State of Maryland created, at the request of merchant and investor Johns Hopkins, two corporations, "The Johns Hopkins Hospital" and "The Johns Hopkins University." Since the founding of the hospital, which opened in May, 1889, and the medical school, which admitted its first class in October, 1893, each institution has been governed separately with the hospital chief executive reporting to the hospital board of trustees and the dean of the school of medicine reporting to the president of the university who is responsible to the board of trustees of the Johns Hopkins University. Accordingly, when William Osler became the first director of medicine, he received two titles from two independent institutions, chief of service from the hospital and professor from the university.

Until the 1990s, the hospital and the school coexisted successfully in this arrangement although, from time to time, leaders, particularly in the medical school and university, attempted to governmentally integrate the hospital into the university. Hospital executives and trustees successfully preserved their administrative independence until an extraordinary series of events brought about a functional amalgamation. This is the story of that transformation as obtained from interviewing 105 members of the faculty, trustees and administrators.

The events which so changed how the academic medical center in East Baltimore would be governed began with the appointment of a new dean, Michael M. E. Johns, M.D. in 1990 and, two years later, a new hospital president, James A. Block, M.D. These two leaders soon differed strongly with each other about how the medical center should be operated and developed. Despite advancing several valuable programs for the hospital, Block, who had never trained or worked at Hopkins previously, came to be seen by the faculty as antithetical to the interests of the school and the dean. Among other areas of conflict, he hired a chief operating officer who antagonized directors of the clinical departments and proposed hiring physicians who were unsuitable, in the judgment of some members of the faculty, to be accorded Hopkins titles.

When Johns resigned in December, 1995 to become chief executive at another academic medical center, university and hospital trustees, pressured by most of the directors of the clinical departments to relieve Block, established a joint committee to consider whether the problem was more fundamental than the differences between the dean and hospital president, and if so, what to do about it. Their deliberations led to a plan to functionally merge the management of the hospital and medical school under an executive to whom the hospital president would report. In March, 1996, the university appointed Dr. Edward Miller, director of the department of anesthesiology, acting dean to succeed Johns. In August, 1996, Block resigned as hospital president and was succeeded by Ronald Peterson, a effective and popular hospital executive at Hopkins.

The university and the hospital delegated governance to a new structure called "Johns Hopkins Medicine," a virtual, not an incorporated, entity to be led by a "Dean/CEO." The first person to hold this position was Edward Miller who was selected in January 1997 with the strong support of Dr. William R. Brody, the recently elected university president and former director of the department of radiology at Hopkins. There is little question, consequently, that the university had become the "more equal" of the two entities that Johns Hopkins had created. Most agree that the new system has worked better than expected partly because of the character of the Miller and Peterson who cooperate constructively with each other and are not inherently confrontational. Whether this will continue to apply when it becomes time to select their successors remains to be seen.

Learning objectives:

1. Describe how Johns Hopkins determined the governance of the two institutions where William Osler would establish America's leading department of medicine.
2. Trace the forces that led recently to a basic change in the governance of the medical school and hospital.
3. Explain how the trustees of the institutions devised the new amalgamated structure.

An Oslerian Response to the Physicians' Charter

HERBERT M. SWICK, CHARLES S. BRYAN, AND LAWRENCE D. LONGO

Herbert M. Swick is Executive Director of the Institute of Medicine and Humanities at St. Patrick Hospital, Missoula, Montana. A pediatric neurologist by training, he spent 30 years in academic medicine at the Medical College of Wisconsin and the University of Kansas School of Medicine, where he served as dean. Brief sketches of Drs. Bryan and Longo appear elsewhere in this booklet.

Background. In 2002, an article entitled “Medical professionalism in the new millennium: a physicians’ charter” called on physicians to reaffirm the principles of medical professionalism (*Ann Int Med* 136:243-246; *Lancet* 359:520-522). The Charter identifies three “fundamental principles”—primacy of patients’ welfare, patients’ autonomy, and social justice—from which flow ten professional responsibilities that reflect a duty-based ethic chiefly concerned with physician competence.

Osler and Professionalism. A century ago, William Osler was the exemplar of medical professionalism. Osler was deeply worried that medicine was being reduced to a trade and about the consequent loss of professional values. In an address to the New Haven Medical Society in 1903, he commented that “the practice of medicine is not a business and can never be one. Our fellow creatures cannot be dealt with as a man deals in corn and coal.” He often spoke of medicine as “a calling, not a business.” Throughout his professional life, Osler articulated the importance of many of the commitments contained in the Physicians’ Charter, such as competence, appropriate patient relationships, professional responsibilities, and scientific knowledge.

An Oslerian Perspective. In many respects, the Physicians’ Charter fails to address the highest ideals of medicine. It conveys nothing about the transcendent values the physician should exemplify, such as beneficence, caring, compassion, or giving the patient hope. William Osler knew the critical importance of such values to the effective practice of medicine. Indeed, from the mists of history, he still speaks meaningfully to the highest standards of medical professionalism, standards that have withstood the test of time and should carry the profession into the future.

Learning objectives:

1. Discuss the strengths and weaknesses of the Physicians’ Charter on Professionalism.
2. Judge whether William Osler’s perspectives on what we now call medical professionalism remain relevant.
3. Express an opinion about whether and how the American Osler Society can promote the values of medical professionalism as contained in the Physicians’ Charter and as exemplified by William Osler.

Mr. Flexner's School

RALPH C. GORDON

Ralph C. Gordon is Emeritus Professor of Pediatrics at Michigan State University and Adjunct Professor of History at Western Michigan University. He is especially interested in the Civil War medicine, African-Americans and medicine, and the history of American medical education.

Abraham Flexner is widely known as the inspector of medical schools through his 1910 Carnegie Report, Because of his Rockefeller Foundation work, and as founder of the Princeton Institute for Advanced Studies. However, few recall his first academic venture in Louisville, known simply as the Abraham Flexner School. As a Kentuckian, I was curious about the early background of this native son, a non-physician, who had such an influence on medicine and higher education in general. What factors existed that influenced his early life? Why and how did he found his school, which later cured the financial ills of his immigrant family and helped fund the meteoric rise of brother Simon to outstanding scientist? What physical remnants, if any, persist of the school?

Methods: The following approaches were taken: (1) City Library and University of Louisville Archives were searched; (2) The City Historian's Office was consulted to help locate any remaining building. Three locations listed in City Directories were considered, but since all house numbers in Louisville were changed in 1907, a difficult problem existed; (3) The Flexner Archives at Vanderbilt were reviewed; (4) An extensive interview was held in Nashville with great-nephew John M. Flexner, M.D., for his recollections of "Uncle Abe"; and (5) The gracious dean of Abraham Flexner historians, Tom Bonner, was consulted regarding the Library of Congress Flexner papers.

Results: Abraham Flexner was born to poor parents who nevertheless owned and encouraged reading of books in the home. He worked in a pay library, read extensively between patrons, and met the local intelligentsia there. He also wrote articles for "The Nation" of such quality that he was excused from English composition on entry to Johns Hopkins University at age 17. He received the bachelors degree there in two years, coming under the influence of Daniel Coit Gilman as well. At age 19 he began teaching mostly classical languages at Louisville Male High School which continued until 1890 when he started his school at age 24. His purpose was to get the sons (and a few daughters) of wealthy Kentuckians into elite eastern colleges and he had enormous success. He operated the school for 15 years and was assisted by his two sisters, and later by four other teachers as well. By his own admission he gave between \$150,000 to \$200,000 in support of his family but finally tired of teaching and departed to study for a masters degree in psychology at Harvard in 1905. Of the three different locations of the school I was able to positively identify and photograph the building under use in 1894 (currently 1209 Garvin Place) through the use of Sanborn Fire Insurance Maps with the assistance of fellow Oslerian Eugene Conner. It is important to note that the postcard photograph owned by several archives and entitled University-Flexner school is not connected with the original institution but a successor apparently sold to other educators. Some Flexner family members attended the school including the father of Dr. John M. Flexner, and the latter describes stern punishment on one occasion for a fight in the classroom. He further relates an incident, where he had written his uncle a letter, which was returned, complete with corrections in red. Other anecdotes from this interview will be presented. His recollections are in agreement with many other observers who reported that his uncle Abe was a very self-assured and confident individual. His private school functioned very well with few rules and little record keeping and was very progressive for the times.

Discussion: Many analogies have been made between Flexner, John Dewey, and to some extent G. Stanley Hall. I believe there has been an over-generalization about Flexner's background and contributions relative to these other educators. This aspect will be discussed in some detail.

Learning Objectives:

1. Describe Abraham Flexner's educational background as a prelude to his major contributions to medical education.
2. Explain the significance of "Mr. Flexner's School" in Flexner's career trajectory.
3. Appraise to what extent the analogies that have been made between Abraham Flexner and such educators as John Dewey and G. Stanley Hall are warranted.

The Six Competencies of Medicine: Nothing New for William Osler

DENNIS K. WENTZ

Dennis K. Wentz is Director of the Division of Continuing Physician Professional Development of the American Medical Association. An internist by training, he previously served as Director of Medical Services at Vanderbilt University Hospital and Associate Dean for Clinical Affairs at Vanderbilt University School of Medicine.

The Accreditation Council for Graduate Medical Education (ACGME) has identified and adopted a set of six competencies that all trainees in accredited graduate medical education programs will be expected to demonstrate prior to completion of their residency or fellowship training programs. Shortly thereafter, the American Board of Medical Specialties (ABMS) formally adopted the “Description of the Competent Physician” followed by a similar statement of six general competencies. The ABMS in 2000 recommended that these competencies be incorporated by their 24 member boards as part of a new concept of “Maintenance of Certification”.

The six general competencies identified by both ACGME and ABMS are: Medical Knowledge, Patient Care, Interpersonal and Communication Skills, Professionalism, Practice-based Learning and Improvement, and Systems-based Practice.

William Osler would likely smile if he could gaze on these efforts and scenarios for developing and documenting both the initial and continued competency of physician. In Osler’s writings are found passages that correspond to each of these six competencies, now re-discovered by today’s medical leaders. Dr. Osler had a strong belief in all of these attributes of a complete physician, although the times were quite different, and his words bring special clarity to these issues. This paper strives to highlight a few of his writings and speeches to illustrate the similarity and universality of the concerns, even though separated by one hundred years.

While there is no argument that today’s efforts are logical and are designed to answer current concerns for increased accountability of practicing doctors and the medical profession as a whole, this paper will demonstrate the prescience and vision of Dr. Osler in defining a physician for the ages. They are useful to recall for a new generation.

Learning Objectives:

1. Explain the conceptual evolution of the recently announced six general competencies of medical practice.
2. Correlate the writings of William Osler with the identified current general competencies of the ABMS and ACGME.
3. Highlight Osler’s ideas and thoughts that can enhance the teaching of these competencies in graduate medical education and continuing medical education activities.

The Nineteenth Century Foundations of Twenty-first Century Accreditation for Hospitals and other Health Care Organizations

JOHN NOBLE

John Noble is Professor of Medicine at Boston University, where he directs the Center for Primary Care. His writings include a definitive textbook of primary care medicine. He is a past president of the Society of General Internal Medicine and a past Regent of the American College of Physicians. He currently serves as chair of the Joint Commission on the Accreditation of Healthcare Organizations. He is also president of the Massachusetts Coalition for the Prevention of Medical Errors.

In October of 2002, the Joint Commission on Accreditation of Health Care Organizations introduced a new accreditation process. Core features of this new process include:

- Streamlined Standards for Accreditation of all categories of Health Care Organizations
- Self assessment of Standards Compliance
- Measurement of core services and the use of organization-specific data to improve critical care processes
- Assessment of patient safety through Failure Mode Effects Analysis and the use of Disease Specific Guidelines as the focus of onsite review

The need for Standards of Care, high quality professional performance and data based decision making were developed by three individuals in the nineteenth and early twentieth century—Florence Nightingale, William Osler and Ernest A. Codman. Their contributions were made independently, yet when taken together, they constitute the foundation of the accreditation process as it is being formulated throughout the world to meet the needs of twenty-first century health care.

Florence Nightingale (1823-1916): During the Crimean War in 1854 and for the rest of her career in London, Nightingale demonstrated the linkage between gathering of data, the of measurement health care processes and the correlation of them with clinical outcomes. She championed best practices, introduced the concept of benchmarking and advocated what is called evidence based medicine today. At the end of her career, she proposed a major reform of Social Services in order to improve the health of communities in the United Kingdom.

William Osler (1849-1919): He addressed the needs for quality in medical education, research and standards for professional conduct. In 6 publications he addressed the following topics: In “The University Question” (1884) he outlined the foundations of the medical curriculum and the need for a research based faculty; in “The Growth of the Profession” (1885) he addressed the need for standards of physician performance and professional competence; in “The Function of a State Faculty” (1897) he called out for the protection of patients from incompetent physicians; in “On Mandatory Reporting of Tuberculosis Cases” (1902) he described the incomplete reporting of tuberculosis cases and deaths as being irresponsible. In his “Testimony to support the formation of a National Health Service” (1918) he urged that the system be centered on General Practice.

Ernest A. Codman (1864-1940): A numerist who measured almost every aspect of his life, pioneered the concept of Outcomes oriented or End Result Medical Practice. He expanded the application of data analysis to the management of patients in a disaster, to the categorization of recruit soldiers, the development of a National Sarcoma Registry and published the End Results of care in his own End Results Hospital. His interest in quality improvement led to the establishment of the Hospital Standards Committee of the American College of Surgeons, which became the forerunner of the JCAHO.

The careers of these three individuals overlapped for 26 years, between 1890 and 1916, when Nightingale died. The interrelationships and focus of their work, their mutual acquaintance or the lack thereof, will be explored to define their collective impact on Accreditation and Quality Improvement in the late 20th and 21st centuries.

Learning Objectives:

1. Distinguish between “accreditation” and “certification.”
2. Define and explain Failure Mode Effects Analysis.
3. Evaluate the respective roles of Florence Nightingale, William Osler, and Ernest A. Codman in the development of guidelines for hospital care.

William Charles Wells, M.D., FRS, L&E (1757-1817): Osler's "Remarkable Philosopher and Physician"

ALLEN J. DENNIS AND MARY LOU DENNIS

Allen J. Dennis is Professor of Medicine, Emeritus, at the Medical College of Georgia, Augusta. Mary Louise Darey Dennis did research in neonatal physiology at Columbia University School of Medicine prior to the birth of their first child. Dr. and Mrs. Dennis received a grant from the Wellcome Institute for the History of Medicine to study the life and works of William Charles Wells, the subject of this report.

When Osler was asked for names of doctors who needed to be more thoroughly studied, he suggested Benjamin Rush, Thomas Beddoes, and "that remarkable philosopher and physician, Wells of Charleston." Throughout his life, Wells earned the respect of distinguished men. However, in spite of even Osler's high regard, Wells remains, for the most part, a forgotten man. This paper will consider his accomplishments and his place in history.

Wells was born in 1757 in Charleston, South Carolina, into a Loyalist family. Although he did not play a significant role in the American Revolution, the Revolution had important effects on his life. He was given a good education: Mr. Chapman's Grammar-school in Dumfries, Scotland; college, drawing school, and medical school in Edinburgh; apprenticeship with Alexander Garden, M. D. in Charleston; and William Hunter's Anatomy School and St. Bartholomew's Hospital for surgery in London. He wrote his thesis, *de Frigore*, at the University of Leyden and received his M. D. degree from the University of Edinburgh in 1780. Before leaving London to take care of his father's business interests in Charleston, Wells wrote his first political piece, a passionate diatribe against Henry Laurens of South Carolina while Laurens was a prisoner in the Tower of London.

Early in 1781, Wells returned to Charleston after the American forces had surrendered that city to the British. There he received an education of a different sort: one related to war, business, law, printing, and publishing. British military friends asked Wells to publish the policy concerning the fate of American officers who had been captured, paroled home, and then recaptured after taking up arms again. The result of this policy was the hanging of prominent South Carolina Patriot, Colonel Isaac Hayne. When it became apparent that the War was lost, the British commander-in-chief in New York gave orders to evacuate the garrison from Charleston. Wells, with other refugees and British soldiers, left in haste for St. Augustine (December 1782). There he published the first newspaper in East Florida. At the close of the war, he crossed the Atlantic for the fifth and last time.

In 1785, following a three months' sojourn in Paris, Wells settled in London where he began thirty-two years of medical practice. In addition, he was elected a Physician to St. Thomas's hospital (1795-1817). He found himself "a good deal unfit for early success" in his profession for, in part, he "entertained a very high notion of its dignity and felt great contempt for most of the apothecaries" (who normally would have referred patients to him). He was always struggling financially. Nevertheless, he edited his medical society's *Transactions* and contributed fourteen important clinical papers. Among them were the first papers on proteinuria in renal disease and on rheumatic heart disease. His last clinical paper concerned Hannah West, who had a large pigmented birthmark. From this finding he went on to develop his theory of naturally selected traits being important in the survival of the different races of mankind. Fifty years later, Darwin wrote that Wells "applies most distinctly the principle of Natural Selection to the Races of Man."

Wells took on the Royal College of Physicians on behalf of a colleague who had also been denied membership in that body because he was not a graduate of Oxford or Cambridge. Wells lost this battle but fought it on the highest level with *A Letter to Lord Kenyon* (1799). In the course of this lengthy letter to the chief justice of the King's Bench, he presented a moving tribute to his ideal, the person he considered the perfect physician, William Heberden, M.D. In his Fitzpatrick Lectures on Medical History at the RCP, Arnold Chaplin stated, "Wells was one of the great men of our profession during the reign of George III; a man of great scientific ability, with a lofty conception of duty, and with an adherence to truth which never swerved."

Among Wells' five major scientific papers, the most important was his *Essay on Dew* (1814). The research was so well done that it ended two thousand years of speculation on how dew was formed, closed the door on future experiments, resulted in Wells' being awarded the Rumford Medal by the Royal Society, and served as a classic example of inductive reasoning. Wells also helped lay the foundation for future studies in vision, "giddiness", and perception. He answered the "attacks" on his studies on giddiness by Erasmus Darwin, M.D. and on dew by Thomas Young, M.D. with a volley of acerbic letters in journals. Wells authored seven brief biographies that were published in *Gentleman's Magazine*. A few surviving letters give insight into his personal life.

As Dr. Benjamin Brodie, one of Wells' colleagues, wrote in 1817, "He is too well known by his writings . . . for it to be worth while for me to speak of him as a natural philosopher." A century later, Osler wrote, "Wells was an extraordinary man, far ahead of his day and generation. I should like some day 'to write him up' for the profession." Wells deserves to be better known.

Learning Objectives:

1. Trace the career of William Charles Wells in the context of his times.
2. Explain why William Osler called Wells "that remarkable philosopher and physician."
3. List two specific major complications that Wells made in medicine and in science.

W.A. Newman Dorland, M.D. (1864-1956):
The Man Behind the Dictionary

WILLIAM S. HAUBRICH

William S. Haubrich is Clinical Professor of Medicine at the University of California, San Diego, and senior consultant emeritus at The Scripps Clinic, La Jolla. He has published extensively in the field of gastroenterology, and is the author of Medical Meanings: A Glossary of Word Origins.

The name Dorland is emblazoned on the spine and cover of 29 editions of a dictionary that most medical workers have consulted at one time or another. Yet few know of Newman Dorland the man or of his once-upon-a-time connection with William Osler. In 1905, Osler's widely publicized "Fixed Period" address set the juices flowing in an army of critics, none more so than in the person of Newman Dorland. To refute Osler's "shocking" claim of the "comparative uselessness of men above 40 years of age," Dorland embarked on a laborious, three-year survey of noteworthy accomplishments by men beyond their fifth decade of life. The result was a series of two lengthy articles that appeared in successive monthly issues of *The Century Magazine* in 1908. Dorland cited the achievement of 400 men (beginning with Moses) whose notable work was done after the age of 40. Whose view prevailed? Osler did what he could to quiet the unintended furor. Dorland felt he had made his point and went back to his lexicon and his medical practice.

Learning objectives:

1. Discuss the person who first compiled what came to be the most widely used medical dictionary in the English-speaking world.
2. Describe a little-known facet of the controversy aroused by Osler's "Fixed Period" address.
3. Determine for oneself whose view—Osler's or Dorland's—prevailed on the issue of human productivity after the age of forty years.

The John P. McGovern Award Lecture The Evolution of the Controlled Clinical Trial

SIR RICHARD DOLL

Sir Richard Doll, is a former Regius Professor of Medicine at Oxford and the Founder Warden of Green College, Oxford. He is internationally known for his seminal work in clinical epidemiology and in clinical trials. On 16 September 2002, just weeks before his ninetieth birthday, he received the Honorary Freedom of the City of Oxford "in recognition of his outstanding work in medical research, particularly in epidemiology and especially in relating smoking to lung cancer." Recently, construction has begun in Oxford on a new building, to be named the Richard Doll Trials and Epidemiology Building. This building will house the Clinical Trial Service Unit of Oxford University and also the Cancer Research UK Epidemiology Unit.

For centuries medical treatment was established by authority and theory, until in the mid seventeenth century, a Flemish physician proposed to cast lots to determine who should treat one or other of two groups of unselected patients. A hundred years later, the need to compare like with like began to be taken seriously by military and naval doctors in Britain, resulting *inter alia* in the discovery of how to treat scurvy. A few excellent trials were conducted and by the end of the nineteenth century alternation of treatments was accepted by many as the appropriate way to test new treatments. The old custom of comparing one doctor's results with another's nevertheless continued to be the norm until the 1930s.

Random allocation of treatment, which Fischer taught was required for reliable statistical analysis, was used by Lowell Read in the United States in 1931, but did not catch on until after the British trial of streptomycin for pulmonary tuberculosis in 1948. It is now a standard requirement to avoid bias in the allocation of treatment. Subsequent developments include the extension to very large trials, the testing of several treatments at once, and the impact of molecular biology.

Learning Objectives:

1. Trace the evolution of the controlled clinical trial.
2. Name the specific contributions of Lowell Read to clinical medicine.
3. Suggest ways in which the clinical trial will continue to evolve from the standard "randomized, prospective, double-blind" trial to assessments of large populations that take into account multiple simultaneous interventions and insights derived from molecular biology.

William B. Bean Student Lecture
“The Best Will Breed the Rest”:
The Implications of the American Eugenics Movement

LAUREN KIM

Lauren Kim is a student at Washington University School of Medicine, St. Louis, Missouri. Her sponsors for the William B. Bean Student Research Award were Rebecca Dresser, Professor of Ethics in Medicine at Washington University, and Kenneth Ludmerer, Professor of Medicine at the same institution.

With the rapid pace of scientific discoveries in the field of genetics, it is presently important to discuss the ethical issues surrounding the manipulation of genes and genetic information. Any such discussion should include an understanding of the eugenics movement, an epoch of American history in which genetic practices and American laws intersected. In the early decades of the twentieth century, the eugenics movement was born out of social, political, and scientific developments during a dynamic period of unprecedented economic growth and immigration. As a response to this societal flux, eugenics was an effort to breed better human beings by encouraging the reproduction of people with “good” genes and discouraging those with “bad” genes. The goal of this presentation is to build a greater understanding of the forces that brought the eugenics movement into being, focusing particularly on the response of scientists and physicians to the eugenics movement. With a firmer understanding of the historical context of the eugenics movement, there is the overarching goal of drawing implications and prescriptions for contemporary discussions of ethics and genetics.

Learning Objectives:

1. Identify the social, political, and scientific developments that impacted on the eugenics movement during the early decades of the twentieth century.
2. Evaluate the responses of various scientists and physicians to the eugenics movement.
3. Appraise the potential relevance of the early American eugenics movement to present and future debates pertaining to the controversial interface between ethics and medical genetics.

Five Letters from the Oslers to an American Student at Oxford

JOHN T. TRUMAN

John T. Truman is Professor of Pediatrics and Deputy Chairman of the Department of Pediatrics at Columbia University. His publications include a paper about the eminent Scottish physician, Dr. John Gregory. He writes, "I do not promise not to bring my bagpipes."

John Brett Langstaff MA, DD, is best remembered as the biographer of Dr. Samuel Bard, one of the founders of the medical school at King's College, now Columbia University. He was also the protégé and friend of the Oslers during and after his days as a student at Magdalen College, Oxford 1914-1916. Two letters from Dr. Osler, three from Grace, and one from Revere were discovered in 2002 in the possession of Langstaff's descendants in Morristown, New Jersey, and have subsequently been donated to the Osler Library at McGill. They tell a touching tale of the hospitality and solicitude of the Oslers to a young American divinity student over a period of eight years.

Langstaff's father and Osler were friends as schoolboys in Southern Ontario and later as classmates at the Toronto Medical School. Thus when the young Langstaff arrived at Magdalen College, Oxford, fresh from Harvard in the autumn of 1914, he was received by the Oslers as a member of the family. He was immediately invited to lunch at Norham Gardens and soon became a regular visitor.

Langstaff went on to become a distinguished Episcopal clergyman and prolific author. In his book, *Oxford 1914* (pub. 1965), he mentions Osler 50 times and describes 21 personal encounters, mostly for lunch or dinner at Norham Gardens or Ewelme. He also describes Osler's taking him to a degree-granting ceremony and escorting him to the Oxford University Press to ensure that Langstaff's thesis would be published. In a later book, *Likable People* (pub. 1970) he mentions Osler nine times, with a touching and humorous description of his having been Osler's patient in 1918. In both books he mentions Grace 23 times with at least seven separate interactions, two of which are having her to tea at Magdalen College. He mentions Revere, an undergraduate at nearby Christ Church, six times.

Osler's humor and breadth of scholarship are readily apparent in both his letters to Langstaff who had declared his wish to take holy orders. In one his salutation is 'Dear St. Augustine'; in the other 'Dear Origen', referring to Origenes Adamantius, a 2nd century scholar and church father. Revere is more traditional with 'Dear Langstaff'. Grace is the most formal with 'Dear Mr. Langstaffe', misspelling his name nearly a year after their first meeting. However, her correspondence continues until 1922 when she tries to persuade him to become the vicar of Ewelme. Though each of the five letters is short, they tell a tale rich with affection and devotion to the best interests of the next generation. The Oslers truly lived their legend of altruism and good will.

Learning objectives:

1. Recount how a new archival discovery was made.
2. Discuss the hospitable character of the Osler family in the context of new information.
3. Describe how owners of Osleriana can be influenced to transfer ownership to the Osler Library.

Frederick Moire Hanes

JAMES F. TOOLE

James F. Toole is Walter C. Teagle Professor of Neurology at the Bowman Gray School of Medicine of Wake Forest University, where he also serves as Visiting Lecturer in Law and Forensic Medicine and Professor of Public Health Services. He is a past president of the American Neurological Association, the American Society of Neuroimaging, and the World Federation of Neurology, and he currently serves as president of the International Stroke Society. He has written more than 600 scholarly publications including a recent book concerning presidential disability.

Frederick Moir Hanes was born 18 September 1883 in Winston-Salem, North Carolina and died 25 March 1946. He is buried in the Moravian Cemetery there.

A 1903 Phi Beta Kappa graduate of the University of North Carolina, he was awarded his M.A. from Harvard University in 1904 and his M.D. from the Johns Hopkins University in 1908, where he interned. There, he studied with Sir William Osler and maintained a correspondence with him thereafter. While at Hopkins, he described the rare condition of familial telangiectasia and Dr. Thayer spoke well of him.

In 1914, he became an assistant in neurology at Queen Square Hospital, London, and communicated with Osler. He returned to the USA as professor of therapeutics at the Medical College of Virginia and then became chairman of the Department of Medicine and physician at Duke University, at the initiation of Wilburt Davison, from 1933 until his death in 1946.

He served as Lt. Col. in the U.S. Army Medical Corps from 1917-19 and established a hospital of 4,200 beds in Kerhuon in France.

Dr. Hanes was a Fellow of the American College of Physicians, a member of the Association of American Physicians, of the American Medical Association, the Clinical and Climatological Association, and Alpha Omega Alpha.

A great friend of Henry L. Mencken, with whom he had a 500-item correspondence covering the years 1927-52, which is now a part of the Southern Historical Collection at Chapel Hill. Fred Hanes was interested in Dr. Samuel Johnson, quoted him endlessly, and once took his wife and young nephew, James Gordon Hanes, Jr., on a tour of England and Scotland in which they traveled in the footsteps of Samuel Johnson.

Learning Objectives:

1. Identify Dr. Frederick Moire Hanes, and discuss his contribution to familial telangiectasia (hereditary hemorrhagic telangiectasia).
2. Discuss the significance of Dr. Hanes's service with the American Expeditionary Force during which he interacted with W. S. Thayer and other members of the Johns Hopkins group.
3. Relate how Dr. Hanes was chosen to be Chairman of the Department of Medicine at Duke University, and evaluate his success there.

The Other Yellow Fever Experiments: For Science and Humanity

SANDRA W. MOSS

Sandra W. Moss, a retired internist, previously served as Clinical Associate Professor of Medicine at the UMDNJ-RWJMS School of Medicine (formerly Rutgers Medical School). She is currently a graduate student in History of Technology, the Environment, and Medicine at NJIT/Rutgers. She is a past president of the New Jersey Medical History Society.

In the two centuries between the disastrous efforts of the Scots to colonize Panama and the charge of the Rough Riders up San Juan Hill, yellow fever killed untold thousands of immigrants, soldiers, and adventurers in the Caribbean and Central America. The successful work of the Yellow Fever Commission led by Walter Reed in 1900-1901 has stood for over a century as an example of ethical human experimentation and informed consent. Reed was often deeply tormented by the burdens of human experimentation. That none of two dozen Reed subjects died was supremely lucky; it was also a deceptive source of encouragement for less fortunate experiments to follow.

This paper is concerned with the men and women who participated, for better or worse, in various yellow fever experiments before and after the Reed experiments. I will touch briefly on the appalling self-experimentation by Stubbs and Firth in Philadelphia in 1804; the foolhardy (Osler said (criminal)) injections of what proved to be hog cholera bacillus by Giuseppe Sanarelli in 1897; Carlos Finlay's enigmatically unproductive efforts to prove his mosquito hypothesis; the ill-conceived inoculation trials of American medical officer Juan Guit  ras, which led to the shocking death of a New Jersey army nurse and two other subjects; and the sloppy serum trials of P. Caldas, a Brazilian investigator who turned up in Havana. This diverse company also includes James Carroll, a member of the Reed Commission, who conducted further experiments in Havana after the main work was complete. It is important to note that the later human experiments of Guit  ras, Carroll, and Caldas overlapped in time, as the three investigators engaged in unseemly tussles at the Las Animas hospital near Havana. The ethics of all these human trials, from Firth to Carroll, must be judged in the context of the prevailing epidemiological situation; for example, many of the later experiments took place at a time when Chief Sanitary Officer of American-occupied Havana, William Crawford Gorgas, had virtually eliminated the mosquito vector and thus yellow fever from the city.

Popular and professional responses to the various yellow fever experiments were contentious and often heated, both in Cuba and the U.S. Although he was not a "microbe hunter," Osler's moral and academic stature, his personal relationship with most of the major figures in the Havana experiments, and his continuing public role in the noisy vivisection controversy helped draw the threads of the various yellow fever experiments together. This study will provide insight into the problems of human experimentation that engaged Osler and many of his contemporaries and which remain relevant today. It will also add texture and context to the mythic account of the yellow fever experiments of Walter Reed.

Learning Objectives:

1. Name at least four yellow fever experiments involving human volunteers, above and beyond the famous ones conducted by the Reed Commission.
2. Evaluate the opinions of William Osler and his contemporaries on human experimentation.
3. Decide to what extent various trials were ethical, in the context of their times.

Psoriasis: From “Leprosy” to Biologic Drug Development

ALAN MENTER

Alan Menter is Clinical Professor of Dermatology at Southwestern Medical School and chief of the Dermatology Division at Baylor University Medical Center, Dallas. He received his primary education in South Africa, where he represented the National Rugby Team. He has published extensively and held many offices in the field of dermatology.

The history of psoriasis is replete with misconceptions and confusion both in its origins as a disease entity as well as in its pathogenesis and therapeutic armamentarium.

It is likely that some of the Biblical descriptions (the case of Gehazi, II Kings 5:27), of Leprosy in fact represented psoriasis. The Roman scholar Aurelius Celsus (25BC–45AD) is credited with the oldest description of psoriasis in his work “Dere Medica”. Thereafter, Galen (133-200AD) first used the word psoriasis from the Greek *Psora* meaning itch. Robert Willan (1757-1812) in 1809 was the first person to publish clinical color plates of psoriasis subsequent to which Ferdinand Hebra (1816-1880) from the Viennese School of Dermatology was credited in 1841 with a full description of the entity we now recognize as psoriasis.

Current descriptions of psoriasis both clinically and historically, retain the names of the giants of dermatology. Thus, Heinrich Koebner (1834-1904) in 1872 first described the clinical phenomenon of the induction of lesions of psoriasis within areas of prior trauma, (horse bite, tattoo, and saddle abrasions) while Heinrich Auspitz (1835-1886) described both the characteristic histological features of psoriasis as well as his eponymous clinical sign of pinpoint bleeding on the removal of psoriatic scale.

Another histological term still in current use is the Munro epidermal microabscess commemorating W.J. Munro’s (1838-1908), originally from Australia, first report in 1898 from the Institute Pasteur in Paris. Franz Kogoj from Yugoslavia (1894-1974) likewise described the pustular histological component of psoriasis while Leo von Zumbusch’s (1874-1940) description of severe inflammatory psoriasis with erythroderma and pustules in 1910 still survives to this day.

From a therapeutic perspective we still retain the names of two greats of dermatology namely, William Goeckerman (1884-1954) from the German school who described his tar-UVB therapy in 1925 while at the Mayo Clinic in Rochester USA, as well as John Ingram’s (1899-1972) dithranol therapy introduced in 1953 from Leeds, UK. Systemic therapy for psoriasis, initially aminopterin and methotrexate was first used in the USA in 1951 with FDA approval finally obtained for methotrexate in 1971. Systemic retinoids and cyclosporine were subsequently introduced after cyclosporine was first described as being effective in psoriasis in the New England Journal of Medicine in 1979.

The German physician Hoede in 1925 first noted the familial nature of psoriasis, subsequent to which Lomholt in 1963 published his 20 year study of psoriasis in the inhabitants of the Faroe Islands. In 1994 the first gene locus for psoriasis on Chromosome 17 was published in *Science* from our group in Dallas.

With the recent introduction of biologic drugs particularly those designed to reduce excess amounts of TNF alpha in diseases such as Crohn’s and rheumatoid arthritis, psoriasis as the most common immune-mediated inflammatory disease, has forged ahead with a whole group of new biologic drugs under development and in late stages of clinical trials. Thus, psoriasis will finally be recognized as a systemic disease with a clinical spectrum as varied as lupus erythematosus, a quality of life impact on a par with asthma and congestive heart failure and a therapeutic pharmacopoeia as varied and complete as inflammatory bowel disease and the spondyloarthropathies.

Learning Objectives:

1. List at least five important names in the history of psoriasis.
2. Explain the confusion surrounding the Biblical and subsequent descriptions of psoriasis as “Leprosy,” “Impetigo,” and “Eczema.”
3. Outline the evolution of psoriasis from a “mere” skin disease to our current understanding of its genetic, systemic, and immune-mediated nature.

Sir Andrew Clark: A Scottish Influence on Osler

CHARLES S. BRYAN

Charles S. Bryan is Heyward Gibbes Distinguished Professor of Internal Medicine and Director of the Center for Bioethics and Medical Humanities at the University of South Carolina, Columbia. He is Secretary-Treasurer of the American Osler Society. His six books include a textbook of infectious diseases and Osler: Inspirations from a Great Physician (Oxford University Press, 1997).

William Osler's trip to Europe (1872 to 1874) after graduation from medical school was of pivotal importance to his career, but relatively little is known about this period of his life. Among the many physicians with whom he came in contact, the two of most obvious importance were Sir John Burdon Sanderson, in whose laboratory Osler learned the latest methods of microscopy leading to his description of the blood platelets, and Rudolf Virchow, who inspired Osler's decision to become a great generalist physician. The purpose of this paper is to suggest that a third exposure of pivotal importance was to the great London consultant, Sir Andrew Clark.

Clark (1826-1893), in brief, was a native of Aberdeen, Scotland. His mother died at his birth and his father, a physician, died when he was seven. Apprenticed to a physician at Dundee at the age of 13, he was largely self-taught; indeed, he received his medical degree from Aberdeen in 1854 without ever having been a student there. In 1853 he went to London for the purpose of studying pathological histology. The next year he became assistant physician at the London Hospital, where he rose rapidly in the ranks. He became the most successful consulting physician in London and was president of the Royal College of Physicians from 1888 until his death.

Neither Osler's nor Clark's biographers make note of any sustained personal relationship between the two men. Evidence that Clark had a strong influence on Osler includes:

- Thirteen references to Clark in the first edition of Osler's *Principles and Practice of Medicine* (1892)—of persons mentioned by more than a surname in that text, only Weir Mitchell receives more citations.
- Clark's famous career advice concerning the internist's career trajectory, cited in Osler's essay on "Internal Medicine as a Vocation."
- The observation that Osler took great pleasure in giving to "any friend who visited the [Bodleian] library with him" a copy of Clark's "A Bodleian Guide for Visitors."
- Parallels between Osler's aphorisms, especially as quoted or paraphrased by W.S. Thayer, and Clark's aphoristic sayings.
- Clark's methods of bedside teaching, which were celebrated in the *Journal of the American Medical Association* the same year (1892) that Osler brought out his textbook, and which—it will be proposed—provide another link between the Edinburgh school and Osler's innovations in North America.

In summary, Clark—like Sanderson and Virchow—profoundly influenced the young Osler and may have had a pivotal influence on Osler's career development.

Learning Objectives:

1. Describe the specific influences of Burdon Sanderson, Rudolf Virchow, and Sir Andrew Clark on William Osler's formative years.
2. Outline the medical career of Sir Andrew Clark.
3. List at least five values or principles described by Clark that find parallels in the aphorisms and writings of Sir William Osler.

William Osler and Appendicitis

ROBERT R. NESBIT, JR.

Robert R. Nesbit, Jr., is Professor Emeritus of Surgery at the Medical College of Georgia, Augusta, where he served as Chief of Vascular Surgery. Relevant to his paper on William Osler and appendicitis is the subject of his undergraduate honors thesis at Harvard College (1961): "Reginald Heber Fitz, a Biobibliography."

William Osler had seen inflammation and perforation of the appendix prior to 1886 when he attended the inaugural meeting of the Association of American Physicians and heard his friend, the Harvard pathologist Reginald Heber Fitz, present his classic paper, "Perforating Inflammation of the Vermiform Appendix, with Special Reference to its Early Diagnosis and Treatment." Fitz concluded that most cases of what had in the past been called "typhlitis"—inflammation of the cecum—in reality began in the appendix. He coined the term "appendicitis" and recommended early operation. Osler recognized the landmark importance of Fitz's presentation, stating in the second edition of *The Principles and Practice of Medicine* that Fitz's paper, "served to put the whole question on a rational basis."

Review of the sections on appendicitis in the eight editions of *Principles and Practice* published during Osler's lifetime reveals an interesting evolution of his thoughts about appendicitis and its treatment. In the first edition, published seven years after Fitz's presentation, Osler devotes most of one page to a description of typhlitis and its treatment, and notes that, "if we regard every case of inflammation in the caecal region as appendicitis, a large proportion of the cases recover." He states that, "The medical treatment of appendicitis can be expressed in three words—rest, opium and enemata," but goes on to say that, "Perforative appendicitis is in more than three fourths of all cases a surgical affection."

Two years later, in the second edition, the section on typhlitis is gone and Osler notes that, "Even the condition formerly described as stercoral typhlitis is in reality appendicitis." Here he first describes "a well marked appendicular hypochondriasis," and notes that, "Appendicitis has become a sort of fad," but he goes on to add, "There is no medicinal treatment of appendicitis," and that he personally has "suspected cases admitted directly to the surgical side." Osler's recommendations for operation gradually progress from, "When the general symptoms are severe, and when by the third day the features of the case point to a progressive lesion," in the second edition, to "twelve hours or even earlier," in the eighth edition..

William Osler's writings on appendicitis reflected changes both in the understanding of the disease and in the ability of surgeons to treat it safely.

Learning objectives:

1. Describe the changing understanding, recognition and treatment of appendicitis over time.
2. Discuss Osler's willingness to change his opinions, based on clinical evidence.
3. Appraise Osler's role in educating the profession about advances in medical practice.

Paul Ehrlich: Pioneer in Three Disciplines

MARVIN J. STONE

Marvin J. Stone is Chief of Oncology, Director of Immunology, and Director of the Charles A. Sammons Cancer Center, Baylor University Medical Center, and Clinical Professor of Medicine at Southwestern Medical School, Dallas. He is second vice president of the American Osler Society.

Paul Ehrlich (1854-1915) was born in the Prussian province of Silesia and educated in Breslau. Carl Weigert, an older cousin, was one of his mentors. While still a medical student, Ehrlich became interested in the affinity of different dyes for various tissues. Following his MD degree, he continued his work with staining methods and was one of the founders of morphologic hematology. Ehrlich described blood cells in health and disease. He named the basophil, eosinophil, neutrophil, mast cell, and bone marrow megaloblast. He also discovered the staining method for tubercle bacilli and subsequently found the organisms in his own sputum.

Ehrlich's work in immunology has had enormous influence. He conducted classic studies on the immune response to the plant toxins ricin and abrin—agents used 90 years later in immunotoxin molecules. He was the first to clearly distinguish active and passive immunity. He developed and standardized the method for reproducibly making potent diphtheria antitoxin after Emil von Behring had initially described this new therapeutic agent. The clinical success of diphtheria antitoxin led to Behring receiving the first Nobel Prize in Medicine in 1901. Behring persuaded Ehrlich to surrender his royalties from the sale of the antitoxin. Behring became fabulously rich from the proceeds and Ehrlich never forgave him for the deception. Ehrlich's most notable impact on immunology was his "side-chain theory of antibody formation," presented to the Royal Society in 1900. This theory proposed that antigen selected for the production and release of appropriate membrane receptors (antibodies) and was a precursor of Burnet's clonal selection theory a half century later. Ehrlich stated, "The immune substances... in the manner of magic bullets, seek out the enemy." Ehrlich shared the 1908 Nobel Prize with Elie Metchnikoff for their work on immunity.

Ehrlich's concept of specific chemical affinity also led to the discovery of Salvarsan (606) in 1910, an event which launched the field of chemotherapy. This arsenical agent was the first effective drug against syphilis and was widely employed by physicians in Europe and America almost immediately after it became available. Ehrlich used the term "magic bullet" to designate drugs like Salvarsan as well as specific antibody: "In cases where serum therapy does not work, *chemotherapy* must be used." He described the phenomenon of drug resistance and the concept of combination chemotherapy. Ehrlich became the target of harsh personal attacks due to some adverse effects blamed on Salvarsan. His last years were unhappy ones and he died in 1915.

Osler and Ehrlich were contemporaries and friends. Ehrlich was included in the *Bibliotheca Prima* section of Osler's great book catalogue. After Ehrlich's death, Osler said, "The brilliant labors of such a man transcend national limitations, and his name will go down to posterity with those of his countrymen, Virchow and Koch, as one of the creators of modern pathology..."

Paul Ehrlich was intensely devoted to science and medicine. He exemplified Osler's dictum that the master word in medicine is "work." He approached research as a detective and was a fan of Conan Doyle's novels. He was a physician who repeatedly demonstrated amazing ability to formulate imaginative hypotheses and to use chemistry in the application of solutions to biological problems. His lifelong dedication to the concept of specific affinity of molecules for cellular receptors resulted in pioneering achievements that laid the foundations for the disciplines of hematology, immunology and chemotherapy. Indeed, Ehrlich has been called the father of all three.

Learning Objectives:

1. Describe Ehrlich's scientific career and the underlying theme of his work, i.e., specific chemical affinity for cellular receptors.
2. Explain Ehrlich's role in the Nobel Prize-winning work of Emil von Behring and Ehrlich's "side-chain theory" of antibody formation.
3. Appraise Ehrlich's contributions and their significance in the development of hematology, immunology and chemotherapy.

The Medical Interests of William Byrd of Colonial Virginia

CHARLES STEWART ROBERTS

Charles Stewart Roberts practices thoracic and cardiovascular surgery at the Winchester Surgical Clinic, Winchester, Virginia. He has publications include numerous articles dealing with cardiovascular diseases and two books, including a biography of his grandfather entitled Life and Writings of Stewart R. Roberts, M.D.: Georgia's First Heart Specialist (1993).

In eighteenth century Colonial Virginia, William Byrd II (1674-1744) was owner of nearly 180,000 acres, a member of the Council of the Virginia Assembly for 35 years, collector of the largest library in British America, and author of three travel journals and recently published private diaries. Though not a physician by occupation, Byrd was interested in medicine throughout his adult life. Wyndham B. Blanton, the historian, describes him as the greatest lay contributor to medicine in the first half of the eighteenth century in Virginia (Thomas Jefferson in the second half).

In his diaries are numerous entries concerning medicine—Byrd noted the illnesses of family members, friends, and servants, and he regularly treated them with various remedies. As master of over 200 servants at Westover Plantation, he was at their quarters early and late giving “his people” medicine, particularly during the Christmas epidemic of 1710. To his own health Byrd paid particular attention. He restricted his diet to one dish per meal. He exercised regularly (“I danced my dance”) and swam daily in the James River. When he became ill himself, he read on the disease from his own medical library, then treated himself. In London, however, where he spent half his life, his gonorrhea was treated by a surgeon.

Of the 3600 books in his private library at Westover, 160 were medical and some 200 were scientific. He owned books by Hippocrates, Celsus, Galen, Vesalius, and Fabricius, as well as contemporary (1600-1750) European authors, covering the range of disciplines. In his British collection were Willis, Sydenham, Lower, Radcliffe, and Mead. Notably absent was Harvey’s *Du Motu Cordis* (1628) in original or translation. Byrd read seven languages.

While in England for his early education, Byrd was elected to the Royal Society in 1696 at the early age of 22. A year later he published a brief paper in its *Philosophical Transactions* on an albino Negro boy whom he described as “dappled.” Byrd later corresponded regularly with Hans Sloane and Robert Southwell, both presidents of the Royal Society.

During the winter of 1721 at Westover, Byrd wrote *A Discourse Concerning the Plague*, published anonymously the same year in London, four years after his first wife died of smallpox. The writing demonstrates the breadth of his personal library as well as his persona as both historian and healer. Had he been born the day he died, Byrd would be as well known as Jefferson, to whom his life and catholic interests are comparable.

Learning Objectives:

1. Explain William Byrd’s medical interests in the context of his times.
2. Critique Byrd’s personal regimen for good health in the context of today’s recommendations, such as regular exercise and regular consumption of fish.
3. Describe Byrd’s personal library with emphasis on the rare medical books in his collection.

How I Came Across the Books of Dr. Shigeaki Hinohara and Sir William Osler that Changed My Life

TOSHIE KOMATSU

Toshi Komatsu was born in Tokyo, has lived in Japan, The United States, and Canada, and is currently director of IQS Company, LTD. She is a member of the Japan-British Society Delegates and of the America-Japan Society Program Committee, and is currently president of the Tokyo Civitan Club.

Osler put his heart and soul into the education of health for the benefit of not only medical professionals but also ordinary citizens of society. I would like to speak about the tremendous influence his messages exercise over the way of life of medical professionals as well as ordinary citizens.

1. How I got to know about Osler.

- How I came across Dr. Hinohara's Japanese translation of Osler's *AEQUANIMITAS With other Addresses to Medical Students, Nurses and Practitioners of Medicine*.
- People can learn how to live their lives by the Japanese translation of Osler's addresses.
- Dr. Hinohara himself respects and practices the life of Osler as a physician and a human being.

2. How encouraging and entertaining Osler's thoughts and spirits are in our lives.

- How I learned a valuable lesson to lead my own life in times of illness, when I was concerned about my child's education and also when I thought about my future.

3. Why I became a member of Osler Society of Japan.

Dr. Hinohara initiated the membership of Osler Society of Japan not only for medical professionals but also for lay persons who are enthusiastic about spreading Osler's message.

Learning Objectives:

1. Explain how so many Japanese people, including people other than medical professionals, became familiar with William Osler and his work.
2. Explain why Dr. Shigeaki Hinohara is so popular in Japan specifically in relation to Osler's teaching.
3. Form an opinion whether other Osler societies, such as the American Osler Society and the Osler Club of London, should consider having as members lay persons who are broadly interested in the humanistic ideals expressed by William Osler.

Joseph Priestly: Gas, God, and Grammar

DENNIS BASTRON

Dennis Bastron, who once studied under the great Oslerian William B. Bean, is Professor of Anesthesiology at the University of Arizona. His interests include renal physiology and pharmacology, medical ethics, the history of medicine, leadership in medicine, and palliative care.

Dr. William Osler was certainly familiar with, and an admirer of, Joseph Priestley. This conclusion is based on three observations. First, Priestley was an exemplar of the ecclesiastic-scientist, a worthy predecessor of the Reverend William Arthur Johnson who introduced Osler to “natural history” and the microscope at Trinity College School. Second, *Bibliotheca Osleriana* lists 16 entries by or about Priestley and five that refer to Priestley. Finally, Osler mentioned Priestley in at least four essays, most prominently in reference to the Warrington collection of books.

Gas: Priestley is best known as the discoverer of oxygen. His interest in gases developed when he lived next to a public brewery. The experiments that followed led to the identification of nine gases, including oxygen (dephlogisticated air) and nitrous oxide. He also developed a practical method for carbonating water, which led to his recognition as a founder of the soft drink industry. Had Priestley not persisted in his support of the *Phlogiston* Theory, his reputation as a chemist would be even greater today.

God: Priestley traces his religious development from being raised a Dissenter, through intermediate stages, to being a founder of Unitarianism. His home, laboratory, and notes were destroyed in the Birmingham Church and King Riots in 1791. In 1795 Priestley immigrated to the USA, where he continued to suffer discrimination because of his religious beliefs. When Thomas Jefferson became President of the USA, Priestley said “...now, for the first time in my life ... [I] find myself in any degree of favour with the government ... and I hope I shall die in the same pleasing situation.” He did, in 1804. In his memoirs, he lists 108 books, 76 of which dealt with religion. He hoped his scientific achievements would lend more weight to his religious beliefs.

Grammar: The last half of the eighteenth century produced a massive interest in English grammar. Most were prescriptivists who wanted to fix the language and protect it from contamination. The primary proponent of this school was Robert Lowth, whom all grade school students of English learn to loath because of his rules about double negatives, split infinitives, and ending sentences with prepositions. Priestley was the primary champion of the descriptivists. Priestley’s grammar textbook showed the independence, tolerance, and good sense that characterized his life. He believed “it not only unsuitable to the genius of a free nation, but in itself ill calculated to reform and fix a language.” In the end, Priestley was right.

Learning Objectives:

1. List three discoveries of Priestley in the field of chemistry of gases.
2. Describe Priestley’s religious evolution.
3. Compare and contrast prescriptivist and descriptivist grammarians of the eighteenth century.

The McGovern Academy of Oslerian Medicine

JACK B. ALPERIN, ROBERT E. BEACH, TUNG V. DINH, ALICE ANN
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The authors are all practicing physicians on the full time faculty and medical staff in the School of Medicine at the University of Texas Medical Branch in Galveston.

The John P. McGovern Academy of Oslerian Medicine at the University of Texas Medical Branch (UTMB) is dedicated to applying Osler's ideals and promoting delivery of compassionate medical care in the 21st century. The ideals to which William Osler aspired 100 years ago light the way for Osler Scholars at UTMB to bring to the attention of all students of medicine the importance of humanism in modern medical practice. These ideals embrace compassionate, personalized care that emphasizes the patient-physician relationship; a sound scientific basis for optimal patient care; and professional behavior at all times.

Opened in 1891 in Galveston, Texas, as the state's oldest medical school, UTMB exerts a major influence on the practice of medicine in Texas and neighboring states. The John P. McGovern Academy of Oslerian Medicine was launched at the UTMB School of Medicine on October 26, 2001, to promote Osler's ideals. Unique in medicine, this endowed entity was established through the collaboration of John P. McGovern, M.D., a retired allergist and philanthropist, and John D. Stobo, M.D., president of UTMB. Both have had distinguished medical careers and share a longtime interest in the teachings of Sir William Osler.

Selection of the inaugural members of the academy began with a call for written nominations from UTMB faculty, house staff, and students. Final selection was made by a committee convened by President Stobo. Members of the academy, called Osler Scholars, are all practicing physicians actively engaged in UTMB's teaching programs. The Osler Scholars include 2 internists (a hematologist and a nephrologist), 2 pediatricians (a family physician and a neonatologist), an obstetrician-gynecologist, and an otolaryngologist.

The Osler Scholars meet twice monthly to discuss Osler's teachings and to plan projects aimed at promoting Oslerian ideals. Meetings begin by reading and discussing an essay written by Osler. The academy sponsors an Osler Club that is open to the entire UTMB community and meets every 2 months to discuss Oslerian ideals in modern society. To celebrate Osler's birth on July 12, the academy hosted the first annual Osler Oration, at which medical students read prize-winning essays (one that honored the freshman anatomy experience, and a senior dissertation based on autopsy findings) and a senior faculty member was presented with the John P. McGovern Award in Oslerian Medicine. Other projects include student dinners at the home of a Scholar and a 4-week elective in which students make rounds with the Scholars. Future projects will bring Vietnamese physicians to the United States for special training and will introduce a novel plan to improve the patient-care skills of ENT residents.

Learning objectives:

1. List Oslerian ideals for practice of medicine in the twenty-first century.
2. Describe the McGovern Academy of Oslerian Medicine.
3. List recent projects of the academy.

The Physician as a Tragic Figure in Literature

DEE J. CANALE

Dee J. Canale, a past president of the American Osler Society, retired from the active practice of neurological surgery in 1999. His interests include William Osler, Harvey Cushing, S. Weir Mitchell, William Hammond, Arthur Conan Doyle, book collecting, tennis, and tree farming.

This essay examines three novels by well known authors. In the first, the principal character is a medical student; in the second, an intern; and in the third, a practicing graduate physician. The authors of two of the novels, W. Somerset Maugham and A. J. Cronin, were themselves physicians, and their biographies reveal how their fictional characters share some of their own experiences. Hence these two novels are to some degree autobiographical.

The three novels selected are *Of Human Bondage* by Maugham, an Englishman; *The Citadel* by Cronin, a Scot; and *The Wild Palms* by William Faulkner, an American. These novels were published between 1936 and 1939. *Of Human Bondage* actually was originally published in 1915, in a small printing receiving poor reviews. It gained attention when published with a new copyright in 1936.

Common to each of the principal characters in the three works is that each was orphaned at an early age and so poor he struggled to finish medical school. In each instance, a romantic affair with a woman leads to a tragic situation. Maugham's subject is a medical student whose hardships and activities take place in a London hospital medical school at the turn of the century. Cronin chronicles a young physician who practices first in a depressing small mining town in South Wales, then eventually moves to a fashionable practice in London's west end. Faulkner's story focuses narrowly on the subject of abortion in the 1930's and the tragic path taken by a young intern.

Literature and medicine, long associated in fictional works, have in recent decades been shown to be of value in medical education. The purely medical events present an historical perspective of medicine and its practitioners in the time frame of the novel. From the standpoint of teaching, literature often affords the student an understanding of how patients perceive their illness and treatment. The reader may confront his own biases and preconceptions in reading the novel. Perhaps more important, ethical and moral issues are viewed contemporary with the novel and later from an historical perspective.

Learning Objectives:

1. Illustrate professional and economic aspects of medicine narrated by the two physician authors in an early period of the twentieth century.
2. Explain changes in ethical and moral attitudes that evolve over time.
3. List ways in which literature has a role in medical education.

An American's Tribute to a Scottish Physician/Author

PETER E. DANS

Peter E. Dans is Associate Professor of Medicine and Associate Professor of Health Policy and Management at the Johns Hopkins University and Clinical Professor of Medicine at Marshall University School of Medicine. His diverse interests include infectious diseases, medical ethics, medical journalism, quality assurance, and health policy, but he is perhaps best known today as a leading authority on medicine as portrayed in motion pictures.

Sir William Osler was famous in his lifetime for his skill as a clinician and his influence on the practice of medicine. Much of that influence persists through his writings which were aimed at a physician audience. By contrast, A.J. Cronin, a native of Cardross and a graduate of Glasgow University, found a wide audience among the general public. His medical training was interrupted by a stint as a naval surgeon in the World War I. While completing medical school, his most affecting rotations were caring for the poor in Dublin and the insane at Locklea Asylum, as well as an apprenticeship with a Dr. Cameron in the West Highlands. The latter was the basis for the ailing Doctor Page in his semi-autobiographical novel *The Citadel* and for the central character in *Doctor Finlay's Casebook*, set in the fictional town of Tannochbrae. After graduation, he served as a Welsh mining inspector and as a practitioner in London, where he graduated from a hardscrabble existence to treating "asthenia" with saline injections in what he called "the worst end of the best society." Boredom and a duodenal ulcer led him to quit clinical practice in 1930 and to pursue writing novels. As he said, "The medical profession proves the best training ground for a novelist since there it is possible to see people with their masks off."

Cronin's writings, like Osler's, were heavily skewed by his idealism and concern for humanity. His impact on medicine, while far less than that of Osler, was still enormous as a result of *The Citadel* which became a rallying cry for medical reform. It earned him scathing criticism in both the *British Medical Journal* and the *Journal of the American Medical Association*, but also praise not just from the public but from Hugh Cabot of the Mayo Clinic. I will discuss Cronin's book and the 1938 movie (using clips from the film, if possible) to illustrate Cronin's concerns about bogus doctoring, fee-splitting, and the development of a payment scheme to assure universal medical care.

I will also repay a debt to Cronin whose autobiography, *Adventures in Two Worlds*, was given to me while I was recuperating from an illness prior to entering college and helped me decide to pursue medicine instead of the law. His influence persists because he showed a latent author how medicine and writing can be symbiotic activities. His star waned considerably after his death, but he deserves to be restored to his proper place in the pantheon of physician/authors.

Learning Objectives:

1. Contrast Osler's non-fictional, hortatory approach to encouraging idealism in medicine with Cronin's fictionalization of events and narrative style.
2. Relate how the concerns about paying for medical care traveled across the Atlantic.
3. Describe the scope of A. J. Cronin's work.

William Beaumont, M.D., and the Guarded Society of Healers

MICHAEL MORAN AND SAKTI DAS

Michael Moran is Clinical Associate Professor of Surgery (Urology) at Albany Medical College, Albany, New York. Sakti Das is Professor of Urology at the University of California, Davis. The title of their paper is taken from Eleanor Roosevelt's statements to the United Nations regarding the fundamental nature of health care, in which she refers to the "Guarded Society of Healers" as a paternalistic group of physicians seeking to better mankind's well-being.

Introduction: William Osler is widely recognized as a primary source on the topic of William Beaumont, a pioneer physiologist. His article, based upon an address before the St. Louis Medical Society on October 4, 1902 formed the basis of this investigation. Specifically, we were interested in the nature of the relationship of William Beaumont, M.D. with his patient turned experimental subject. The interactions and comments by Beaumont were sought in his writings and compared to the impressions left by William Osler.

Methods: The source reference, *William Beaumont A Pioneer American Physiologist*, JAMA, Nov. 15, 1902 was cross-referenced to numerous articles on the relationship of Beaumont with his patient and experimental subject, Alexis St. Martin. In addition, the textbook of Beaumont was scrutinized for personal interactions, documented by Dr. Beaumont with his patient. *Experiments and Observations on the Gastric Juice, and the Physiology of Digestion* by Beaumont and *Life and Letters of Dr. William Beaumont* by Jesse S. Myer, M.D. formed the core for opinions regarding Beaumont's treatment of Alexis St. Martin as an experimental patient. Also, letters of Alexis St. Martin were available to gain insight from his standpoint (*Four Letters of Alexis St. Martin*, William Clements Library, Ann Arbor, 1937). Finally, all sources were compared to a developmental anthology of "informed consent."

Results: Beaumont schooled, apprenticed and practiced medicine in the early 19th Century, before formalized medical curricula existed and prior to the notion of patient's rights and informed consent theory existed. The scientific foundations of current medical practice in fact, did not exist and the basics of sciences such as biology, chemistry, and geology were in their infancies. Influences in the young Dr. Beaumont's training include a careful attention to observation and an appreciation to the methods of Thomas Sydenham. A paternalism of medical practice predominated, and Beaumont clearly applies this philosophy in his interactions with Alexis St. Martin. Throughout his letters and writings, Beaumont describes how he has to induce the cooperation of his patient/ now experimental subject, time and time again; careful to always note how little discomfort St. Martin actually experiences. Osler is a humanist and an enlightened historian. He fully appreciates the foundations of clinical practice represented by Sydenham's work and the enlightenment that Beaumont's experiments fostered. The paternalism inherent in this method is reflected by each of these great physicians role in the "guarded society of healers".

Conclusions: William Osler rightly extols the scientific method utilized by Beaumont in his treatise but ignores the paternalistic implications of extorting undue influence on his patient to participate in his scientific investigations. Beaumont's remarks concluding Osler's paper best sum up this philosophy—"truth, like beauty, when 'unadorned, is adorned the most,' and, in prosecuting these experiments and inquiries, I believe I have been guided by its light."

Learning Objectives:

1. Assess the relationship between Dr. William Beaumont and his patient, Alexis St. Martin, especially as it pertains to Eleanor Roosevelt's concept of a "guarded society of healers."
2. Compare the philosophy of medical practice between William Osler, Thomas Sydenham, and William Beaumont.
3. Describe the relationship between Dr. William Beaumont and his famous experimental subject, Alexis St. Martin, in light of today's "informed consent" theory.

Sir William Osler, “Tuberculosisly” Bellicose: His Battle Plan for the Conquest of Tuberculosis

CYNTHIA DEHAVEN PITCOCK

Cynthia Pitcock is Adjunct Assistant Professor in the Division of Medical Humanities, University of Arkansas for Medical Sciences, where she teaches an elective course entitled “William Osler: Genesis of Modern Medicine” for senior students. She is currently working on a book to be entitled “A Revolution in the Treatment of Tuberculosis: The Arkansas Experiment.”

In 1900 tuberculosis was the number one killer in the world. It did not strike with the sudden horror of plague or yellow fever or cholera, and it did not respond to desperate, traditional remedies of any historical age. Tuberculosis seemed to taunt the wealthy to seek protection in mountainous or lakeside retreats, only to strike them as it struck the poor, with unfailing aim. It was not an epidemic disease; it was a resident, chronic, ever present horror of human kind. It held firm against all manner of weaponry.

In the worldwide struggle against tuberculosis, there were many warriors through the centuries. Doctors and priests, municipal officials and old wives strove mightily against this foe. As the 19th century was drawing to a close, there was a young Canadian physician whose training and self-teaching in medical therapeutics was rational, scientific, and tenacious. Tuberculosis seemed to be ever present among his patients and within his own family as well. William Osler approached this formidable enemy with cool objectivity and a keenly informed will, and as he advanced in years and knowledge, he saw tuberculosis as a disease with profound social consequences.

He faithfully studied and observed tuberculosis and gradually he developed a preliminary plan of battle which involved both scientific and social campaigns. In the half century between the discovery of the bacillus and the development of streptomycin, Osler informed himself and wrote about tuberculosis. He enlisted medical students to participate in his investigations. He pioneered professional groups for study and research and he brought his social and political skills to the creation of new therapeutic approaches.

William Osler was a born warrior, as surely as Alexander or Caesar or Napoleon. His foe was disease. His plan for conquest created a model which others followed and which led ultimately, a half-century later, to the death of tuberculosis. The enemy, however, proved himself to be silently biding time. To the dismay of world health organizations, tuberculosis survived its own death.

In the campaign waged in 2002, Osler’s battle plan comes to mind to direct new weapons against a mightily-armed, mutated, multi-drug-resistant strain of the ancient foe.

Learning Objectives:

1. Explain the lifelong commitment of William Osler to the study, analysis, and observation of tuberculosis as well as other diseases.
2. Explain the sanitarium movement.
3. Explain Osler’s active participation in organizations, both professional and social to combat tuberculosis.

The Beginning and End of a Japanese Disease: SMON (Subacute Myelo-optic Neuropathy)

F. CLIFFORD ROSE

F. Clifford Rose is Director of the London Neurological Centre and Honorary Consulting Neurologist at Charing Cross Hospital. He has received numerous awards during a long and distinguished career in neurology and is a past president of the Medical Society of London. His recent books include A Short History of Neurology: The British Contribution, 1660-1910 (1999), Multiple Sclerosis at Your Fingertips (2000), and Twentieth Century Neurology: The British Contribution (2000).

In the 1960's an outbreak of blindness and paralysis occurred in Japan. The clinical picture was similar to subacute combined degeneration of the spinal cord with involvement of the optic nerves, pyramidal tracts and a peripheral neuropathy. By 1970 ten thousand cases had been reported in Japan; since it had not been reported elsewhere, the question arose whether it was a genetically determined disease confined to the Japanese race. The Japanese government formed a SMON commission, headed by a virologist, because the disease occurred in clusters and another hypothesis for its aetiology was a virus.

Four non-Japanese neurologists were invited to Japan to familiarise themselves with the disease and consider whether similar cases occurred in their own countries (UK, Switzerland and India). By the time this panel arrived in 1971, a further hypothesis had been postulated, viz the disease was due to a drug (generic name clioquinol) to which the Japanese were sensitive, as this substance had been prescribed elsewhere in the world without any neurological sequelae. While in Japan, a series of six cases of SMON were reported from Sydney, Australia. The author, as the UK member of the panel, was asked to go to Sydney to report whether these cases were SMON. This was confirmed proving that the disease was not confined to the Japanese race.

As a consequence of reports of a green tongue and green urine in patients, the green pigment was analysed and found to be due to an iron-clioquinol conjugate. It was then ascertained that all cases were associated with massive doses of clioquinol. The manufacture of the drug, which was dispensed in 200 over-the-counter preparations, was eventually banned in Japan, since when the disease has disappeared.

This experience proved to be the largest litigation case in medical history. It established principles of epidemiology, extra suspicion before basing diagnosis on ethnic grounds and the need for continuous monitoring of drug delivery.

Learning Objectives:

1. Describe the clinical features of subacute myelo-optic neuropathy (SMON).
2. State the value of careful clinical evaluation as a requisite for good epidemiology, drawing on the author's investigation of neurologic disease in Australia initially thought to be SMON.
3. Evaluate the epidemiologic methods used in elucidation of the cause of SMON, and discuss SMON as an example of pharmacogenetics.

Albuminuria—From Hippocrates to Henry Bence Jones

MICHAEL EMMETT

Michael Emmett is chairman of the Department of Internal Medicine at Baylor University Medical Center, Dallas. Widely published as a nephrologist, he notes in his covering letter: "Since the late 1660s physicians and 'Pisse Prophets' have examined the urine for abnormal substances by means of acidification and boiling." Reference is made to abstract number 24 in this program in which it is suggested that William Charles Wells was the first to describe proteinuria in renal disease.

An aphorism attributed to Hippocrates (about 400 BCE) states "When bubbles settle on the surface of the urine, they indicate disease of the kidneys, and that the complaint will be protracted." We now know that the foamy urine he described was probably due to the pathologic excretion of albumin that reduces the urine's surface tension and generates bubbles. About 2000 years later in Leyden, Fredericus Dekkers described the test that was used for next 300 years to test for albumin— acidification and heat. He examined the urine of patients with wasting diseases to see if it contained "vital substances" similar to those present in milk. After boiling and acetic acid addition some urine specimens developed a cloudy precipitate. We now know this precipitate also represented albumin. Subsequently, Domenico Cotugno using a heat and acetic acid test, showed that the urine of edematous patients reacted positively and similarly to the reaction of plasma. In 1827 Richard Bright first associated albuminuria, determined by these same tests, with the presence of edema and contracted kidneys (Bright's disease). During the early to mid 1800s, Justus Liebig ushered in the modern era of quantitative organic analysis. He combined his "Potash Bulb" for measuring carbon with a CaCO_3 absorption chamber to measure hydrogen, thereby perfecting combustion analysis of organic substances. Liebig also developed a philosophy of "Animal Chemistry" in part a brilliant deduction but in part also over-speculative and erroneous. In 1841 Henry Bence Jones spent several months of study in Liebig's laboratory at Giessen, learned multiple organic quantitative techniques and adopted many of Liebig's ideas. Upon his return to London and Guy's Hospital he quickly established a quantitative clinical lab and a well-deserved reputation as an outstanding clinical chemist. In 1845 Drs. Watson and MacIntyre sent Jones a urine specimen containing a substance with unusual heat coagulating properties and he undertook an exhaustive quantitative chemical analysis. Jones measured and reported the proportion of carbon, hydrogen, nitrogen, oxygen and sulfur in the substance. Although his results were essentially correct, Jones incorrectly deduced that the substance was a "hydrated deutoxide of albumen." I plan to discuss the quantitative techniques used by Bence Jones for his famous analysis and describe the state of understanding of mid-nineteenth century protein chemistry.

Learning Objectives:

1. Discuss how and why clinicians decided to acidify and boil urine to look for urine pathology.
2. Review the history of chemical analysis of organic substances of interest to clinicians.
3. Discuss how Henry Bence Jones arrived at his conclusion that the protein named for him was a "hydrated deutoxide of albumen."

William Hunter (1718-1783): The Man Behind the Museum

W. WATSON BUCHANAN

W. Watson Buchanan is Emeritus Professor of Medicine at McMaster University, Hamilton, Ontario. He has written more than 500 scientific papers, mainly in the field of rheumatology, and in recent years had written extensively on historical subjects. Dr. Buchanan received his primary education in Glasgow and won the MacFarlane Prize in Medicine upon receiving his M.B. from Glasgow University. He is a fellow of the Royal Colleges of Medicine of Glasgow, Edinburgh, and Canada.

Members of the American Osler Society can regret that Sir William Osler in his 1921 book on “The Evolution of Modern Medicine” only cites the younger of the two famous Hunter brothers, John (1718-1783). He was, as his biography Harvey Cushing noted, aware of the museum which William (1718-1783) bequeathed to his Alma Mater, the University of Glasgow. The purpose of this paper is to describe the accomplishments of William Hunter and to explain how he was able to collect the massive material for his museum. Both William and his younger brother, John, were born at the farm of Long Calderwood, East Kilbride, just seven miles south of Glasgow. William graduated in medicine at Glasgow University and for a time was apprentice to Dr. William Cullen (1710-1790). In 1741 Hunter left for London following the dictum of Dr. Samuel Johnson (1709-1784) that “the noblest prospect which a Scotchman ever sees, is the high road that leads him to England”. In London Hunter established his famous school of anatomy in Great Windmill Street. Hunter became an obstetrician and became popular with people of rank; and was known by the sobriquet “Queen’s Nightman” after being appointed to Queen Charlotte, wife of George III. Hunter is best remembered for his 1774 classic, *The Anatomy of the Human Gravid Uterus*, illustrated by the talented Dutch artist Jan van Rymsdyk.

Sir William Osler visited Glasgow University at the turn of the twentieth century and was “bewildered with the impression of the extent and value” of the Hunterian Museum. In addition to anatomical and pathological specimens, there are some 10,000 books, including 534 incunabula, paintings, coins and shells and Maori artefacts from his friend Captain James Cook (1728-1779). How did he manage to pay for the contents of the museum? Examination of Hunter’s bank account suggests he made money on the stock exchange.

Learning Objectives:

1. Recite, in outline form, the biographies of the two famous Hunter brothers, John and William.
2. Assess William Hunter’s contributions to anatomy and obstetrics.
3. Summarize the contents of the Hunterian Museum of Glasgow University, and explain how William Hunter acquired the financial resources to assemble such an impressive and useful collection.

Osler and Oriental Medicine

KIMIE MORIYAMA

Kimi Moriyama, a member of the Japanese Osler Society, has studied Chinese and oriental philosophy, Confucian teachings, theology, and English. She is employed by the Confucian Society of Japan.

Osler took deep interest in Oriental Medicine since his early days as a medical student. I would like to illustrate how he was involved in his whole life as follows:

1. **Osler's early studies, including acupuncture.** During his study in England 1872 and 1873, his interest in the Oriental Medicine continued to heighten. In 1872 after graduating at McGill University Medical School, Osler went to study British Medicine for two years. He studied clinical medicine in the University Hospital, and under Dr. Sydney Ringer he studied acupuncture. After returning to Canada he worked in the Montreal General Hospital. One day he treated a patient, Mr. P. Redpath, who was a wealthy merchant and a philanthropist. He tried to give the patient immediate relief by acupuncture to his back, but it did not work. And this meant a "a loss of a million dollars to McGill."
2. **The inclusion of oriental medicine in his textbook.** In 1892 Osler's "*The Principles and Practice of Medicine*" was published. And in the textbook, it described the Oriental disease, knowledge and it's history, the cause of beriberi which as a widespread disease in Japan, India and China, the first 'probably due to a micro-organism'. But it was a prelude to the later discovery of thiamine. The term "Vitamines" was first mentioned, in the last edition, seventeen, 1947. In 1892 Lambago and Sciatica were mentioned in the first edition. The Chinese practice of the moxa was introduced in it (analagous to moxibustion in which little combustible cones of magwort are ignited on the skin.)
3. **P. B. Cousland and his correspondence with Osler on his textbooks.** Dr. Philip B. Cousland was born in Glasgow. After graduating from Edinburgh University Medical School in 1893, he became a member of the English Presbyterian Mission and Founder and President of the China Medical Missionary Association in 1896. He was a major force in the translation of English Language medical textbook into Chinese in 1890. He published the English Language Chinese Medical Dictionary in 1908. Osler's textbooks which were translated into Chinese could be thus published with the help of Cousland, his translated oral Chinese was noted the assistance by a native Chinese. The first two are dated 1909, the later three are dated 1910. Chinese Medical Mission Association was the sponsor of Cousland's works. The Chinese textbooks were printed by the Fukuin Printing Co. Ltd. of Yokohama, Japan. At that time Japanese Medical system was influenced by Germany, so these books could not be introduced in Japan.

Learning Objectives:

1. Explain Osler's training in oriental medicine and his interest in acupuncture. Relate how his failure at an attempted cure with acupuncture cost McGill "a million dollars."
2. Discuss Osler's treatment of beriberi in the first edition of *Principles and Practice of Medicine*.
3. Recite how P.B. Cousland, a Scotland-born Presbyterian missionary, was instrumental in translating Osler's *Principles and Practice of Medicine* into Chinese.

Naming Streets for Physicians: L’Affaire Carrel

MARK E. WEKSLER

Mark E. Weksler is Wright Professor of Medicine at Cornell University Medical College. A nephrologist by training, his research interests now center on problems related to aging, including Alzheimer’s disease. He belongs to at least three organizations that were of great interest to William Osler: the Association of American Physicians, the Interurban Clinical Club, and the Royal Society of Medicine.

The names of streets say much about a nation. Main Street suggests plainspoken Americans and Boulevard Pasteur in Paris indicates the respect of the French for “savants”. This tradition of naming streets for savants in Paris is not new. In 1909, William Osler wrote in an essay “Impressions of Paris” that his strongest single impression of Paris was “the extraordinary reverence of the French. The history of science is writ large in the city; in monuments, in buildings dedicated to illustrious dead and in streets called by their names.” Since Osler’s visit, Paris has continued to name streets for “medical men”. In 1974, Paris named a street in honor of Alexis Carrel, the second Frenchman to win the Nobel Prize. At that time few French citizens remembered much about Carrel. Carrel was born in 1873 in Lyon, entered the Medical Faculty of Lyon, and received his medical degree in 1900. His outspoken criticisms of the liberal, anticlerical forces in academic circles may have contributed to his failure to obtain a permanent position in Lyon. In 1904, he left France and, after a short stay in Canada, entered the United States to work at the University of Chicago where he was recognized as a skillful vascular surgeon who developed techniques for suturing blood vessels. In 1906, Carrel was recruited to the Rockefeller Institute for Medical Research in New York City. By 1910, Carrel had perfected his techniques for rejoining severed blood vessels and used them to demonstrate the long-term function of re-implanted organs. In contrast to autografts, he observed that, despite technical success, organs transplanted from one animal to another functioned for only a short time due to the rejection of transplanted organ. The application of Carrel’s surgical techniques to human organ transplantation seemed close at hand and for this work Carrel was awarded the Nobel Prize in 1912. However, it would be more than 40 years before the discovery of immunosuppressive drugs to control graft rejection would allow the promise of allogeneic organ transplantation to be realized.

In 1991, the general ignorance about Carrel came to an abrupt end in what might be called “L’Affaire Carrel.” At that time, the ultra-right National Front party, led by Jean-Marie Le Pen, argued that the entry of immigrants into France should be limited and cited the writings of Carrel warning that immigrants fleeing Nazi persecution were polluting the French population. Like a bolt of lightning, Carrel’s name shot to center stage of the political debate. In contrast to Carrel’s early work on experimental surgery and transplantation that earned him the Nobel Prize and his work on the antiseptic treatment of battle wounds, virtually all his activities in the last 27 years of his life, inside and outside the laboratory, engendered controversy. Carrel’s political activities in the 1930s provoked consternation, controversy, and condemnation. He had welcomed the aviator, Charles A. Lindbergh, into his laboratory. It turned out that Carrel and the young aviator were impressed by the efficiency and organization of the Nazi leaders in rebuilding Germany, and railed against the “Bolsheviks and Jews” who were raising alarms against Nazi racism. In his 1935 best-selling book, *Man, the Unknown*, Carrel argued that the purity of the human species, could be assured only by positive selection, encouraging reproduction of the genetically endowed, combined with negative selection, eliminating the genetically unfit. A shocking and tragically prophetic sentence is found in the last chapter, “The Reconstitution of Man”. Five pages before the end of the book, Carrel suggested that unfit individuals and those who that had betrayed the public should be sent “to institutions where a supply of the appropriate gas would permit their disposal in a humane and economic fashion.” In the mid-thirties, this suggestion might have been taken as hyperbole but Carrel would live to see this suggestion become Nazi policy. Not surprisingly, Carrel was accused of being the father of the gas chambers.

In 1939, Carrel retired from the Rockefeller Institute and in 1941, returned to Nazi-occupied France. He was recruited by the Vichy government to direct the French Foundation for the Study of Human Problems. In this position, he propagated his ideas of human eugenics, targeting in particular residents of France who had fled Nazi persecution. After the allied liberation of France in August 1944, Carrel was fired from this position and returned to Paris where he died 3 months later. However, when Carrel’s name was injected into the political debate by the National Front in 1991, his views on eugenics were reconsidered and a majority of the French concluded that Carrel’s views brought more dishonor than his Nobel Prize brought honor to France. As a result, during the 1990s, his name was removed from streets in more than twenty French cities, and the Alexis Carrel Medical Faculty in Lyon was renamed in honor of Claude Bernard. However, rue Alexis Carrel remained in the French capital. While immoral persons can enlarge the field of scientific knowledge, most believe that a country’s honor requires a high standard of personal conduct. In the spring of 2002, the Paris city hall voted to remove Alexis Carrel’s name from the street in the 15th arrondissement of Paris.

Learning Objectives:

1. Explain whether political beliefs should influence recognition of a physician for scientific achievements.
2. Discuss whether the eugenic views of Alexis Carrel warrant the removal of his name from a street in Paris.
3. Discuss whether “political correctness” is consistent with the ethical beliefs of William Osler

Champ Lyons, M.D.: Penicillin Pioneer

MARTIN L. DALTON

Martin L. Dalton is Professor and Chairman of the Department of Surgery at Mercer University School of Medicine, Macon, Georgia. He was a member of the team that performed the first successful human lung transplant on June 11, 1963. Currently president of the Georgia Surgical Society, he has a broad range of interests in clinical and experimental surgery.

The most important medical contribution of the twentieth century was undoubtedly the introduction of antibiotics beginning with penicillin. Penicillin was discovered by Sir Alexander Fleming in 1928 who vigorously pursued its bacteriostatic quality. In 1941, Sir Howard Florey was the first to use penicillin in the treatment of sepsis. Five patients were treated with intravenous penicillin with two survivors. Ultimately, the mass production of penicillin was accomplished by America's pharmaceutical companies with the advent of World War II. Due to his training in both microbiology and surgery Champ Lyons, an attending surgeon at Massachusetts General Hospital, was asked to treat victims of the Cocoanut Grove nightclub fire which occurred on November 28, 1942. Chester Keefer, head of the National Research Council's Committee on Chemotherapeutics apportioned enough penicillin for Lyons to treat thirteen of the 39 critically burned and infected survivors. They were given 5,000 units of penicillin intramuscularly every four hours with moderate benefit. Because sulfur drugs were used concomitantly, the effect of each drug was difficult to ascertain.

In March, 1943, the U.S. Army opened a 2,500 bed hospital in Brigham City, Utah. The patients were wounded American servicemen with infections and major wound complications. Chester Keefer placed Champ Lyons in charge of this major experiment with penicillin. Increasing quantities of penicillin were available and a second military hospital, Halloran General, was opened in Staten Island, New York with Lyons in charge. In August 1943, Lyons was commissioned a major in the U.S. Army and was sent to the Mediterranean Theater of operation where he worked under his long time mentor and colleague, Edward D. Churchill. During the Italian campaign, the battle lines remained static for several months and a stable hospital environment combined with an abundant supply of penicillin provided Lyons with the opportunity to prove the value of penicillin in the treatment of staphylococcal and streptococcal infections.

Following completion of his military service, Lyons served on the Tulane faculty from 1945 through 1949. On January 1, 1950 he became the Chair of Surgery and the first full-time faculty member at the Medical College of Alabama. He continued his productive research and became a renowned expert in the treatment of gas gangrene and tetanus. Later, he was named Chairman of the American College of Surgeons Pre and Postoperative Care, Vice-Chairman of the AMA Section on Surgery and Chairman of the Board of Regents of the National Library of Medicine. He was later named to the NIH Surgery Study Section and to the National Heart Council. He was the first distinguished professor and the first Kerner Chairman of Surgery at UAB which was its first fully funded chair. Lyons continued research in microbiology and physiologic studies of intra-arterial monitoring of blood gases. He made many contributions to the progress of vascular surgery and open heart surgery. He died of a brain tumor on October 25, 1965 at age 58.

Learning Objectives:

1. Present a time line of penicillin from discovery to proven clinical effectiveness.
2. Explain how the United States Army played a role in the ultimate success of penicillin therapy.
3. Describe the contributions of Champ Lyons, M.D., especially regarding penicillin therapy.

Sir William Osler's Influence on the Development of Pediatrics

BILLY F. ANDREWS

Billy F. Andrews is Professor and Chairman Emeritus of Pediatrics at the University of Louisville, Louisville, Kentucky. He is a past president of the American Osler Society and is a visiting fellow at Green College, Oxford. A pioneering neonatologist, he has written more than 200 scientific articles and received numerous honors. He is also well known for his poetry and aphoristic sayings.

The influence of Sir William Osler did not escape pediatrics which has paralleled medicine in development of subspecialties with the exception of gerontology in medicine and neonatology in pediatrics. Pediatrics also has a major link with Obstetrics. His contributions were truly measurable from care of the unborn to the adolescent. There are many who trained under him who insist that children were his very favorite patients. His reputation was established from his publications, presentations, autopsies and long term follow-up of infants with special problems from birth throughout childhood. His explicit and detailed description of signs and symptoms for diagnosis are still applicable, e.g. cretinism, congenital syphilis, progeria, the diagnosis of TB by stains of the bacillus from gastric contents and others will be mentioned to illustrate the breadth of his interest and diagnostic ability in Pediatrics. His role in founding the American Pediatric Society in 1888 along with 43 others will be discussed as well as his participation as fourth president and later as an honorary member. The ascendancy of Osler's students such as Wilburt C. Davison, Sir James Spence, Dame Cicely Williams and others who became national and international leaders in medicine and pediatrics and their students who continue to embody and perpetuate the highest ideals in medicine, ethics and the humanities, demonstrate his tremendous influence upon this Society and hopefully for future generations.

Learning Objectives:

1. Describe William Osler's contributions to some classic signs, symptoms, and diseases of infancy and childhood.
2. Evaluate Osler's influence in the establishment of the American Pediatric Society and the specialty of Pediatrics.
3. Name at least three prominent persons who perpetuated Osler's influence on the development of pediatrics in the United States and Great Britain by becoming great leaders who built institutions, advanced medicine, and trained others who would continue Oslerian principles.

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NICHOLAS DEWEY (1981)
Santa Barbara, California

*Emeritus

**Associate

Elected Members (continued)

JACALYN M. DUFFIN (1998)
Kingston, Ontario

PAUL G. DYMENT (1982)
Cumberland, Maine

GEORGE C. EBERS (1985)
London, Ontario

RICHARD EIMAS (1986)
Iowa City, Iowa

LYNN C. EPSTEIN (1999)
Providence, Rhode Island

WILLIAM H. FEINDEL* (1977)
Montreal, Quebec

GARY B. FERNGREN (1996)
Corvallis, Oregon

REGINALD H. FITZ* (1981)
Woodstock, Vermont

EUGENE S. FLAMM (1998)
New York, New York

HERBERT L. FRED* (1984)
Houston, Texas

CONRAD C. FULKERSON (2001)
Durham, North Carolina

ABRAHAM FUKS (1999)
Montreal, Quebec

W. BRUCE FYE (1975)
Rochester, Minnesota

CHRISTOPHER G. GETZ (2000)
Chicago, Illinois

JOHN T. GOLDEN** (1999)
Roseville, Michigan

RICHARD L. GOLDEN* (1980)
Centerport, New York

JAMES T. GOODRICH (1982)
Grandview, New York

RALPH C. GORDON (1998)
Kalamazoo, Michigan

JOHN L. GRANER (1997)
Rochester, Minnesota

STEVEN P. GREENBERG (1997)
Houston, Texas

ARTHUR GRYFE (1999)
North York, Ontario

DAVID R. HABURCHAK (2002)
Augusta, Georgia

JAMES F. HAMMARSTEN* (1981)
Melrose, Minnesota

WALTER D. HANKINS* (1972)
Johnson City, Tennessee

WILLIAM HAUBRICH* (1994)
La Jolla, California

H. ALEXANDER HEGGTVEIT (1982)
Hamilton, Ontario

PERRY HOOKMAN (1999)
Potomac, Maryland

JOEL D. HOWELL (1987)
Ann Arbor, Michigan

ROBERT P. HUDSON* (1970)
Kansas City, Kansas

J. WILLIS HURST* (1985)
Atlanta, Georgia

K. GARTH HUSTON, JR. (1992)
Leucadia, California

EDWARD J. HUTH* (1988)
Bryn Mawr, Pennsylvania

BRUCE J. INNES (2001)
Macon, Georgia

M. GEORGE JACOBY** (1999)
Patchogue, New York

D. GERAINT JAMES* (1972)
London, England

WILLIAM H. JARRETT, II** (1998)
Atlanta, Georgia

ROBERT J. T. JOY* (1981)
Chevy Chase, Maryland

RICHARD J. KAHN (1981)
Rockport, Maine

ROBERT M. KARK* (1974)
Lynnwood, Washington

ANAND B. KARNAD (1998)
Johnson City, Tennessee

ELTON R. KERR (1989)
Dayton, Ohio

JACK D. KEY* (1979)
Sandia Park, New Mexico

ROBERT C. KIMBROUGH, III (1987)
Lubbock, Texas

MARY E. KINGSBURY (1986)
Chapel Hill, North Carolina

PAUL D. KLIGFIELD (1980)
New York, New York

S. ROBERT LATHAN (2002)
Atlanta, Georgia

JOSEPH W. LELLA (1998)
London, Ontario

PHILIP W. LEON (1996)
Charleston, South Carolina

LAWRENCE D. LONGO (1976)
Loma Linda, California

KENNETH M. LUDMERER (1983)
St. Louis, Missouri

PAUL R. McHUGH (1990)
Baltimore, Maryland

NEIL McINTYRE (1995)
Wembley, England

WILLIAM O. McMILLAN, JR. (1995)
Wilmington, North Carolina

ROBERT L. MARTENSEN (1997)
Kansas City, Kansas

ROBERT U. MASSEY* (1980)
Avon, Connecticut

ROBERT G. MENNEL (1999)
Dallas, Texas

DANIEL D. MORGAN (2000)
Freemont, California

ROBERT H. MOSER* (1974)
Green Valley, Arizona

SANDRA W. MOSS (2002)
Metuchen, New Jersey

DAVID M. MUMFORD* (1988)
Houston, Texas

SEAN B. MURPHY (2002)
Montreal, Quebec

T. JOCK MURRAY (1992)
Halifax, Nova Scotia

ANDREW T. NADELL (1986)
Burlingame, California

Elected Members (continued)

FRANCIS A. NEELON (1992)
Durham, North Carolina

JOHN NOBLE (1993)
Boston, Massachusetts

ROBERT K. OLDHAM (1982)
Franklin, Tennessee

MICHAEL F. O'ROURKE (1996)
Sydney, Australia

BRUCE R. PARKER (1995)
Houston, Texas

CLYDE PARTIN, JR. (1999)
Atlanta, Georgia

G. R. PATERSON* (1981)
Barrie, Ontario

STEVEN J. PEITZMAN (2002)
Philadelphia, Pennsylvania

EDMUND D. PELLEGRINO* (1975)
Washington, District of Columbia

CLAUS A. PIERACH (1991)
Minneapolis, Minnesota

CYNTHIA D. PITCOCK (1992)
Memphis, Tennessee

TONSE N. K. RAGU (1999)
Chicago, Illinois

ROBERT E. RAKEL (1983)
Houston, Texas

P. PRESTON REYNOLDS (1998)
Baltimore, Maryland

HARRIS D. RILEY, JR.* (1990)
Nashville, Tennessee

WILLIAM C. ROBERTS (2000)
Dallas, Texas

LORENA. ROLAK (1995)
Marshfield, Wisconsin

ALEX SAKULA* (1985)
Sussex, England

LEON Z. SAUNDERS* (1988)
Wynnewood, Pennsylvania

CLARK T. SAWIN (1993)
Washington, District of Columbia

A. BENEDICT SCHNEIDER* (1973)
Cleveland, Ohio

OM P. SHARMA (1985)
Los Angeles, California

CHRISTOPHER B. SHIELDS (1989)
Louisville, Kentucky

BARRY D. SILVERMAN (1997)
Atlanta, Georgia

MARK E. SILVERMAN (1987)
Atlanta, Georgia

WILLIAM SMITH, JR. (2000)
Fulton, Kentucky

WILLIAM A. SODEMAN, JR. (1998)
Toledo, Ohio

R. TED STEINBOCK (1994)
Louisville, Kentucky

MARVIN J. STONE (1990)
Dallas, Texas

HERBERT M. SWICK (2000)
Missoula, Montana

JAMES F. TOOLE* (1976)
Winston-Salem, North Carolina

JOHN T. TRUMAN (2000)
New York, New York

HECTOR O. VENTURA (1999)
New Orleans, Louisiana

FERNANDO G. VESCIA* (1986)
Palo Alto, California

FREDERICK B. WAGNER, JR.* (1981)
Gladwyne, Pennsylvania

C. PETER W. WARREN (1996)
Winnipeg, Manitoba

THOMAS A. WARTHIN* (1982)
Silverdale, Washington

ALLEN B. WEISSE* (1997)
Newark, New Jersey

JOHN B. WEST* (1995)
La Jolla, California

STEWART G. WOLF* (1979)
Bangor, Pennsylvania

CHARLES F. WOOLEY (1984)
Columbus, Ohio

W. CURTIS WORTHINGTON (1999)
Charleston, South Carolina

JAMES B. YOUNG (1992)
Cleveland, Ohio

Deceased Members of the American Osler Society

Honorary Members

WILBURT C. DAVISON
(1892-1872)

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(1912-1998)

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(1891-1976)

LLOYD G. STEVENSON
(1918-1988)

ALASTAIR H. T. ROBB-SMITH
(1908-2000)

EMILE F. HOLMAN
(1890-1977)

HAROLD N. SEGALL
(1897-1990)

GEORGE W. CORNER
(1899-1981)

EDWARD H. BENSLEY
(1906-1995)

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PAUL DUDLEY WHITE
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(1914-1988)

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(1905-1977)

WILLIAM B. BEAN
(1909-1989)

WILLARD E. GOODWIN
(1915-1998)

WALTER C. ALVAREZ
(1884-1978)

R. PALMER HOWARD
(1912-1990)

GEORGE T. HARRELL
(1908-1999)

CHAUNCEY D. LEAKE
(1896-1978)

RAYMOND D. PRUITT
(1912-1993)

EDWARD C. ROSENOW, JR.
(1910-2002)

EARLE P. SCARLETT
(1896-1982)

THOMAS F. KEYS
(1908-1995)

SAMUEL X. RADBILL
(1901-1987)

CÉCILE DESBARATS
(1907-1998)

Elected Members

ARTHUR D. KELLY
(1901-1976)

LAWRENCE C. McHENRY, JR.
(1929-1985)

CHARLES S. JUDD, JR.
(1920-1987)

MARSHALL N. FULTON
(1899-1977)

GEORGE E. BURCH
(1910-1986)

ROBERT J. MOES
(1905-1988)

I. N. DUBIN
(1913-1981)

K. GARTH HUSTON
(1926-1987)

S. GORDON ROSS
(1899-1990)

GEORGE E. GIFFORD, JR.
(1930-1981)

GORDON W. JONES
(1915-1987)

MAURICE A. SCHNITKER
(1905-1990)

Deceased Members (continued)

JAMES V. WARREN
(1959-1990)

HASKELL F. NORMAN
(1915-1996)

R. CARMICHAEL TILGHMAN
(1904-1999)

NICHOLAS E. DAVIES
(1926-1991)

JOHN W. SCOTT
(1915-1997)

STANLEY W. JACKSON
(1920-2000)

PETER D. OLCH
(1930-1991)

IRVING A. BECK
(1911-1997)

SAUL JARCHO
(1906-2000)

JOHN Z. BOWERS
(1913-1993)

EDWARD W. HOOK, JR.
(1924-1998)

LLOYD W. KITCHENS, JR.
(1946-2001)

WILLIAM B. SPAULDING
(1922-1993)

JAMES A. KNIGHT
(1918-1998)

ARNOLD G. ROGERS
(1925-2001)

LEWIS THOMAS
(1913-1993)

NORMAN SCHAFFTEL
(1914-1998)

ROY SELBY
(1930-2002)

RODERICK K. CALVERLEY
(1938-1995)

DANIEL B. STONE
(1925-1998)

E. CARWILE LEROY
(1933-2002)

DYKES CORDELL
(1944-1996)

ALVINE E. RODIN
(1926-1999)

LUTHER C. BECK
(1909-1996)

GARFIELD J. TOURNEY
(1927-1999)

RDAY, OCTOBER 24, 1908.

THE RECTORIAL ELECTIONS.

STORMY SCENES IN EDINBURGH.

SIEGE LADDERS AND BATTERING RAMS.

Wild and weird scenes characterised the eve of the poll in Edinburgh. The Wyndham and Osler forces were again in conflict; but on this occasion the Wyndham men were the assailants. They evidently considered it a point of honour to return the visit of their opponents in the early hours of that morning, when the Oslerites caught the Wyndham garrison off their guard, and captured and wrecked their premises in Lindsay Place. The scene of battle accordingly was shifted to the Osler headquarters in Drummond Street, where for the greater part of the evening a scene was enacted which recalled in a vivid fashion sieges in the days of walled cities. Assailants and defenders were equally determined, and attacked and defended in large force. An element of a bizarre character was added in the fact that the conflict was carried through in darkness, lighted up occasionally with an improvised torch.

A FORMIDABLE PROCESSION.

The attack was meant to be a surprise one. The Wyndham physical force party, several hundreds strong, suddenly appeared in the vicinity of Drummond Street, walking in procession and accom-

THE AMERICAN OSLER SOCIETY has been founded for the purpose of bringing together members of the medical and allied professions who are, by their common inspiration, dedicated to memorialize and perpetuate the just and charitable life, the intellectual resourcefulness, and the ethical example of William Osler (1849-1919). This, for the benefit of succeeding generations, that their motives be ever more sound, that their vision be on ever-broadening horizons, and that they sail not as Sir Thomas Browne's Ark, without oars and without rudder and sails and therefore, without direction.

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of University of South Carolina School of Medicine-Palmetto Health Richland CME Organization and the American Osler Society. The USCSOM-PHR CME Organization is accredited by the ACCME to provide continuing medical education for physicians.

The USCSOM-PHR CME Organization designates this educational activity for a maximum of 17.5 Category 1 credits towards the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the educational activity.