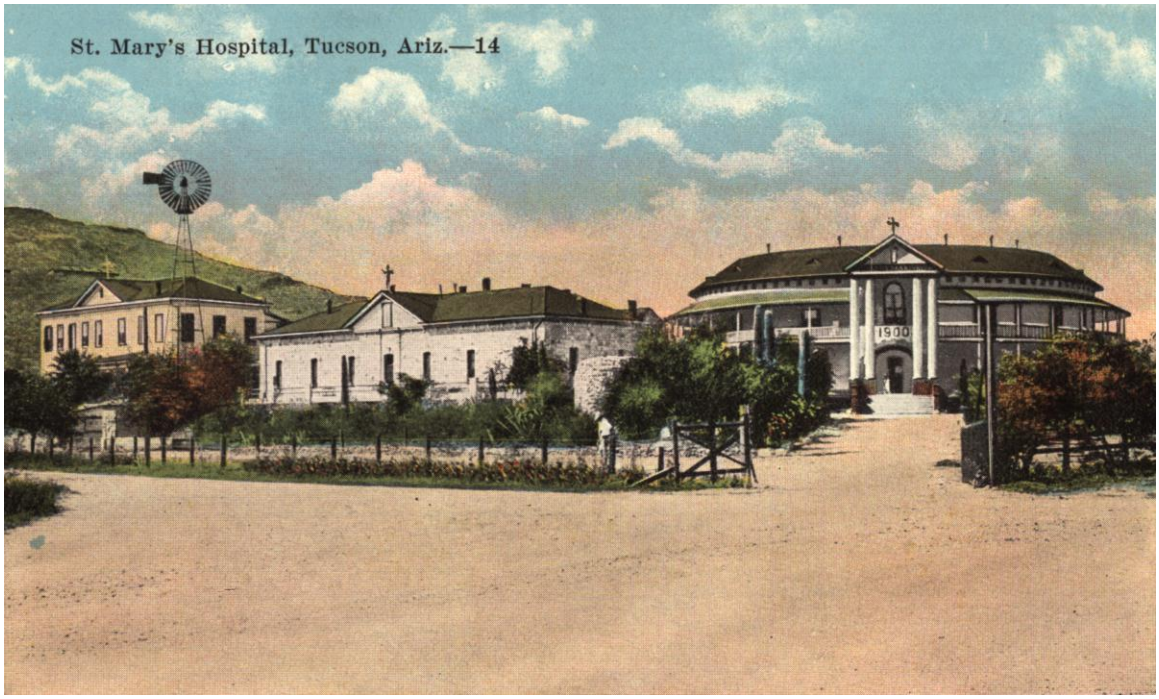
43rd Annual Meeting

of the

AMERICAN OSLER SOCIETY



Sunday, April 7th – Wednesday, April 10th, 2013

Loews Ventana Canyon Resort
Tucson, Arizona

On the Cover

Altitude and desert environment made Tucson an ideal location for the out-of-doors, open air treatment of tuberculosis espoused by Dr. Osler. The "Round Building" of St. Mary's Hospital, constructed in 1900, was designed to facilitate this treatment. Veranda porches on both the outside and the inside, surrounding the courtyard, improved indoor ventilation and encouraged an open air existence for the patients.

Photo courtesy of Osler Library of the History of Medicine, McGill University

Portrait of William Osler, October 1881

43rd Annual Meeting of the
AMERICAN OSLER SOCIETY

Sunday, April 7th - Wednesday, April 10th, 2013

Loews Ventana Canyon Resort
Tucson, Arizona

Officers and Board of Governors
American Osler Society

OFFICERS

Sandra W. Moss
President

Pamela J. Miller
First Vice President

Herbert M. Swick
Second Vice President

Christopher J. Boes
Secretary

R. Dennis Bastron
Treasurer

Joseph B. VanderVeer, Jr.
Editor, Oslerian

Richard L. Golden
Historian

BOARD OF GOVERNORS
(Expiration of Term)

R. Dennis Bastron (2014)
Michael Bliss (2015), *past president*
Christopher J. Boes (2015)
Charles S. Bryan (2014), *past president*
Anand E.P. Date (2013)
Jonathon Erlen (2015)
Richard L. Golden, *ex officio*
H. Michael Jones (2013)
Pamela J. Miller (2017)
J. Mario Molina (2014)
Sandra W. Moss (2016)
John Noble (2013), *past president*
Cynthia D. Pitcock (2014)
Scott H. Podolsky (2015)
Charles S. Roberts (2015)
Herbert M. Swick (2018)
Allen B. Weisse (2013)
Joseph B. VanderVeer, Jr., *ex officio*

Course Objectives

Upon conclusion of this program, participants should be able to:

- Describe new research findings in the history of medicine.
- Outline the evolution of medicine in a particular disease.
- List professional contributions made by others in medicine.

Intended Audience

The target audience includes physicians and others interested in Osler, medical history and any of the medically oriented humanities who research and write on a range of issues. Attendees will acknowledge the diversity of topics discussed and the spectrum of research techniques employed to investigate hypotheses, frame arguments, and draw conclusions. The themes addressed are comprehensible to all health care providers, making the content and conclusions accessible to the participants regardless of their main professional identity.

CME Accreditation and Designation

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 The University of Arizona College of Medicine at the Arizona Health Sciences Center and the American Osler Society. The University of Arizona College of Medicine at the Arizona Health Sciences Center is accredited by the ACCME to provide continuing medical education for physicians.

The University of Arizona College of Medicine at the Arizona Health Sciences Center designates this live activity for a maximum of 16.5 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Appreciative Acknowledgements

Local Arrangements Committee
R. Dennis Bastron
Christopher J. Boes
Michael E. Moran
Joseph B. VanderVeer, Jr.

Program Committee
Pamela J. Miller, chair
Jacalyn M. Duffin
Conrad C. Fulkerson
H. Michael Jones
J. Mario Molina
Michael E. Moran
P. Preston Reynolds
Herbert M. Swick

Sponsored in part by the following:
Department of Anesthesiology at the Arizona Health Sciences Center

John P. McGovern Academy of Oslerian Medicine at the University of Texas Medical Branch at Galveston

David K.C. Cooper in memory of Mark Silverman and Peter Warren

Elton R. Kerr

Lawrence D. Longo

Eric L. Matteson

Kenneth G. Swan

Joseph B. VanderVeer, Jr.

Tote Bags Underwriter
Medical History Society of New Jersey

Program Schedule

Sunday, April 7, 2013

2:00 – 6:00 p.m.	Registration *Promenade (across from resort's front desk)*
3:00 – 5:00 p.m.	The Frank Neelon Literary Gathering Moderators: Joseph Lella & Clyde Partin, Jr. *Salon E*
5:00 – 6:30 p.m.	Past Presidents Dinner Meeting *Ventana Dining Room*
7:00 – 9:00 p.m.	Board of Governors Meeting *Coronado Room*

Monday, April 8, 2013

7:00 – 8:00 a.m.	Registration & Continental Breakfast *Foyer*
8:00 a.m. – 5:30 p.m.	Third Annual Art Exhibit *Salon F*
7:50 a.m.	Sandra W. Moss, AOS President Welcome and Announcements *Ballroom B & C*

***THE HEART* - Sandra Moss, Moderator**
Ballroom B & C

I have spent a couple of mornings with Dr. Maude Abbott at the McGill Museum going over my old specimens…

The Life of Sir William Osler, Harvey Cushing, vol. I, p. 654.

8:00 a.m.	Robert I. Levy (page 36) William Harvey's *De Motu Cordis and the Heart as Metaphor*
8:20 a.m.	Richard S. Fraser (page 26) The Maude Abbott Medical Museum William Osler Collection
8:40 a.m.	William N. Evans (page 24) Maude Abbott and Helen Taussig: Passions and Personalities

Program Schedule

Monday, April 8, 2013 (continued)

9:00 a.m. — J. Mario Molina (page 41)
Paul Dudley White, T. Duckett Jones, and the History of Rheumatic Fever

9:20 a.m. — David K. C. Cooper (page 22)
Pioneers in the Development of the Total Artificial Heart

9:40 a.m. — BREAK
Foyer

ABOUT OSLER **- Sandra Moss, Moderator**
Ballroom B & C

A man who has filled Chairs in four universities, has written a successful book, and has been asked to lecture at Yale, is supposed popularly to have brains of special quality.

William Osler, A Way of Life, 1913

10:00 a.m. — Gonzalo M. Sanchez (page 48)
What We Know Now That Sir William Osler Did Not Know About Ancient Egyptian Medicine

10:20 a.m. — Harold A. Braun (page 20)
A Sunny Prognosis with Sixty-Nine Year Follow-Up

10:40 a.m. — Robert P. Turk (page 58)
Osler Jailed For Attempted Murder

11:00 a.m. — **The John P. McGovern Award Lectureship**
Bert Hansen (page 31)
Louis Pasteur: Exploring His Life in Art

12:00 p.m. — LUNCHEON
Cascade Terrace

Program Schedule

Monday, April 8, 2013 (continued)

***MORE ABOUT OSLER* - Laurel Drevlow, Moderator**
Ballroom B & C

A few of my intimate friends really know the truth about me, as I know it! Mine, [my brains] in good faith I say it, are of a most mediocre character.

William Osler, A Way of Life, 1913

1:00 p.m.	Ernest B. Hook (page 32) Some Aspects of the Evolution of Therapeutic Bloodletting in Osler's *Principles and Practice of Medicine*
1:20 p.m.	Alyssa M. Shell (page 50) Then and Now: Physicians, Medicine, and Public Health
1:40 p.m.	George Sarka (page 49) A Tale of Two Bills: The Pepper/Osler Connection
2:00 p.m.	Michael C. Trotter (page 57) Halstedian Principles, Oslerian Traditions, Impairment, and Productivity: Was it Worth the Trouble?
2:20 p.m.	J. Michael Fuller (page 28) The Physical Examination is a Lost Art—Would Osler Agree?
2:40 p.m.	Charles S. Bryan (page 21) *Philanthropia* and *Philotechnia*: Competence, Caring, and the C's of Medicine
3:00 p.m.	BREAK *Foyer*

Program Schedule

Monday, April 8, 2013 (continued)

***CHANGES* - Laurel Drevlow, Moderator**
Ballroom B & C

What, after all, is education but a subtle, slowly-effective change, due to the action upon us of the Externals…

"The Leaven of Science" 1894.

3:20 p.m.	Kenneth G. Swan (page 53) Tube Thoracostomy: A Missed Battlefield Lesson
3:40 p.m.	Charles V. Bender (page 16) The Influence of Patrick Bouvier Kennedy on the Development of Neonatology
4:00 p.m.	Faustino Bernadett, Jr. (page 17) iOsler - What Would a Mobile App by Osler Look Like?
4:20 p.m.	Michael H. Malloy (page 39) The Osler Student Societies of the University of Texas Medical Branch: A Medical Professionalism Translational Tool
4:40 p.m.	ADJOURN
6:00 p.m.	RECEPTION *Upper Terrace*

Program Schedule

Tuesday, April 9, 2013

7:00 – 8:00 a.m. Registration & Continental Breakfast
Foyer

7:00 a.m. – 5:00 p.m. Third Annual Art Exhibit
Salon F

***BIOGRAPHIES* - J. Mario Molina, Moderator**
Ballroom B & C

The trials and triumphs of the men, their failures and foibles, and the personal traits that make or mar – this is the sort of knowledge we want…

"The Future of the Medical Profession in Canada", Sept. 9, 1918.

8:00 a.m. Rimma Osipov (page 43)
Nikolai I. Pirogov: A Russian Osler? Some Reflections on the Function of the "Great Man Myth" in Medical History

8:20 a.m. Lorelei E. Stein (page 51)
A 19th Century Physician in Southwestern Pennsylvania During the Oslerian Era

8:40 a.m. Christopher G. Goetz (page 29)
Donald H. Harter Treating Melancholia in the Home: Theoretical Wisdom and Grim Reality in the Career and Life of E. C. Seguin

9:00 a.m. Joseph B. VanderVeer, Jr. (page 59)
Medical Man vs. Medicine Man: The Army vs. Geronimo

9:20 a.m. Herbert M. Swick (page 54)
From Ozark Farm Girl to Oslerian Physician: Dr. Caroline McGill

9:40 a.m. BREAK
Foyer

Program Schedule

Tuesday, April 9, 2013 (continued)

***HEALING/HEALERS* - J. Mario Molina, Moderator**
Ballroom B & C

When I began clinical work in 1870, the Montreal General Hospital was an old coccus- and rat-ridden building but with two valuable assets for the student – much acute disease and a group of keen teachers.
"The Medical Clinic" BMJ, Jan. 3, 1914.

10:00 a.m.	**William B. Bean Student Research Award Lecture** Kristin Huntoon (page 33) Recognizing Patterns: Dr. Lindau's Quest to Understand a Syndrome
10:20 a.m.	J. Gordon Frierson (page 27) Guarding the Golden Gate: Establishing the Quarantine Station in San Francisco Bay
10:40 a.m.	Darryl D. Bindschadler (page 18) Charles H. Rammelkamp and the Warren Air Force Base Strep Lab
11:00 a.m.	Rob Stone & Marvin J. Stone (page 52) Jules Stein: Visionary Extraordinaire!
11:20 a.m.	**William B. Bean Student Research Award Lecture** Joshua Tompkins (page 56) The Medical Discovery of Child Abuse
11:40 a.m.	Allen B. Weisse (page 62) Saving Lives, Not Sacrificing Them: The Inevitable Clash Between Medical Research and the Protection of Human Subjects
12:00 p.m.	LUNCHEON *Cascade Terrace*

Program Schedule

Tuesday, April 9, 2013 (continued)

***THE HEAD* - Herbert Swick, Moderator**
Ballroom B & C

The history of the progress of the human mind is a history of a struggle with its delusions.
"The Powder of Sympathy. Sir Kenelm Digby's Powder of Sympathy, An Unfinished Essay by Sir William Osler", 1972

1:00 p.m.	Clyde Partin, Jr. (page 44) The Most Famous Neurologist You Never Heard of: Charles Loomis Dana, MD
1:20 p.m.	Christopher J. Boes (page 19) Walter DeWitt Shelden: The Father of Mayo Neurology
1:40 p.m.	Douglas J. Lanska (page 35) Osler's Contributions to Disorders of Posture, Stance, and Gait
2:00 p.m.	Eric L. Matteson (page 40) Friedrich J. Wohlwill, MD: A Fight for Science and Against Fate
2:20 p.m.	Michelle Foshat (page 25) The Face of Leprosy: An Investigation of Leprosy in Galveston, Texas and Osler's Early Impressions of the Disease
2:40 p.m.	Rachel Pearson (page 45) The Diagnosis of Incorrigible Criminals: From Bumps on the Skull to Psychopathy
3:00 p.m.	BREAK *Foyer*

Program Schedule

Tuesday, April 9, 2013 (continued)

***ADVANCES* - Herbert Swick, Moderator**
Ballroom B & C

Only by the labours of transmuters has progress been made possible and their works will fill the shelves of the Bibliotheca Prima of the future.
Cushing, vol. II, p. 526.

3:20 p.m.	**William B. Bean Student Research Award Lecture** Ramya Takkellapati (page 55) Georg Hohmann: An Orthopedist, Activist, and Inventor of His Namesake Retractor
3:40 p.m.	Claus A. Pierach (page 46) "Give Me a Break!" Küntscher and His Nail
4:00 p.m.	C. Ronald MacKenzie (page 38) William Grant Stewart and a Way of Life
4:20 p.m.	David Hamilton (page 30) What Halted The Early Development of Organ Transplantation?
4:40 p.m.	ADJOURN
6:00 – 7:00 p.m.	SOCIAL HOUR *Foyer*
7:00 – 9:00 p.m.	BANQUET PRESIDENT'S ADDRESS Sandra W. Moss *Catalina Ballroom*

Program Schedule

Wednesday, April 10, 2013

7:00 – 8:00 a.m. Registration & Continental Breakfast
Foyer

7:30 - 8.30 a.m. Annual Business Meeting
Ballroom B & C

ARTS AND BOOKS **- Pamela Miller, Moderator**
Ballroom B & C

I was diverted to the Trinity College School…by a paragraph in the circular stating that the senior boys would go into the drawing-room in the evenings, and learn to sing and dance – vocal and pedal accomplishments for which I was never designed;

A Way of Life, p. 7

8:40 a.m. Charles T. Ambrose (page 15)
Vesalius and the China-Root Epistle, 1546

9:00 a.m. Sara E. Walker (page 60)
Michelangelo's Knee: Signs of Disease in Raphael's Figure of Heraclitis

9:20 a.m. Michael E. Moran (page 42)
Sir Thomas Browne's Head

9:40 a.m. BREAK
Foyer

MORE ARTS & BOOKS **- Pamela Miller, Moderator**
Ballroom B & C

I made a great haul last week, a splendid collection of Sir William Petty's letters during twenty years in Ireland. A case-book of Sir Theodore Mayerne's:…(but I am ruined!)

May 1911, Cushing, vol. II, p. 271

10:00 a.m. Scott H. Podolsky & Jeremy A. Greene (page 47)
Osler Versus the Centaur: William Bean, Felix Marti-Ibañez, and the Struggle Over the Medical Humanities

10:20 a.m. Christopher M. Lyons (page 37)
Osler Online –Finding Oslerian and Other Historical Medical Information on the Web

Program Schedule

Wednesday, April 10, 2013

10.40 a.m.	Laurel E. Drevlow (page 23) Music, Medicos, Mahler
11:00 a.m.	Richard J. Kahn (page 34) Christopher Morley's Letter to Norman [Cousins?], July 7, 1947, or Should Christopher Morley Be Made a Posthumous Honorary Member of the AOS (nonvoting)?
11:20 a.m.	John W. K. Ward (page 61) The First 600 Years of the University Library in Oxford Humfrey, Bodley, Pembroke, Osler and a Cast of Bibliophiles
11:40 a.m.	ADJOURN

Vesalius and the China-Root Epistle, 1546

Charles T. Ambrose

Charles Amborse is a 1955 graduate of the Johns Hopkins Medical School. Following a residency in infectious diseases in Boston, he pursued research in cellular immunology. Currently, he is a professor at the College of Medicine, University of Kentucky, and of late has published articles on Osler and other medical figures, on early priority disputes in immunology, on the 5th medical school in the US (Transylvania University, Lexington, KY, 1799-1859), and on neuroangiogenesis and Alzheimer's disease.

The year 1514 saw the birth in Brussels of Andreas Vesalius, the anatomist who introduced the era of modern medicine. The 500th anniversary celebration will occur a year hence in 2014, and will likely see a flood of books, essays, and lectures about him, of which this talk may be an early example. He was a student of medicine in Paris and Venice (1533-37), an investigator and teacher of anatomy in Padua (1538-43), and a physician at two royal courts of Europe – first for Charles V, who was then both the Emperor of the Holy Roman Empire and the King of Spain (1543-56), and later for his son, King Phillip II of Spain (1556-1564).

Because both Charles and Philip valued so greatly Vesalius' medical attention, it was only with difficulty that the anatomist gained release from royal service to return to a university career. He was allowed to do so only on the condition that he make a pilgrimage to the Holy Lands. In 1564 he embarked from Venice to begin the journey, but while there discovered that his old chair of anatomy at Padua was vacant and that his appointment was assured upon his return. During the voyage back from Palestine he died at age 50 of an illness contracted aboard the ship and was buried on the Island of Zante, one of the Ionian Islands west of Peloponnese.

Apart from *De Humani Corporis Fabrica* and his several related anatomical books (*Tabula anatomicae sex* and the *Epitome*), Vesalius wrote other medical works in Latin, including his consillia, i.e., a dozen or so letters sent in response to medical questions from European physicians. Among the last is the 100-page *China-Root Epistle*, which examined a newly introduced medical plant imported from the Far East. This agent and a comparable one, sarsaparilla, were then touted for the treatment various ailments, notably syphilis, the new plague of the 16th century.

The first 15 pages of the *Epistle* itself concern the China-root, while the rest reviews aspects of Vesalius' life and the difficulties he encountered in convincing readers of the errors in Galen's anatomy. Copies of the *Epistle* are far rarer today than the *Fabrica*. A 1546 edition of the *Epistle* is listed in the Biobiotheca Osleriana and is also held in the Special Collections of Transylvania University, Lexington, KY, which provided me with a digital copy for study.

Learning objectives:

1. Become familiar with the main features of Vesalius' life.
2. Relate his life to events in 16th century Europe.
3. Appreciate the significance of his *China-Root Epistle* with respect to the new epidemic of syphilis and the dominance of Galenic anatomy in medicine then.

The Influence of Patrick Bouvier Kennedy on the Development of Neonatology

Charles V. Bender

Dr. Bender is an Assistant Professor of Pediatrics and of Obstetrics and Gynecology in the University of Pittsburgh School of Medicine and is Associate Director of the UPMC (University of Pittsburgh Medical Center) Newborn Medicine Program. He is one of the lecturers in the History of Medicine elective for medical students. On rounds in the NICU he is as likely to ask residents about the cause of hyaline membrane disease as the contribution of Ignatz Semmelweis to modern neonatology.

Patrick Bouvier Kennedy was the only child born to a sitting President of the United States in the 20th Century. This year marks the 50th anniversary of his tragically short life. The nation, wrapped up in the Camelot-like mystique of the Kennedys, followed the news of his premature birth and his death less than two days later. In addition to the customary (and severely limited) care given to premature infants of that time, Patrick was also exposed to hyperbaric oxygen therapy as a desperate rescue measure. The attention drawn to his life influenced then-current and future pediatricians to enter the fledgling discipline of neonatology.

A second intersect of the Kennedy family and neonatology was the "space race" of the 1960s. Spurred by the Cold War and the success of the USSR in achieving manned space flight, President John F. Kennedy pushed for the development of technology to enable the United States to reach the moon first. The computers, telemetry devices and miniaturization of devices that made manned space flight possible also made NICU care possible.

The combination of the interest in Patrick's brief life and the technologic advancements resulting from his father's agenda were linked to the rapid development of neonatology. As a result, babies like Patrick, born at 34 weeks gestation and weighing 2 kilograms, are now routine, "bread and butter" NICU patients with an almost certain survival.

Patrick's death has historically been attributed solely to prematurity and the related hyaline membrane disease. But when information that can be culled from print and interviews is examined under the "retrospectoscope", an alternative, or at least additional, cause of his death appears likely. His clinical course would implicate bacterial sepsis as the likely cause of his death.

Learning objectives:
1. Discuss the role that the Kennedy family had in the development of neonatology.
2. Contrast the care that was available to Patrick Kennedy in 1963 and that is available today.
3. Evaluate the evidence for bacterial sepsis as the cause of Patrick Kennedy's death.

iOsler - What Would a Mobile App by Osler Look Like?

Faustino Bernadett, Jr.

Faustino Bernadett, Jr., is a practicing physician who serves on the Foundation Board of the University of California, San Francisco, and as a Commissioner of Hospitals and Healthcare Facilities for Los Angeles County.

In the time since Osler stood with students over dissection cadavers or at bedside rounds discussing patients, a whole new world of technical discoveries and inventions have fallen upon physicians and educators. Today's mobile technology presents both opportunity and challenge to medical education and the practice of medicine. Osler relied upon librarians of the time to assist him in his research, as the process of information gathering and research was labor and time intensive, requiring much skill.

It is the physician's responsibility to distill and interpret information in the process of diagnosis, treatment and education. The intention of the application of technology to medicine has always been to improve quality outcomes and interactions, while a secondary goal has been to reduce the cost of care across the entire healthcare continuum. An unexpected consequence of the rapid use of electronic technologies in medicine is to separate the patient and patient's family from the physician. The commercialization and broad adoption of the home computer and now mobile computing devices, along with the explosion of the availability of information via the internet, has led to a false sense that to have access to information is to understand it.

This paper explores what a mobile application (app) developed by Osler might have looked like. With information readily available and virtually free to all, how would Osler have applied current technology to the teaching of modern physicians, the practice of medicine and the doctor-patient relationship? What would an Osler App look like?

Learning objectives:

1. Outline the availability, role and uses of mobile apps in medical education and the practice of medicine today.
2. Discuss the impact of the technological advancement of mobile technology as it relates to the doctor-patient relationship from Osler's point of view.
3. Identify three medical apps available today of which Osler would approve.

Charles H. Rammelkamp and the Warren Air Force Base Strep Lab

Darryl D. Bindschadler

Dr. Bindschadler is a retired pulmonologist internist.

Epidemic streptococcal infections and acute rheumatic fever posed a major problem for the U.S. Military during and after World War II. The U.S. Army Commission on Hemolytic Streptococcal disease was reactivated in 1948. In January 1949 the Streptococcal Diseases Laboratory at Warren Air Force Lab in Cheyenne Wyoming, under the direction of Dr. Charles H Rammelkamp Jr. was opened. The investigative laboratory and supporting clinical area continued operation until 1955, after which the acute rheumatic fever ward continued for some time. The Laboratory's mission was to investigate in detail the epidemiology of streptococcal infections and their relationship to rheumatic fever. Maclyn McCarty would later refer to the Commission's Strep Lab as the "star in its crown."

The classical studies carried out during the six years of the Lab's operation on the epidemiology and clinical features of streptococcal infection proved that streptococci were the sole cause of acute rheumatic fever. After overcoming potential problems related to the theoretical development of resistance to penicillin if it were widely distributed and continued for extended times for prophylaxis plus the ethical dilemma of foregoing treatment in a control group of streptococcal infected individuals, studies proved the effectiveness of penicillin without the appearance of resistant strains and led to the use of mass prophylaxis as the cornerstone of acute rheumatic fever control in the U.S. military. For its accomplishments, the 1954 Albert Lasker Group Award was presented to the Streptococcal Disease Laboratory.

During World War II, Warren Air Force Base served as a training center for more than 20,000 Quartermaster Corps troops. Most were housed in one of twenty wooden buildings constructed without insulation or interior walls. Close contact among the troops was inevitable. Often they would awaken in the winter months with ice covering their blankets.

Dr. Rammelkamp was a Research Fellow at the Thorndike Laboratory in 1939 and then moved to Boston University under Dr. Chester Keefer in 1940, where he developed the Rammelkamp method that became the standard procedure for the measurement of penicillin in body fluids and exudates. His career-long scientific interests evolved around the streptococcus and the staphylococcus. He brought his expertise to the area of teaching and patient care with the development of a system patterned on the "firm" system as practiced in Great Britain. Headed by a senior physician and consisting of residents, fellows and students, this group was responsible for the total hospital and ambulatory care of the patient. The continuity of care and the teaching offered by this system was not the usual in the United States at that time. Rammelkamp championed the integration of basic science and clinical teaching as one of the architects of an innovative curriculum at Western Reserve, where he finished his distinguished career.

Learning objectives:

1. List three results of studies carried out at the Streptococcal Laboratory at Francis E. Warren Air Force Base in Cheyenne, WY.
2. Outline Dr. Charles H. Rammelkamp's early, middle, and late career features.
3. Summarize the relationship of streptococcal infections to acute rheumatic fever.

Walter DeWitt Shelden: The Father of Mayo Neurology

Christopher J. Boes

Chris Boes is an Associate Professor of Neurology at the Mayo Clinic in Rochester, MN. He is secretary of the American Osler Society, president of the Mayo Clinic History of Medicine Society, and neurology residency program director. He was recently named Associate Dean in the Mayo School of Graduate Medical Education.

Walter DeWitt Shelden was born near Windom, Minnesota on February 2nd, 1870, grew up in Reedsburg, Wisconsin, and graduated from the University of Wisconsin in 1891. He attended Rush Medical College, spent two years as an intern at Cook County Hospital, and worked as a general practitioner in Reedsburg for four years. He then received internal medicine training at the University of Vienna for 1.5 years. He worked with Edmund von Neusser, Friedrich Kovacs, Lothar von Frankl-Hochwart (neurology), Ernest Finger, and Alois Monti. Shelden noted that Neusser "couldn't write worth sour grapes," and that to learn from him one had to observe him examining patients. These trips to Vienna by Americans were criticized by some, but most of this criticism was directed at those without prior internship and practice experience who had short stays, partied too much, did not speak the native language, and/or came after World War I. None of these things applied to Walter Shelden. He learned German well enough there to translate German articles for an American neurologic journal later in his career.

Shelden subsequently had a lucrative private internal medicine practice in Minneapolis and taught at the University of Minnesota for 10 years. His medical students noted that he spent the greater part of his time in the charity wards of the Minneapolis City Hospital, where he instituted inductive diagnosis and post-mortem checkups. The number of post-mortem exams increased significantly (from a score to 300) after his first year at the hospital. He was known as an excellent bedside teacher and diagnostician, and a proficient neurologist. In 1913, at the age of 43, he was asked by William J. Mayo to start the Mayo neurology section. He told a colleague that he accepted the job because it offered "a grand chance to learn a little about nervous and mental diseases." His Mayo trainees and associates nicknamed him "Pop" because of his fatherly attitude. Shelden attained the rank of professor of neurology and was head of the neurology section until 1930. His research output was hampered by clinical demand. Shelden died on February 13th, 1946.

Shelden exemplified the benefit of post-graduate training in Vienna before World War I for the well- prepared physician. His recruitment to Mayo Clinic gives insight into how W.J. Mayo chose diagnosticians and developed specialty sections. A neurologic section at the Mayo Clinic was needed for patient care, training of specialists, and to aid neurosurgery. Like Wilhelm Erb, Shelden was an internist who focused primarily on neurology over time. The section of neurology at Mayo Clinic was more like internal medicine than neuropsychiatry because of Shelden's background. He did not publish much and therefore did not have a significant, direct, national influence, but he had an indirect influence via the roughly 45 residents he taught (including Henry Woltman, Fred Moersch, and Lee Eaton).

Learning objectives:
1. Describe where Walter Shelden trained.
2. Explain why he was chosen to start the neurology section at the Mayo Clinic.
3. Identify his local and national neurologic influence.

A Sunny Prognosis with Sixty-Nine Year Follow-Up

Harold. A. Braun

During his half-century in cardiology practice, Dr. Braun's interests have extended from the electrocardiogram of the grizzly bear to creating texts on coronary care and respiratory physiology. Receipt of the Laureate Award, American College of Physicians (Montana) and the Edwards Award of the national ACP were related to his more recent role in establishing indigent care services in Missoula.

In the mid-1970s I examined an elderly professor with an interesting heart murmur. When given a sunny prognosis he startled me with a declaration, "That is exactly what Sir William Osler told me 69 years ago."

The professor, H. G. Merriam, was a westerner through and through. Chair of the Department of English, University of Montana, he was especially esteemed for developing a nationally recognized creative writing program that fostered opportunities for what he called 'a distinctive western voice.'

How was it possible that in 1905 a 21 year old youngster from Cheyenne, Wyoming became a patient of the Regius Professor of Medicine, University of Oxford? I learned that Merriam, when a student at the University of Wyoming, became a member of the first group of American Rhodes scholars, arriving in Oxford in October, 1904. Six months later, Osler, Grace Revere Osler and 10 year old Revere unpacked their trunks at Thirteen Norham Gardens. There, only five days after arrival, the ever-hospitable Oslers entertained their fellow North Americans, the Rhodes group of which Merriam was a member.

Merriam entered Lincoln College, Oxford, founded in 1427, fully 300 years before present Wyoming saw its first Caucasian visitor. In contrast, the University of Wyoming was founded in 1887, only18 years before Merriam travelled from Cheyenne, Wyoming to Oxford, England.

While at Oxford, he became a competitive oarsman. It was an injury while rowing that led to his single medical contact with the Regius Professor. In his diary Merriam writes, "Dr. Osler was the only one of three doctors who, it subsequently turned out, was right in the diagnosis of the trouble." Would it be surprising if the physician whom we know as an advocate of thorough physical examination listened to the heart of a young man presenting with a rowing injury? I think not.

Osler and I practiced with the aid of far different tools. However, we came to the same conclusion and provided the same sunny prognosis: "This murmur should not bother you in any way." Each of us was correct. My patient provided a 69 year follow-up of Sir William's prognosis. Professor Merriam led an active life, free of cardiac symptoms until his death at 97 years.

Learning objectives:

1. Contrast student life in 1905 at the University of Wyoming and at the University of Oxford.
2. List two contributions of the Rhodes scholarships to American higher education.
3. Contrast the techniques for evaluation of heart murmurs in 1905 and 1975.

Philanthropia and *Philotechnia*: Competence, Caring, and the C's of Medicine

Charles S. Bryan

Charles S. Bryan is Heyward Gibbes Distinguished Professor of Internal Medicine Emeritus at the University of South Carolina and a past president of the American Osler Society.

In his 1919 presidential address to the Classical Association of Great Britain, Sir William Osler paraphrased the Hippocratic maxim, "Where there is love of humanity there also is love of the art," by speaking of "philanthropia and philotechnia—the joy of working joined in each one to a true love of his brother." Caring and competence—these are the twin pillars of medicine, but how do we balance them? Some years ago, the present author ranked four "C's of medicine" in this rank order: (1) courage (the cardinal virtue that, as Churchill put it, makes the other virtues possible); (2) competence; (3) consistency (which assures competent service to every each patient); and (4) compassion. Benevolent competence, the argument went, *is* compassion, whereas "compassion" without competence is fraud. MEDLINE searches over the next 21 years brought humility in two respects.

First, analysis of 346 articles in 222 journals in which the terms "competence" and "caring" (or empathy) were both indexed revealed nearly twice as many articles in nursing journals than in medical journals (32.7% versus 16.9%, with the remainder in "other" journals). Second, analysis of 69 articles containing lists of "C's" in their titles again revealed, again, nearly twice as many articles in nursing journals than in medical journals (49.7% versus 25.7%, with the remainder in "other" journals). "Good" C-words (e.g., care, caring, compassion, collaboration, commitment, communication, and competence) occurred twice as often in nursing journals than in medical journals. "Suspect" business-oriented C-words (such as capitation, case management, commerce, commercialism, compensation, and compensation) occurred predominantly (70%) in the "other" journals.

These data are subject to many interpretations, but here are two tentative conclusions: (1) While nurses concern themselves with the perceived tension between technical competence and humanistic caring, physicians are increasingly reconciled to the idea that theirs is a technology-heavy occupation, with others doing more and more of the humanistic "caring" and also the business administration; and (2) judging from the published literature, physicians are less concerned than their colleagues in other health care-related disciplines with concepts derived from such highly-relevant disciplines as behavioral psychology and management. "C's" that received little play, but deserve physicians' attention, are *C*onscience, *C*haracter, and *C*oncern for medicine as opposed to (and as Osler warned against) a purely technology- and business-oriented occupation.

Learning objectives:

1. Suggest reasons why nurses and nurse educators seem to pay more attention to the interplay between "competence" and "caring" than their physician counterparts.
2. Give at least three explanations for the paucity of "C-lists" in medical journals as opposed to nursing journals.
3. Describe how Oslerian principles and valuables might counteract, at least in part, the seductiveness of technology and the commodification of medicine.

Pioneers in the Development of the Total Artificial Heart

David K. C. Cooper

David Cooper trained in cardiothoracic surgery in the UK, and continued an academic career largely focused on heart transplantation for 17 years before he devoted himself fulltime to research in organ transplantation.

The development of the total artificial heart (TAH) captured the public's imagination as being close to science fiction – the bionic man. Ventricular assist devices (VADs) now play an increasing role in the treatment of patients with heart failure. The development of these mechanical devices involved the work of several memorable pioneers.

Willem Kolff, the developer of the dialysis machine in Nazi-occupied Netherlands during World War II, was among the first to pursue the goal of building a TAH, but it was the well-known cardiovascular surgeon, Michael DeBakey who, through his influence in Washington, DC, did much to ensure funding for this expensive area of bioengineering. In Cleveland and later Salt Lake City, Kolff worked on a TAH in collaboration with Robert Jarvik, with whom he would later part company. When DeBakey, working independently in Houston, found that high-risk patients could not be weaned from the heart-lung machine after open heart surgery, he began laboratory work aimed at developing a TAH.

By 1969, DeBakey did not feel that the results in animal models were sufficient to proceed to a clinical trial, but Denton Cooley, a junior faculty colleague, went ahead surreptitiously (when DeBakey was out of town) with implantation of a TAH in a patient as a 'bridge' to heart transplantation. Within three days, the TAH was replaced with a human heart transplant, but the patient had suffered severe brain damage and did not recover. The relationship between the two men was irreparably damaged. Cooley resigned his position and set up in surgical practice independently. His exquisite surgical skills had already made him one of the most successful cardiac surgeons in the world and, after splitting from DeBakey, his popularity and success continued. The two men did not reconcile for almost 40 years. The differences in their personalities could not be greater, with DeBakey being highly disciplined and unbelievably tough on his juniors, whereas the relaxed Cooley never lost his equanimity.

It was left to Kolff's young surgical colleague in Salt Lake City, William DeVries, to implant the TAH to replace a failing heart on a permanent basis. His first patient, in 1982, was a dental surgeon named Barney Clark. This surgical procedure received immense public and media attention. Although Mr. Clark lived for 112 days, his life was plagued by complications, and he was never well enough to leave hospital. Each of DeVries's next two patients (now in Louisville) lived for over one year, but the fourth patient lived only 10 days. Drained by the effort to pursue this clinical trial, as well as by the demands of being a "celebrity", DeVries abandoned his academic career and returned to private surgical practice.

Although TAHs are not entirely successful as yet, many advances have been made in the design of VADs which can now support patients on occasions for several years without major complications. The pioneering work of Kolff, DeBakey, Cooley, and DeVries opened a new therapeutic option in the treatment of patients with heart failure.

Learning objectives:
1. Understand the early development of cardiac mechanical support devices.
2. Evaluate the contrasting personalities of surgical pioneers in this field.
3. Understand the present role of mechanical devices in the treatment of cardiac failure.

Music, Medicos, Mahler

Laurel E. Drevlow

Dr. Drevlow is a professor of medicine at the University of Minnesota Medical School, a clinician and educator in the Abbott Northwestern residency program, and director of student education at Abbott Northwestern Hospital in Minneapolis, Minnesota. She is an avid musician who is profoundly moved by the music of Mahler.

In artistic circles, the name Mahler can evoke sighs of rapturous emotion or vague, guttural noises of utter disdain. In medical circles, the name personifies a story that reads like a veritable "Who's Who" of medical personages at the turn of a past century. A musical celebrity and married to a woman of the arts who was also well-connected to a plenitude of practitioners of science and medicine, Mahler lived and died in an era when medical diagnostics were becoming a precise, well-defined science, as can be seen in preserved accounts of his physicians' notes and letters. Several physicians involved in the master's care were the very ones who were at that time defining the diagnostic criteria for *endocarditis lenta*. Therapeutics of that day, however, were negligible. In such a setting, the history of Mahler's illness and death becomes a *lusus naturae* of rheumatic valvular heart disease and its clinical sequelae.

During the course of his remarkable life, Mahler's medical care was provided by physicians including such luminaries as Emmanuel Libman (a student of Osler), Franz Chvostek, Jr., Sigmund Freud, and, of course, William Osler himself, among a great many others. A name seldom listed, yet perhaps the most important, was a most ordinary doctor named Blumenthal, who was placed in the unfortunate position of being the one to first make the diagnosis of the condition that would ultimately lead to the death of the conductor, composer, poet and artist. Despite a certain lack of bedside manners, he is remembered for his knowledge of his craft and diligence in its practice. Many of the diagnostic criteria he and others used are extant in today's practice of medicine. While the use of antimicrobial agents has dramatically changed the outcome of this disease, the addition of imaging technology to the clinical diagnosis has curiously made little difference to the survival of patients since Mahler's time.

As exquisite as his musical oeuvre is, Mahler's personal and medical story is equally compelling and reminds us of the necessity of careful clinical observation, strong diagnostic skills and the all-important personal connection with our patients. It also offers convincing evidence that well-hewn diagnostic skills in the hands of medical masters are dependable over time.

Learning objectives:

1. Cite diagnostic criteria used to identify Gustav Mahler's fatal condition still used today.
2. Cite evidence for and against the use of auxiliary testing to diagnose this condition today.
3. Describe the roles Libman and Osler played in the diagnosis of Gustav Mahler's illness.

Maude Abbott and Helen Taussig: Passions and Personalities

William N. Evans

William Evans is professor of pediatrics at the University of Nevada School of Medicine, and he is the founder and director of the Children's Heart Center – Nevada. His interest is in the history of pediatrics and pediatric cardiology.

The passions of Maude Elizabeth Abbott and Helen Brooke Taussig set pediatric cardiology in motion. Today, few pediatric cardiologists know of Maude Abbott, yet before Helen Taussig, no one contributed more to founding the specialty than Maude Abbott. Stimulated by William Osler, Abbott achieved international fame as the early twentieth-century expert on cardiac malformations. The past literature has scant documentation of the relationship between the important founders of pediatric cardiology, Maude Abbott and Helen Taussig, but correspondence and diaries kept by Maude Abbott provide evidence for a close connection between them. Further evidence suggests that their association was complex and influenced by outside factors, such as their difference in age and era-related notoriety.

The conventional history of pediatric cardiology teaches that it was Helen Taussig who founded the cardiac clinic for children at the Harriet Lane Home of the Johns Hopkins School of Medicine in 1930, when Edwards Park appointed her director of the clinic. The story is more complex than that, and involved the collaboration of institutions and the frustrations, doubts, and passions of both Park and Taussig. Also, Taussig was the second director, succeeding Clifton B. Leech, whom Edwards had appointed as the first director of the pediatric cardiac clinic in the fall of 1928.

Primary source material from the McGill University Archives, the Alan Mason Chesney Medical Archives of the Johns Hopkins Medical Institutions, and the Osler Library of the History of Medicine at McGill University helped to provide insights into the careers and the early, important contributions of these two women.

Learning objectives:
1. Provide insights into the relationship between Maude Abbott and Helen Taussig.
2. Clarify the history of the first pediatric cardiac clinic at the Harriet Lane Home.
3. Discuss how primary source material sheds light on previous historical accounts including transcribed oral histories.

The Face of Leprosy: An Investigation of Leprosy in Galveston, Texas and Osler's Early Impressions of the Disease

Michelle Foshat

Michelle Foshat is a graduate of the University of Texas Medical Branch in Galveston, where she served as a mentor for her student Osler society. She is currently a pathology resident at her alma mater.

The University of Texas Medical Branch in Galveston has a collection of historic pathology specimens some dating back to nearly a century ago. Within this assortment is a rare and remarkable example of leprosy involving the head. The uniqueness of the specimen prompted an investigation into the early history and impact of leprosy in Texas. The first documentation regarding leprosy in Texas is the 1889 report by George Dock, a professor at the University of Texas in Galveston, who had been both a student and colleague of Osler at the University of Pennsylvania. His report was followed by more extensive epidemiological studies published in 1920 and 1921 describing the history and demographics of the disease in Galveston. These were written by Mark Boyd, a professor of the University of Texas, and Warren Fox, a Past Assistant Surgeon for the U.S. Public Health Service. Significant portions of these articles were devoted to the elusive nature of the spread of the disease.

It is well known that Osler became familiar with leprosy after multiple visits to the lazarrato at Tracadie, New Brunswick. However, even Osler, a contemporary expert, struggled to explain how the disease spread and the cause of its variable presentation. Despite Gerhard Armauer Hansen's discovery of *Bacillus lepræ* in 1872, early physicians debated the manner of transmission with theories that ranged from contamination of fish products, to infestation by insects, to physical contact.
It would take decades of infectious disease research and experimental animal models for the mysteries of leprosy to unfold, and yet even today there are details of leprosy that leave us with questions. The rarity of leprosy in Western civilization and the distinctiveness of this specimen demonstrate the value of historical collections and their teaching potential.

Learning objectives:
1. Review the earliest reports of leprosy in Galveston, Texas.
2. Examine the contributions by George Dock and his connection with Osler.
3. Explore Osler's role as a pathologist, his understanding of leprosy, and why the pathophysiology of leprosy confounded so many early physicians.

The Maude Abbott Medical Museum William Osler Collection

Rick Fraser

Rick Fraser is a professor of pathology at McGill University, Montreal, and Director of the Maude Abbott Medical Museum. Joan O'Malley is an administrator in the McGill Pathology Department and was responsible for specimen photography and the website construction.

William Osler performed over 800 autopsies during his tenure as pathologist at the Montreal General Hospital. Many of the organs derived from these autopsies were used for teaching medical students, for presentation at the Medico-Chiurgical Society and for publication in Societal or medical journals. The most interesting of these specimens he also gave to the McGill Medical Museum. After she took charge of the Museum in 1899, Maude Abbott was able to identify about 180 of these. This number had decreased to 130 in 1934 and, by 1971, only 55 appeared to remain. Following renewed study of the Medical Museum's holdings in the early 2000's, an additional five specimens were identified.

The specimens were originally mounted in jars containing alcohol or Sappey's fluid. Many were remounted in specially designed rectangular jars in 1934 -1935 and their fluid preservative was changed to Kaiserling III in 1963. Despite these manipulations and some natural disintegration over time, most of the specimens still clearly illustrate the abnormalities which Osler and Abbott wished their students to observe.

In addition to display in Abbott's Medical Historical Museum, special exhibits of the collection were mounted in 1920 at the Congress of American College of Surgeons in Montreal and at the Osler Library in 2006. During the past year, the entire collection has been digitally imaged to be put on display as an exhibit on the website of the recently reconstituted McGill Medical Museum. In addition to the specimens, the website includes reproductions of Osler's writings related to the specimens. The major part of this presentation will be a review the digitized collection, with a discussion of the interesting aspects of some of the specimens, including those illustrating endocarditis, aortic aneurysms and veterinary pathology.

Learning objectives:
1. Discuss the history of the Osler Pathology Collection.
2. List the major groups of organs and some specific specimens in the collection.
3. Discuss the relation between professional advancement and pathologic specimens in the 1800s.

Guarding the Golden Gate:
Establishing the Quarantine Station in San Francisco Bay

J. Gordon Frierson

Dr. Frierson was engaged in the private practice of internal medicine and infectious diseases for 35 years. He served as attending physician at the Tropical Medicine Clinic at the University of California San Francisco for many years and operated a private travel medicine clinic for 16 years. He is currently retired.

After the discovery of gold in California, the port of San Francisco had expanded rapidly to accommodate increasing numbers of immigrants. Smallpox outbreaks in the city were fairly routine. Quarantine laws were established as early as 1859, but not rigorously enforced. In 1882, as the Chinese Exclusion Act was about to be enacted, Chinese immigration surged. One ship, the *Altonower*, arrived from Hong Kong carrying 829 passengers, one of whom had smallpox. Lacking any quarantine facilities, the passengers were kept on board in crowded conditions, while 83 more smallpox cases developed among them. Angry protests reached President Arthur, who ordered a study to determine a site for quarantine facilities. Angel Island in San Francisco Bay was chosen, the Marine Hospital Service to be in charge.

The model was based on an existing station in New Orleans, which, in addition to quarantine buildings, had incorporated "ship disinfection" as a way of preventing yellow fever epidemics. Passengers were placed in barracks, an isolation hospital housed the sick, and luggage and clothing of passengers were steam sterilized in huge containers. Meanwhile ships and their cargo were fumigated with sulfur dioxide, their decks and cabins scrubbed with mercuric chloride, and then sent on their way. Delays in ship traffic were thereby minimized.

Construction of the Angel Island station was finalized early in 1891, complete with three massive sterilizers and fumigating equipment. But no money was available for operating the site, so when the first ship with smallpox aboard arrived, the steamship company paid the expenses from its own pocket. More ships carrying smallpox arrived, overloading the system at first, and on one occasion passengers slept out in the rain. Life on the station was fairly primitive, with no electricity, inadequate fresh water, poor heating facilities, and frequent fog and wind. The hilly terrain required mules and carts to transport furniture and equipment. In dry weather fires threatened the buildings, and in rainy weather mudslides occurred. Telephone service did not arrive until 1900. Only gradually were improvements made. The media reported bitter disputes between the Marine Hospital Service and the local quarantine officer over who was in overall charge of quarantine. The issue was settled in favor of the Marine Hospital Service only after several years of dispute.

Smallpox had been the principal disease of concern until plague broke out in Hong Kong in 1894 and 1896. This put the station on heightened alert as it disinfected all ships from China. Despite the augmented precautions, in 1900 plague broke out in San Francisco, diagnosed in the Angel Island laboratory. In 1906, the great San Francisco earthquake damaged some buildings, though not seriously. The station continued to be busy until the 1920s, after which its use declined, and it was closed in 1947.

Learning objectives:
1. Outline the history of quarantine in San Francisco.
2. Explain the method of disinfecting ships.
3. Discuss the evolution of quarantine activities in the Marine Hospital Service.

The Physical Examination is a Lost Art—Would Osler Agree?

J. Michael Fuller

Michael Fuller is Associate Professor of Medicine, Assistant Dean for Faculty Development, Program Director for the Internal Medicine Residency and Vice Chairman – Academics for the Department of Medicine at the University of South Carolina School of Medicine - Greenville where he also serves as an attending in the Division of Pulmonary and Critical Care Medicine.

"The radiology dictation line said that the chest x-ray has a left lower lobe infiltrate or effusion. We are getting a CT of the chest to evaluate further." Words like these are heard daily in medical institutions around the world. Such comments have caused many to feel that the physical examination—the use of the prized, sharply honed, primary tools of the physician—is a lost art. The once hallowed words of Osler to "see, and then reason and compare and control, but see first" seem to be fading in the distance. There may be numerous reasons for this declining interest in the art. Advances in laboratory and imaging technology increase the likelihood of undervalued and abbreviated exams. Computer skills and timely arrangement for consultations are often valued more than physical diagnostic skills. Resident work hours are limited with less time to spend in the hospital and at the bedside. Patients are discussed not at the bedside, but around conference tables due to concern for efficiency. The generations of physicians who have practiced in the traditional fashion and are masters at the bedside are retiring. Without leadership, this skill set may completely disappear. Can it be resuscitated?

Current physician leaders would do well to heed the words of McGehee Harvey that, "…the basic tools and concepts that we use…stand more vividly for us when cloaked in the robes of their historical origins." This is not the first time that the physical examination has gone into decline. A study of medical history illustrates how the practice of medicine is a product of the social climate in which it exists. Medical education has moved from a low technology, teacher-centered and uni-dimensional learning environment to one with high technology and student-centered, multi-dimensional learning. The possibilities for curriculum reform provide a blank slate for the revitalization of physical examination skills. This revitalization begins with the recognition that today's medical technology is actually rooted in the history of observational diagnostic techniques. Furthermore, even with these great scientific tools, the art of medicine carries something different—the understanding that we are caring for human beings. Science cannot feel where there is tenderness or discern clues from a patient's facial expression or words. Technology does not give the whole picture. Rather, careful physical examination gives the ability to decide what appropriate technologies to use so that they become an extension of what is done rather than a replacement.

We must strive to enhance and pass on the legacy that has come to us. The historical study of examination techniques and the appreciation of the ability to marry technology with these revered tools of the practitioner create possibilities for the revitalization of diagnostic skills in the next generation of physicians. Osler would agree: "Skill and nicety in manipulation…will do more towards establishing confidence in you than a string of Diplomas, or the reputation of extensive Hospital experience."

Learning objectives:

1. List reasons for a declining interest in physical examination techniques.
2. Outline the historical origin of diagnostic skills as important tools for a practitioner.
3. Describe medical education reforms that may revitalize the examination as a desired skill set.

Treating Melancholia in the Home:
Theoretical Wisdom and Grim Reality in the Career and Life of E. C. Seguin

Christopher G. Goetz

Christopher G. Goetz is Professor of Neurological Sciences and Pharmacology at Rush University Medical Center in Chicago, IL and serves as Director of the Movement Disorders Program. Dr. Goetz is also the United Parkinson Foundation Professor of Neurology. He does research in the history of neurology, his major interest being the study of nineteenth century French and U.S. neurology with particular interest in Jean-Marie Charcot and his school.

Donald H. Harter is a clinical neurologist and neurovirologist who investigated the interactions between viruses and nerve cells, with particular attention to viruses that cause "slow" infections. In 1985, Dr. Harter joined the Howard Hughes Medical Institute as Senior Scientific Officer and Director of the HHMI-NIH Research Scholars Program. He is currently Professor Emeritus of Neurology at the School of Medicine and Health Sciences of George Washington University in Washington, DC. He has a particular interest in early microbiological discoveries and the interface between French and American neurological schools during the nineteenth century.

E. C. Seguin was one of the early, influential 19th century neurologists who participated in the development of neurology as a specialty in the United States. Born in France but raised from early childhood in the United States, Seguin published widely, developed a high-profile New York City practice, and was named Clinical Professor of Diseases of the Mind and Nervous System at the College of Physicians and Surgeons in New York in 1874. Typical of the era, he studied not only neurological disorders, but also several conditions that today would be considered in the realm of psychiatry.

One of his seminal papers was titled “The treatment of mild cases of melancholia at home” (1876). Contrary to the wide spread practice of isolating patients in either rest homes or asylums, Seguin introduced and formalized treatment of depression within the household. In this article, publicized in major journals, he outlined the criteria for selecting patients for this treatment and the guidelines for daily monitoring.

Seguin's wife, Margaret Amidon Seguin, was afflicted with long-standing depression, and she was treated at home using his techniques. When Seguin returned home on October 31, 1882, he discovered that his wife had committed suicide after murdering their three children, ages 4, 5 and 6. The grim dichotomy between the confidently written manuscript and the reality of the treatment failure is a lesson in humility regarding diseases and their unpredictable outcomes.

This presentation is based on original documents, Seguin’s medical writings, and published testimonies on the suicide/murder and its aftermath.

Learning objectives:
1. Contrast the core differences between rest home or asylum treatment of depression and Seguin’s home-based treatment.
2. Explain the historical details of Mrs. Seguin’s killing of herself and her three children.
3. Outline key elements of Seguin’s neurological/psychiatric career before and after his family tragedy.

What Halted The Early Development of Organ Transplantation?

David Hamilton

Dr. Hamilton is the author of A History of Organ Transplantation (2012), Scottish Medicine: An Illustrated History (2011) and The Monkey Gland Affair (1984). He was the AOS McGovern Lecturer in 1994.

About 1915, Egerton Yorrick Davis, of Oxford, wrote playfully to the Rockefeller Institute in New York, "*Dear Sir, Both my kidneys are worn out, my heart is used up and my liver has struck work. How much will it cost to have new ones put in at your Institute?*"

At first sight, Osler's request seems odd: organ transplantation is now regarded as a development of the 1960s. But Osler's awareness of the possibilities at that time was not unreasonable. Organ transplant attempts had been made in Europe in the first decade of the century, and at the Rockefeller Institute, Alexis Carrel had worked intensively on this challenge from 1906. Surgeons at Johns Hopkins, notably Halsted, produced work on tissue grafting of which Osler would be aware. By 1914, Carrel had realized that immunosuppression by radiation or benzol would be effective, and he also had some hopes for tissue matching. But, by the 1920s, organ transplantation had simply disappeared from the studies at the Rockefeller Institute.

The usual explanations for such historical discontinuity are that the original work was carried out in an obscure place, or the researcher was unknown, or that the pioneering publications, only later judged to be perceptive, were hidden in minor journals. None of these factors fit in explaining this halt in transplantation development. The Rockefeller Institute was famous, as was Carrel, and the newspapers of the day followed and admired his every move. Moreover, Carrel's transplantation studies gained him a Nobel Prize in 1912.

One explanation is that Carrel, having shown the way ahead to the surgeons, felt that his equally famous tissue culture methodology, developed just before the War, would uncover more fundamental insights, and would reveal the nature of living matter and malignancy. Simon Flexner, the Institute director agreed, or even suggested this change of direction, and in the 1920s he diverted Carrel further into a huge animal breeding project. This was an inconclusive analysis, prompted by the growing U.S. eugenics movement, of the relative roles of nature and nurture, and it was part of an unproductive phase at the Rockefeller Institute.

But tissue transplantation was no longer on the investigative agenda elsewhere, notably at Hopkins, and this neglect by others of Carrel's road-map for the future of organ transplantation requires a more general explanation. European post-War investigative medicine was at a low ebb, and there was a reaction against Germany's style of medical science, now judged to be too mechanistic. In the resulting shift to holistic medicine, reductionist investigative experimental surgery, notably transplantation studies, faltered, and were not resumed for three decades.

Learning objectives:
1. Examine the early twentieth century development of tissue transplantation.
2. Recognize the delay in development of transplantation research.
3. Explain this failure.

The John P. McGovern Award Lectureship

Louis Pasteur: Exploring His Life in Art

Bert Hansen

Bert Hansen has been teaching history at Baruch College of CUNY since 1994, following appointments at Binghamton University (SUNY), New York University, and the University of Toronto. He holds degrees in chemistry (Columbia) and history of science (Princeton). Trained as a medievalist, Hansen's first book was Nicole Oresme and the Marvels of Nature: A Critical Edition and Translation of "De causis mirabilium" (1985). *Articles have examined obstetrics teaching in the 1860s, the new medical categorization of homosexuals in the 1890s, the advocacy for public health and sanitation in political cartoons from 1860 to 1900, and the popularity of medical history heroes in children's comic books in the United States (1940s) and in Mexico (1960s and 1970s). His second book, Picturing Medical Progress from Pasteur to Polio: A History of Mass Media Images and Popular Attitudes in America was honored with an award from the Popular Culture Association and named to "2010 Best of the Best" for Public and Secondary School Libraries by the American Library Association.*

Louis Pasteur (1822-1895), the French chemist who helped revolutionize medicine and public health, has usually been seen as a dour, rigid, and unsociable workaholic with no personal interests outside of the laboratory—even neglecting his devoted wife and children at times. That picture, however, is incomplete. New research shows that Pasteur was passionately engaged with art and artists from the age of thirteen until his death at age seventy-two. These activities, which take place over the course of an inordinately productive career in science, have not been traced by scholars nor acknowledged, even in passing, in the comprehensive biographies.

Most historians are familiar with the paintings and portrait photographs made of Pasteur at the height of his fame. But he started as a maker of portraits himself, not a sitter for them, under the guidance of a local drawing teacher who cultivated Pasteur's native perseverance and visual acuity, with remarkable results. Even after he put his own drawings aside to study chemistry, Pasteur's involvements were more than just chatting with painters while sitting for his portrait. For example, on a number of occasions, he interrupted his normal work day in the laboratory to take his daughter Marie-Louise to her portrait sittings because he enjoyed discussing art with the man doing her portrait, Jean-Jacques Henner, whom he also invited to informal suppers at his house. In much the same way that Pasteur promoted his own discoveries, he lobbied and used his connections to secure favorable notices of works by artists he favored.

In the early 1880s Pasteur welcomed into his family circle Albert Edelfelt, a promising young Finnish artist. Edelfelt's unprecedented painting of Pasteur in his laboratory contemplating rabies-infected nerve tissue in a drying bottle set into play a new iconography used by other artists to show physicians and scientists actively at work rather than as gentlemen scholars. Even after Pasteur suffered several strokes and retired from laboratory work at age sixty-five, he remained active in commissioning art works for the opening of the Pasteur Institute.

Learning objectives:

1. Understand the place of art in the life and work of one of history's most famous medical scientists.
2. Appreciate how a new look at sources can produce important revisions to historical understanding.
3. Acquire a key historical case for thinking about the place of the arts and humanities in medicine and medical education.

Some Aspects of the Evolution of Therapeutic Bloodletting in Osler's *Principles and Practice of Medicine*

Ernest B. Hook

Ernest Hook, pediatrician and medical geneticist by training, is a *professor in the School of Public Health at Berkeley, is interested in and has published on historical and philosophical aspects of discovery processes in medicine and science. One project involves changes in medical thinking that affected use of bloodletting in the 1800s and 1900s.*

Bloodletting had diminished in the course of the 19th century Britain and the US, but then underwent a resurgence in the late 1800s and early 1900s. In the first edition (1892) of Osler's textbook, he recommended venesection in arteriosclerosis, cerebral hemorrhage, emphysema, [valvular] heart-disease, [lobar] pneumonia, and sunstroke. The recommendation and discussion of its usage in lobar pneumonia outlasted all the other listed recommended indications in the 1st edition, going through two subsequent authors up to last edition to list Osler's name on the title page, the 16th, by Henry Christian, in 1947.

In the 1st edition, Osler wrote on what was later termed lobar pneumonia, that it is one of the diseases in which a timely venesection may save a life. "In a full-blooded, healthy man with high fever and bounding pulse the abstraction of from twenty to thirty ounces of blood is in every way beneficial, relieving the pain and dsypnea, reducing the temperature, and allaying the cerebral symptoms it is a rational procedure and, in cases of emphysema and of heart disease, proves satisfactory under identical hydraulic indications..."

In the 3rd edition (1898), he included the telling comment, "We employ it nowadays much more than we did a few years ago", implying that in just six years he had observed a notable increase in usage. Yet he became more restrained and flexible in subsequent editions. In the 8th edition (1912), for instance, the last of which he was sole author, he wrote "The quantity of blood removed must be decided by the effect; small amounts are often sufficient."

Osler's discussion of bloodletting in 1892 indicated both his literary and historical interests: "The reproach of Van Helmont that a 'bloody Moloch presides in the chairs of medicine', cannot be brought against the present generation of physicians. During the first five decades of this century the profession bled too much, but during the last decade we have certainly bled too little." Presumably many of his readers versed in the Old Testament would have known that a "Moloch" was a Caananite idol which demanded a costly sacrifice. But how many would have known that Van Helmont was a prominent medical iatrochemist of the 1600s whose theory denounced bloodletting? Perhaps Osler hoped this passage might have inculcated an interest in some aspects of medical history. These historical passages lasted through the editions written by McCrae and then Christian into the 1940s, neither of whom, one suspects would alter this charming historical legacy of their former Chief.

Learning objectives:
1. To explain the rationale for Osler's original endorsement of bloodletting in lobar pneumonia.
2. To indicate the changes in this endorsement.
3. To indicate Osler's usage of medical history in his comments on bloodletting.

Recognizing Patterns: Dr. Lindau's Quest to Understand a Syndrome

Kristin Huntoon

Kristin Huntoon Ph.D. is a fourth year medical student at New York College of Osteopathic Medicine in Old Westbury, NY. She completed her undergraduate studies at Michigan State University, during which time she studied abroad at Kungliga Tekniska högskolan in Stockholm, Sweden, for a year. She then pursued graduate work in Cellular and Molecular Biology at Roswell Park Cancer Institute in Buffalo, NY. During medical school, she did research on von Hippel-Lindau disease as a Clinical Research Training Program fellow in the Surgical Neurology Branch at the National Institutes of Health in Bethesda, MD.

Dr. Arvid Lindau embodies the breadth of the term "physician": he was a pathologist, a researcher, an active member of his local government, a believer in the social determinants of health, and a professor widely-liked by his colleagues and students. In addition to all this, he stands as a model for the crucial medical skills of making observations and identifying connections.

The early 20th century was a time of great advances in medicine, and many great physicians combined the ancient art of observation with new understandings of anatomy, physiology and disease. Dr. Lindau made the connections necessary to combine a disparate array of pathologies into a classifiable syndrome – now known as von Hippel-Lindau (VHL) disease – without the benefit of modern technologies we now take for granted. His attention to detail, his ability to recognize patterns, and his drive to understand the connections he discovered should make him a paragon for physicians and researchers today. Sadly, while other physicians of his time are well-known and deservedly lauded, much less is known of Dr. Lindau's work in formulating his understanding of VHL. As we continue to develop new and exciting technologies to assist in the diagnosis, treatment and prevention of disease, we risk losing sight of the importance of curiosity, observation and humanity. By understanding the story of Dr. Lindau's work, we can remain vigilant in emulating the open-mindedness and drive of Arvid Lindau and his fellow pioneers.

Learning objectives:

1. Develop an understanding of the breadth of Dr. Arvid Lindau's activities in the many facets of his life as a physician and citizen.
2. Gain insight into the process of making observations and finding connections in unexpected places by exploring Dr. Lindau's work in classifying von Hippel-Lindau syndrome.
3. Explore the ways in which Dr. Lindau's discoveries have aided sufferers of von Hippel-Lindau, and our continuing struggles to understand the disease.

Christopher Morley's Letter to Norman [Cousins?], July 7, 1947, or Should Christopher Morley Be Made a Posthumous Honorary Member of the AOS (nonvoting)?

Richard J. Kahn

Richard Kahn is Patty's husband. Less important: five months ago, after 40 years of practice, he began working part-time and plans to find some daytime hours to work on historical projects.

Our son Ian, an antiquarian bookseller, unearthed a letter from Christopher Morley (1890-1957) to "Norman." I assume the recipient to be Norman Cousins (1915-1990). Morley cofounded the *Saturday Review of Literature* in 1924. Cousins joined the staff in 1940, and he became its editor in 1942. I am hoping for a second "Norman Conquest" by gathering letters (evidence) from New York City, Texas, and California regarding "Norman."

Most of the 1947 letter involves Osler, Cushing, and Sherlock Holmes. In 1900, Christopher Morley moved to Baltimore, where his father taught mathematics at Johns Hopkins. After graduating Haverford College in 1910, he was a Rhodes scholar at New College, Oxford University 1910-13 and it is there he met William Osler, who made a great impression on the young scholar as noted in his letter of July 1947. In 1921, *Modern Essays selected by Christopher Morley* included Osler's "The Student Life," which is preceded by some biographical material about Osler that includes the following: "As one who has found them [Osler's essays] an unfailing delight, I venture to hope that our medical confrères may not be the only readers to enjoy their vivacity and charm." Osler's essay joined those of Joseph Conrad, George Santayana, Bertrand Russell, and many other leading authors of the day. Morley's first two novels, *Parnassus on Wheels* in 1917 and *The Haunted Bookshop* in 1919, were about the love of books and book collecting. It is easy to imagine Morley and Osler discussing their favorite books, authors, and classical references.

Learning objectives:

1. Who was Christopher Morley and what was his interest in William Osler?
2. Was the "Norman" to whom the letter was addressed actually Norman Cousins?
3. How would you describe *Parnassus on Wheels*?

Osler's Contributions to Disorders of Posture, Stance, and Gait

Douglas J. Lanska

Douglas Lanska is senior staff neurologist and former Chief of Staff at the Tomah VA Medical Center, and has been Professor of Neurology at the University of Kentucky and the University of Wisconsin. Dr. Lanska has published widely on the history of neurology and serves as Editor for the History of Neurology for the Journal of the History of the Neurosciences. He was awarded the McHenry Award three times and also received a Tyler Fellowship from the American Academy of Neurology for his contributions to the history of neurology.

William Osler (1849-1919) made significant contributions to neurology during his tenure from 1884 to 1889 at the Infirmary for Nervous Diseases of the Philadelphia Orthopedic Hospital where, as a colleague of Silas Weir Mitchell (1829-1914), he conducted investigations of choreiform disorders and cerebral palsy, and made several lasting contributions to the clinical description of disorders of posture, stance, and gait. These observations were incorporated into journal articles, monographs, and *The Principles and Practice of Medicine*. *S*ome have been handed down as Oslerian aphorisms.

For example, in *Cerebral Palsies of Children* (1889), Osler utilized footprint tracings to illustrate the scissoring gait of spastic diparesis and drew classic illustrations of the "scissoring" stance of such patients. In *On Chorea and Choreiform Affections* (1894), Osler noted that the "enfeeblement of the muscular strength" in Sydenham's chorea occurred without "actual paralysis," and could present with a hemiplegic, paraplegic, or more frequently monoplegic pattern. Further, "the monoplegic cases in young girls about the age of puberty may be difficult to separate from hysterical [psychogenic] monoplegia."

Osler was particularly intrigued by cases of Huntington's disease, and lauded the clinical description by George Huntington (1850-1916). In *On Chorea and Choreiform Affections* (1894), he noted that in Huntington's disease, "one of the most striking peculiarities is the gait … which may be very early affected [and is] unlike the gait in any other affection. The station may be good with the exception of a slight swaying of the trunk, but on attempting to walk the unsteadiness develops and is characterized by large lateral deviations from the straight line, by marked swaying of the body and sometimes by precipitate movements, in which the patient almost falls but catches himself. … It has been very well compared with the gait of a drunken man. The difficulty in locomotion may persist before the patient becomes bedridden."

Osler was in Philadelphia during the 1884-1885 collaboration at the University of Pennsylvania between photographer Edweard Muybridge (1830-1904) and neurologist Francis Dercum (1856-1931). Muybridge and Dercum used series of sequentially-triggered single-image cameras to record the gait in 21 patients with various neurological disorders, including tabes dorsalis. Based on his own clinical experience and these photographs, Osler created one of his classic aphorisms concerning the dynamic Romberg phenomenon: "The normal man walks by faith, the tabetic by sight."

Learning objectives:

1. List Osler's important contributions to disorders of posture, stance, and gait.
2. List the disorder in which Osler recognized the dynamic Romberg phenomenon, and articulate Osler's aphorism.
3. Indicate which disorder that Osler felt was likely to be confused with hysteria in adolescent girls.

William Harvey's *De Motu Cordis* and the Heart as Metaphor

Robert I. Levy

Robert I. Levy, M.D is a retired nephrologist. Since retirement, he has been working part time at the History of Medicine Library at the Johns Hopkins Welch Library. He has written articles on a variety of subjects for presentation at the AOS meetings. These have included articles on the history of nephrology, Richard Bright, animal chemists in the circle of Richard Bright, etc.

This paper is introduced with a consideration of the heart as metaphor. Myriads of metaphors relating to the heart are a continuing everyday experience. The OED lists 53 pages of metaphors of the word "heart." Their origins reflect the history of the multiple functions attributed to the heart prior to William Harvey's *De Motu Cordis*. Examples of such metaphors are "a warm- hearted person" originating from Galen's concept that an important function of the heart was to provide innate heat. The Bible and Shakespeare contribute multiple examples.

Harvey's early life, education at Cambridge and Padua are discussed. His initial stimulus to reevaluate cardiac function was related to the discovery of valves in the veins by Fabricius, his teacher in medical school. Retuning to London he delivered lectures or *Prelectiones* that described his observations in comparative physiology using cold blooded animals to allow more accurate demonstration of the heartbeat. Using quantitative methods, he concluded that the large volume of ejected blood from the heart could be managed only by postulating the concept of a circulation. Additional studies of ligatures applied to the limbs, noting the direction of venous flow supported the concept of a circulation of the blood.

Publication of *De motu cordis,* a slim volume of 72 pages is discussed. Harvey's poor handwriting and the fact that the printing was done in Frankfurt, Germany required an *errata* leaf to correct 126 items. Harvey's revolutionary concepts were fairly well accepted in his life time. The French were particularly intransigent, Jean Riolan objecting to Harvey's straying from Galen's 1500 year old doctrines, including the concept of pores in the septum of the heart and the direction of venous flow. Several letters were exchanged in a discussion of these matters.

Harvey did not use the word pump in any place in the *De Motu Cordis,* preferring to use such words as eject, drive out or send forth. This is to be explained by Harvey's adherence to Aristotelian concepts of vitalism where an innate animistic force is to be considered rather than mechanical factors. Descartes, on the other hand, was one of the first to champion Harvey's theory of the circulation since it complemented his theory of such a mechanical world view.

Learning objectives:

1. Consider the meaning of a "warm- hearted person" as it reflects Galen's belief that one of the heart's major functions to provide innate heat.
2. Review how Harvey first postulated a circulation of the blood, entirely at variance with that of Galen.
3. Review Harvey's education as well as prior sixteenth century concepts of cardiac function.

Osler Online – Finding Oslerian and Other Historical Medical Information on the Web

Christopher M. Lyons

Christopher Lyons has been with the Osler Library since 2004, first as a liaison librarian and, since 2012, as Head Librarian, and has led the Library's digitisation and other online initiatives. He has written a number of articles and given several presentations on the Osler Library and its online resources, including a presentation at the Thirty-Ninth Annual Meeting of the American Osler Society in Cleveland, Ohio, in 2009 on the William Osler Photo Collection. He is also currently President of the Archivists and Librarians in the History of the Health Sciences.

These are exciting and in some ways frustrating days for those researching in the history of medicine. The amount of historical material available on the web continues to grow at an astronomical pace. The good news is that much of it is freely accessible; the bad news is that it can be very hard to find. The Osler Library has been trying to help researchers identify useful sources of information on the web by listing a selection of sites on its website. The Library has also been creating indexes to its collections and digitising some of its unique or rare holdings, such as the William Osler Photo Collection. This presentation will instruct members on how to find and use a selection of the key resources listed on the Osler Library website. The main focus of this presentation is the unveiling of the Library's latest project: a publically accessible index to over 7,000 William Osler letters and related items collected by Dr. Harvey Cushing for his 1925 biography *The Life of Sir William Osler*. This is one of most popular collections of the Library, and making this index publically available should be a great resource for those interested in Osler and medicine of the period. In the future, the Library hopes to add references to more Osler letters in its holdings and provide scans of the actual letters online.

Learning objectives:

1. Identify Osler correspondence held in the Osler Library of the History of Medicine.
2. Discover online resources for historical medical research collected by the Osler Library.
3. Use a selection of online resources for historical research.

William Grant Stewart and a Way of Life

C. Ronald MacKenzie

Dr. MacKenzie is associate professor of medicine (Rheumatology) and public health (Medical Ethics) at the Weill Cornell Medical Center, New York, NY. He holds the C. Ronald MacKenzie Chair in Ethics and Medicine at Hospital for Special Surgery. Co-Author: Christopher Lyons is the head librarian at The Osler Library of the History of Medicine, McGill University, Montreal, Quebec, Canada.

In the spring of 1913 William Osler traveled to the United State for the last time to deliver the Stillman Lectures at Yale University. In response to a request to meet informally with faculty the night before this distinguished address, Osler requested the attendance of undergraduate students to whom he presented his now familiar work entitled *A Way of Life*. Written en route to America, it was finished in the Graduates' Club at New Haven on the day of presentation and delivered in Woolsey Hall from the handwritten notes of that afternoon. Echoing Carlyle's famous admonition "not to see what lies dimly at a distance, but to do what lies clearly at hand," the essence of Osler's 'lay sermon' is a plea to do the day's work, living in the day (day-tight compartments). Of Osler's non-medical works, *A Way of Life* is amongst his most enduring, owing in part to its champion at McGill, William Grant Stewart.

William Grant Stewart (1860-1928) was, like Osler, the son of a clergyman. Educated in Ontario he received his MD from McGill in 1888, four years after Osler's departure to Philadelphia, graduating first in his class. Upon completion of postgraduate work in Berlin, London and Edinburgh, he returned to Montreal where he pursued the private practice of medicine for the next 40 years, succumbing ultimately to cardiac disease. His obituary states that in his death he "bequeathed a pure standard of life, a record of lofty ambition for the public good, a monument of labor." Further he bequeathed an important Osler tradition.

Stewart's private interests paralleled those Osler in one other respect, as books were said to be the greatest of his recreations. Indeed it is William Grant Stewart who, in 1927, conceived and initiated the now traditional presentation to McGill medical students of a copy of his favorite address, Osler's *A Way of Life*. In one of Stewart's reproduction of this work, his prologue reads, "I consider this a beautiful lay sermon. I am giving it with the hope that seed will fall into good soil and bring forth, some one hundred fold some sixty, some thirty."

This presentation reviews the tradition established at McGill by Stewart and provides a brief history of its founder and commentary concerning this important Osler work. Representative reproductions of A Way of Life from the last 100 years will be available for examination by audience members.

Learning objectives:

1. Evaluate the significance of *A Way of Life* in the catalogue of William Osler.
2. Evaluate the role played by William Grant Stewart in the persistence of this important Oslerian non-medical work.
3. Discuss the significance of William Grant Stewart in the development of an enduring Oslerian tradition at McGill.

The Osler Student Societies of the University of Texas Medical Branch: A Medical Professionalism Translational Tool

Michael H. Malloy

Dr. Malloy is a neonatologist and Professor at the University of Texas Medical Branch, Galveston and holder of the John P. McGovern Chair in Oslerian Education and Assistant Dean of the Osler Student Societies.

As "translational medicine" seeks to move basic scientific research to practical diagnostic procedures and therapies with meaningful improvements in physical mental, or social health outcomes, so I use this term to indicate the attempt to transmit, interpret, and integrate the cognitive base of medical professionalism attributes into the educational process of medical students. The importance of doing so resides in the extensive attempts over the past 20 years to re-define medical professionalism as it relates to the medical ethics and moral values of the physician-healer and the obligations of the medical professional in contemporary society. How to best convey these attributes to medical students and to integrate them in the process of identity transformation associated with the development of a new physician remains a process in evolution.

A narrative-based approach to the integration of professionalism in medical education proposed by Coulehan (Acad Med 80(10):892-898, 2005) offers an appealing method to accomplish the task in a less didactic format and in a way that promotes more personal growth. The Osler Student Societies of the University of Texas Medical Branch were developed to promote faculty-student interaction and the Oslerian ideals of humanistic medicine, and they offer a convenient vehicle to carry out the narrative-based approach proposed by Coulehan. Through mentor-modeled professional behavior, opportunities for student self-reflection, the development of narrative skills through reflection on great literature, and opportunities for community service, the Osler Student Societies provide a ready-made narrative-based approach to medical professionalism education.

Learning objectives:

1. To review the attributes and issues associated with developing a humanistic and virtuous physician.
2. To describe the motivation for and the development of the Osler Student Societies at UTMB.
3. To illustrate how the Osler Student Societies provide a method for integrating medical professionalism into the life of a new physician using a narrative-based approach.

Friedrich J. Wohlwill, MD: A Fight for Science and Against Fate

Eric L. Matteson

Eric L. Matteson, M.D., is chair for the Division of Rheumatology in the Department of Internal Medicine at Mayo Clinic. He has a joint appointment in the Division of Epidemiology in the Department of Health Sciences Research and is faculty in the Clinical & Translational Science program at the Mayo Graduate School.

Friedrich J. Wohlwill was born into a renowned academic family in Hamburg, Germany, on August 20, 1881. He studied medicine at the Universities of Freiburg, Munich, and Strassburg, where Friedrich von Recklinghausen awakened Wohlwill's interest in pathologic anatomy. After Wohlwill completed his medical studies, he returned to Hamburg and worked under the well-known pathologist Eugen Fraenkel. He then trained in neurology under several famous neurologists.

In 1924, Wohlwill was named professor of pathology and then director of the department of pathology of Hamburg's oldest hospital, Saint George, where he worked for eight years until 1933. While at the university in Hamburg, Wohlwill published the first coherent account of microscopic polyarteritis (polyangiitis) nodosa. After a careful pathohistologic examination of these cases, Wohlwill distinguished them from classic polyarteritis nodosa as described by Kussmaul and Maier.

This period of enormous productivity and collegiality was interrupted by the election of the National Socialists under Adolph Hitler in 1933. Because he was Jewish, Wohlwill was forced to resign his position in Hamburg, but he was able to assume a position at the cancer institute in Lisbon, Portugal, where he eventually was appointed director of the Institute for Pathology. Wohlwill stressed the importance of close contact between the clinic and the department of anatomy in order to better understand disease processes and to provide a more solid foundation for medical education.

At age 65, after 13 years of fruitful activity in Lisbon, Wohlwill immigrated to the United States to be closer to his children. Wohlwill continued to be an outstanding pathologist and teacher, working in Cooperstown, New York, and Danver, Massachusetts, and finally in the neuropathology section of the Warren Museum of Harvard Medical School in Boston, Massachusetts. He continued to be professionally and scientifically active to his death in 1956. Wohlwill's intense productivity reveals an astonishing vitality and the ability to rise above external circumstances, which, as his student and commemorator, Schuback, wrote, "does not really fit into our contemporary times with the search for security."

Learning objectives:
1. Discuss the recognition of microscopic polyarteritis.
2. Discuss the concept of inflammatory vasculopathies from the perspective of the early 20th Century.
3. Discuss the social and political context of the life in medicine of Friedrich Wohlwilll.

Paul Dudley White, T. Duckett Jones, and the History of Rheumatic Fever

J. Mario Molina

J. Mario Molina is CEO of Molina Healthcare, sits on nonprofit boards, and is an avid collector of medical books and stray dogs.

In 1931, Paul Dudley White wrote that in New England, rheumatic heart disease (RHD) "is the commonest of all types [of heart disease] being found in approximately 40% and in 93% of all cases under the age of 20." These findings were based on research from his own practice, compiled by T. Duckett Jones in 1928.

Jones came from a medical family and, after completing medical school and residency in Virginia, did a cardiology fellowship under White at the Massachusetts General Hospital (MGH). This was followed by a year with White's mentor in London, Sir Thomas Lewis. Upon his return, Jones received an appointment at the House of the Good Samaritan in Boston, where he spent the next 19 years studying rheumatic fever. At the time, RHD was the leading cause of death for persons age 5 to 15 years old. Jones developed a detailed record keeping system that allowed him to follow the natural history of rheumatic fever. Under P.D. White, Jones inaugurated the rheumatic fever clinic at MGH.

In 1944, he published the landmark paper "The Diagnosis of Rheumatic Fever" in JAMA, and the "Jones criteria" for the diagnosis of rheumatic fever became widely adopted. The most common manifestation is carditis, which is the most important because it is the only part of the illness that leads to permanent disability. In 1948, Jones co-authored the first report on the use of penicillin in eradicating throat infection thereby preventing rheumatic fever. After his death in 1954, the American Heart Association inaugurated the T. Duckett Jones Memorial Lecture; the first one was given by P.D. White in 1962.

John Poynton was the first to identify the association between streptococcal infection and rheumatic fever. Because the causative link could not be proven, the diagnosis of RF was made on clinical grounds using the "Jones criteria." While common in the early 20th Century, by 1986 rheumatic fever had disappeared from the industrialized world. Medical students today are unfamiliar with the "Jones criteria" and few have ever seen a case of rheumatic fever. It is thought to result from infection with certain types of group A streptococci that induce an autoimmune reaction. While antibiotics have been credited with the decline in rheumatic fever, the incidence began to decline even before the introduction of antibiotics. It now appears that the manifestations of rheumatic fever and RHD are due to rheumatogenic types of group A streptococci that have largely been replaced by non-rheumatogenic types in acute streptococcal pharyngitis in children in the United States.

Learning objectives:

1. State the leading cause of heart disease in the early 20th century.
2. Identify two contributions made by Jones to the diagnosis and treatment of rheumatic fever.
3. Give the bacteriological explanation for the disappearance of RHD from the United States.

Sir Thomas Browne's Head

Michael E. Moran

Dr. Moran is the Curator for the American Urological Association's William P. Didusch Center for Urologic History. He is currently an Adjunct Clinical Associate Professor of Urology at the University of Florida. In addition, he has adapted to his new practice to the Sonoran Desert in Southern Arizona where he lives, practices, reads and writes.

Sir Thomas Browne, Osler's favorite author and perhaps the Muse of Bibliophilia, was an avid collector of manuscripts and ephemera. In writing, he is also known to have had a certain irony and sarcasm that might also have appealed to the imp within Osler.

Sir Thomas Browne (1605-1682) was a polymath, linguist, antiquarian scholar, natural philosopher, theologian and bibliophile. He was born in Cheapside, London the son of a successful merchant. He attended Oxford University and received his medical degree from Leiden in 1633. Browne moved to Norwich, England, where he lived and practiced for the rest of his life. His first well known work was *Religio Medici* (1642). In *Hydriotaphia* (1658), he discussed the ancient Egyptian method of embalming bodies and noted "all was vanity, feeding the wind, and folly. Egyptian mummies, which Cambyses or Time hath spared, avarice now consumeth. Mummy is become merchandise, Mizraim cures wounds, and Pharaoh is sold balsams." Browne was lampooning the notion that or medicines derived from mummies did any good and deriding those who utilized such therapies.

Cranioklepty is the removal of the skull from the buried or unburied dead, usually for purposes of collection, but in some instances for enshrinement. In fact, the use of body parts has a long and illustrious history from the Roman Catholic tradition of reliquary or enshrinement of martyrs and saints.
Browne famously anticipated all too poignantly his own burial desecration and his skull's resurrection: "who knows the fate of his bones, or how often he is to be buried?....To be gnawed out of our graves, to have our skulls made drinking-bowls, and our bones turned into pipes to delight and sport our enemies, are tragical abominations." In 1840, workers digging a grave at St. Peter Mancroft church unwittingly opened Browne's vault. The sexton, George Potter, called in Dr. Robert Fitch a chemist, druggist, and amateur to record the findings of the exhumed body. Browne's earthly remains were re-interred, except that Potter sold the skull to Dr. Edward Lubbock for an unrecorded sum. He in turn gave the skull to the Norfolk Hospital Museum where Charles Williams a young surgeon (a lithotomist ironically) began to investigate the skull intensely. In 1848, the Norwich Pathologic Society was formed and its members met quarterly in the Norwich and Norfolk Hospital Museum, joined in that year by the skull of past member, Sir Thomas Browne. In 1851, the Museum formally put Browne's skull on display, along with hundreds of calculi for which the institution had rightfully become famous.

Learning objectives:
1. Describe the afterlife of Sir Thomas Browne's skull.
2. Discuss his morbid fascination with death, dissection and "division."
3. Explain how the writings and thinking of Sir Thomas Browne were predictive of the subsequent exhibition of his skull.

Nikolai I. Pirogov: A Russian Osler? Some Reflections on the Function of the "Great Man Myth" in Medical History

Rimma Osipov

Rimma Osipov is an MD/PhD student at the University of Texas Medical Branch in Galveston. Her graduate work at UTMB's Institute for the Medical Humanities has been focused on the history of medicine as well as literature and medicine. She has previously presented on the history of the American Osler Society and its connection to the Medical Humanities movement at the 2012 meeting of the American Society for Bioethics and Humanities.

Nikolai I. Pirogov (1810-1881) was one of the most admired Russian medical men of the 19th century. In a career that spanned enormous transitions in medical knowledge and practice, as well as in Russian society as a whole, Pirogov, a surgeon, worked to reform Russia's antiquated system of medical education, introduced updated practices such as surgical anesthesia, authored an exacting, modern textbook of anatomy, and worked to build up the autonomy of Russian physicians as a professional group within the arcane Tsarist bureaucracy of his time. Like his younger contemporary, Sir William Osler, active in North America and Britain during an era of equally dramatic scientific and social transition within medicine, Pirogov's name became synonymous with the humanitarian and educational aspects of medicine, remembered by generations of students as their "great teacher."

Although the lives of these two great physicians demonstrate some strikingly common themes, it is their "afterlives" that can offer some of the most interesting insights. Charles S. Bryan and Richard L. Golden examine what they term "the Osler industry," asking "what is this fascination with Osler?" as they list the hundreds of articles and dozens of societies devoted to William Osler. A glimpse at Russian medical literature reveals a similar trajectory, with Pirogov inspiring over a century's worth of scientific congresses and physician societies. Established in 1881, the year Pirogov died, the Pirogov Society promoted a sense of unity among physicians as they negotiated their roles and promoted reform in a charged political climate. Re-established after the Communist period, the society provides a forum for what many still feel is a beleaguered profession. Under very different circumstances, Osler's admirers also drew on their familiar hero in uncertain times. Chester R. Burns and John P. McGovern, founding members of the American Osler Society, referred to the AOS as an effort "to bring Osler to the aid of a troubled profession." Osler's legacy as a patient-centered physician, teacher, and humanist was called upon as an antidote to the perceived growing impersonality and disillusionment of contemporary medicine.

Considering Osler and Pirogov together can help us tell the story of their particular era within the history of medicine. However, considering the legacies these two "great teachers," can broaden our perspective on contemporary issues as well. Why do physicians seem particularly drawn to what some critics have called hagiographic portrayals of their predecessors? Why do doctors need heroes, and how do they choose them? What kind of work are "great men" and for that matter "great women," called upon to do even long after they are dead?

Learning objectives:
1. Introduce Nikolai Pirogov as a significant figure in Russian medical history.
2. Compare the lives and legacies of Nikolai Pirogov and William Osler.
3. Examine the implications of these two physicians' legacies for the function of the "great man myth" for groups of physicians.

The Most Famous Neurologist You Never Heard of:
Charles Loomis Dana, MD

Clyde Partin, Jr.

Clyde Partin teaches in the Department of Medicine at the Emory School of Medicine in Atlanta. He labors diligently in the world of poetry, having amassed a ratio of poems written to poems published in the range of 35:1. As did Osler, he has a love of sports. He is a member of the Emory Sports Hall of Fame. He spent six years in the USAF as a flight surgeon. Residing near the Emory campus with his wife Kim DeGrove, his two sons attend Emory.

My interest in Charles Dana, MD stems from his book, *Poetry and The Doctors*, published in 1916 by the Elm Tree Press. Dana (1852-1935) was born in Woodstock, Vermont. His father, a keen man of letters, made sure his sons were well-educated at the local schools, augmented by private tutors. While in college at nearby Dartmouth studying the classics, Dana dabbled in medicine with a local Woodstock practitioner, Dr. Boynton. After graduation, he moved to Washington, DC, and became the secretary to the US Senator from Vermont, Justin Morrill, followed by jobs at the Smithsonian Institute and Woods Hole which allowed him to pursue his penchant for natural history. Ever industrious, he somehow gained entrance into several medical schools, including Columbia, Georgetown and Dartmouth. After receiving one medical degree, he matriculated at the College of Physicians and Surgeons in New York and received yet another one. Studying under E.G. Janeway and Austin Flint at Bellevue, his interests in neurology and his love of writing flourished. Greek literature particularly enthralled him. He and his brothers founded the Elm Tree Press in Woodstock, an outlet for many of his works on Horace and other classicists. Despite his success in New York, his roots were in Woodstock and he maintained a whimsical retreat, Togo Hill, on a mountainside there, adorned with Hellenistic statuary and replicas of Greek temples.

As Dana ascended the academic world of neurology, largely at Cornell Medical School, he developed expertise in forensic psychiatry and forged a career as a medico-legal expert. Testifying in high profile criminal cases garnered him frequent newspaper headlines, but he was eventually disenchanted with the psychiatric realm and retreated from the more psychiatric oriented aspects of his career to concentrate on neurology. In 1892, his fame blossomed with the publication of a textbook, *Diseases of the Nervous System*, which went through ten editions. Curiously, in 2006, Jed Rubenfeld published an historical novel, *The Interpretation of Murder*, which recounts Sigmund Freud and Carl Jung's visit to the USA in 1909. Dana appears in the novel as an antagonist to Freud, who is using psychoanalytic technique to solve a murder case. In Dana's papers, there is an unpublished essay brutally dismissive of Freud, remarking "the serious application of Freudian doctrine is a thing to be avoided."

Oslerians will be pleased to know that Dana was a contemporary of Osler, helped found the Charaka Club and was an invited guest at Osler's 1906 farewell dinner at the Waldorf-Astoria Hotel in New York. Like Osler, Dana suffered the loss of a son in World War I.

Learning objectives:
1. Explain why we should examine the life and writings of Dr. Dana - a medical educator, scientist, neurologist, writer and humanist.
2. Discuss the evolution of his neurology textbook with attention to his shifting views on the field of psychiatry.
3. Understand what the book Poetry and the Doctors was about and why he wrote it.

The Diagnosis of Incorrigible Criminals:
From Bumps on the Skull to Psychopathy

Rachel Pearson

Rachel Pearson is a fourth-year MD/PhD student at the University of Texas Medical Branch and the Institute for the Medical Humanities, and she is proud to be an Osler Student Scholar in the John P McGovern Academy for Oslerian Medicine. Her graduate research in the medical humanities focuses on consciousness theory, the history of psychiatry, and poetry and literature in medicine.

This paper traces important changes in physicians' theories of mind over the last two centuries via the lens of two diagnostic technologies: phrenology and the Psychopathy Checklist. It shows how diagnostic technologies have changed, but asks this question: have the basic social projects that our diagnoses support truly advanced?

Research using texts from the Blocker History of Medicine Collection shows how the European practice of phrenology—examining bumps on skulls to diagnose mental and emotional aberrations—was well-received in the U.S., in part because it was consistent with contemporary theories of mind advanced by American physicians such as Benjamin Rush. Physicians of the 19th century thought that madness had distinct physical causes, and so it made sense to diagnose insanity by looking at the skull. Later, physicians inspired by the phrenologists began to diagnose a category of people called "incorrigible criminals" by examining their skulls and bodies. This diagnosis led to the permanent imprisonment, execution, and in some cases sterilization of criminals. Osler would denounce phrenology in his 1894 address *The Leaven of Science*, claiming that advances in neurophysiology "have enabled psychologists to dispense with metaphysics altogether."

This paper asks contemporary physicians whether we are living up to Osler's claim. Although our use of the Psychopathy Checklist shows how we now understand insanity through the medium of language—rather than through bumps on the skull—we continue to diagnose "incorrigible criminals." Nowadays, we call them psychopaths.

Learning objectives:
1. Explain major aspects of the history of the diagnosis of "incorrigible criminals" in the United States, from 1821 to the present day.
2. Describe how the historical medical technology of phrenology was consistent with 19th-century physicians' theories of mind, and how the Psychopathy Checklist is consistent with present-day theory of mind.
3. Discuss the moral and ethical issues that face contemporary physicians who diagnose psychopathy, relating them to the ethical issues of our 19th-century colleagues.

"Give Me a Break!" Küntscher and His Nail

Claus A. Pierach

Claus Pierach is Professor of Medicine at the University of Minnesota Medical School, Twin Cities Campus, Minneapolis, where he continues his clinical work with porphyria. He is a past president of the American Osler Society.

It has long been established that the healing of broken bones requires immobilization, often with splints, and at times with prolonged bed rest. Casting with plaster of paris was introduced in the latter half of the 19th century and Osler likely saw patients with such a cast. Later, traction was added to assure proper position of the bony fragments. Early attempts to fix the fractures internally failed since the material was either not biocompatible or broke easily.

This changed when the German surgeon Gerhard Küntscher (1900-1972) stabilized broken long bones with the intramedullary insertion of "nails." These stainless steel rods had a cross section of a V or a cloverleaf, important for their internal resilience, and were introduced through a small incision, distant from the fracture. Additional instruments for successful nailing of fractures were later developed by Küntscher and others, patented and all initially manufactured by a single company (Pohl in Kiel, Germany). Küntscher started to treat fractures by his method in the 1930s while working as a physician at the Kiel University. During World War II he was stationed for two years in Finland where he treated wounded soldiers and prisoners of war.

In 1940, he presented his early and encouraging results to the German Surgical Congress and was fiercely rejected by the academic establishment. It was the army that allowed him to continue his work. POWs returning home after the war propagated the new methodology simply by revealing on roentgenograms the rods in their legs (though they were initially suspected to result from German torture). Thus, while Küntscher's fame spread, he remained shunned in German academic circles. He was never offered a chairmanship and was seen as a pariah. After the war he practiced mostly in non-academic hospitals in Hamburg (where fifty years ago the author studied and worked with him for half a year), in Flensburg and Schleswig. His experiments and experiences were published in more than 200 articles, almost all with Küntscher as the single author.

It is not known to what extent Küntscher obtained consent from his patients for these new operations. He himself later said that he considered *all* operations experimental. One can only imagine what would have happened had his operations on POWs not gone so well. He would have likely been accused of crimes at the Nuremberg Doctors Trial, 1947, especially since he was also an early member of the Nazi Party. The latter circumstance did not seem to have helped or hindered his career.

While Küntscher got many a break in broken bones, he never got his accolades for his great success in treating fractures, nowadays a universally accepted technique that helps a patient to get up from bed within days rather than months, thus saving costs and sparing them from much misery.

Learning objectives:
1. Describe the progress in treating broken bones.
2. Consider the ethical challenge of experimental surgery.
3. Ponder the difficulties that can exist within academic hierarchies.

Osler Versus the Centaur: William Bean, Felix Marti-Ibañez, and the Struggle Over the Medical Humanities

Scott H. Podolsky & Jeremy A. Greene

Scott Podolsky, M.D., is Associate Professor of Global Health and Social Medicine at Harvard Medical School, and Director of the Center for the History of Medicine at the Countway Library of Medicine. Jeremy Greene, M.D., Ph.D., is Associate Professor, Elizabeth Treide and A. McGehee Harvey Chair in the History of Medicine at the Institute of the History of Medicine at Johns Hopkins University.

In 1959, William Bean published in the *Archives of Internal Medicine* a delightfully snarky review of a new book garbed in a "not unattractive meconium-colored paper jacket" with a chimeric figure on the cover. Felix Marti-Ibañez's *Centaur: Essays on the History of Medical Ideas* was meant to be the first in an ambitious four-part series on the history of medicine, but Bean felt the prospects of the tetralogy to be so monstrous that it might better be termed a "teratology." Marti Ibañez had written "such an extravagantly bad book," Bean archly wrote, "that one sympathizes with the guilt complexes awakened in the numerous persons praised in the acknowledgements."

At the time Bean wrote the review, he had already edited the writings of Sir William Osler, whom he located as the guiding vision of medical humanities in North America. Bean's *Sir William Osler: Aphorisms* would become a sturdy reference point for all who claimed to define an "Oslerian" approach to medical humanism. By the early 1970s, Bean would become the Sir William Osler Professor of Medicine at the University of Iowa College of Medicine, and the founding President of the American Osler Society.

And yet, Ibañez, too, thought he was returning medicine to its humanistic underpinnings. Simultaneously a physician, medical publisher, medical historian, and pharmaceutical public relations employee, Ibañez had founded the newsmagazine *MD* two years before Bean wrote his review. As he wrote in his initial editorial preface to the magazine: "A physician is a man of many personalities. As a professional he must maintain a constant interest in the art and science of medicine throughout his entire active career; as an individual he feels the mental need to broaden his interest in culture, science and the arts; as a member of society he requires an understanding of the many political, economic, sociologic and public health problems posed daily by his community and country, and by the world he lives in. A physician is not only social but also a historical person, and his are the problems of the world today."

What was at stake in Bean's review of Marti-Ibañez's book, and what was the vision of the medical humanities that each of the two men had at the time? What was so Oslerian about Bean, and so un-Oslerian about Ibañez? Was it the superficiality of engagement, the mercenary aspects of such engagement, or a deeper concern regarding the nature of the relationship between the medical humanities and the practice of medicine?

Learning objectives:
1. Identify the views of medical humanities articulated by William Bean and Felix Marti-Ibañez.
2. Examine the relationship of the views of the medical humanities of Bean and Marti-Ibañez to those articulated by Osler.
3. Examine the concerns of Bean, Marti-Ibañez and Osler regarding the relationship of medicine and the medical humanities.

What We Know Now That Sir William Osler Did Not Know About Ancient Egyptian Medicine

Gonzalo M. Sanchez

Gonzalo M. Sanchez was Associate Professor of Surgery at the University of South Dakota from 1973 to 1997 and continues his neurosurgical private practice in South Dakota. He has maintained a life-long interest in ancient Egyptian medicine, and spoken and published extensively on Medical-Egyptological subjects. He is the principal author of The Edwin Smith Papyrus Updated Translation of the Trauma Treatise and Modern Medical Commentaries(2102). He was elected to the Explorer's Club in 2005. He is Medical Advisor to the University of Arizona Egyptian Expedition.

One hundred years ago, this month, Sir William Osler gave a series of lectures at Yale on "The Evolution of Modern Medicine". His discussion on Egyptian Medicine was objectively based on the knowledge of the time, discerned primarily from six or seven Medical Papyri, the Ebers Papyrus (ca. 1550 BCE) being the most significant. Osler opined that these medical documents consisted of "motley collections, filled with incantations, charms, magic formulae, symbols, prayers and prescriptions for all sorts of ailments", concluding that while "the Egyptians had shown growth in the development of practical medicine, their knowledge of disease remained crude and primitive." However, in assessing Greek Medicine, Osler lauded the Hippocratic School for its novel approaches and contributions, resulting from "its emancipation from the shackles of priesthood, its conception of medicine as an art based on accurate observation, and, the high moral ideas expressed in the Hippocratic Oath."

The Edwin Smith Papyrus (existing copy ca. 1650-1550 BCE), now considered to be one of the most outstanding medical documents from antiquity was not translated until 1930, 11 years after Sir William Osler's death. The Edwin Smith Papyrus is a didactic text, an objective treatise on trauma, with a systematic analysis and documentation of injuries, clearly employing a clinical methodology later attributed to the Hippocratic Medicine. One such technique evident throughout the Edwin Smith papyrus is "bedside teaching" which would have pleased Sir William Osler, as it was his own personal passion. Had this document been accessible to him, it would have, most surely, greatly augmented his views regarding the contributions of Egyptian medicine to modern medicine.

It is the objective of the presenter to analyze our current understanding of the early evolutionary steps toward modern medicine as seen in the Edwin Smith Papyrus, using objective anatomical, physiological and clinical examples to show how this applies to Sir William Osler's rich contribution 100 years ago.

Learning objectives:

1. Discuss basic differences between the Edwin Smith Papyrus and other Egyptian Medical Papyri.
2. Identify the clinical pattern of each "Case" presentation in the Edwin Smith Papyrus, and scientific basis.
3. Identify how the availability of the translation of the Edwin Smith Papyrus could have influenced the content of Osler's lecture in 1913.

A Tale of Two Bills: The Pepper/Osler Connection

George Sarka

George Sarka is an Associate Clinical Professor of Medicine at UCLA, Vice President of the California Neurology Society, and Past Governor of the Southern California Region ACP. He is a Diplomate in eleven subspecialties.

In many ways, Dr. William Pepper (1843-1898) was a role model for Sir William Osler. In 1884, Osler was to follow Pepper as the Professor of Clinical Medicine at the University of Pennsylvania. Dr. William Pepper, a born-and-bred disciple of the University of Pennsylvania's academic and medical prowess, became one of the most successful physicians and provosts that this university has ever produced. To his distinction, Dr. Pepper's legendary career was honored posthumously in a passionate and motivating speech by Sir William Osler in 1899.

Like Osler, Dr. Pepper was a teacher of Morbid Anatomy, Physical Diagnosis and Clinical Medicine. Similar to the sojourns of Osler during his formative years, Pepper also traveled to Europe to further refine his ideas concerning medical education and institutional administration, which would serve as a framework for changes at the University of Pennsylvania and his future position as provost. The incorporation of clinical training with classroom teaching in medicine became paramount at the University of Pennsylvania and was due in a large part to the efforts of Dr. Pepper. Osler commented in 1899 about this subject with the following quote: "Were I asked to name the most satisfactory single piece of work in Dr. Pepper's life, I should say unhesitatingly that which related to the promotion of higher medical education." Dr. Pepper also served as medical school professor and curator of the hospital museum which was synonymous with pathologist and director of the hospital's laboratory, similar to the early career of Osler.

As provost of the University of Pennsylvania in 1881-1894, Dr. Pepper provided the visionary and practical leadership to make sweeping changes in the quality of medical school and university educational instruction, research and publications. Dr. Pepper was also actively involved in founding several cultural and educational institutions in Philadelphia, including the Free Library of Philadelphia in 1891-1892, the University of Pennsylvania Archaeological Museum in 1887, the Wistar Institute in 1894 and the Philadelphia Commercial Museum in 1898. He served as the Medical Director of the Centennial Exposition of 1876.

Osler described Dr. Pepper posthumously as a "leader who sees ahead of his generation, but who has the sense to walk and work in it. While not such a potent element in progress, he lives a happier life, and is more likely to see the fulfillment of his plans…the most notable the profession of this country has offered to the world."

Learning objectives:

1. Examine Dr. William Pepper's pivotal role in the historical evolution of the University of Pennsylvania.
2. Identify the accomplishments of Dr. William Pepper's legendary academic career.
3. Discuss the nexus between William Pepper and William Osler at the University of Pennsylvania.

Then and Now: Physicians, Medicine, and Public Health

Alyssa M. Shell

Alyssa Shell is an MD/PhD candidate in Population Health Science and an Osler Student Scholar in the John P. McGovern Academy of Oslerian Medicine at The University of Texas Medical Branch, Galveston, Texas. She graduated from Harvard University with honors in 2006 with a degree in Social Studies and a Certificate in Health Policy. Alyssa plans to pursue an integrated career in community health research and rural family medicine.

The politics of health care implementation have taken center stage in the national political dialogue over the last several decades. Issues of access to care and structures of reimbursement have arisen repeatedly without resolution on a federal level. However, these issues have not always been at the forefront of the national agenda; involvement of the federal government in health care funding and administration is relatively new. Physicians who practiced at the turn of the last century, such as William Osler, witnessed the consolidation of the sanitary movement and the transition of health care oversight from a state to a federal level. These factors paved the way for attention to settle on issues of access and funding. Although Osler had already accepted a position at Oxford by the time U.S. political debate encompassed issues of universal coverage in the 1910s, he was not immune to this transition. An avid supporter of public health, he experienced the enactment of the UK National Insurance Acts in 1911, which established national health care run and subsidized by the government. This presentation compares today's public health concerns with those of Osler's time and describes Osler's thoughts on the role of physicians and government in securing the public's health.

Learning objectives:

1. Describe the dominant concerns in public health at the turn of the century and relate these concerns to the main issues of today.
2. Discuss Osler's thoughts on the role of the physician in public health and compare and contrast his opinions with those of contemporary physicians.
3. Evaluate if and how the role of the physician in public health has changed since Osler's time and examine the implications of this evolution for individual and population health today.

A 19th Century Physician in Southwestern Pennsylvania During the Oslerian Era

Lorelei E. Stein

Dr. Lorelei Stein is a professor in the School of Arts and Sciences at Point Park University in Pittsburgh, Pennsylvania. She teaches the history of medicine, health care policy analysis, and the role of politics in public policy. She is a member of the Southern Association for the History of Medicine and Science, and also the Pittsburgh-based C. F. Reynolds Medical History Society. Dr. Stein's areas of research are the history of medical education, the history of medicine, the accreditation of graduate medication education in the United States, and medical treatment in correctional institutions.

Many medical and scientific discoveries were made during the 19th century, and one wonders how this information impacted practicing physicians in the United States. This study sought to answer the question: what was the daily practice like of Dr. Cyrus Schreiner, one of the first physicians in southwestern Pennsylvania during the period of 1877-1900?

During the mid to late 19th century, the city of Pittsburgh was becoming an industrial powerhouse, while the areas beyond the city limits were principally farm land. Even though Dr. Schreiner had an exceptional medical education at Jefferson Medical College in Philadelphia and clinical training at Long Island College Hospital in New York City in 1877, it is important to understand how aspects of his education and training were applied to his medical practice, and how receptive his patients may have been to the new advances in medicine.

For 23 years, from 1877-1900, Dr. Schreiner was the only physician in the rural South Hills area of Pittsburgh, Pennsylvania. His patient ledgers provide evidence of an average annual volume of 150 patients in nearly 100-square miles, and house calls, which were the basis of his practice, were made via and horse and carriage. It was said that no other man traveled over the roads as often and as fast as Dr. Schreiner. Dr. Schreiner's personal hand-written pharmacopeia contains formulas for preparing paregoric, bone and nerve liniment, as well as the signs and symptoms of bilious remittent fever. Dr. Schreiner had qualities very similar to Sir William Osler: a quick wit and great sense of humor, a love of teaching and the belief that teaching was a professional responsibility, doing a day's work well regardless of the hours it involved, and esteem for the relationships with patients who trusted his care. Why "Old Doc Schreiner," as he was called, would take his own life at the age of 48 remains a mystery.

Learning objectives:

1. Examine the application of medical and scientific discoveries to the practice of a physician in late 19th century rural southwestern Pennsylvania.
2. Analyze the preparation and use of hand-made pharmaceuticals.
3. Explain the organization and management of the daily practice of a physician in late 19th century rural southwestern Pennsylvania.

Jules Stein: Visionary Extraordinaire!

Rob Stone & Marvin Stone

Marvin Stone directs the internal medicine clerkship and medical oncology fellowship program at Baylor University Medical Center in Dallas. He is a past president of the American Osler Society. Rob Stone is a producer, writer and director at Vienna Productions, which specializes in documentary films and specials for television. In 2007, Stone produced the documentary, Sir William Osler: Science and the Art of Medicine.

Julian Caesar Stein was born in South Bend, Indiana on April 26, 1896. As a boy, he learned the violin and started organizing orchestras in the area. He graduated from the University of Chicago at age eighteen and later attended Rush Medical College, graduating in 1921. He did postgraduate study in ophthalmology at the University of Vienna, and in 1923 he became Chief Resident in Ophthalmology at Cook County Hospital in Chicago. He then became certified by the American Board of Ophthalmology.

As a medical student, Stein played the saxophone and violin to help finance his studies. While still in college, he began arranging band dates for his fellow musicians and other bands that were playing for weeks or months at a time in various clubs and venues. In 1924, Stein opened a two-room office in Chicago and decided to call his booking company the Music Company of America (MCA).

Over the next five decades, Stein's organization expanded into Hollywood and represented many of the most successful artists in music, film, and television. MCA was nicknamed the octopus because it had its tentacles in so many entertainment divisions. Under the tutelage of studio mogul Lew Wasserman, the company added producing movies and television shows to its talent agency business.

Despite being the architect of what is arguably the most powerful entertainment entity in the world, Stein maintained an ongoing interest in ophthalmology. In 1960, at the urging of his wife Doris, Stein founded Research to Prevent Blindness, Inc. The Steins recognized the tremendous magnitude of visual difficulties and the enormous costs to those who were legally blind. They publicized knowledge about various eye disorders and awarded grants for ophthalmology research. Through Stein's philanthropy, eye surgery, ophthalmic pharmacology, and a number of new diagnostic techniques advanced the field.

Today, the Jules Stein Eye Institute at UCLA is one of the world's leaders in ophthalmology research. At the dedication of his eye institute, Stein said, "Movements to advance science and medicine need the time, the effort, and the ability of those men and women who have learned to move the immovable mountain."

Stein always thought he would be remembered for his work in ophthalmology, not as the man who created the traveling band. "If I am remembered for anything, it will not be for anything I did in show business, but for what I did to prevent blindness."

Learning objectives:

1. Explain how Jules Stein simultaneously launched a lucrative music booking company while completing his medical education.
2. Outline some of the many highlights of Dr. Stein's career in both medicine and show business.
3. Integrate audio highlights from interviews with Dr. Stein's living relatives and business associates.

Tube Thoracostomy: A Missed Battlefield Lesson

Kenneth G. Swan

Dr. Swan is a Professor of Surgery at the New Jersey Medical School; COL, Medical Corps, USAR (Ret.); and veteran of Vietnam and Desert Storm

Historically, surgical lessons learned on the battlefield have become the standard of care for the peacetime trauma victim. Tube thoracostomy for penetrating thoracic injury is the current standard of care and is highly successful in the nonoperative management of such patients. The principle is simple. Rapid re-expansion of the injured lung, by pleural drainage of hemopneumothorax, arrests pulmonary parenchymal bleeding and air leak. Autotransfusion restores blood loss. This principle was known and the technology practiced in America's civilian trauma centers by 1950. The Korean War began that same year. Except for head injuries, the chest was the most common site of fatal wounds in that war. Tube thoracostomy was rarely used and, in fact, was condemned as dangerous. Instead, hemopneumothorax was treated by thoracentesis (needle aspiration of the pleural cavity), as often as necessary, to obliterate the pleural space and re-expand the lung. For some patients, this amounted to multiple aspirations each day for months! The first Department of Defense/NATO *Handbook of Emergency War Surgery* (1958), continued to recommend thoracentesis for traumatic hemopneumothorax. The authors admitted the superior efficiency of " ... an intercostal tube drain with water seal ... ", but the latter was condemned because of: 1) its potential failure from occlusion by blood clot, 2) its risks for bacterial contamination of the pleural cavity and 3) anticipated dangers with chest tube drainage during evacuation In Vietnam tube thoracostomy was routine, its indications clinical.

Fifty years later, our civilian trauma centers continue to use this technique. Of patients with penetrating chest wounds, 85% respond to tube thoracostomy alone. Only 15% require thoracotomy and chest tube drainage. This protocol was endorsed by the revised *Handbook(s) of Emergency War Surgery* (DoD: 1975, 1988 and 2004). Implementation of tube thoracostomy at forward combat casualty treatment facilities, from which aerial evacuation is inevitable, attests to the safety of this therapy.

The hesitation of physicians in the Korean War to adopt the new technology correlates with the well- known concern that "tactics in current wars often are based on lessons learned from the most recent past war." Thoracentesis was used in WW II, and subsequent military surgeons, trained in peacetime military hospitals, received little or no trauma training. The Vietnam War was more than ready for the "new" technology.

Learning objectives:
1. Define penetrating chest trauma.
2. Discuss the pathophysiology of pulmonary injury.
3. Explain the treatment of traumatic hemopneumothorax.

From Ozark Farm Girl to Oslerian Physician: Dr. Caroline McGill

Herbert M. Swick

Dr. Swick is Research Professor at The University of Montana and Clinical Professor at the University of Washington Medical School. Although retired, he continues to teach at UM and in the WWAMI Program, focusing on professional values and the narrative structure of medicine.

In the early 20th Century, physicians in the young state of Montana ranged from completely untrained charlatans to supremely well-qualified physicians. Among the latter was Montana's first pathologist, Caroline McGill, M.D., Ph.D.

Caroline McGill was raised on an 80 acre hardscrabble farm in the Ozarks. It was a one hour ride from the family farm to the primary school. Her horse knew the way, so Caroline often rode backwards with a book propped up on horse's rump "studying her lessons between switches of tail." She then attended the University of Missouri and, in 1908, at the age of 29, Caroline McGill became the first woman to earn a Ph.D. from that school. After graduation, she taught anatomy and physiology at the University of Missouri Medical School. One of her students was Walter Dandy. In about a dozen years, then, she had gone from reading a book between swishes of a horse's tail to teaching neuroanatomy to a man who was to become one of this country's preeminent neurosurgeons.

In the spring of 1909, Caroline McGill was named the first recipient of the Sarah Berliner Research Fellowship. She used her $1200 fellowship to support a year of study in Europe, where she worked with several leading scientists of the day, including Paul Ehrlich.

While still abroad, she received a letter offering her a job as pathologist at the Murray Hospital in Butte, Montana, a job she had never considered in a remote state she had never visited. But she was intrigued. McGill stepped off the train in Butte during a howling blizzard at midnight on New Year's Eve and began work early the next morning, January 1, 1911. In the fall of 1912, she took a leave of absence to attend Johns Hopkins Medical School. William Osler had left Hopkins by then, but his principles and approach to clinical teaching endured. McGill earned her MD in only two years, graduating as the top student in the class of 1914. Ironically she was not allowed to participate in the graduation ceremonies because she had not attended a full four years.

Over the next 40 years, Caroline McGill devoted herself to the practice of medicine in Butte. A copy of Osler's Principles and Practice was always nearby. She kept abreast of the latest scientific and clinical advances, then shared her new knowledge by giving frequent talks to local and regional medical societies. She became renowned for her astute diagnostic skills in taking a history and performing a physical exam. She endeared herself to her patients and their families, many of whom were first generation immigrants. She was truly interested in them not just as patients but as people. It has been noted that Dr. Caroline McGill "had the Osler touch."

Learning objectives:
1. Appreciate William Osler's widespread influence on medical practice, even in remote areas of the U.S.
2. Gain some insight into a woman who, in many ways, was ahead of her time.
3. Identify three contributions of Dr. Caroline McGill to medical practice in Montana.

William B. Bean Student Research Award Lecture

Georg Hohmann: An Orthopedist, Activist, and Inventor of His Namesake Retractor

Ramya Takkellapati

Ramya Takkellapati is a 4th year medical student at UMDNJ-New Jersey Medical School in Newark, New Jersey. She is applying for a residency in Internal Medicine and looks forward to continuing more historical research.

The Hohmann retractor is ubiquitous in orthopedic operating rooms worldwide. Georg Hohmann (1880-1970) was a German orthopedic surgeon who invented his famous retractor while working with Dr. Fritz Lange. Hohmann's invention was spurred by the lack of existing instruments that provided enough protection for the tissues, vasculature, and nerves surrounding the bone tissue. He and Dr. Lange successfully used the retractor in over 50 osteotomies before publishing their findings in the Zentralblatt für Chirurgie in 1906.

From 1910 to 1930, Hohmann practiced orthopedic surgery in Munich and became a professor at the Universities of Frankfurt and Munich. The Nazi government mandated reorganization of orthopedic clinics and reduced available resources while removing Jewish members from the German Orthopedic Society (GOS). Hohmann signed a petition against anti-Semitism in 1932, which resulted in heavy criticism from national socialist newspapers. Despite the prevailing national socialist views, Jewish colleagues were well-respected within the GOS.

Hohmann was nominated as chair of the GOS after its reorganization under the NSDAP, but his election was prevented at first because of his liberal associations and open criticism of anti-Semitism.
Hohmann was elected chair of the GOS in 1937, but he was required to select board members who were NSDAP members.

The Gauleiter, or leader of an NSDAP district, secretly investigated Hohmann in 1937, with the results sent directly to the Führer. It was determined that, while Hohmann was amicable, courteous, and proper, he did not support the NSDAP, and was therefore unsuitable for the educational upbringing of his students. Hohmann continued as leader of the GOS until the collapse of the regime. He kept his democratic convictions, publicly fought against anti-Semitism, and treated Jewish patients in his hospital despite prohibition.

In the first postwar congress in 1947, Hohmann apologized to his Jewish colleagues who had been forced to emigrate during the war and offered them the help of the GOS in rebuilding their lives. He placed a high value on education and directed the reopening of both the Universities of Frankfurt and Munich in one year, an accomplishment of which he stated he "may be a little proud." His inaugural lecture at the University of Frankfurt was, fittingly, about the history of orthopedics.

Learning objectives:
1. Evaluate Georg Hohmann's impact on the German Orthopedic Society and orthopedics in Germany.
2. Contrast this impact with the alternate outcomes that may have occurred had Hohmann not been such an instrumental member of the society.
3. Discuss the link many scientists made between physical deformity, race differences and inferiority.

William B. Bean Student Research Award Lecture

The Medical Discovery of Child Abuse

Joshua Tompkins

Joshua Tompkins is a veteran science and health journalist and former Los Angeles Magazine senior editor whose work has appeared in The New York Times, Los Angeles Times, Popular Science, Men's Journal, and other publications. To gain a more intimate perspective on his subject matter, he elected to attend medical school, and he is now a fourth-year student at the Keck School of Medicine of the University of Southern California. As a student he has written essays about medical education for the Journal of the American Medical Association, the New England Journal of Medicine, and the Chronicle of Higher Education. He is the recipient of the 2012 Eric R. Martin Award for Excellence in Medical Writing from the American Medical Writers Association. After earning his medical degree, he will specialize in psychiatry while continuing to write.

Although the mistreatment of children likely dates back to the origin of human civilization, recorded efforts to pathologize child abuse date back only to the nineteenth century. In 1857, French physician Auguste Ambroise Tardieu published *Forensic Study of Sexual Assault*, and though the book went through seven editions, Tardieu's findings were largely ignored by clinicians and garnered no public attention. In the U.S., similar efforts found no traction: even the lurid details of the infamous Mary Ellen McCormack case of 1874, covered extensively by the *New York Times*, did nothing to convince either medical professionals or lay readers that child abuse was a widespread public health issue. In 1912, the U.S. government founded the Children's Bureau, but the institution's mission was the promotion of child welfare (education, nutrition, etc.) and not the recognition or investigation of child mistreatment. In the mid-twentieth century, however, a few American physicians began to write articles that questioned the purportedly accidental origin of many traumatic injuries to children. The tipping point was reached in 1962 with the publication of an article titled "The Battered-Child Syndrome" in the *Journal of the American Medical Association*. The article's five physician-authors had conducted a nationwide survey of hospitals and district attorneys, tallying at least 447 cases of child mistreatment (including 33 fatalities) during a one-year period. Countless other cases had gone unreported, they estimated, due to physicians' inability to diagnose non-accidental trauma and reluctance to make accusations. The article was heavily publicized in the popular media, and before the end of the 1960s every U.S. state had passed legislation that not only criminalized child mistreatment by caregivers but also mandated physicians, nurses, and other health care professionals to report any case of suspect child abuse to police or other authorities. The success of "The Battered-Child Syndrome" in fomenting permanent societal change can be attributed to its first-ever convergence of two key elements on the subject of child abuse—physician advocacy and widespread mass media coverage—strongly suggesting that both elements were necessary for cultural elevation of the issue.

Learning objectives:

1. Identify the pre-1962 efforts by physicians to draw attention to child mistreatment.
2. Revisit the 1962 JAMA article "The Battered-Child Syndrome" and its impact on the problem of child abuse.
3. Examine the mass media response to "The Battered-Child Syndrome" article in JAMA and the media's influence on government response and further medical research.

Halstedian Principles, Oslerian Traditions, Impairment, and Productivity: Was it Worth the Trouble?

Michael C. Trotter

Dr. Trotter received his undergraduate and medical educations at the University of Tennessee and Wake Forest University. He trained in surgery and cardiovascular surgery at the University of Alabama at Birmingham and the Ochsner Clinic in New Orleans. He practices cardiothoracic and vascular surgery in Greenville, Mississippi.

William Osler was one of the most respected and best known physicians in medical history. His legacy remains with us today through an abundance of contributions including the basic importance of the physical examination, practicing evidence-based medicine, and his teaching methodology. He has been called the ideal doctor, known for his humanism. He lived his life well, and Oslerian traditions are renowned and revered.

William Halsted secured his place in medical history as a pioneering and innovative surgeon. He and Osler were members of the "Big Four" founding staff of Johns Hopkins Hospital, along with William Welch and Howard Kelly. Halsted was impaired by drug addiction throughout his professional career. Halstedian principles (which remain relevant) evolved during his career at Hopkins and include strict asepsis, meticulous hemostasis, and gentle tissue handling. His legacy to surgery is forever linked to the surgical treatment of inguinal hernia, breast cancer, and vascular disorders, as well as the development of the surgical residency and the introduction of surgical rubber gloves. Yet it is striking that Halsted's venerable contributions evolved 'under the influence.' Additionally, he consistently worked approximately eight months per year, taking extended vacations. He was famous for his condescending and sarcastic verbal intimidation towards students and trainees. Only a select few enjoyed 'favored son' status, and they were forever loyal to him.

Halsted appears to be the polar opposite of Osler except in medical intellect in their chosen fields. He would be considered a less than ideal employee by today's standards. Were Halsted's contributions so valuable as to tolerate his behavior? Why were his flaws seemingly overlooked or ignored by his colleagues? Why did it take so long to change the autocratic teaching mentality and put his methodology in the proper context? Has his place in the culture of medical education changed?

Medicine and surgery in the early twentieth century were evolving to a more enlightened state. Many brilliant clinicians were making contributions worldwide. This evolution would likely have progressed regardless of Halsted's valuable input. Addiction and character flaws impaired Halsted's legacy yet his productivity cannot be denied. The traditions of Osler enabled productivity and left a legacy that has hardly been equaled. Perhaps Halsted would have benefitted from more 'Oslerian influence.'

Learning objectives:
1. Compare the differences between Osler and Halsted while they were colleagues.
2. Achieve perspective on Halsted's accomplishments in the context of addiction and impairment.
3. Understand the longstanding legacy of Halstedian surgical training methodology and its relatively recent conversion to a new paradigm.

Osler Jailed For Attempted Murder

Robert P. Turk

Dr. Turk graduated from the Medical College of Alabama. He retired from the Air Force with 24 years of service. For the following 20 years he was a Clinical Professor in Wright State University's Integrated Program in General Surgery, and for the past 13 years he has been involved with the surgery clerkship.

On page 272 of Harvey Cushing's Pulitzer Prize-winning biography *The Life of Sir William Osler*, there is a paragraph which mentions that Osler took a "5 weeks' holiday in British Columbia…this trip was made over what was then called the Winnipeg Western Railway in company with his brother Edmond and a group of men who were financially interested in the future development of the great country to the north and west. There is little record of this outing." In his footnote, Cushing mentions that the only episode of note was "the-baby-on-the-tracks" which Osler's Montreal friends found to be so bizarre that it may have been the writing of Dr. Osler's alter ego, Edgerton Yorrick Davis. However, in a recent article in "The Philatelist" (November 2012), there is a sidebar by the Reverend David Oldfield in which he relates an episode in which Osler was removed from a stage coach by the driver and jailed for attempted murder:

> Not long after the construction of the Converse county jail, the local sheriff mentioned to Councilman Cross that he had a Canadian in jail for attempted murder. "What's his name?" asked Harry. "Osler," was the reply. "He's well-dressed and says he's a doctor." Immediately Harry rode to the jail to find Dr. William Osler sitting on a cell bunk. The convict jumped up and clasped Harry's hands through the bars. Then bubbling with amusement, Osler explained that the driver on the stage in which he was riding had drawn water from a stagnant creek. Had the passengers drunk it, they might have contracted typhoid fever. Osler's 'crime' was dropping a chlorine pill into the drinking water for purification. Harry yelled for the sheriff to release his prisoner. He was delighted to 'spring' the man who would eventually be knighted for his work on the mysterious process of infectious disease, for instigating bedside teaching, and for creating one of the greatest educational hospitals in the world. A man whose story might have ended on a tree in Wyoming in 1888 had it not been for George Harry Cross.

George Harry Cross was born in Montreal, and his family had become personal friends of Osler while he was at McGill. The Reverend Oldfield gleaned this interesting episode from a book *Braehead. Three Founding Families in Nineteenth Century Canada* by Sherril MacLaren, published by McClelland and Stewart in 1986. Notes in the book state that the Osler in Wyoming event was passed down through Cross family oral tradition.

Learning objectives:

1. Review the story of "the-baby-on-the–tracks."
2. Discuss Osler's interest and study of typhoid.
3. Examine the truthfulness of the Cross/Osler episode.

Medical Man vs. Medicine Man: The Army vs. Geronimo

Joseph B. VanderVeer, Jr.

Dr. VanderVeer is a retired general surgeon who served on the faculties of the Oregon Health Sciences University and the University of Arizona. He divides his time between Pennsylvania and Arizona. He is editor of the AOS newsletter, The Oslerian.

At the outbreak of the Civil War, the Union Army had only fifteen thousand men. Ten times that number marched in the victory celebration in Washington, and over two million men served in the Union Army. By 1885 under Grant's presidency, the size of the Army had been shrunk by Congress to under 26,000 enlisted men and officers. Although the war was over, the pacification of the Western Indian tribes was unfinished, so about one fifth of the strength of the Army was diverted to the Arizona Territory to try to capture the Chiricahua Apaches, the last tribe refusing to be confined to a reservation.

Leonard Wood was a medical man, an 1884 graduate of Harvard Medical School who signed on as a contract surgeon with the Army and was sent to the Arizona Territory a year later. His participation in the campaign against Geronimo began Wood's meteoric rise through the U.S. Army officer ranks, culminating in his appointment as Chief of Staff by President Taft, twelve years after he received the Medal of Honor from his friend Theodore Roosevelt for his part in the Geronimo campaign.

Geronimo was not a chief. He was a medicine man, a shaman of the Chiricahua Apaches, but was considered its leader by the Army. His band of hunters subsisted largely by raids against the white settlers who had come into the southwest. But as a young man, Geronimo's wife, mother and two children were killed by Mexican soldiers, and he bore a life-long, mortal hatred against them. So when his band of less than fifty fled south from the San Carlos Reservation in Arizona to disappear in the mountains of Mexico, he became hunted by both the American and the Mexican forces.

General George Crook had gained fame as an accomplished Indian fighter, largely through his unconventional means, including riding a mule instead of a horse, using mule pack trains to make his forces more mobile in the mountain topography of Arizona, employing Indian scouts to track their brethren, and keeping his word with the tribes he fought. But he had a falling out with Army Chief of Staff General George Sherman – whose aggressive tactics in the Southwest were not unlike his March to the Sea – and he was replaced by General Nelson Miles, who eventually brought Geronimo in, but not without deception.

This paper describes that final campaign, portraying its leaders, and explains why despite a huge advantage in numbers and supplies, despite using the telegraph and heliograph, the Army never really conquered Geronimo, but rather lured him into surrender through false promises.

Learning objectives:
1. Describe how the Apaches were moved about Reservations in the Arizona Territory.
2. Explain why tracking and capturing Geronimo was so difficult for the Army.
3. Relate what happened to Wood and Geronimo after the Indian Wars were over.

Michelangelo's Knee: Signs of Disease in Raphael's Figure of Heraclitis

Sara E. Walker

Sara E. Walker, M.D. is Professor Emerita of the University of Missouri. She is an accomplished researcher and clinician with a special interest in systemic lupus erythematosus. Dr. Walker is Master of the American College of Physicians and Master of the American College of Rheumatology. She was President of the American College of Physicians 2002-2003 and received the Stengel Award for outstanding service to the College in 2009.

One of the most often discussed figures in Italian Renaissance art is that of Heraclitus in Raphael's *School of Athens* (1509-1510) in the Stanza della Segnatura, Vatican. The figure slouches on the stairs in the foreground to the left of center, his left cheek resting on his hand and his right knee bent at a sharp angle as he uses a marble block for a writing table. One reason the figure has attracted such attention is the belief that he represents not only the ancient Greek philosopher, but also Michelangelo Buonarotti (1475-1564). Raphael did paint the figure with features that correspond with Vasari's description of Michelangelo: dark hair and a dark beard, and a broad forehead and widespread cheekbones ("La faccia era ritonda…"). Heraclitus sits alone, and his remoteness appears to mirror the solitary life of the quarrelsome Michelangelo who, Vasari tells us, loved solitude.

The figure deserves attention from a medical perspective because its right knee appears to be deformed. The joint is swollen, and three masses are lined up vertically along the lateral aspect of the patella. The thigh muscles appear to be out of place and protrude over the superior margin of the knee, and bony elevations that should be visible are simply not present.

The author surveyed ten individuals trained in anatomy who looked at a close-up of Raphael's painting, and eight concluded that the knee was diseased. Raphael was known to take liberties with the knee and either moved bones to new locations or eliminated outlines. But if the knee was portrayed accurately, it was not normal. Three experts suggested the diagnosis was osteoarthritis, but Michelangelo was only 35 years old when the *School of Athens* was painted. Three other experts thought gouty arthritis could explain the joint effusion and periarticular, tophaceous lumps. If gout was present, the knee of the Michelangelo figure had a form in which tophi were prominent and pain was minimal.

Both of Michelangelo's contemporary biographers recorded that he passed stones in his urine, a manifestation of gout. Vasari notes he had pain on urination and passed gravel, followed by stones. Condivi adds that a physician attended the master diligently for this problem. If Raphael's Heraclitis was a representation of Michelangelo, the urinary stones and deranged knee support the argument that Michelangelo had gout.

The fact that Raphael would paint a Michelangelo figure suggests he acknowledged the influence of the great master on Raphael's artistry. The detail suggests that Raphael and Michelangelo, who were thought to be bitter rivals, actually had some friendly encounters that gave Raphael the opportunity to observe, remember, and later paint Michelangelo's knee.

Learning objectives:
1. Recognize the major physical signs of a normal knee.
2. Understand the importance of careful observation in diagnosing arthritis.
3. Recognize physical findings that suggest the presence of gouty arthritis of the knee.

The First 600 Years of the University Library in Oxford
Humfrey, Bodley, Pembroke, Osler and a Cast of Bibliophiles

John W. K. Ward

John Ward is a retired family doctor with a lifelong interest in medical history. A past president of both the Osler Club of London and the British Society for the History of Medicine, he is a fellow of the Royal College of Physicians of Edinburgh and of the Royal College of General Practitioners. He has lectured widely in Britain and North America on medical history, family medicine and Johnsonian topics. He is chairman of the local organising committee for the AOS meeting in Oxford in 2014.

When Osler became its Regius Professor, the University of Oxford was already about 700 years old. Its first library was housed at St. Mary the Virgin but the accommodation became inadequate largely due to the book donations of Humfrey, Duke of Gloucester, the younger brother of King Henry the Fifth.

In 1424, the Divinity School was planned; later a room still known as Duke Humfrey's Library was built above it. The library sadly declined, particularly in the reign of Edward the Sixth, but with the retirement to Oxford of Sir Thomas Bodley it again flourished. Bodley, a Devonian by birth had had a successful career as an academic, politician and diplomat but decided to "set up my Staffe at the Librarie dore in Oxon". With his personal wealth, and the knowledge that he was well able to "stirre up other men's benevolence", the library was transformed. Over the years it continued to receive gifts and bequests from the likes of Robert Burton, Elias Ashmole, John Selden, William Laud, and William Herbert, Earl of Pembroke. It also acquired the Camera from the bequest of John Radcliffe.

William Osler, as Regius Professor, was an ex-officio curator of the Bodleian and made multiple contributions, including the return of the First Folio of Shakespeare, the donation of a clock, the construction of the underground stack, the suggestion of a celebration marking the tercentenary of Bodley's funeral and the start of the Bodleian Quarterly Review, in one edition of which was published his "Illustrations of the bookworm". He also delivered "Creators, Transmuters and Transmitters" at the opening of the Bodleian Shakespeare Tercentenary Exhibition on the 24th April 1916. The Bodleian received additional bequests on Sir William's death but greatly mourned the passing of a man admired for his personality, presence, stimulation and kindness.

Learning objectives:
1. Examine the characteristics and means enabling Bodley to set up the library.
2. Explain how the Bodleian became a copyright library.
3. Outline Sir William Osler's contributions to the Bodleian.

Saving Lives, Not Sacrificing Them: The Inevitable Clash Between Medical Research and the Protection of Human Subjects

Allen B. Weisse

Dr. Weisse is a cardiologist and medical historian. He retired from his academic position as professor of medicine at the UMDNJ-New Jersey Medical School in 1997 in order to concentrate on his writing. In 2004 he and his wife established the Weisse Lecture on the History of Medicine at which a number of Oslerians have appeared as guest speakers.

Medical practitioners throughout history have been admonished to do nothing in the treatment of their patients that might result in harming them. It was not until the twentieth century that such teaching was codified in specific legislation. Spurred on by the perversity of Nazi doctors during the Holocaust, world leaders produced the Nuremburg Code (1947) and later the Declaration of Helsinki (1964). Revelations about other egregious acts in the guise of legitimate medical research, such as the Tuskegee Syphilis study and exposure of unsuspecting subjects to harmful radiation, led to other measures to prevent such mistreatment. Legislation established Institutional Review Boards (IRBs) in 1974. Later, the HIPPA (Health Insurance Portability and Accounting Act) was introduced (1996). Other regulations to insure physician competency and responsibility have mushroomed in the succeeding years.

During the time that such measures were coming into being, some of the greatest advances in medicine were being achieved, not least among them those in cardiovascular surgery. Surgical treatment of coronary artery disease, valvular heart disease and many types of congenital heart disease all became part of our modern therapeutic approach to these conditions. Ironically, much of this research, as valuable as it proved to be, would not have been approved had the regulatory measures now firmly in place been operative. It must be recognized that, given the nature of some types of medical research, more often than not a certain degree of risk in all patients entering such trials may be unavoidable. There is always a balance to be maintained between risk and potential benefit. It is the duty of medical investigators to make these fully known to patients considering subjecting themselves to such research and, often with participation of family, help them make informed decisions about whether or not to participate. Regulations alone cannot achieve this goal and, at times, may even impede attempts to advance medical innovation and patient survival.

Learning objectives:
1. List the major unethical acts that gave rise to patient protection legislation.
2. List the major pieces of legislation and policies that have been instituted to protect patients as research subjects.
3. Explain the requirements of informed consent.

John P. McGovern Lectureship Awards

1986	Albert Rupert Jonsen
1987	Edward Janavel Huth
1988	Joanne Trautmann Banks
1989	John Nicholas Walton
1990	E. A. Vastyan
1991	Daniel Michael Fox
1992	William C. Beck
1993	Anne Hudson Jones
1994	David Hamilton
1995	Sherwin B. Nuland
1996	David J. Rothman
1997	Roger James Bulger
1998	Paul Potter
1999	John David Stobo
2000	Gert Henry Brieger
2001	Kenneth M. Ludmerer
2002	James K. Cassedy
2003	Sir Richard Doll
2004	William F. Bynum
2005	Karen Hein
2006	Joseph Jack Fins
2007	Abraham Verghese
2008	Charles E. Rosenberg
2009	Patrick A. McKee
2010	Nuala P. Kenny
2011	Rosemary A. Stevens
2012	C. David Naylor
2013	Bert Hansen

Lifetime Achievement Awards

2005	Earl F. Nation
2006	Charles G. Roland
2007	Lawrence D. Longo
2008	Richard L. Golden
2009	W. Bruce Fye
2010	Charles S. Bryan
2011	Michael Bliss
2012	Jeremiah A. Barondess
2013	John C. Carson

Presidents of the American Osler Society

* Deceased

William B. Bean*	1970-1971	Alvin E. Rodin*	1992-1993
George T. Harrell*	1971-1972	Robert E. Rakel	1993-1994
Thomas M. Durant*	1972-1973	Kenneth M. Ludmerer	1994-1995
John P. McGovern*	1973-1974	Charles F. Wooley*	1995-1996
Edward C. Rosenow, Jr.*	1974-1975	Billy F. Andrews	1996-1997
A. McGehee Harvey*	1975-1976	Eugene H. Conner	1997-1998
Raymond D. Pruitt*	1976-1977	Richard J. Kahn	1998-1999
Martin M. Cummings	1977-1978	Dee J. Canale	1999-2000
Earl F. Nation*	1978-1979	Mark E. Silverman*	2000-2001
Irving A. Beck*	1979-1980	John C. Carson	2001-2002
Peter D. Olch*	1980-1981	Lawrence D. Longo	2002-2003
William C. Gibson*	1981-1982	Marvin J. Stone	2003-2004
R. Palmer Howard*	1982-1983	Chester R. Burns*	2004-2005
Jeremiah A. Barondess	1983-1984	Claus A. Pierach	2005-2006
K. Garth Huston*	1984-1985	T. Jock Murray	2006-2007
William B. Spaulding*	1985-1986	Francis A. Neelon	2007-2008
Charles G. Roland*	1986-1987	Joseph W. Lella	2008-2009
Robert P. Hudson	1987-1988	John Noble	2009-2010
W. Bruce Fye	1988-1989	Charles S. Bryan	2010-2011
Richard L. Golden	1989-1990	Michael Bliss	2011-2012
Jack D. Key	1990-1991	Sandra W. Moss	2012-2013
Paul D. Kligfield	1991-1992		

Secretaries and Treasurers of the American Osler Society

*Deceased

Year(s)	Treasurer-Historian	Secretary
1971	Alfred R. Henderson	John P. McGovern*
1972	Alfred R. Henderson	Edward C. Rosenow, Jr.*
1973	Alfred R. Henderson	A. McGehee Harvey*
1974	Alfred R. Henderson	Raymond D. Pruitt*
1975	Alfred R. Henderson	Martin M. Cummings
	Secretary-Treasurer	
1976 - 1985	Charles C. Roland*	
1986 - 1989	Jack D. Key	
1990 - 2000	Lawrence D. Longo	
2001 - 2009	Charles S. Bryan	
	Treasurer	**Secretary**
2010 - 2012	R. Dennis Bastron	Paul S. Mueller
2012 - 2013	R. Dennis Bastron	Christopher J. Boes

Living Members of the American Osler Society

Honorary Members

THOMAS G. BENEDEK
Pittsburgh, Pennsylvania

GERT H. BRIEGER
Baltimore, Maryland

SHIGEAKI HINOHARA
Tokyo, Japan

MARIAN FRANCIS KELEN
Ottawa, Ontario, Canada
Northumberland, England

JOHN D. STOBO
San Rafael, California

JOHN N. WALTON
Detchant, Belford

Charter Members

* Emeritus

MARTIN M. CUMMINGS*
Sarasota, Florida

ALFRED R. HENDERSON*
Bethesda, Maryland

FRED B. ROGERS*
Trenton, New Jersey

ILZA VEITH*
Tiburon, California

Elected Members

* Emeritus

JACK B. ALPERIN (2004)
Galveston, Texas

CHARLES T. AMBROSE (1998)
Lexington, Kentucky

BILLY F. ANDREWS (1972)
Floyds Knobs, Indiana

STANLEY M. ARONSON* (1987)
Providence, Rhode Island

JAMES E. BAILEY (2011)
Memphis, Tennessee

JAMES O. BALLARD (2006)
Hummelstown, Pennsylvania

JEREMIAH A. BARONDESS* (1975)
New York, New York

R. DENNIS BASTRON (2003)
Tucson, Arizona

GEORGE S. BAUSE (2010)
Cleveland, Ohio

STEVEN L. BERK (1988)
Lubbock, Texas

PAUL E. BERMAN* (2002)
Amherst, Massachusetts

FAUSTINO BERNADETT (2012)
Long Beach, California

KERSTIN BETTERMANN (2010)
Hershey, Pennsylvania

DARRYL BINDSCHADLER (2007)
Cheyenne, Wyoming

JOHN S.G. BLAIR* (2003)
Perth, Scotland

RICHARD K. BLAISDELL* (1973)
Honolulu, Hawaii

MICHAEL BLISS (1996)
Toronto, Ontario, Canada

CHRISTOPHER J. BOES (2010)
Rochester, Minnesota

W. BRYANT BOUTWELL (2005)
Houston, Texas

CHARLES S. BRYAN (1994)
Columbia, South Carolina

JOHN D. BULLOCK (2008)
Dayton, Ohio

LEONARD H. CALABRESE (2008)
Cleveland Heights, Ohio

IAN A. CAMERON (2011)
Sherbrooke, Nova Scotia, Canada

DEE J. CANALE* (1985)
Memphis, Tennessee

RICHARD M. CAPLAN* (1988)
Iowa City, Iowa

JOHN C. CARSON (1987)
La Jolla, California

MICHAEL W. CATER (2001)
Santa Ana, California

DONALD CATINO* (1984)
New London, New Hampshire

WALTER R. CHITWOOD, JR. (1989)
Greenville, North Carolina

CLIFTON R. CLEAVELAND* (1999)
Signal Mountain, Tennessee

EUGENE H. CONNER* (1980)
Thomasville, Georgia

BARRY COOPER (2002)
Dallas, Texas

DAVID K. C. COOPER (2006)
Pittsburgh, Pennsylvania

CHRISTOPHER CRENNER (2005)
Kansas City, Missouri

JOHN H. CULE* (1973)
Ceredigion, Llandysul, Wales

BURKE A. CUNHA (2002)
Garden City, New York

MARTIN L. DALTON* (2000)
Macon, Georgia

PETER E. DANS* (2002)
Cockeysville, Maryland

SAKTI DAS (1998)
Lafayette, California

ANAND P. DATE (2002)
Middlesex, United Kingdom

ALLAN J. DENNIS, JR.* (2005)
Augusta, Georgia

NICHOLAS DEWEY* (1981)
Santa Barbara, California

Living Members of the American Osler Society (continued)
Elected Members

* Emeritus

CHRISTOPHER F. DIBBLE (2011)
Carrboro, North Carolina

LAUREL E. DREVLOW (2006)
Minneapolis, Minnesota

JACALYN M. DUFFIN (1998)
Kingston, Ontario, Canada

PAUL G. DYMENT* (1982)
Topsham, Maine

GEORGE C. EBERS (1985)
Oxford, England

RICHARD EIMAS* (1986)
Reston, Virginia

ARNOLD EINHORN* (2002)
Chevy Chase, Maryland

MICHAEL EMMETT (2003)
Addison, Texas

LYNN C. EPSTEIN (1999)
Bristol, Rhode Island

JONATHON ERLEN (2002)
Pittsburgh, Pennsylvania

WILLIAM N. EVANS (2010)
Las Vegas, Nevada

MEGHAN A. FEELY (2011)
Short Hills, New Jersey

WILLIAM H. FEINDEL* (1977)
Montreal, Quebec, Canada

ANDREW Z. FENVES (2005)
Dallas, Texas

GARY B. FERNGREN (1996)
Corvallis, Oregon

JOSEPH J. FINS (2009)
New York, New York

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

THOMAS W. FRANK (2010)
El Paso, Texas

RICHARD S. FRASER (2012)
Montreal, Quebec, Canada

HERBERT L. FRED* (1984)
Houston, Texas

GORDON FRIERSON (2009)
Palo Alto, California

ABRAHAM FUKS (1999)
Montreal, Quebec, Canada

CONRAD C. FULKERSON (2001)
Durham, North Carolina

J. MICHAEL FULLER (2009)
Greenville, South Carolina

W. BRUCE FYE (1975)
Rochester, Minnesota

CHRISTOPHER G. GOETZ (2000)
River Forest, Illinois

JOHN T. GOLDEN (1999)
Grosse Pointe Woods, Michigan

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

JAMES T. GOODRICH (1982)
Grandview, New York

JOHN L. GRANER (1997)
Rochester, Minnesota

STEPHEN B. GREENBERG (1997)
Houston, Texas

DAVID R. HABURCHAK (2002)
Augusta, Georgia

JAMES F. HAMMARSTEN* (1981)
Melrose, Minnesota

H. ALEXANDER HEGGTVEIT* (1982)
Hamilton, Ontario

PERRY HOOKMAN (1999)
Potomac, Maryland

JOEL D. HOWELL (1987)
Ann Arbor, Michigan

ROBERT P. HUDSON* (1970)
Olathe, Kansas

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

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

BRUCE J. INNES* (2001)
Macon, Georgia

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

H. MICHAEL JONES (2006)
Chapel Hill, Carolina

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

RICHARD J. KAHN (1981)
Tenants Harbor, Maine

ANAND B. KARNAD (1998)
San Antonio, Texas

JOHN A. KASTOR* (2004)
Baltimore, Maryland

CARLA C. KEIRNS (2011)
Port Jefferson Station, New York

ELTON R. KERR (1989)
Pasco, Washington

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

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

IRVING KUSHNER (2012)
Shaker Heights, Ohio

ROBERT A. KYLE (2007)
Rochester, Minnesota

S. ROBERT LATHAN* (2002)
Atlanta, Georgia

JOSEPH W. LELLA (1998)
London, Ontario, Canada

ROBERT I. LEVY* (2007)
Baltimore, Maryland

LAWRENCE D. LONGO (1976)
Redlands, California

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

CARL E. LUNDSTROM (2011)
Rochester, Minnesota

CHRISTOPHER M. LYONS (2012)
Montreal, Quebec, Canada

ERIC L. MATTESON (2011)
Rochester, Minnesota

CHRYSSA N. K. McALISTER (2009)
Toronto, Ontario, Canada

VIVIAN C. McALISTER (2010)
London, Ontario, Canada

PAUL R. McHUGH (1990)
Baltimore, Maryland

NEIL McINTYRE (1995)
Woodford Green, Essex, England

LAURA McLAFFERTY (2011)
Baden, Pennsylvania

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

Living Members of the American Osler Society (continued)
Elected Members

* Emeritus

ROBERT G. MENNEL (1999)
Dallas, Texas

M. ALAN MENTER* (2004)
Dallas, Texas

PAMELA J. MILLER (2003)
Westmount, Quebec, Canada

J. MARIO MOLINA (2008)
Long Beach, California

MICHAEL E. MORAN (2004)
Tucson, Arizona

DANIEL D. MORGAN (2000)
Fremont, California

SANDRA W. MOSS (2002)
Metuchen, New Jersey

PAUL S. MUELLER (2003)
Rochester, Minnesota

SEAN B. MURPHY* (2002)
Westmount, Quebec, Canada

T. JOCK MURRAY* (1992)
Halifax, Nova Scotia, Canada

ANDREW T. NADELL (1986)
Burlingame, California

FRANCIS A. NEELON* (1992)
Durham, North Carolina

ROBERT R. NESBIT, JR. (2003)
Augusta, Georgia

JOHN NOBLE* (1993)
Boston, Massachusetts

ROBERT K. OLDHAM (1982)
Summerland Key, Florida

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

BRUCE R. PARKER* (1995)
Houston, Texas

CLYDE PARTIN, JR. (1999)
Atlanta, Georgia

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

SCOTT H. PODOLSKY (2010)
Boston, Massachusetts

BETH PREMINGER (2002)
New York, New York

MABEL L. PURKERSON* (2003)
St. Louis, Missouri

TONSE N. K. RAJU (1999)
Gaithersburg, Maryland

ROBERT E. RAKEL (1983)
Houston, Texas

MICHAEL A. E. RAMSAY (2006)
Dallas, Texas

P. PRESTON REYNOLDS (1998)
Charlottesville, Virginia

C. JOAN RICHARDSON (2008)
Galveston, Texas

CHARLES S. ROBERTS (2004)
Winchester, Virginia

WILLIAM C. ROBERTS* (2000)
Dallas, Texas

LOREN A. ROLAK (1995)
Marshfield, Wisconsin

MILTON G. ROXANAS (2012)
Wahroonga, New South Wales, Australia

GEORGE SARKA (2009)
Laguna Hills, California

CHRISTOPHER B. SHIELDS* (1989)
Louisville, Kentucky

BARRY D. SILVERMAN (1997)
Atlanta, Georgia

RUSSELL L. SILVERSTEIN (2005)
Dallas, Texas

WILLIAM A. SMITH, JR. (2000)
Fulton, Kentucky

THOMAS C. SODEMAN (2012)
Toledo, Ohio

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

MARVIN J. STONE (1990)
Dallas, Texas

ROB H. STONE (2008)
West Hills, California

KENNETH G. SWAN (2011)
South Orange, New Jersey

HERBERT M. SWICK (2000)
Missoula, Montana

BARBARA L. THOMPSON (2012)
Galveston, Texas

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

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

ROBERT P. TURK (2008)
Dayton, Ohio

JOSEPH B. VANDER VEER, JR. (2003)
Devon, Pennsylvania

HECTOR O. VENTURA (1999)
Metairie, Louisiana

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

SARA E. WALKER (2012)
Las Cruces, New Mexico

JOHN W. K. WARD (2003)
Abingdon, Oxfordshire, England

MARGARET P. WARDLAW (2011)
Austin, Texas

ALLEN B. WEISSE (1997)
Springfield, New Jersey

MARC E. WEKSLER* (2004)
Tenafly, New Jersey

DENNIS K. WENTZ* (2003)
Bozeman, Montana

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

THORNE S. WINTER (2010)
Atlanta, Georgia

W. CURTIS WORTHINGTON (1999)
Charleston, South Carolina

JAMES R. WRIGHT
Calgary, Alberta

JAMES B. YOUNG (1992)
Cleveland, Ohio

Deceased Members of the American Osler Society

Honorary Members

WILBURT C. DAVISON
(1892-1972)

WILDER G. PENFIELD
(1891-1976)

EMILE F. HOLMAN
(1890-1977)

GEORGE W. CORNER
(1899-1981)

TRUMAN G. BLOCKER, JR.
(1908-1984)

LLOYD G. STEVENSON
(1918-1988)

HAROLD N. SEGALL
(1897-1990)

EDWARD H. BENSLEY
(1906-1995)

H. ROCKE ROBERTSON
(1912-1998)

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

Charter Members

PAUL DUDLEY WHITE
(1886-1973)

THOMAS M. DURANT
(1905-1977)

WALTER C. ALVAREZ
(1884-1978)

CHAUNCEY D. LEAKE
(1896-1978)

EARLE P. SCARLETT
(1896-1982)

SAMUEL X. RADBILL
(1901-1987)

HOWARD L. HOLLEY
(1914-1988)

WILLIAM B. BEAN
(1909-1989)

R. PALMER HOWARD
(1912-1990)

RAYMOND D. PRUITT
(1912-1993)

THOMAS F. KEYS
(1908-1995)

H. GRANT TAYLOR
(1903-1995)

CECILE DESBARATS
(1907-1998)

A. McGEHEE HARVEY
(1911-1998)

WILLARD E. GOODWIN
(1915-1998)

GEORGE T. HARRELL
(1908-1999)

EDWARD C. ROSENOW, JR.
(1909-2002)

WILLIAM K. BEATTY
(1926-2002)

PALMER H. FUTCHER
(1910-2004)

G. S. T. CAVANAGH
(1923-2005)

JOHN P. McGOVERN
(1921-2007)

EARL F. NATION (1910-2008)
(1910-2008)

VICTOR A. McKUSICK
(1921-2008)

CHARLES G. ROLAND
(1933-2009)

WILLIAM C. GIBSON
(1914-2009)

Elected Members

ARTHUR D. KELLY
(1901-1976)

MARSHALL N. FULTON
(1899-1977)

I. N. DUBIN
(1913-1981)

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

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

GEORGE E. BURCH
(1910-1986)

K. GARTH HUSTON
(1926-1987)

GORDON W. JONES
(1915-1987)

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

ROBERT J. MOES
(1905-1988)

S. GORDON ROSS
(1899-1990)

MAURICE A. SCHNITKER
(1905-1990)

JAMES V. WARREN
(1915-1990)

NICHOLAS E. DAVIES
(1926-1991)

PETER D. OLCH
(1930-1991)

JOHN Z. BOWERS
(1913-1993)

WILLIAM B. SPAULDING
(1922-1993)

LEWIS THOMAS
(1913-1993)

RODERICK K. CALVERLEY
(1938-1995)

DYKES CORDELL
(1944-1996)

LUTHER C. BECK
(1909-1996)

HASKELL F. NORMAN
(1915-1996)

JOHN W. SCOTT
(1915-1997)

IRVING A. BECK
(1911-1997)

THOMAS A. WARTHIN
(1909-1997)

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

JAMES A. KNIGHT
(1918-1998)

Deceased Members of the American Osler Society
Elected Members

NORMAN SCHAFTEL
(1914-1998)

DANIEL B. STONE
(1925-1998)

ALVIN E. RODIN
(1926-1999)

GARFIELD J. TOURNEY
(1927-1999)

R. CARMICHAEL TILGHMAN
(1904-1999)

STANLEY W. JACKSON
(1920-2000)

SAUL JARCHO
(1906-2000)

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

ROBERT E. BEAMISH
(1916-2001)

ARNOLD G. ROGERS
(1925-2001)

FREDERICK W. BARNES
(1909-2001)

WALTER D. HANKINS
(1910-2001)

ROY SELBY
(1930-2002)

E. CARWILE LEROY
(1933-2002)

ROBERT M. KARK
(1911-2002)

CARLETON B. CHAPMAN
(1915-2002)

DAVID M. MUMFORD
(1927-2003)

ALEX SAKULA
(1917-2003)

FREDERICK B. WAGNER, JR.
(1916-2004)

CLARK T. SAWIN
(1934-2004)

A. BENEDICT SCHNEIDER
(1914-2004)

STEWART G. WOLFE
(1914 - 2005)

G. R. PATERSON
(1919-2005)

W. WATSON BUCHANAN
(1930-2006)

CHESTER R. BURNS
(1937-2006)

ROBERT AUSTRIAN
(1916-2007)

CHARLES F. WOOLEY
(1930-2008)

M. GEORGE JACOBY
(1920-2008)

MARK E. SILVERMAN
(1939-2008)

ROBERT U. MASSEY
(1922-2008)

ARTHUR GRYFE
(1935-2009)

LEON Z. SAUNDERS
(1920-2009)

HOWARD B. BURCHELL
(1908-2009)

HARRIS D. RILEY, JR.
(1924-2010)

D. GERAINT JAMES
(1922-2010)

ROBERT C. KIMBROUGH, III
(1941-2010)

C. PETER W. WARREN
(1940-2011)

J. WILLIS HURST
(1920-2011)

PHILIP W. LEON
(1944-2012)

OM P. SHARMA
(1936-2012)

WILLIAM S. HAUBRICH
(1923-2012)

The American Osler Society was 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 Sir 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.