45th Annual Meeting of the AMERICAN OSLER SOCIETY

Sunday, April 26th - Wednesday, April 29th, 2015

Sheraton Inner Harbor Hotel Baltimore, Maryland

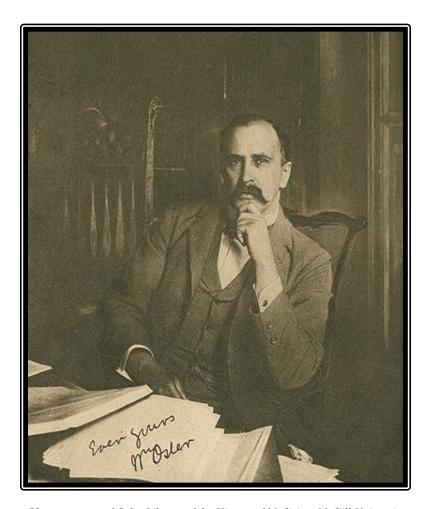


Photo courtesy of Osler Library of the History of Medicine, McGill University

William Osler at his desk at 1 West Franklin Street in Baltimore.

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 accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership 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 15.25 *AMA PRA Category 1 Credit(s)* TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Disclosure Information

All Faculty, CME Planning Committee Members, and the CME Office Reviewers have disclosed that they have no financial relationships with commercial interests that would constitute a conflict of interest concerning this CME activity.

William Osler, William Francis, H.A. Lafleur, and W.S. Thayer at Johns Hopkins Hospital, 1891



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

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

Osler at the bedside.



Hotel Maps

Level 2



KEY

Room 1 - Severn Gallery

Room 2 - Severn Room

Room 2A - Severn Room I

Room 2B - Severn Room II

Room 2C - Severn Room III

Room 3 - Camden Gallery

Room 4 - Camden Room

Room 4A - Camden Room I

Room 4B - Camden Room II

Room 5 - Harborview Gallery

Room 6 - Harborview Ballroom

Room 6A - Harborview Ballroom I

Room 6B - Harborview Ballroom II

Room 7 - Board Room

Room 8 - Sassafras

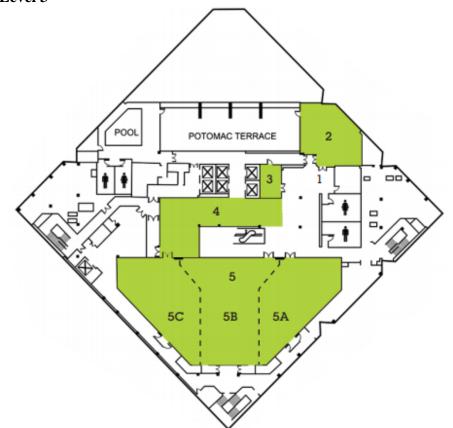
Room 9 - Loch Raven Gallery

Room 10 - Loch Raven Room

Room 10A - Loch Raven Room I

Room 10B - Loch Raven Room II

Level 3



KEY

Room 1- Potomac Gallery

Room 2 - Potomac Room

Room 3 - Patapsco

Room4 - Chesapeake Gallery

Room 5 - Chesapeake Ballroom

Room 5A - Chesapeake Ballroom I

Room 5B - Chesapeake Ballroom II

Room 5C - Chesapeake Ballroom III

Sunday, April 26, 2015

2:00 – 6:00 pm	Registration Foyer, Level 2
3:00 – 5:00 pm	The Frank Neelon Literary Gathering Loch Raven I, Level 2 Moderator: Joseph Lella & Clyde Partin
5:00 – 6:30 pm	Past Presidents' Dinner Meeting Loch Raven II, Level 2
7:00 – 9:00 pm	Board of Governors Meeting Loch Raven I, Level 2

Monday, April 27, 2015

7:00 am – 4:00 pm	Registration Chesapeake I & II Foyer, Level 3
7:00 – 8:00 am	Continental Breakfast Chesapeake Gallery, Level 3
7:50 am	Welcome & Announcements Chesapeake I & II, Level 3 Herbert Swick, AOS President

Osler

Herbert Swick, Moderator | Chesapeake I & II, Level 3

8:00 am	Joseph W. Lella (page 40) "A Man is Known by the Company He Keeps:" Osler in Osler's Biographical Essays
8:20 am	J. Gordon Frierson (page 29) Titans of Tuberculosis: Osler and Trudeau
8:40 am	Ernest B. Hook (page 34) William Osler, Pierre Louis, Bloodletting, and the Numerical Method in Medicine
9:00 am	Jamie S. Barkin (page 13) Osler-Weber-Rendu Disease
9:20 am	Charles S. Bryan (page 18) "My Dear Remsen:" Osler's Polemic Revisited
9:40 am	BREAK Chesapeake Gallery, Level 3

Monday, April 27, 2015 (continued)

Psychosocial Aspects of Medicine Herbert Swick, Moderator | Chesapeake I & II, Level 3

10:20 am	WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE Krista Grande (page 30) A Place for Every Child: The Development of Child Psychiatry in Rochester, NY	
10:40 am	Darryl D. Bindschadler (page 15) George Engel and the Biopsychosocial Model	
11:00 am	THE JOHN P. MCGOVERN AWARD LECTURESHIP Rolando Del Maestro Leonardo da Vinci and the Search for the Soul	
12:00 pm	LUNCHEON Chesapeake III, Level 3	
Disparities Paul Mueller, Moderator Chesapeake I & II, Level 3		
1:00 pm	P. Preston Reynolds (page 51) Promoting Diversity and Addressing Health Disparities through Teaching about the History of African Americans in the Health Professions	
1:20 pm	WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE Angela Castellanos (page 19) Shifting Attitudes Towards Health Disparities: The Office of Negro Health Work from 1932-1951	
1:40 pm	Jacqueline Posada (page 50) St. Vincent's Clinic: A Student Run Free Clinic That Emphasizes Oslerian Ideals	
2:00 pm	WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE Matthew L. Edwards (page 25) Nancy Caroline and Peter Safar's Freedom House: Physicians as Agents of Change	

Monday, April 27, 2015 (continued)

Potpourri I

Paul Mueller, Moderator | Chesapeake I & II, Level 3

2:20 pm Robert R. Nesbit, Jr. (page 47)

Chlorosis

2:40 pm Peter E. Dans (page 23)

"The Angel of the Lower East Side:" Resurrecting Doctor Annie Sturges

Daniel from Obscurity

3:00 pm BREAK | Chesapeake Gallery, Level 3

4:00 pm BOARD BUSES

4:30 – 6:30 pm RECEPTION & TOURS

Welch Library, Board Room, Osler Textbook Room, Christus Consolator

statue, & Johns Hopkins "Dome"

6:30 pm DINNER

West Reading Room of the Welch Medical Library

PRESIDENTIAL ADDRESS

Herbert M. Swick

Tradition and Change: Wither the AOS?

Tuesday, April 28, 2015

7:00 am – 5:00 pm Registration | Chesapeake I & II Foyer, Level 3

7:00 – 8:00 am Continental Breakfast | Chesapeake Gallery, Level 3

Military Medicine

Joseph VanderVeer, Moderator | Chesapeake I & II, Level 3

8:00 am Henry Travers (page 55)

William Osler and Stonewall Jackson: A Footnote to History

8:20 am David Hamilton (page 32)

'Flushing out the Badness:' The U.S. Military and Empyema Management

in 1918

Tuesday, April 28, 2015 (continued)

8:40 am	Martin L. Dalton & Laurence A. Lyons (page 22) Medicine Men - Drs. Edward Churchill and Champ Lyons in World War II
9:00 am	WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE Colten D. Bracken (page 17) The Humanity of a Professional Brotherhood: Collaboration of Civil War Surgeons
9:20 am	John F. Delaney (page 24) Joseph-Ignace Guillotin, M.D Wrongly Accused!
9:40 am	BREAK Chesapeake Gallery, Level 3
Novel Treatment, Technologies and Teaching Joseph VanderVeer, Moderator Chesapeake I & II, Level 3	

10:00 am	David K. C. Cooper (page 21) The Forgotten French – The 'Heroic' Era of Kidney Transplantation
10:20 am	Robert A. Kyle (page 38) The Emergence of Modern Chemotherapy from a World War II Bombing Raid (The "Second" Pearl Harbor)
10:40 am	Scott H. Podolsky (page 49) From the "Personal Equation" to the "Double Blind" Study
11:00 am	Eric L. Matteson (page 42) A Complex Crossroads of History and Hope: The First Use of Cortisone for Rheumatoid Arthritis
11:20 am	Bernard M. Karnath (page 36) Diagnostic Technology in Sir William Osler's Time
11:40 am	Christopher J. Boes (page 16) The Founding of the Mayo School of Graduate Medical Education
12:00 pm	LUNCHEON Chesapeake III, Level 3

Tuesday, April 28, 2015 (continued)

Baltimore

Laurel Drevlow, Moderator | Chesapeake I & II, Level 3

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1:00 pm	William N. Evans (page 26) Maude Abbott, Alfred Blalock, and Helen Taussig's Trips to London: The North American Invasion of the "Beatles" of Congenital Heart Disease	
1:20 pm	Paul R. McHugh (page 43) The Tudor and Stuart Literary Club of Johns Hopkins University: Sir William Osler's Hopes, Their Realization, and Recent Frustration	
1:40 pm	Richard Colgan (page 20) "A Servant to his Brethren" - Osler's Impact on the University of Maryland School of Medicine and on the Maryland Med-Chi	
2:00 pm	C. Ronald MacKenzie (page 41) The Johns Hopkins Hospital Bulletin: History with a Concentration on the Osler Years	
2:20 pm	Marvin J. Stone (page 53) John M.T. Finney: Distinguished Surgeon and Oslerphile	
2:40 pm	Robert M. Beazley & Milford M. Foxwell, Jr. (page 14) Dr. Maurice Pincoffs: Soldier, Teacher and Master Physician	
3:00 pm	BREAK Chesapeake Gallery, Level 3	
Quacks and Controversies Laurel Drevlow, Moderator Chesapeake I & II, Level 3		
3:20 pm	John M. Harris, Jr. (page 33) Turning the Tables – An Osler Admirer Fights Quackery in the Press	
3:40 pm	Stephen B. Greenberg (page 31) "take the parliamentary lancet out of the national arm:" Conscientious Objectors and the Anti – Vaccination Movement	
4:00 pm	Richard S. Fraser (page 28) Duncan McEachran and the Comparative Medicine Movement in Nineteenth Century North America	

Tuesday, April 28, 2015 (continued)

4:20 pm Michael E. Moran (page 46)

The Cybernetics of Dr. Warren McCulloch

4:40 pm Robert G. Mennel (page 44)

Medical Thought: Has Its Essence Changed Throughout History?

Or Are We Doomed to Make the Same Mistakes?

5:00 pm Douglas J. Lanska (page 39)

Andreas Vesalius as a Vivesectionist

5:20 pm ADJOURN

6:00 – 7:00 pm RECEPTION | Chesapeake Gallery, Level 3

7:00 pm BANQUET | Chesapeake Gallery, Level 3

Wednesday, April 29, 2015

7:00 am – 12:00 pm Registration | Chesapeake I & II Foyer, Level 3

7:00 – 8:30 am Continental Breakfast | Chesapeake Gallery, Level 3

7:30 – 8:30 am Annual Business Meeting | Chesapeake I & II, Level 3

Potpourri II

Christopher Boes, Moderator | Chesapeake I & II, Level 3

8:40 am Richard J. Kahn (page 35)

The Case of the Blank Physician's Case Book

9:00 am Paula Summerly (page 54)

Oslerian Pathology and Museology in Texas

9:20 am John W. K. Ward (page 57)

The Gift of a Book from the AOS and the Spoor of Previous Owners

9:40 am BREAK | Chesapeake Gallery, Level 3

Wednesday, April 29, 2015 (continued)

Medical Luminaries

Christopher Boes, Moderator | Chesapeake I & II, Level 3

10:00 am Michael C. Trotter (page 56)

Rudolph Matas, M.D.: 'The Surgical Osler'

10:20 am Maria G. Frank (page 27)

Vesalius, Valverde, Galenism and Plagiarism: A Short Review of Two Anatomical Illustrators of the Sixteenth Century and Praise of One of the

Most Influential Physicians in the History of Medicine

10:40 am J. Mario Molina (page 45)

Osler, Cushing and Vesalius

11:00 am Rebecca Pinnelas (page 48)

Letters from Libman: Divining Dispatches from an American

11:20 am Irving Kushner (page 37)

Claude Bernard – A Failed Playwright

11:40 am George Sarka (page 52)

Osler, Abbott, Barriers to Women in Medicine and Congenital Heart

Disease

Noon ADJOURN

1:00 pm TOUR OF HISTORICAL DAVIDGE HALL (optional)

Davidge Hall opened in 1812 and is the oldest U.S. building in continuous

use for medical education. The University of Maryland Alumni Association has offered to provide a one hour tour of this National

Historic Landmark.



Photos courtesy of University of Maryland Alumni Association

Osler-Weber-Rendu Disease

Jamie S. Barkin

A nationally recognized leader in the field of gastroenterology, Dr. Barkin graduated magna Cum Laude from the University of Miami, School of Medicine. He is Professor of Medicine and Oncology at the University of Miami, Miller School of Medicine and served as Chief of Gastroenterology at Mount Sinai Medical Center, Miami Beach, FL. He was President of the American College of Gastroenterology and Governor and Trustee of the American College of Physicians. He is a distinguished physician, dynamic educator and lecturer, innovator, editor and author with over three hundred articles and editor of multiple books He is a Major General (RET) in the US Army Reserve.

Osler Weber Rendu Disease (OWRD) aka, hereditary hemorrhagic telangiectasis (HHT) is an autosomal dominant disorder causing vascular dysplasia throughout the body which results in bleeding. OWR, an eponymous disease, is named and honors the physician who first identified or elucidated the basic tenet(s) of the disease. The aim of this presentation on HHT is to review the history of its discovery and to answer this question of what is its rightful name. OWRD is manifested by mucocutaneous telangiectasias and arteriovenous malformations (AVMs), which can cause recurrent severe bleeding and shunting and are a source of serious morbidity and mortality. Lesions can affect the GI tract, skin, nasopharynx, respiratory and GU system. Bleeding is its most common presentation, leading to severe anemia that requires multiple transfusions. The prognosis varies, depending on the location and the severity of symptoms. Citations in the literature for HHT vary between the names Osler, Weber and Rendu. In 1909, Frederic Moir Hanes, [1883-1946] a 26 year old medical resident at the Johns Hopkins Hospital, who later became head of the Department of Medicine at Duke University, reviewed the world's literature in the Johns Hopkins Hospital Bulletin 20:63–73 and for the first time named the disease Hereditary Hemorrhagic Telangiectasia. Haynes stated, "the striking impetus imparted to the disease by Osler's communication" published in 1901. Other physicians such as Drs. H.G Sutton (1864), BG Babbington (1865), W. Legg (1876), O. Chiari (1887) and MA Chauffard (1896) had reported on vascular nevi in patients with familial epistaxis but had suggested that it was a variant of hemophilia. Osler's description of recurrent mucous membrane bleeding from multiple cutaneous telangiectases was initially published in 1901 in Johns Hopkins Hospital Bulletin 12:333–337 entitled "On a family form of recurring epistaxis, associated with multiple telangiectases of the skin and mucous membranes." He credited Dr. Rendu's 1896 report of a 52 year-old man with telangiectasias of the lips, nose, soft palate, and tongue who had recurrent epistaxis. While Rendu seemed to recognize this as a non-hemophiliac disorder, it was Osler who clearly stated that this disease was unrelated to hemophilia and suggested the presence of bleeding telangiectasias in the viscera. Osler was the first to document at autopsy, visceral telangiectasias of the stomach. F. Parkes report in Lancet 1907;2:160–162 on multiple hereditary developmental angiomata (telangiectases) of the skin and mucous membranes associated with recurring hemorrhages and Weber's publication, listed William Osler's 1901 article as their first citation. Thus again, confirming that Osler provided the knowledgeable foundation of this disease. In contrast to others like Dr. Barry Cooper who presented his view to the Society in 1999 concluding that Rendu's name should be first, we believe that HHT should be OWR disease based on Osler's contributions of the first documented description of its hereditary and non-hemophiliac nature of this recurrent mucocutaneous bleeding disease. Osler also described visceral angiomata both in clinical cases and by autopsy studies. This strongly supports the opinion that Osler should be the first name of this syndrome.

- 1. Explain the history of HHT.
- 2. Describe the discovery of HHT.
- 3. Answer the question of HHT's rightful name.

Dr. Maurice Pincoffs: Soldier, Teacher and Master Physician

Robert M. Beazley & Milford M. Foxwell, Jr.

Dr. Beazley is a graduate U of M School of Medicine. Professor Emeritus, Surgery, Boston University and Dr. Foxwell is a graduate U of M School of Medicine and Associate Dean of Admissions at UMSM.

Pincoffs was Chicago born and educated before transferring to Johns Hopkins School of Medicine in 1910 to complete his last two years. After internship at Chicago Presbyterian Hospital he returned to the Hopkins system for two years of medical residency at Baltimore City Hospitals where he became friends with the Chief of Surgery, Dr. Arthur Shipley. In 1915, he entered practice with Dr. Lewellys Barker, Dr. Osler's successor, while he did part time work on secretin in Dr. John Abel's lab.

Called to France in 1917, he served gallantly and without regard for his safety as an Ambulance Medical Officer. Twice nominated for Congressional Medals of Honor, he earned a DSC as well as the Croix de Guerre. Returning to Hopkins in 1919 he became an Instructor in Medicine but in 1922 was offered, with the strong urging of Dr. Shipley, the post of Professor and Head of Department of Medicine at the University of Maryland School of Medicine. He held the chair for the next 32 years.

He was an excellent administrator and in the Depression even managed to build a University Hospital. A Socratic teacher, he held his students to especially high standards. Generations of medical students heard the story of a young woman with paroxysmal hypertension in whom Dr. Pincoffs made the first preoperative diagnosis of pheochromocytoma. He asked that she return daily to his office until she had an "attack" during which he recognized the clinical effects of excessive adrenalin and asked Dr. Shipley to remove her adrenal tumor. His consistent thoroughness and attention to detail had him labeled as a "true Oslerian physician."

For 27 years he was Editor of the Annals of Medicine and ultimately President of The American College of Physicians which awarded him title of "Master of the College". World War II found him Commanding Officer of the 42nd General Hospital in Australia, later Chief of Preventive Medicine for Southeast Pacific Theater and finally, after liberation, Director of Public Health for Manila. His experience with tropical diseases would lay groundwork for the University's development of an internationally recognized expertise in infectious diseases. Pincoffs stepped down in 1954 to start the Department of Preventive Medicine. His colleagues established the Pincoffs Annual Visiting Lectureship in 1957. In 1960, at the age of 74, he passed away, having influenced thousands of students while leaving an indelible mark on the School, the State of Maryland and the Nation.

- 1. Understand early relationships between Hopkins and University of Maryland.
- 2. To show how WWI influenced Maurice Pincoffs' leadership skills.
- 3. To highlight Pincoffs' ability to teach by example.

George Engel and the Biopsychosocial Model

Darryl D. Bindschadler

Dr. Bindschadler is a retired Pulmonologist Internist from Cheyenne, Wyoming.

George Libman Engel and his twin brother Frank Libman Engel were born at home in New York City on December 10, 1910. Engel's uncle, Dr. Emanuel S. Libman played a pivotal role in young George's development. Columbia Grammar School was followed by Dartmouth College and Johns Hopkins Medical School. After a first year summer in Russia with biologist Alexander Gurwitsch, George and his brother worked under Dr. Harrison Martland, the Sherlockian Pathologist, Medical Examiner of Essex County NJ. This experience helped to establish one of the most notable characteristics of George's career. He became an outstanding clinician in Internal Medicine, often amazing and mesmerizing his audience with the most astute observations and legendary deductions related to puzzling and mysterious patient maladies. During his medical school years he also was exposed to Dr. Adolf Meyer, distinguished professor of Psychiatry, and Dr. George Canby Robinson, lecturer in preventive medicine who emphasized the "personal, social and sanitary background of patients."

A Boston fellowship with Dr. Soma Weiss followed two years of productive scientific investigation and clinical advancement as a rotating intern and a year of residency. A highlight of his fellowship: "I saw the attending, John Romano, a young psychiatrist pull up a chair and sit down with the patient and, in effect, invite him to tell his own story before the assembled group....the drama of Romano, "pulling up a chair and listening to the patient, as he was accustomed to do on psychiatric rounds, changed my life forever. My entire career since can be traced to that happy concordance of vision and action."

Engel and John Romano arrived in Rochester NY in 1946 and introduced a multidisciplinary and multidimensional approach to medical education that included the use of the open ended interview, a focus on the biological factors in disease and an emphasis on personal, psychological and social factors that might influence, exacerbate or modify illness. Over the next twenty five years Engel directed and taught the second-year introduction to Medicine course. He served as a superlative model for interviewing technique, performing detailed physical examinations and demonstrating his outstanding skills of deductive reasoning and summation. Students joined in sessions that analyzed the results of observed interviews, great attention being paid to the psychological and social settings in which illness developed as well as those factors involved during recovery.

Engel published his classic paper "The Need for a New Model: A Challenge for Biomedicine" in the April 8th 1977 issue of Science. Somewhat controversial and often misunderstood, it never gained widespread acceptance as an alternative to the progressively reductionist, biomedical, probabilistic method that dominates Medicine. Its approach to a patient and illness, taking into account the psychological and social circumstances in addition to "measurable" bioscience serves, along with the use of the open ended interview technique, as a method to greatly enhance the total knowledge base concerning the patient as well as contributing immeasurably to the connectivity and trust between the physician and patient. If we move from the probabilistic to the individualistic practice of medicine, the biopsychosocial approach has the opportunity to enhance patient- doctor communication, reduce criticism and distrust and provide more effective care.

- 1. List three individuals who greatly influenced George Engel's early medical career.
- 2. Outline features of the Biopsychosocial Model.
- 3. Discuss three components of an open-ended interview.

The Founding of the Mayo School of Graduate Medical Education

Christopher J. Boes & W. Bruce Fye

Chris Boes is secretary of the American Osler Society. Bruce Fye is a past president of the American Osler Society, and won the Society's Lifetime Achievement award in 2009.

The Mayo Foundation for Medical Education and Research (Mayo Foundation), the precursor to the Mayo School of Graduate Medical Education, originated in 1915. The Mayo Foundation aimed to establish a higher standard for training specialists. Most authors rightfully emphasize Johns Hopkins Hospital (founded 1889) as the site of origin of the American medical residency. While not the first, the Mayo Clinic made significant contributions to the residency system for training physicians in the United States.

Together, the University of Minnesota and the Mayo Foundation pioneered a graduate medical education program that allowed residents to earn Masters and Ph.D. degrees in clinical medicine and surgery. Unlike the situation elsewhere in the United States, the residency training program was not pyramidal. In a pyramidal residency program, each year some residents were eliminated. All who started the Mayo Clinic residency program had a chance to finish. Louis Wilson, the first director of the Mayo Foundation, was a member of the American Medical Association's Council on Medical Education and Hospitals, whose 1920 university graduate medical education recommendations were patterned after the Mayo Foundation. He was the first president of the Advisory Board for Medical Specialties. In 1934, the Advisory Board clarified that specialists should have three years of training after internship, mirroring the residency training at Mayo Clinic. Wilson felt strongly that "only the men in a specialty [were] competent to say who else should be recognized as competent in that specialty." Of the 456 graduate students who left the Mayo Foundation during its first decade, 100 received Master of Science degrees, and six received Ph.D. degrees. By the end of a resident's training, the faculty could intelligently certify "the competency of each candidate to begin the practice of the special field of his major study in a scientific manner without supervision."

The Mayo Clinic residency was the nation's first three-year, university-based program to train graduate physicians in specialty practice and medical scientific research, and to grant the M.S. or Ph.D. degrees in clinical specialties. Mayo pioneered the parallel residency system before World War II, and in the postwar years it would replace the pyramid system so prominent elsewhere in America. The Mayo Foundation required that its advanced degree graduates be able to practice without supervision by the end of the residency program. Specialty board certification replaced graduate degrees as proof of competency over time, and the Mayo Clinic training programs adjusted accordingly. The Mayo Clinic ultimately became the largest site of graduate medical education in the world.

- 1. Define the unique contributions of the Mayo Clinic to the American residency system.
- 2. Compare the parallel residency pioneered at Mayo Clinic to the pyramidal residency popular in America before World War II.
- 3. Outline the contributions of Louis Wilson, M.D., to graduate medical education in America.

WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE

The Humanity of a Professional Brotherhood: Collaboration of Civil War Surgeons

Colten D. Bracken

Colten Bracken is a fourth-year medical student at Mayo Medical School in Rochester, MN. He completed his undergraduate studies at Southern Utah University. He has done research in everything from Orthopedics to Family Medicine. In addition to researching this project he has also written a few historical editorials for ACP-Hospitalist. He is the director of the Boerhaave History of Medicine interest group and looks forward to future research in medical history.

2015 marks the 150th anniversary of the surrender of General Robert E. Lee and the end of the American Civil War. The 4-year war bitterly divided a young nation and pitted North vs. South and brother vs. brother. Yet throughout the conflict, medical professionals on both sides were able to see past the contentious political and social issues of the time as they cared for all injured soldiers regardless of where their allegiances or sympathies lied. In fact, directions to do so were communicated from the highest levels of military and medical hierarchies. Even harder to comprehend is that these 'enemy' surgeons often worked side-by-side after battles.

This professional collaboration had not always been the case. At the beginning of the war, surgeons were treated with no distinction from soldiers, and they were often taken prisoner despite their honorable mission. In 1862, more than a year into the war, General "Stonewall" Jackson's physician, Hunter Holmes McGuire, initiated a movement that would ultimately lead to both the Federal and Confederate governments declaring that all physicians be considered non-combatants and immune to capture as prisoners of war. Ratified in June of the same year by both governments, the "Winchester Accord" provided the means by which a small ray of light was introduced into the bloodshed of the Civil War.

After the Winchester Accord, surgeons were able to continue their work triaging and operating on the seemingly endless stream of injured soldiers brought to make-shift hospitals without fear of being captured. It was in those blood-stained hospital camps that Union and Confederate surgeons rolled up their sleeves and operated together on numerous occasions. While not always the case, they often shared their desperately scarce medical supplies with their enemy counterparts. In some circumstances they even slept in the same quarters. By studying these doctors' stories and their acts of humanity in an inhumane environment, we may gain a deeper understanding of the collaborative brotherhood that played a small role in keeping our nation undivided and perhaps jumpstarted American medicine.

- 1. Identify the conditions and steps that led to the free exchange of captured medical personnel between the North and South armies.
- 2. Evaluate the motives and costs of helping 'enemy' surgeons.
- 3. Contrast the prevailing social climate of the time with the altruistic conduct of Civil War surgeons and the possible repercussions their conduct had on post-war American medicine.

"My Dear Remsen:" Osler's Polemic Revisited

Charles S. Bryan

Charles S. Bryan is Heyward Gibbes Distinguished Professor of Internal Emeritus at the University of South Carolina, and a past president and long-time secretary-treasurer of the American Osler Society.

What would William Osler do in today's confusing healthcare environment? His famous polemic against the full-time system, dated September 1, 1911, and addressed to president Ira Remsen of the Johns Hopkins University, suggests Osler was probably no better than most of us at forecasting what is best for future generations.

In brief, the prospect of a large Rockefeller Foundation grant prompted a proposal to put the Department of Medicine at Johns Hopkins (and two other departments) on the "so-called university or full-time basis," whereupon the professor's salary would be \$10,000 and two associate professors' salaries would be \$7,500 (in 2014 dollars, \$261,230 and \$195,922, respectively), with all patient care income to be returned to the department. Osler strongly opposed the plan, prophesized the evolution of "a set of clinical prigs" throughout the U.S., and urged that "ardent souls who wish to be whole-time clinical professors" be diverted "to the Research Institutes in which they properly belong." Osler's letter was widely circulated.

None of numerous retellings of this story reviewed by the present prospective presenter contrast Osler with Remsen—who in at least three ways was better positioned than Osler to foresee the future of academic internal medicine. First, whereas Osler's experience in Germany was brief (inspiring him to "build up a great clinic on Teutonic lines"), Remsen's was substantial (Ph.D. at Göttigen, post-doctoral work at Tübingen) and imbued him with a deep appreciation for the German research university, then the world's prototype. Second, Remsen had not only written a definitive textbook (in organic chemistry) but had also contributed significantly to basic science. Finally and usually overlooked, Remsen had a medical degree (from the College of Physicians and Surgeons of New York) and was thus an avatar of the M.D.-Ph.D. physician-scientist. Indeed, after arriving in Baltimore, Remsen in 1878 addressed the Medical and Chirurgical Faculty of Maryland on "Chemistry and its relations to medicine." Nonetheless, Remsen declined temptations to argue with Osler, wisely allowing events to play out toward the eventual compromise solution.

Osler acknowledged the inevitability of self-interest: "We are all for sale, my dear Remsen." His polemic to Remsen, and Remsen's polite response, illustrate the importance of considering all stakeholders' perspectives when decisions will affect society's best interests.

- 1. Define the several versions of the full-time plan as it evolved in the U.S.
- 2. List Osler's principal objections to the full-time plan.
- 3. Discuss at least three ways in which Remsen's response to Osler (October 26, 1911) demonstrates diplomacy, tact, and "the sense to let things settle."

WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE

Shifting Attitudes Towards Health Disparities: The Office of Negro Health Work from 1932-1951

Angela Castellanos

Angela Castellanos is a fourth-year medical student at Harvard Medical School.

In 1932, the federal government, facing newly documented health disparities between African-Americans and the white majority, established the Office of Negro Health Work within the United States Public Health Service (USPHS). This was the first federal office to address minority health in the 20th century.

Although this Office served mostly as a central liaison for the larger "National Negro Health Week" public health movement with little large-scale impact on American health policy, I will here highlight the importance of this office by tracing the events leading up to this Office's formation in 1932 and dissolution in 1951. I will analyze how the shifting national burden of disease from infectious to chronic illness, the African-American intellectual community movement towards integration, and the rise of the African-American physician shaped this first attempt at addressing health disparities on a national level.

The documentation of health disparities between the white and African-American populations began in the early 20th century, and also demonstrated infectious diseases to be the primary cause of mortality in the U.S. The fear of infectious disease, particularly venereal disease, gained prominence in American society, and vital statistics now proved that such diseases disproportionately affected African-Americans. While the white majority maintained that African-American health was due to inherent physical inferiority, the African-American community, led by intellectual leaders such as Booker T. Washington and W.E.B. DuBois, pointed to "matters of condition," such as poor sanitation and poor economic opportunity as determinants of African-American health. In 1915, the Tuskegee Institute founded Negro Health Week, a grass-roots movement in the African-American community to promote health and disease prevention. By the 1930s, physician and business leaders from Howard University and the National Medical Association took the reigns of the movement to gain more visibility and support from the federal government.

During the 1920s-30s, the USPHS grew increasingly focused on infectious diseases such as tuberculosis and venereal diseases, and saw the African-American community as an important and untapped target audience. With Negro Health Week gaining momentum, the USPHS seized the opportunity and partnered with African-American leaders, establishing an official Office of Negro Health Work in the USPHS in 1932.

By the 1940s, with treatments available for syphilis and tuberculosis, and a shift towards cancer and heart disease as the predominant feared causes of death, the fervor around infectious disease in the public health realm began to fade. At this time, African-American intellectuals, notably physicians, publicly opposed a separate health week for African-Americans, emphasizing integration and a greater need for African-American physicians and hospitals. With decreased interest and support both internally and federally, The Office of Negro Health Work dissolved in 1951, leaving health disparities unaddressed at the federal level until the mid 1980s.

- 1. Identify the shifting burden of disease in the US during the early to mid 20th century and how this shift differed between the African-American and white population.
- 2. Identify the motivations to address health disparities from within the African-American community and from the United States Public Health Service during the 1930s.
- 3. Examine the societal forces that lead to the dissolution of the Office of Negro Health Work and how these perspectives relate to modern federal approaches to alleviate health disparities.

"A Servant to his Brethren" - Osler's Impact on the University of Maryland School of Medicine and on the Maryland Med-Chi

Richard Colgan

Richard Colgan is Professor and Vice Chairman of Medical Student Education and Clinical Operations in the Department of Family and Community Medicine at the University of Maryland School of Medicine in Baltimore, Maryland. He is the author of <u>Advice to the Healer: On the Art of Caring.</u>

Although William Osler's impact on the Johns Hopkins Hospital and School of Medicine are legendary, less-well-known are his relationships elsewhere in Baltimore—specifically at the University of Maryland School of Medicine and at the Medical and Chirurgical Faculty of the State of Maryland (the Med-Chi). How was he perceived? What did he do to defuse envy and mistrust, and to help advance medicine outside of East Baltimore? Archival sources support the thesis that Osler, a peacemaker at heart, did much to foster collaboration and good will.

From the archives of the University of Maryland School of Medicine, in its publication *Old Maryland*, one finds many references to Osler. As his departure drew near, the May 1905 issue of *Old Maryland* featured Osler on its cover. Future issues contained excerpts and enthusiastic reviews of Osler's addresses. Osler was "warmly welcomed" as a keynote speaker at the inaugural meeting of the University of Maryland's' Library and Historical Society, held in Maryland's historic Davidge Hall on December 20, 1905. "Dr. Osler then rose," it was reported, "amid the cheers of the audience . . . [and] spoke beautifully and impressively of his subject The meeting was in every way a great success and will doubtless be long remembered by those present, especially the students." Such mutual expressions of appreciation surely reflect numerous small, mutually-beneficial acts through the years. After his departure from Baltimore Osler continued to receive the publication; he wrote from Oxford: "Many thanks for the *Old Maryland*, which I read with great interest."

The archives of the Med-Chi document the extent to which Osler frequented that institution, promoted its library and journal club, supported local public health measures, and advanced the medical profession. He thus chose the Med-Chi as the venue for his farewell address to the medical profession of the United States, aptly named "Unity Peace, and Concord." That address begins with his stated intent to "be first of all a servant of my brethren" and closes with a plea for charity to all. The Med-Chi cherished his memory and honored him in 1920 with a special commemorative bulletin conveying the extent to which they had fully embraced the Canadian as one of their own.

- 1. List at least three ways by which Osler fostered collaboration and good will among physicians in Baltimore and elsewhere in Maryland.
- 2. Describe Osler's remembrance at the University of Maryland and at the Maryland Med-Chi.
- 3. Outline take-home messages from Osler's 1905 farewell address at the Maryland Med-Chi that remain highly relevant to today's increasingly balkanized medical profession.

The Forgotten French – The 'Heroic' Era of Kidney Transplantation

David K. C. Cooper

David Cooper, a graduate of Guy's Hospital in London, 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.

There are two French pioneers in kidney transplantation (Tx) whose work has largely been forgotten. Dr. Joseph Murray, American 1990 Nobel Prize winner for his contributions to organ transplantation, told me that "the combined efforts of the French were monumental, there is no question about it." The two men, both Parisians, were Rene Kuss, a urologist, and Jean Hamburger, a nephrologist. Their contributions largely paralleled each other over a 30 year period. The relationship between them was strained and they rarely communicated.

Kuss, born in 1913, was a charismatic personality, liked by all. He was born into relative wealth, his father having accumulated an astounding collection of paintings by famous artists, to which his son added. Kuss was a tall, distinguished-looking man. In his youth, he had a number of beautiful girlfriends, including one who was a Lido nightclub showgirl, and he also enjoyed fast cars, participating in the Monte Carlo Rally. During WWII, he joined the French Navy and was on one of the destroyers in Toulon bombed by the British to ensure they did not fall into German hands. For his courageous help to others, he was awarded the Military Cross with Palm. Once the Americans entered France, he engaged as a surgeon in the American 72nd Army of General Patton. After the war he set up in urological practice in Paris and embarked on experimental and clinical programs of kidney Tx. Importantly, he introduced the surgical technique of kidney Tx that is still used today. In 1951, his first four transplants used guillotined prisoners as donors, Kuss removing the kidneys on the prison floor. In 1952, he concluded that "in the present state of knowledge, the only rational basis for kidney replacement would be between monozygotic twins," thus preempting Murray who carried out the first transplant between identical twins in 1954. Kuss died in 2006, aged 93.

Jean Hamburger, born in 1909, was a very different personality. He was ambitious, emotionally cold, and lacked the humor of Kuss. To him, surgeons were just technicians. As early as 1947, he described what would be needed for successful kidney Tx, namely (i) protection of the kidney against ischemia during Tx, (ii) identification of tissue compatibility groups (similar to blood groups) to diminish rejection, and (iii) discovery of anti-rejection techniques or drugs. He urged his friend, Jean Dausset, the discoverer of the first human leukocyte antigens, to explore tissue typing in selecting donor-recipient matches, which Dausset did, winning the Nobel Prize in 1980 for this work. Hamburger's team carried out the first kidney biopsy and described the histopathology of early rejection. His contributions led to his election to the French Academy of Science, but he had his sights set on election to the French Academy, which is the most prestigious of the French Academies, its members being known as the 'immortals'. To achieve this goal, he established himself as a popular philosopher. He died in 1992, aged 82.

Both the groups of Kuss and Hamburger were among the first to (i) carry out transplants without immunosuppressants, (ii) carry out transplants with living-related and unrelated donors, (iii) use immunosuppressive drugs, and (iv) obtain long-term survivors. Many consider their contributions have not been sufficiently recognized. Both were disappointed when they did not share the Nobel Prize with Murray, but I am told that each would have been much more upset if their Parisian competitor had shared the prize without them.

- 1. Appreciate the contributions of two largely-forgotten pioneers in organ Tx.
- 2. Understand the difficulties faced by the pioneers of organ Tx.
- 3. Learn of the early progress in kidney Tx.

Medicine Men - Drs. Edward Churchill and Champ Lyons in World War II

Martin Dalton & Laurence Lyons

Dr. Martin Dalton received a B.S. degree from Auburn University in 1953 and an M.D. from the University of Alabama School of Medicine in Birmingham in 1957. In September 2005, he was appointed Dean of Mercer University School of Medicine and continued to serve as Chair of Surgery until June 30, 2007. Dr. Dalton is a member of the American Surgical Association, the Southern Surgical Association, the American Association for Thoracic Surgery, the Society of Thoracic Surgeons, the International Surgical Society, the Society for Vascular Surgery, and the Southeastern Surgical Congress. He is the author of 153 publications in journals, seven books and four book chapters.

Dr. Laurence Lyons holds an A.B. from Harvard University and an M.S and Ph.D. in Electrical Engineering from Syracuse University. His avocation is Military History, with a particular interest in how technology influenced the conduct of World Wars I and II. He has coauthored two books: "Missed Signals on the Western Front – How the Slow adoption of Wireless Restricted British Strategy and Operations in World War I" (McFarland &Co., 2010) and a biography "George Owen Squier, U.S. Army Major General, Inventor, Aviation Pioneer, Founder of Muzak" (McFarland &Co., 2014).

The Second World War placed extreme stress on all belligerents, both totalitarian and democratic. But, in our democratic society it brought forward groups of extraordinary individuals dedicated to help the United States prevail against tyranny. In Los Alomos New Mexico Dr. Robert Oppenheimer assembled a team of distinguished physicists, some of whom had won or would win Nobel Prizes, to build a new complex nuclear device which was finally demonstrated to be feasible at Alamagordo NM in July 1945. At MIT's Radiation laboratory in Cambridge Mass. an equally distinguished team of electrical engineers and physicists, some of whom also won Nobel prizes, built the radar systems that hastened the defeat of the German and Japanese armed forces, notably against the Kamikaze threat off Okinawa in 1945. Less known until recently, a group of distinguished art restorers, curators and artists worked in the European and Mediterranean Theaters of Operations to safeguard centuries' old monuments from wartime damage and recover stolen art from Nazi leaders. Thanks to Robert Edsel we know them now as the "Monuments Men". Also less known, in the Mediterranean Theater Dr. Edward ("Pete") Churchill brought together a surgical team from leading American medical institutions that revived old and championed new methods of wound treatment that provided new hope for the servicemen wounded in action. His team included Drs. Frank Berry, Champ Lyons, Howard Snyder and many others who would go on to have distinguished careers in surgery. After the war these colleagues formed the Excelsior Surgical Society (after the Excelsior Hotel in Rome) with one honorary member, Dr. Churchill.

Pete Churchill had been Chief of the West Surgical Service at the Massachusetts General Hospital (MGH). In March 1943 he became the Chief Surgical Consultant in the theater, with the rank of full Colonel. After touring the theater he recommended and the Army adopted the concept of delayed primary wound closure and early adequate debridement, preventing infections in contaminated wounds. He noted that plasma was inadequate for the severely wounded. Getting no action from the Army on this he asked a New York Times reporter to break the story that Col. Churchill said blood transfusions were urgently needed. The Army responded.

Dr. Champ Lyons, who specialized in surgical bacteriology at MGH under Churchill, joined him in the theater in August 1943. He brought special qualifications. In November 1942 the Cocoanut Grove nightclub fire in Boston killed 492 people and those still alive were brought to MGH and the Boston City Hospital. Some of the victims were given the new drug penicillin, which had been purchased by the government and authorized for use in the treatment of mass casualties. Because of his work with the government in surgical bacteriology, Champ Lyons was selected to administer the drug and evaluate its effectiveness. Penicillin was so successful that the Army chose Champ to further evaluate it for wartime use. He led pilot studies of the drug at the new Bushnell General Hospital in Brigham City Utah and the new Halloran General Hospital in Staten Island in New York. He developed the protocol for the administration of the drug. When Champ arrived in the theater, he was immediately placed in charge of the treatment of the wounded by penicillin. He shared his knowledge and expertise with all medical personnel in the theater and in the subsequent campaign in Northern Europe. The widespread use of penicillin saved many lives.

- 1. Evaluate the improvement in the care of the wounded soldier brought about by Dr. Churchill and his group of surgeons.
- 2. Contrast the treatment of wounds by sulfonamides with treatment by penicillin.
- 3. Discuss the decline in mortality for the severely wounded between World Wars I and II.

"The Angel of the Lower East Side:" Resurrecting Doctor Annie Sturges Daniel from Obscurity

Peter E. Dans

Dr. Dans is an associate professor of medicine at Johns Hopkins School of Medicine where he taught medical ethics. He trained on the Osler medical service at Hopkins, as well as his alma mater Columbia P&S. After a 3 month stint treating cholera patients in Calcutta, he completed fellowships in infectious diseases at the Thorndike Memorial Laboratory and the NIH. He helped establish a migrant health clinic in Fort Lupton Colorado and was an RWJ fellow at the Institute of Medicine. Since 1990 he has written movie reviews for Pharos and is the author of <u>Doctors in the Movies: Boil the Water and Just Say Aah!</u>

This presentation is dedicated to two women physicians and to William Crozier. Living on Manhattan's Lower East Side in a cold water flat from 1938 to 1948, I was fortunate to be cared for by Doctor Mary Dunne Walsh, a Hopkins graduate whose copious hand-written instructions my mother kept till she died. In researching my book *Life on the Lower East Side*, I also learned from Bill Crozier about Doctor Annie Sturges Daniel's dedicated care for the sick in nearby tenements and her tireless work to abolish child labor. Called the Angel of the Lower East Side and the Ministering Angel to the Poor, she is virtually unknown today.

In some respects, Dr. Daniel represented three major missing areas in the development of the Hopkins model of patient care. First, she was a woman in medicine, a subject of much contention in Osler's day. Second, despite her work and that of many women doctors, the specialty of Pediatrics was not well-recognized as witness the absence of dedicated beds for children in the Hopkins Hospital design. Finally, the Hopkins care model was hospital-based not out-patient based and remained so for almost a century.

Born in 1858, Daniel was orphaned as a young child. She graduated in 1879 from the Women's Medical College of the New York Infirmary having specialized in obstetrics, gynecology and pediatrics. After two years as a pharmacist and as an intern, she was placed by Elizabeth Blackwell in charge of the Outpractice department (the Tenement House Service) which encompassed the notorious Five Points and Mulberry Bend. She made daily visits to the tenements treating illnesses as well as teaching hygiene and child care. She also supplied food, fuel, and clothing, as well as Thanksgiving and Christmas dinners.

In the 1890s Daniel's lecture coursework included a class on the normal child which she believed to be necessary to understand abnormal children. Her most important work was The Wreck of the Home: How Wearing Apparel is Fashioned in the Tenements. In it, she made the case that child labor was not just bad for children and the family, but for consumers as well. She also wrote articles in JAMA on tubercular meningitis, Fatal Fetal Ichthyosis, and 450 cases of Scarlet Fever. She died in 1944 having seen child labor outlawed and infamous squatters' tubercular roosts, like the Lung Block, destroyed.

- 1. Discuss child labor in America and Doctor Daniels role in abolishing it.
- 2. Contrast the state of Pediatrics in America with that at Hopkins at its founding.
- 3. Evaluate the role women physicians played in caring for children well into the 20th Century.

Joseph-Ignace Guillotin, M.D. - Wrongly Accused!

John F. Delaney

The author is an Associate Professor of Psychiatry, Temple University School of Medicine. He is currently the vice president of the Reynolds History of Medicine Society, at the University of Pittsburgh. He is board certified in Neurology, board certified in Psychiatry and in Geriatric Psychiatry. He has been president of the Allegheny County Medical Society, and currently is a board member of the Pennsylvania Medical Society, as District 13 (Allegheny County) trustee.

This article was written during the discovery of historical material that the author was gathering for a course about famous people who were physicians. It was noted that Guillotin was given credit for a device he did not invent, and any attempt to remove his name from it, failed. This was interesting because his name, the device and procedure were so common during the French Revolution. This paper hopes to show once again how wrongly accused Dr. Guillotin was for having invented this instrument of execution.

Joseph-Ignace Guillotin was well known during the French Revolution for recommending the large blade in an overhead frame as a humane method of execution. The device was named for Dr. Guillotin, but he was not the inventor. This paper will trace his education from Jesuit Professor of Literature, to Doctor of Medicine and Regent-Doctor in France. Additionally, his role in the French revolution and interest in Mesmer and "animal" magnetism" will be explored. Finally the attempts of his family to have his removed as the inventor of the device will be reviewed.

- 1. Know the historical misconceptions about the origins of the Guillotine, and its inventor.
- 2. Discuss the life of Dr. Guillotin and his contributions.
- 3. To evaluate the role of the guillotine and its historical use, even in the 20^{th} century.

WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE

Nancy Caroline and Peter Safar's Freedom House: Physicians as Agents of Change

Matthew L. Edwards

Matthew L. Edwards is a third-year medical student at the University of Texas Medical Branch. He received his undergraduate degree in sociology magna cum laude from Princeton University in 2010 and a graduate certificate in public health from the University of Texas School of Public Health in 2012.

Physicians have a long history of involvement in social activism, ranging from issues such as crime and public safety to food security, education, and poverty. Drs. Nancy Caroline and Peter Safar's social activism work in Pittsburgh during the 1960s improved not only on the community's health, but also addressed the social and economic conditions of many of the city's residents.

Prior to the 1960s, most critically ill or injured patients were transported to hospitals in the back of police cars, hearses, and paddy wagons. There were no formal requirements for hospital transporters, and most lacked even basic first-aid training. Dr. Peter Safar, an anesthesiologist and critical care physician concerned about the quality of acute medical care, developed Freedom House Enterprises ambulance service (FHE) as a vehicle to test his plans for mobile intensive care units staffed by trained paramedics. Dr. Safar appointed Dr. Nancy Caroline, a critical care fellow, as medical director of FHE.

Freedom House was a social and medical experiment. Safar and Caroline hired 50 "unemployable" African Americans: none had completed high school, many had criminal histories, and others could not read or write. These inner-city Hill District residents underwent the "most rigorous paramedic training ever offered to non-physicians." Caroline was previously involved in the civil rights movement and understood that FHE was an opportunity to not only improve the city's medical care, but was also a way of "encouraging Black enterprise." Each year of FHE's eight-year tenure, however, was confronted by several challenges, including: a skeptical city administration, a police force unwilling to relinquish its role in transportation, declining funding, changing leadership, and community-based racial tensions. By 1975, the FHE program was terminated. Despite its shortened tenure, FHE was the "proving ground for national standards" in personnel training and medical equipment.

Caroline's work with FHE encouraged her to write *Emergency Care in the Streets*, the first textbook for paramedic medicine. Through a joint effort by the White House Interagency Advisory Committee on EMS and the Department of Transportation, Caroline and Safar wrote the national curriculum for paramedic training. Moreover, nearly all of the FHE paramedics went on to achieve higher education, with some becoming physicians, allied health professionals, civic leaders, and teachers.

- 1. Discuss how physicians have historically understood their roles as agents of change.
- 2. Discuss the factors that provided the impetus for socio-medical programs like FHE.
- 3. Offer perspectives on what factors led to the success and discontinuation of FHE.

Maude Abbott, Alfred Blalock, and Helen Taussig's Trips to London: The North American Invasion of the "Beatles" of Congenital Heart Disease

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 pediatric cardiology.

In July 1932, Maude Abbott took her exhibit of diagrams of comparative anatomy, embryology, cardiac physiology, heart anomalies, photographs, clinical histories, chest X-rays, and electrocardiograms to London for the British Medical Association's Centenary Meeting. The *British Medical Journal* December issue described the exhibit: "The artistic merit of the many fine medical art drawings interpolated the wall display, and the skillful technique manifested in the mounting and stencil labeling of the specimens, made this exhibit one of the most attractive parts of the museum.... The systematic demonstration given by the author during the three days of the exhibition was honoured by a large attendance of visiting physicians, among which were many leading cardiologists."

Maude Abbott's collection exhibited in New York and London inspired clinicians and scientists to pursue the study of congenital cardiac malformations. England's Dr. James W. Brown authored his *Congenital Heart Disease* in 1939. In his preface he wrote, "Many will recall a magnificent collection of specimens and diagrams of congenital heart disease at the Centenary Meeting of the British Medical Association.... This exhibit was the work of Maude Abbott who has established herself as a principal pioneer in this particular field.... I must freely acknowledge my indebtedness to her...."

In September of 1947, two years after the end of World War II, The International Conference of Physicians met in London. Drs. Blalock and Taussig traveled to London where they demonstrated and lectured on the Blalock-Taussig shunt. London cardiovascular surgeon, Sir Russell Brock, wrote: "The Great Hall of the British Medical Association was packed. Dr. Taussig delivered her address impeccably and was followed by Dr. Blalock who presented his surgical contribution with his characteristic, apparently casual, drawl but really a forceful and incisive presentation of his brilliant and impressive results. The silence of the audience betokened their rapt attention and appreciation. The hall was quite dark for projection of his slides, which had been illustrating patients before and after operation, which suddenly a long searchlight beam traversed the whole length of the hall and unerringly picked out on the platform a Guy's nursing sister, dressed in her attractive blue uniform, sitting on a chair and holding a small cherub-like girl of 2 ½ years with a halo of blonde curly hair and looking pink and well; she had been operated on at Guy's by Blalock a week earlier. The effect was dramatic and theatrical and the applause from the audience was tumultuous. It was a Madonna-like tableau, a perfect climax to an impressive lecture on an epoch-making contribution and left nothing more to be said by the lecturer. No audience could fail to have been convinced or satisfied by this summation and no one there could possibly forget it."

- 1. Discuss the historical context of Drs. Abbott, Blalock, and Taussig.
- 2. Outline the respective medical conferences in 1932 and 1947.
- 3. Examine the influence of Drs. Abbott, Blalock and Taussig's influence on the development of UK and European congenital heart disease care.

Vesalius, Valverde, Galenism and Plagiarism: A Short Review of Two Anatomical Illustrators of the Sixteenth Century and Praise of One of the Most Influential Physicians in the History of Medicine

Maria G. Frank

Dr. Frank is Associate Chief of Hospital Medicine at Denver Health Hospital Authority and Assistant Professor of Medicine, University of Colorado, School of Medicine.

Undoubtedly, Sir William Osler has become one of the most emblematic personalities in clinical medicine. In the fifth centenary of his birth, I would like to remember another iconic physician, Andreas Vesalius, who not only changed the way we understand Medicine but was also a dedicated teacher and academician. As such, he was admired, criticized and even plagiarized by some of his contemporaries.

Andreas Vesalius of Brussels (1514-1564) was born to a family that had, for over a century, demonstrated a great devotion to Asclepius; his great-great-grandfather was a physician of reputation, and this tradition was carried over for generations. His education migrated between the University of Louvain; University of Paris; then back to Louvain where he obtained his baccalaureate; and the University of Padua, where he received his Doctorate in Medicine at the age of twenty-three. The day after his doctorate degree, he was appointed "Professor of Surgery" which made him also responsible for the teaching of anatomy.

Vesalius was a very prestigious physician and successful academician even before the publication of his masterpiece, *De Humani Corporis Fabrica and Epitome*, in 1543. In 1538, he published *Tabulae Sex*, the prelude for *De Fabrica*, followed by collaboration in two other publications, the 3rd edition of "*Institutiones*" and "*Opera Galeni*", in which he wrote about Galenic views and works. Paradoxically, he was viewed as an anti-Galenist; while respectful of Galen's teachings, he refused to blindly accept all ancient Greco-Roman doctrines and sought instead to note discrepancies through the observational method. His constructive criticism of Galen led Vesalius' peers view him as narcissistic and vain. Some of his contemporaries, such as Realdus Colombo (who followed Vesalius as Chair of Surgery), Juan Valverde de Amusco (Colombo's closest disciple), and Bartolommeo Eustacchi (one of the most openly vindictive adversaries of Vesalius) were among those University of Padua's Galenists who did not positively receive *De Fabrica*; they claimed that the anatomical differences found in Vesalius' *de Fabrica*, were due to human body's deterioration since the times of Galen.

The anti-innovation Galenism, or "anti-Vesalian faction", was aligned with the Catholic Anti-Reformation movement; its main aim was to return to traditional doctrines and outlaw any contradictory innovations. The Galenist Juan Valverde de Amusco, was born in Spain and studied in Padua under Colombo and Eustacchi's mentorship. He later followed Colombo to Rome where, as an "active member of the Galen Faction", published "*De anime et corporis sanitate*" in 1552. Curiously, the illustrations that he chose to include were modified copies of van Kalkar's woodcuts (most renowned of Vesalius artists). In 1556, he published "*La historia de la composicion del cuerpo humano*" containing 42 copperplates; for which he again borrowed most (all but four) from Vesalius' *De Fabrica*. Ironically, most of his illustrations are a mirror image of those of Vesalius. Plagiarism was not uncommon in the sixteenth century; however it is noteworthy that Valverde chose to "borrow" from who he criticized.

In the quincentenaries' of his birth, Vesalius is still remembered as exemplary academician, talented physician and superlative anatomist. Even his sixteenth century adversaries respected him and made this evident by plagiarizing his work. I feel it my duty to assist with the transcendence of these magnificent medical contributions for future generations.

- 1. To outline Andreas Vesalius' legacy to academic medicine.
- 2. To discuss the influence of Galen's teachings in the acceptance of Vesalius' *Fabrica* in the sixteenth century medical community.
- 3. To explore some of the multiple examples of plagiarism in the sixteenth century medical literature.

Duncan McEachran and the Comparative Medicine Movement in Nineteenth Century North America

Richard S. Fraser & Jennifer Pors

Dr. Richard Fraser, Professor, Department of Pathology, McGill University, Montreal, Canada. Jennifer Pors is a fourth year medical student at McGill University in Montreal. She recently won first prize from the McGill Osler Society and Osler Library Board of Curators for her essay Blood Ties: A History of Blood Transfusion. She plans on starting a residency in pathology in 2015.

The famous physician Rudolf Virchow wrote in the early 1880s "... (that) between animal and human medicine there are no dividing lines - nor should there be". Although this association had been loosely made for centuries, Virchow's statement concisely presaged the concept now known as *one health* – the notion that human and animal medicine inform and affect each other. This concept embodies two main tenets: first, the reciprocity of human and animal knowledge, namely that understanding disease in one species can lead to better understanding of that in another; and, second, the convergence of human and animal medicine, as exemplified by the transfer of disease from animal to man. Duncan McEachran had an important role in promoting these ideas in North America, and his work foreshadowed many facets of the one health movement.

McEachran graduated from the Edinburgh Veterinary College in 1861 and immigrated to Upper Canada in 1862. In 1865 he founded the Montreal Veterinary College, which became the first institute to teach veterinary pathology in North America. He modeled the College syllabus on that of the human medical school and employed lecturers from the McGill Medical faculty, including William Osler. In 1889, the Veterinary College was renamed the Faculty of Comparative Medicine and became a formal part of McGill University. This entity retained a close connection with the Medical Faculty; in fact, a veterinary student who completed one extra year of study in the Faculty could be certified as a human physician.

McEachran also acted as chief veterinary inspector for Canada from 1876 to 1902. One of the important aspects of this job was the prevention of spread of disease between animals and humans, exemplifying the convergence concept of one health. He published educational papers on zoonoses such as human - bovine tuberculosis and argued for legislation and testing to eradicate the disease. He was also one of the first advocates of the tuberculin skin test in Canada and was a strong proponent of milk pasteurization.

McEachran pushed the bounds of comparative medicine farther than pathology and physiology when he posited similarities between the human and animal psyche. He founded the Society for Comparative Psychology in 1887, and advanced the notion that the animal psyche has a depth and expression similar to that of the human child. Such ideas foreshadowed the evolution of veterinary medicine in the 20th century by focusing on animal emotions, particularly with respect to suffering.

- 1. Explain the origins and the concept of "one health."
- 2. List biographical information about D. McEachran.
- 3. Outline the emergence of one health in North America through the Montreal Veterinary College and other work of D. McEachran.

Titans of Tuberculosis: Osler and Trudeau

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 hearing from Edward Janeway that he had tuberculosis Edward Trudeau was stunned. He closed his practice and eventually retreated to the Adirondacks to live his last days near nature. But he improved and went on to establish the well-known Adirondack Cottage Sanatorium at Saranac Lake and the entire sanatorium movement. He built a primitive laboratory and trained himself in microbiology, being one of the first in the U.S to culture Mycobacteria. The "white plague" was everywhere, and the sanatorium thrived. Celebrities, also afflicted, arrived, the most prominent being Robert Louis Stevenson, whose relation to Trudeau was tentative.

In 1887 Trudeau traveled to Baltimore to report to the American Climatological Association on experiments showing that an unhealthy environment aggravates tuberculosis in rabbits. Arising to present the paper he fainted, causing a commotion, but with the bonus that Trudeau and Osler met, remained close friends, and corresponded frequently. Not long after, Osler referred a third-year medical student, Lawrason Brown, to Trudeau's sanatorium, where he improved enough to return to Hopkins and obtain his degree. Brown later returned to Saranac Lake to become resident physician at the Sanatorium, produce numerous papers, and help the institution grow. Osler referred other students, members of his own family, and Hopkins staff there. In his 1892 *Principles and Practice of Medicine* Osler specifically mentioned Trudeau's rabbit experiment, and that for tuberculosis patients he had "seen better results from the Adirondacks than anywhere else". Trudeau's first experiments with Koch's famous "tuberculin" were with a sample sent to him by Osler.

Trudeau's work and the benefits of fresh air at Saranac influenced Osler, who initiated tuberculosis programs for the poor in Baltimore (creating the first social service workers), founded the Laennec Society for the study of tuberculosis, and opened a tuberculosis dispensary at Hopkins. And Osler was instrumental in forming the National Association for the Study and Prevention of Tuberculosis, with Trudeau as president and Osler vice-president.

Trudeau's outlook emphasized optimism in the emotional makeup of the physician, as noted in a famous speech in 1910. It resembled Osler's views of idealism and the physician's "calling", but was expressed a little differently.

In his last year Trudeau was so weak from TB that he was carried in a chair to his favorite hunting spot, finally succumbing to his disease in 1915. In a eulogy Osler affirmed Trudeau's greatness and compared his struggle and endurance to that of Adolf Kussmaul, who had suffered a paraplegia while early in practice.

- 1. Outline the devastation produced by tuberculosis in the late nineteenth century.
- 2. Discuss Edward Trudeau's role in the sanatorium movement.
- 3. Evaluate the humanitarian and emotional role of the physician in caring for tuberculosis patients.

WILLIAM B. BEAN STUDENT RESEARCH AWARD LECTURE

A Place for Every Child: The Development of Child Psychiatry in Rochester, NY

Krista Grande

Krista Grande is a third year medical student at the University of Rochester School of Medicine and Dentistry. She completed her undergraduate training in Biology and Psychology at Williams College. She is committed to the liberal arts ideal of education and is proud to be a student at the institution that pioneered the biopsychosocial model of medicine.

The development of child psychiatry in Rochester, NY parallels its nationwide development. Rochester's first asylum for the mentally ill was established in 1857 as part of Monroe County Alms House. In 1891, New York State bought the asylum, and it became Rochester State Hospital. Children were admitted to Rochester State Hospital in its early years; however, it wasn't until 1959, seven years after the establishment of the American Academy of Child Psychiatry, that Hospital Director Christopher Terrence established the first formal children's treatment unit. "This was something that was sadly lacking in our treatment program" he wrote "and before this year, children were being cared for on adult wards." What happened between the late nineteenth century and the mid-twentieth century that accelerated the psychiatric care of children? Using Rochester, NY as an example, this presentation addresses the development of child psychiatry within the United States.

The development of child psychiatry happened alongside the field of adult psychiatry rather than within it. There were few psychiatrists interested in children's mental health in the nineteenth and early twentieth centuries. Their intent was to establish the origin of adult psychiatric illness rather than to dedicate special care to children. Children were rarely institutionalized in the infamous asylums of the nineteenth century, and when they were, it was often because they required nursing care for medical problems such as epilepsy or intellectual disability, rather than mental illness. Commonly listed diagnoses were "idiocy," "imbecility," and "stupidity." As child welfare became a social issue, those children who, in today's era, might be hospitalized in a children's psychiatric unit or facility, were served primarily by institutions for delinquent children and the foster care system. It was under the influence of organizations such as the juvenile court, the Society for the Protection of Children, and visiting teachers programs, that medical institutions began to take interest in child psychiatry.

- 1. Describe the changing circumstances under which children were admitted to psychiatric treatment facilities.
- 2. Understand the evolving interest in child psychiatry, from an attempt to explain the heredity and origins of mental illness to a public health agenda and an issue of child welfare.
- 3. Explain the contribution of the juvenile courts, child savers, and the child guidance movement to the development of child psychiatry.

"...take the parliamentary lancet out of the national arm:"* Conscientious Objectors and the Anti – Vaccination Movement

Stephen B. Greenberg

Stephen B. Greenberg is Professor of Medicine, Herman Brown Teaching Professor and Distinguished Service Professor at Baylor College of Medicine. He is the Vice Chief of Staff for Academic and Educational Affairs at Ben Taub Hospital. He has been Chief of Medicine at Ben Taub General Hospital since 1990 and has been a member of the Vaccine Evaluation Unit of Baylor College of Medicine since 1976.

Although "conscientious objectors" are commonly associated with individuals choosing not to participate in military activities during wartime, the term was used in the late 19th century England when speaking of parents who refused to have their newborn infant vaccinated against smallpox. Throughout the 19th century, several laws were enacted by Parliament which helped create a medical profession and give it authority to supervise the nation's health. Smallpox vaccination was the first medical intervention to be enforced by British law (the Compulsory Vaccination Act of 1853). Delivery of the vaccine was by way of government employees, thus tying preventive medicine to the state. Over the next several decades, many groups arose to question the law's authority and benefit. Some were advocates of alternative medicine (botanists), of self help (hygieanism), or of no government intervention in personal health care matters. A few politicians wanted to "take the parliamentary lancet out of the national law."

In addition, many groups argued that the vaccine was both dangerous and unnecessary. The anti – vaccination movement was supported by the lower and middle classes, by the trade unions, by religious dissenters, and by women's rights groups. They argued that the state had no right to compel parents to vaccinate their own children. In 1898, the British government tried to solve the vaccination issue by passing a law that allowed parents to apply to a magistrate for an exemption to claim "conscientious objection." In one year over 200,000 certificates were issued. By 1904-1905, ~50% of births were given certificates of exemption and there was a rise in reported cases of smallpox.

In the past 20 years, there has been recurrent support for the anti – vaccination movement, both in the UK and throughout the world. In recent years, the parents choosing not to vaccinate their children are highly educated, but distrustful of government, physicians, and the pharmaceutical industry. They employ the same arguments and plead for "conscientious objection" as in the 1800's. In the past 5 years, there have been major outbreaks of measles, mumps and whooping cough, as vaccination rates have declined in certain populations. These outbreaks point to the continued tension between a citizen's right to opt out of behaviors he/she believe would jeopardize the health of a family member and societies right to provide protection for the whole population. Although not compulsory, our current vaccination program – our "parliamentary lancet" – continues to be questioned and contested by a vocal minority of the population.

*Hansard's Parliamentary Debates, July 1, 1857, 722.

- 1. Learn the history of the term "conscientious objector."
- 2. Know the origin of British Compulsory Vaccination Act.
- 3. Understand the differences between the 19th century and 21st century anti vaccination supporters.

'Flushing out the Badness:' The U.S. Military and Empyema Management in 1918

David Hamilton

David Hamilton's works include <u>The Healers – A History of Medicine in Scotland</u> (1983), <u>The Monkey Gland Affair</u> (1986), <u>Scottish Medicine - An Illustrated History</u> (2012) and <u>A History of Organ Transplantation</u> (2013). My biography of Alexis Carrel will be published in 2015.

During Osler's last illness in December 1919, an empyema followed a lung infection and chest drainage was required. Osler's advisors had experience with the challenge, since in Britain and elsewhere empyema had been common as a serious, secondary complication during the influenza pandemic which had just ended.

This virulent epidemic may have started in U.S. army camps in Texas in March 1918 and when empyema followed, a 30% death rate could result. The many deaths in these young recruits, prior to reaching the European conflict, caused public unease, and the concerned Surgeon General quickly established an Empyema Commission. They noted that physical findings and aspiration were largely relied on for diagnosis, with X-ray studies slowly gaining a place when localisation proved difficult. Little could be done therapeutically for the viral infection or secondary bacterial pneumonia, but choices existed when treating the grave complication of empyema. Useful findings by the Commission included management according to the organism found, and they gave advice on the timing of rib resection and drainage.

A new method of treating sepsis had also emerged, using the Carrel-Dakin strategy, promoted in Europe for treating infected WW1 wounds, and involving continuous, prolonged irrigation with antiseptic. To support Carrel, The Rockefeller Institute for Medical Research had set up a War Demonstration Hospital in New York in summer 1917 to teach the method to military surgeons prior to service in Europe. In autumn that year, there was a tense controversy in the medical journals over Carrel's claims. Even so, Carrel and Institute continued to advocate the method strongly and military medical staff returned to camp from the Demonstration Hospital proud to be inducted into a new scientific movement led by Carrel's belief in 'flushing out the badness'. When the empyema problem arose in 1918, the Hospital advocated that lavage of the chest cavity be added to simple drainage. But results were no better and perfusion could be dangerous, giving erosion into the bronchial system. With poor results and complications, the strategy was largely abandoned, just as the epidemic ceased in mid-1919.

Empyema was then a less clamant peace-time clinical problem, one to be managed by individualised attention, rather than by protocol. The Carrel-Dakin method and 'flushing out the badness' from body cavities, though intuitively attractive, proved to be no better, and could be worse, than relying on the body's post-drainage natural healing mechanisms.

- 1. Recount the emergence of empyema in the 1918 influenza epidemic.
- 2. Evaluate the role of the Empyema Commission.
- 3. Discuss the impact of the Carrel-Dakin strategy.

Turning the Tables - An Osler Admirer Fights Quackery in the Press

John M. Harris Jr.

John M. Harris Jr., MD is the former Executive Director of the Office of Continuing Medical Education at the University of Arizona. He was previously Editor-in-Chief of the Virtual Lecture Hall, an online CME site owned by the University. In his career he has worked as an internist in the US Army and private practice, an executive in managed care, and a medical educator and researcher.

There are two books in the *Bibliotheca Osleriana* with similar flyleaf dedications: "To Dr. Wm. Osler With Love, James E. Reeves, Chattanooga, Tenn, Oct. 17th, '95." Until recently their donor was a mystery.

Dr. James Edmund Reeves (1829-1896) spent most of his professional career in West Virginia, yet he was well-known and well-respected in national medical and public health circles. Samuel Gross described him as "...an old friend and eminent physician of Wheeling." William Osler knew him and diagnosed his final illness. Among his accomplishments, Reeves was a founder of the Medical Society of West Virginia and its president in 1881. He was president of the American Public Health Association in 1885 and a trustee of the American Medical Association in 1895. He wrote the law establishing West Virginia's Board of Health, which led to a landmark 1889 Supreme Court ruling, established the right of states to license physicians.

Reeves' story and the legal battles around the West Virginia law are the subjects of James Mohr's 2013 book, *Licensed to Practice – The Supreme Court Defines the American Medical Profession*. Mohr characterizes Reeves' efforts as part of a broader battle between regular physicians and irregulars, such as eclectics and homeopaths. This is a common mischaracterization of 19th century regulatory efforts. Like many of his contemporaries, including Osler, Reeves was tolerant of appropriately trained and professionally honest irregulars. What he fought against, with almost religious energy, was medical fraud, quackery, and charlatanism.

James Reeves' fight against quackery by use of a professional licensing law was representative of the work of many members of organized medicine in the 19th century. However, his story is unique in that he also used the marketing tools of quackery, specifically the press and the courts, to challenge and discredit the Amick brothers of Cincinnati, two regular physicians who marketed a bogus cure for consumption. The fascinating story of Reeves' efforts, which led to his arrest in 1893 and a contentious civil trial in 1895, illustrate the inconsistencies and complexities of physician regulation and the often unrecognized work of regular physicians to address problems within their own ranks.

- 1. Understand the evolution of professional licensing laws in the 19th century.
- 2. Recognize the differences between quackery and medical sectarianism.
- 3. Appreciate the conflicting incentives facing physicians who seek to establish and enforce standards of professional conduct.

William Osler, Pierre Louis, Bloodletting, and the Numerical Method in Medicine

Ernest B. Hook

Ernie Hook is a pediatrician and medical geneticist, who in recent years has worked in the history and philosophy of medicine and science. He is particularly interested in episodes, which viewed from the present day, provide "puzzles", such as the persistence of bloodletting, the "delayed" discovery of inhalation anesthesia, and others.

William Osler admired Pierre-Charles-Alexandre Louis (1787–1872) to such an extent that in 1905 he organized a pilgrimage to his grave in Paris. Louis had imbued young physicians studying with him, many from the US, with the value of exactness and precision in recording and reporting their observations on large numbers of patients. Louis described his approach to collection and close examination of clinical data as the "numerical method". About this Osler wrote enthusiastically in 1897 in an essay on "Louis' influence on American Medicine" that "we use [it] every day" although "the phrase is not often on our lips." Louis' influence, Osler stated, was achieved through his writings (among which he listed his reports on bloodletting), but even more so through his many American disciples who worked with him in Paris in the 1830s. Osler wrote of them: "every one …has left a deep and enduring impression in his sphere of work." (One was Oliver Wendell Holmes who had written on his experiences working with Louis.).

Many today regard Louis today as a precursor if not the founder of clinical epidemiology and the critical chart review, and believe he established that bloodletting was useless in lobar pneumonia. But the historical record with regard to the evidence, and Louis' recognition and influence on clinical practice is more complex. Louis interpreted his findings (published 1828-1835) as demonstrating bloodletting had less effect than generally believed at the time, yet endorsed bloodletting if "inflammation was in deep-seated organs", by implication in lobar pneumonia. Paradoxically, his work in subsequent decades was cited as often in favor of, as against the procedure.

In the first edition of his textbook in 1892, Osler lamented that in the previous few decades the profession had bled too little, and endorsed bloodletting for lobar pneumonia. Only by the 3rd (1898) edition did Osler first cite Louis in this regard, referring to his "iconoclastic work" on bloodletting. (And implying he had only recently become aware of it.) Yet, Osler wrote, "to bleed at the outset...is, I believe good practice", leaving the reader to reconcile this endorsement with his comments on Louis, his enthusiasm for the numerical method, and the close scrutiny of clinical evidence. Osler's own views are somewhat at odds with those of Oliver Wendell Homes who explained the impact of Louis' bloodletting work at the time he wrote.

- 1. Examine the basis for Osler's enthusiasm for the tenets of Pierre Louis.
- 2. Discuss Louis' influence on American medicine.
- 3. Examine the rationale for Osler's endorsement in the late 1800s for bloodletting for selected disorders and its relationship to Louis.

The Case of the Blank Physician's Case Book

Richard J. Kahn

Richard is a practicing internist, a lifelong Oslerian, former AOS president, and Patty's husband. Patty is a medical librarian and Richie's wife, lo these many years (almost 50 years: "it was the eighth of August in '65, hardly a man is now alive who remembers that famous day and year").

Several years ago I was given a blank, 8-by10 inch, "Physician's Case Book" published in 1832 by Allen & Ticknor, Boston. I know it was printed that year because Allen left the partnership in 1833, I found an advertisement for the book in the "Boston Medical and Surgical Journal" of 7 November 1832, and a review of it in the "Medical Magazine" Boston 1833. That review mentions it is a "republication of an English edition" which I eventually found at the British Library; they were kind enough to send images of their 1831 edition allowing me to compare and contrast it with the Boston version. I believe the case book was intended for recording medical and surgical care for outpatient/home use.

The book has a full-page foldout template for recording a plan for a systematic history and physical examination. At the bottom of the page are 13 questions such as: What function is deranged, what organ is affected, and what are the grounds for the diagnosis? There is a small section for an index of patients &/or diseases then 100 pages, each to hold one patient: Name/Number, Age, Abode, Occupation, History and Probable Cause, Reports, and Treatment. The 1833 review of the book states that "every scientific and thinking physician does or ought to have this Case Book." There is no column or box for finances.

I will briefly discuss physician's office/outpatient records in the first half of the 19th Century. There has been a fair amount written over the past fifty years on the importance of clinical records by historians Erwin Ackerknecht, Guenter Risse, Charles Rosenberg, and John Harley Warner, who were trying to piece together patient care in the 19th Century from a medical/scientific, cultural, social, and economic perspective. I will attempt to look at the Case Book as a physician who might use such a book and ask why was it published at that time and why did it include and exclude certain data points? Did this book anticipate the EMR templates by 150 years? Ticknor became Ticknor & Fields publishers in 1854, which later became part of Houghton Mifflin.

- 1. Discuss the significance of the Allen & Ticknor "Physician's Case Book.
- 2. Who is William Ticknor and what author do you associate with him.
- 3. How did this case book hope to set the record straight?

Diagnostic Technology in Sir William Osler's Time

Bernard M. Karnath

Dr. Karnath is Professor of Internal Medicine; Scholar and Chair in the John P. McGovern Academy of Oslerian Medicine, and a Distinguished Teaching Professor at the University of Texas Medical Branch.

Principles and Practice of Medicine was first published in 1892; the 8th edition was published in 1912. During that 20-year interval, the x-ray and the electrocardiogram were developed, and the method for measuring blood pressure changed significantly. Did Osler use these newly discovered technologies during this period? What does his textbook tell us about his views on the use of these innovations? In 1816, Laënnec invented the stethoscope using a cylinder to amplify cardiac and pulmonary sounds. The stethoscope would undergo several changes over the next few decades, and the binaural stethoscope created in 1851 became the centerpiece of diagnostic equipment in Osler's time. Several photos show Sir William Osler with his stethoscope in hand at a patient's bedside.

In 1895, Röntgen first used the term "x-ray" in a manuscript. The first diagnostic x-ray in the United States was obtained in 1896. Tuberculosis was seen often during Osler's time. In 8th edition of the *Principles and Practice of Medicine*, Osler mentions the use of the x-ray as being of primary importance in the examination of spinal cord compression relative to Pott's disease and acute pneumonic tuberculosis of the lungs.

Einthoven's invention of the electrocardiogram in 1902 was a major technological advancement for the diagnosis of heart disease. Osler's 8th edition mentioned Sir Thomas Lewis and his description of auricular fibrillation as numerous small and continuous waves on galvanometric tracings. Osler would later meet with Sir Thomas Lewis at a military hospital in Colchester, England, at which time they evaluated a patient with heart disease. Ultimately, an electrocardiogram showed a left-bundle branch block on this particular patient.

In 1905, the Russian military physician Nikolai Korotkov described measuring arterial blood pressure by auscultation. Discussing hypertension in his 8th edition, Osler mentioned that normal blood pressure ranged from 120 to 130 mm of mercury but made no mention of the diastolic pressure. In conclusion, the 8th edition of Osler's *Principles and Practice of Medicine* mentions several developments in diagnostic technology that had occurred since the initial publication 20 years earlier.

- 1. Explain how the diagnostic technology available in Sir William Osler's time was utilized.
- 2. List the contributions by Laënnec, Röntgen, Einthoven and Korotkov in diagnostic medicine.
- 3. Contrast the 1st edition of the Principles and Practice of Medicine to the 8th edition in regards to diagnostic technology.

Claude Bernard - A Failed Playwright

Irving Kushner

Dr. Kushner: B.A. Columbia University, 1950; M.D. Washington University, 1954. He trained at Yale-New Haven Hospital and the Harvard Service of the Boston City Hospital. He is Professor Emeritus at Case Western Reserve University (MetroHealth campus) and is a Master of the American College of Rheumatology.

Claude Bernard was born in the village of St. Julien in France's Beaujolais wine growing region in 1813. While a pharmacy apprentice in a suburb of Lyon, he attended the theater on his monthly evenings off and was inspired to write an ambitious five act historical drama. At the age of 21, letter of introduction and manuscript in hand, he arrived in Paris, hoping to become an acclaimed playwright. However, France's leading literary critic was not impressed and advised: "You've done some pharmacy. Why don't you try medicine?" While he found the lectures at the medical school boring, those by the physiologic pioneer François Magendie at The Collège de France were exciting. He became his assistant, pursued research ideas of his own, and decided that medical practice was not for him and that he would commit his life to research.

He failed, however, to get an appointment in a university department, but two older friends arranged a marriage to the unmarried daughter of a successful society physician, with a nice dowry. In 1847 Bernard was asked to fill in for Magendie at The Collège de France. His first lecture famously began "The scientific medicine which it is my duty to teach you does not exist. The only thing to do is to lay the foundation upon which future generations may build, to create the physiology upon which this science may later be established." In the end, he accomplished just that.

He made 3 broad major contributions: 1. When Bernard came along the concept of vitalism was widely believed. It held that living things were not governed by the same principles that governed chemistry and physics, but that a mysterious "vital spark", an "élan vital", played a role. Bernard showed that the phenomena of life were just as determinable and definable as those of the other sciences. 2. His most important contribution was his recognition that our cells live in a fairly constant internal environment - the milieu intérieur. In 1877 he wrote "All of the vital mechanisms, however varied they may be, have always one goal, to maintain the uniformity of the conditions of life in the internal environment". This insight was later pursued in the early 20th century under the term homeostasis. 3. In his great "Introduction to the Study of Experimental Medicine" (1865) Bernard explained his philosophy of the experimental method and emphasized the importance of experimentation as the criterion for validity. This influential book was translated into a dozen languages and used in courses on physiology and philosophy for another century. When Claude Bernard died in 1878, he was the first French scientist to be honored with a state funeral. Today his statue stands in front of the Collège de France.

- 1. List Claude Bernard's 3 broad major contributions.
- 2. Discuss the concept of vitalism and how Bernard's work caused it to be discredited.
- 3. Explain why it is a good thing that Claude Bernard was not a very good playwright.

The Emergence of Modern Chemotherapy from a World War II Bombing Raid (The "Second" Pearl Harbor)

Robert A. Kyle

Robert A. Kyle is Professor of Medicine, Laboratory Medicine & Pathology at Mayo Clinic College of Medicine. He is immediate past president of the International Myeloma Society and past president of the International Society of Amyloidosis. He serves as chairman of the Scientific Advisory Committee of the International Waldenstrom's Macroglobulinemia Foundation and chairman of the Scientific Advisory Board of the International Myeloma Foundation.

On December 2, 1943, the German Luftwaffe bombed the Bari, Italy harbor which had recently been captured by American Forces. During the 20-minute raid, 16 ships were sunk and 4 others partially destroyed. Unfortunately, one ship, The John Harvey, carried 100 tons of mustard gas as well as a large quantity of high explosive munitions. This resulted in a powerful explosion that shattered window glass seven miles away and disseminated the mustard gas which subsequently dissolved in surface oil. All personnel on the ship died. The United States Military expected Germany to use mustard gas and wanted it available for retaliation in the event of an attack.

The first symptoms of exposure consisted of burning of the eyes from vapor exposure followed by a sensation of grittiness and marked lacrimation. Photophobia and blepharospasm developed but after 3-4 days symptoms abated. Skin lesions were extremely varied and consisted of burning, erythema and the development of vesication. Involvement of the skin was directly related to exposure to the mustard in oil solution. This was aggravated by the continued wearing of oil-soaked clothing. Those who washed their skin and avoided oil-soaked clothing had minor skin lesions. The respiratory tract was involved and produced cough, sore throat and lower respiratory tract infection on the 5th or 6th day.

The white blood count began falling within a few days and reached less than 0.1⁹/L. Lymphopenia and granulocytopenia was striking. Bone marrow examination was not available. Autopsies were performed on 53 persons. Blast injury to the lung was commonly seen. The spleen was usually small or shrunken while the lymph nodes and bone marrow were pale. Nodal atrophy was not reported but two patients had necrosis of lymphoid tissue. There were 617 mustard casualties with a mortality rate of 13.6%. This was felt to be due primarily to exposure to the mustard in oil solution.

A contract between the United States Government and Yale University was signed to study the effects of mustard gas early in World War II. Louis Goodman and Alfred Gilman and colleagues synthesized a number of nitrogen mustard compounds. They noted that lymphoid tissue was shrunken in mice. In 1946, L.S. Goodman, M.M. Wintrobe, W. Dameshek and A. Gilman reported positively on 67 patients with Hodgkin's disease, lymphosarcoma and the leukemias. This was the forerunner of MOPP (Mechlorethamine, Oncovin, Prednisone and Procarbazine) in 1970 followed by ABVD (Adriamycin, Bleomycin, Vinblastine and Dacarbazine) five years later which resulted in the cure of many patients.

- 1. The attendees will learn that war can lead to benefit for patients.
- 2. One will realize that the study of disasters may result in new therapeutic approaches.
- 3. Listeners will learn that there is some truth in the old Proverb "It's an ill wind that blows no good!"

Andreas Vesalius as a Vivesectionist

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, Preventive Medicine and Environmental Health at the University of Kentucky, and Professor of Neurology at the University of Wisconsin. Dr. Lanska has published widely on the history of neurology, has been the Associate Director of 6 international historical exhibitions, serves as Editor for the History of Neurology for the Journal of the History of the Neurosciences, and Associate Editor for History of Neurology for the Encyclopedia of the Neurological Sciences. He was awarded 3 McHenry Awards (1997, 2001, 2013) and a Tyler Fellowship (2012) from the American Academy of Neurology for his contributions to the history of neurology, and also received the History of Military Medicine Essay Award (2013) from AMSUS - The Society of the Federal Health Agencies.

While Renaissance anatomist Andreas Vesalius (1514-1564) is most often recognized for his fundamental contributions to our understanding of human anatomy, he fully understood that dissection of cadavers could only provide suggestions of the function(s) of different structures, and further that the study of living organisms was necessary to understand the roles that different structures served during life—in other words, that anatomy and physiology were separate and complementary domains of medical science. In addition to his anatomical demonstrations, Vesalius used vivisection as a pedagogical device to help his students understand the *function* of structures within the fabric of the body that they had previously studied in anatomical detail. Even as he began to criticize the errors in Galen's anatomical works, Vesalius adopted some of Galen's classic *physiological* demonstrations, including the ligation (and subsequent release) of the recurrent laryngeal nerves of a pig or a dog to demonstrate their role in generating, respectively, the pig's squeal and the dog's bark. Vesalius preferred to use pigs for this demonstration, because pigs reliably continued to try to vocalize, despite the trauma of vivisection, whereas the same was not true of dogs. Nevertheless, for reasons of ready availability, Vesalius used a dog for this demonstration during his public anatomy in Bologna in January 1540. At other times, Vesalius also employed pig vivisection to demonstrate tracheostomy and artificial respiration with a bellows, showing that life could be artificially maintained even when the thorax was opened. Although Vesalius's masterwork, De humani corporis fabrica (usually referred to simply as the Fabrica, 1543), was ostensibly an anatomy text, Vesalius nevertheless included textual and figural references to his use of vivisection to explicate the function of specific structures. Unlike the elegant anatomical woodcut plates Vesalius used in the Fabrica to illustrate an idealized anatomy, he employed distinctly inelegant historiated initials to depict the coarse chores of a surgeon-anatomist such as himself—represented by a throng of putti busily engaged in grave robbing, dissection, vivisection, and surgery. While Vesalius continues to be widely acknowledged for his reinvigoration of the study of human anatomy based on direct observation of human dissection, and for his unprecedented use of realistic, and even artistic, anatomical illustration, his revival of Galen's approach to animal vivisection (at least for pedagogical purposes), and his illustrations of vivisection and other chores of a surgeonanatomist in the historiated initials of the Fabrica, have been largely ignored.

- 1. Give examples of Vesalius's use of vivisection as a pedagogical device in student demonstrations.
- 2. Contrast the types of illustrations used in the *Fabrica* (1543) for structural anatomy and for the processes employed by a surgeon-anatomist, including vivisection.
- 3. Discuss reasons for differential reception of the two types of illustrations (anatomical woodcuts and historiated initials) in the *Fabrica*.

"A Man is Known by the Company He Keeps:" Osler in Osler's Biographical Essays

Joseph W. Lella

Joseph Lella is Professor Emeritus of Sociology, and Professor of History of Medicine, Western University. He has published on: change in chronic care, medical education, and, matters Oslerian. He 'becomes' Sir William Osler live onstage and on video in his monologue, Willie: A Dream and is a Curator of the Osler Library at McGill University.

"It was the height of my ambition as a teacher... to make known, to students the lives and works ... of the great and good ... who handed on the torch to our generation." "lack of time prevented" my completing many "biobibliographic sketches." Sir William did, however, complete numerous short appreciations and obituaries as well as longer essays on what he called his "friends of the spirit." These reveal much of his "clear mind and loving heart."

Major collections were Earl Nation's *Men and Books* (columns Osler called "snippets" in the fledgling *Canadian Medical Association Journal*, 1912 to 1914); and, McGovern and Roland's *Collected Essays of Sir William Osler*, *vol. III: The Historical and Biographical Essays*. Forty-five individuals treated in these sources span the history of medicine from Aristotle to Osler's contemporaries. Their celebrity ranges from "hardly any at all" (e.g. Dr. John Y. Bassett, the 'Alabama Student') to worldwide recognition as scientists and or clinicians, poets and philosophers, e.g. John Keats, John Locke, Rudolph Virchow. Because of time limits, this talk quickly classifies the eras and major contributions of these individuals; then analyzes a few essays selected from these categories illustrating what they reveal of their author. As brief examples here, I offer 'snippette' treatments of two pieces.

Osler's brief 'Aristotle' is a gem. It reveals Willie's deep concern for students, as well as the broad, medical, humane, and literate intensity of his own spirit. Aristotle, he says, offers students "a stimulating diet, full of intellectual hormones." "No man" [like this] "master of those who know...has ever swayed such an intellectual empire" [from metaphysics to natural history]. He cites some of the "ways and habits of living things ... [that] appealed to [Aristotle's] imagination and his diligence." Osler uses Shelley's phrase to poetic effect. This great student of nature "first taught men to look upon '[her] naked loveliness." He says, "The son of a physician, Aristotle saw, as no one had seen before, the value of science in medicine" in sum, recommending that we 'revere and follow, this intellectual ancestor.'

The essay called "Dr. Slop, i.e. [Dr. John Burton, 1710-1771], is a short snippet like the "Aristotle" and is present in both collections. Osler richly praises his 18th century "friend" called "the man midwife of York, so cruelly [and unjustly] held up to ridicule as Dr. Slop by Stern in *Tristam Shandy* ..." He refers to James Atkinson in his *Medical Bibliography*, *A and B* (1834) as the *only man he knows* to defend Burton against such calumny. Citing his written work, Burton, argues Osler was "not only a distinguished physician- midwife, but the author of a celebrated ... work on the "antiquities of Yorkshire"... through whose influence and energy, the York Infirmary was founded... perhaps his best memorial." "In days when the man –midwife was looked down upon, Burton lived, "a Gentleman and a Scholar." Osler adds: "he was a worthy student of the great Boerhaave, whose Life (London, 1743) I believe is from his pen."

Thus, Osler enters the historical lists to defend the oft-maligned reputation of a friend and brother physician in spirit, not perhaps a great man but a good one: a man who was, like himself, of broad interests, and committed to patient care and community service.

I enthusiastically recommend Osler's biographical works to those who have not yet read and enjoyed their scholarly and articulate sparkle.

- 1. Discuss what one biographical essay illustrates about Sir William's values, as a physician.
- 2. Discuss one essay in which Osler's poetic sensibilities are revealed.
- 3. How does his essay on Sir Thomas Brown reveal in Osler his "Doctor's Religion."

The Johns Hopkins Hospital Bulletin: History with a Concentration on the Osler Years

C. Ronald MacKenzie

Dr. C. Ronald MacKenzie MD, FACP,FRCPS(C) is the C Ronald MacKenzie Chair in Ethics and Medicine and Attending Physician at the Hospital for Special Surgery and Professor of Clinical Medicine and Medical Ethics at Weill Medical College of Cornell University. Originally from Canada, he received his Bachelor of Science (Physiology) at the University of Western Ontario, his medical degree from the University of Calgary and subsequently trained in Winnipeg and New York, specifically at the New York Hospital (Cornell) and the Hospital for Special Surgery. He was subsequently appointed as consulting physician (Rheumatology) at Memorial Sloan Kettering Hospital and has maintained an active practice in general medicine and rheumatology at these institutions for over thirty years. Dr. MacKenzie was formerly Chair of the Ethics and Conflict of Interest Committee of the American College of Rheumatology. He has recently published book, The Perioperative Care of the Orthopedic Patient, is a reflection of his interest and extensive experience in perioperative care. He is a member of the Board of a number of non-profit institutions including the Newport Festivals Foundation and as a musician is a long standing member of the Westchester Symphonic Winds an amateur concert band located in Westchester County where he resides.

Eighteen eighty-nine was a busy time for the Baltimore medical community. Following on the opening of the Johns Hopkins Hospital (JHH) on May 7th, there was founding of the School of Nursing, organization of the Johns Hopkins Medical Society, initiation of the Journal Club, and planning for the appointment of the hospital's first interns was underway. It was in this whirlwind of activity that the JHH Trustees approved proposals for the development of the institutions' first publications, the JHH *Bulletin* and the *Reports*. In contrast to the *Reports*, initially the more scientific of the publications, the *Bulletin* was to serve as a periodical for the Hospital publishing announcements of lectures and courses, commentary on medical practice, and for the presentation of affairs of general interest in connection with the institution. Henry M. Hurd, a psychiatrist and first superintendent of the JJH, was the *Bulletin's* first editor; published monthly, a subscription cost one dollar per year.

From its inaugural publication of December 1889, until his death in December 1919, William Osler was an ardent supporter of the *Bulletin* with over 50 contributions covering a wide range of topics including papers on various infectious diseases especially tuberculosis and malaria, hysteria, myxedema, arsenic poisoning, and Addison's Disease. Indeed his well-known piece *An Alabama Student* was first presented in the Bulletin (Vol. XII, 1986); his last article, entitled *The Jonathan Hutchinson Iconography*, appeared in 1915 (Vol. XXVI).

A late but important contribution to Osleriana appeared in the July 1919 (Vol. XXX) issue, a series of papers not written by William Osler but rather about him. This volume, honoring his career and published 6 months before his death, presents the views and reminiscences of 18 notable contemporaries. Covering a broad swath of his capacities, contributions, and interests, this issue includes commentaries on Osler as clinician, teacher, pathologist and bibliophile to name a few, evokes his presence through essays and photographs, and concludes with a presentation of Osler's bibliography.

Following these observations concerning Osler's influence on the *Bulletin* in its early years, the presentation will conclude with a brief history of the *Bulletin*, emphasizing its contribution to Johns Hopkins as an institution and to medicine writ large, examining how various challenges were overcome in order to ensure the Bulletin's viability until, as The Johns Hopkins Medical Journal, its nine-three year history was brought to a close in 1982.

- 1. To learn the history of one of the first, enduring, and influential publications of American Medicine, *The Johns* Hopkins Hospital Bulletin.
- 2. To appreciate the vital contribution of William Osler to the early success of this historically important medical journal.
- 3. To appreciate the challenges faced by journal editors and institutional sponsors in maintaining the viability of a medical journal.

A Complex Crossroads of History and Hope: The First Use of Cortisone for Rheumatoid Arthritis

Eric L. Matteson

Eric L. Matteson, MD, MPH, is a professor of medicine in the Division of Rheumatology at Mayo Clinic and consultant in Rheumatology and Epidemiology, Department of Health Sciences Research. He obtained undergraduate training at the University of Nebraska, medical school at the University of Erlangen, and served his rheumatology fellowship at the University of Michigan and completed a master's degree in Public Health at the University of Chapel Hill, North Carolina.

The development of a new treatment modality necessarily means first in human use and brings with it the responsibility to both protect the patient and provide knowledge or benefit that is generalizable to others. Into the 1940s, clinical therapeutic trials were carried out informally. The patients were not expected to understand the details of the study. Although their motivations and backgrounds vary, researchers and patients both, nevertheless, share the excitement of discovery and consequences of study participation.

The development and use of cortisone for rheumatoid arthritis in 1948 created great hope and led to the awarding of the Nobel Prize in Medicine in 1950. The experience of the first patient to receive cortisone for rheumatoid arthritis was complex. The initial clinical response was exhilarating, but the reaction to the unexpected adverse events of the drug was marked and sustained. Tensions of the study environment created by patient and investigator expectations as well as the effect of the drug led to a complex dynamic, which provided useful lessons for all involved and has important implications for clinical investigation today. The tension between the trial goals and patient care goals created a rift that was irreparable and regretted by the Mayo Clinic physicians.

The lessons learned from this initial use of corticosteroids continues to provide powerful instruction in the doctor/patient relationship in practice and clinical research, which have positively influenced the development of approaches and tools to address patient and investigator concerns and foster human subjects protection in the conduct of clinical trials.

- 1. Examine the gap between patient expectations and outcome in the pre-informed consent clinical trial era.
- 2. Understand how this key study and the experience of this patient lead to better understanding of patient expectations and develop tools to address patient and investigator concerns and foster subject protection in the context of clinical trials.
- 3. Describe how the research environment and initial impact of cortisone on the disease course influenced subsequent attitudes about the role of cortisone in the treatment of rheumatoid arthritis.

The Tudor and Stuart Literary Club of Johns Hopkins University: Sir William Osler's Hopes, Their Realization, and Recent Frustration

Paul R. McHugh

Dr. McHugh is University Distinguished Service Professor of Psychiatry at Johns Hopkins and from 1975-2001 was Psychiatrist-in-chief of Johns Hopkins Hospital. In 1979 he was President of the Tudor and Stuart Club.

On December 30, 1918 Sir William Osler wrote to tell President Gilman of Johns Hopkins University that he and Lady Osler would hand over \$35,000 in securities (along with collection of books) to form a "Tudor and Stuart Literary Club" to be based in the Department of English as a memorial to their son, Edward Revere Osler, killed in combat in August 1917. The club was intended to "encourage the study of English Literature in the Tudor and Stuart periods" and to draw undergraduates and graduate students together in friendly and informal ways for mutual enrichment and literary fellowship.

Although the Club was funded in the English Department and the Club-room was built into Gilman Hall at the Homewood Campus, right from the start medical students and medical faculty were encouraged to join and share in the scholarly enterprises. In fact early in its history a decision was made to alternate the presidency of the club annually between a faculty member in the English Department and a faculty member from the School of Medicine. In this way the club encouraged not only the enhancement of literary scholarship amongst English students but also the illumination of humanistic thought (and ultimately practice) amongst medical students. Such visitors and speakers to the club as Robert Frost and Vachel Lindsay enriched the literary side and William Welch and Harvey Cushing the medical side.

This easy literary/medical relationship so typical of the broad interests of William Osler continued happily right up until the late 1970s when the English faculty controlling the Club's funds began to move away from interest in humanistic studies with their discernment/appreciation of literary greatness and towards cultural criticism (in such forms as gender, Marxist, and feminist criticism) of literary texts as "instruments of power and control". With this change of interest and activity, the English faculty found contributions from the Medical faculty of little value even as the Medical Faculty found the concepts the English faculty employed within their "theory" of literary criticism incomprehensible and the meetings pointless for their enterprises.

As a result the cross-university, inter-professional humanistic connections so vital to William Osler have broken down at Hopkins, the Tudor and Stuart Literary Club survives in name only, and a cultural preoccupation with politics and ideology exists where once interest in great literature brought on fellowship and mutual appreciation. This year though, with a new appointment to the English Department of a Milton scholar from Oxford University many see a possible renewal of what had been an Oslerian treasure at Hopkins.

- 1. Describe William Osler's commitments to literary humanism as a value in itself and as important to the complete physician.
- 2. Describe the cultural changes that have come to separate the aims of students of literature from those of budding physicians.
- 3. Understand the humanities in the face of doctrinaire tendencies to undercut their role in the contemporary university and the education of physicians.

Medical Thought: Has Its Essence Changed Throughout History? Or Are We Doomed to Make the Same Mistakes?

Robert G. Mennel

Robert Mennel is a practicing medical oncologist at Baylor University Medical Center in Dallas. He is also the Director of the Precision Medicine Institute for the Baylor Health Care System.

In Osler's time there were almost no curative medicines. However, many physicians touted various medicines as curative or effective therapy for different diseases when they were not. Mercury as a treatment for syphilis, fresh air and sanatoriums as a treatment for consumption are just two examples of therapies thought to be curative, that probably had very little direct impact on the pathology of the disease. Are there modern therapies that today's physician's tout as curative or effective in a disease, which have little or no benefit for the disease? Surely, in this era of genomic medicine and targeted therapies physicians are safe from treating patients with ineffective therapies. This is not the case. Perhaps, chemotherapy for squamous cell lung cancer or diet and exercise for diabetes are the mercury and sanatoriums of the past. Are most therapies of today effective? Or, are we blinded by the same distractions that blinded the physicians of Osler's time to the ineffectiveness of our therapies?

Why do we have therapies advertised as beneficial when they are not? What is it that allows medical thought to endorse some therapies that may be ineffective or downright dangerous for our patients? Is it ignorance, ineffective logic, false science, pride, financial gain, a herd mentality, dishonesty, or a combination of the above that leads to the promulgation of ineffective therapies? Every group in every period of history wants to be recognized as making important and positive contributions to society, and to their field of study. The academic measurement of achievement and success comes primarily through publication. Perhaps the rush to recognition leads to an increase in the quantity and a decrease in the quality of the published articles. William Osler was a prolific contributor to the medical literature, but was Osler a contributor to the liturgy of ineffective therapies? The comparison of Osler's publications to medical publications of his time and medical publications of today in this paper will give examples of ineffective therapies of today, and will attempt to bring to light the potential reasons for the adoption of therapies of minimal or no benefit throughout the history of medicine.

- 1. Give examples of ineffective therapies of the past and present.
- 2. List the reasons that have led to the acceptance of these therapies.
- 3. Evaluate if our drug development system leads to effective therapies.

Osler, Cushing and Vesalius

J. Mario Molina

Dr. Molina collects books in the history of medicine and anatomy. He is a member of the Grolier Club, a member of the Board of Overseers of the Huntington Library and member of the Board of Curators of the Osler Library.

In 2015 we mark the 500th anniversary of the birth of Andreas Vesalius. It is an appropriate time to reflect on the influence of his work and that of two of the most ardent collectors of his books, William Osler and Harvey Cushing.

William Osler inspired physicians in the United States and England to collect the history of medicine and science, and lead a productive movement in the study of history of science and medicine in both countries. He was a famous collector who compiled a great collection, the catalogue of which was published after his death. In the Bibliotheca Osleriana he writes that a library is usually "the result of the enthusiasm of one or two men." His association with Welch, Kelly, Halsted, and John Shaw Billings, all of whom were collectors, and the Historical Club of the Johns Hopkins Hospital stoked his enthusiasm for the history and books. The club met from 1890 to 1905 at a time when large collections were assembled. Billings' collecting is reflected in the NLM and Osler's in the library that bears his name at McGill. Just as Bovell was the spiritual father of Osler, so Osler was the spiritual father of Cushing. At Hopkins, Cushing became interested in collecting books. Osler wrote "that for some years Dr. Harvey Cushing and I bought everything of Vesalius that was offered. One evening we had six copies of the first edition on exhibition. Osler gave away six copies of the 1543 Fabrica to various libraries during his life time. He wrote no books or monographs on Vesalius and most of what we know about Osler's thoughts on Vesalius comes from two books published posthumously, Bibliotheca Osleriana and The Evolution of Modern Medicine. Osler wrote "the Humani corporis fabrica is one of the great books of the world, with which in the literature of Medicine only the 'De motu cordis' of Harvey is to be compared. The one revolutionized anatomy, the other created modern physiology."

Cushing's attributes his interest in Vesalius to the Hopkins Historical Club and Fulton traces it to a meeting in 1898. Cushing obtained his first copy of the 1543 *Fabrica* in 1903. In Baltimore, Cushing, living next door to Osler, became a latchkeyer and was "inoculated with his bibliophilic spirit." A Vesalian club was started, and a few days later, Kelly left a copy of the 1555 *Fabrica* on his doorstep. His first purchase of a Vesalian item was made in 1905. Cushing had the "bug" and began to "follow the footsteps of Vesalius and to seek him libraries, universities and art galleries...not to mention the perusal of auction sale/catalogues. "Cushing collected Vesalius the way Osler collected Browne, and his Vesalius collection Vesalius outstripped Osler's. In the last years of his life he began to collect important books in the history of science, too. For 20 years, Cushing contemplated writing a Vesalian bio-bibliography and in the last months of his life, he confiscated the family dining room and began work on his catalogue. It was while lifting a heavy Vesalian volume that he suffered chest pain that landed him in the hospital. A few days later he died.

Osler planted the Vesalian seed and it took root in Cushing, ultimately bearing fruit in Cushing's collection. Cushing's *Bio-Bibliography of Andreas Vesalius* was published posthumously in 1943, and it remains the definitive bibliographic work on Vesalius. After visiting the Osler Library at McGill, Cushing promoted the idea that his collection, along with those of John Fulton and Arnold Klebs should go to Yale where the three "could go down to bibliophilic posterity hand-in-hand" creating in 1946 one of the great medico-historical libraries in North America.

- 1. Explain Osler's role in the collecting of books in science and medicine.
- 2. Explain Cushing's role in creating one of the great libraries in science and medicine.
- 3. Describe how Osler influenced Cushing's interest in Vesalius and collecting books.

The Cybernetics of Dr. Warren McCulloch

Michael E. Moran

Dr. Moran is the Curator for the American Urological Association's William P. Didusch Center for Urologic History. He has written extensively on history with a textbook, <u>Urolithiasis: A Comprehensive History</u> appearing this year from Springer. He has been moving about the country in search of an ideal urologic practice.

Warren Sturgis McCulloch is now one of the relatively forgotten clan of intellectuals that arose directly following the massive academic outpouring of data that was generated from the technologies of World War II. He was born on November 16, 1898 in Orange, NJ and attended Haverford undergraduate and Yale to study philosophy and psychology. He obtained his M.D. from Columbia in 1927 and went back to Yale for research from 1934-1942 with de Barenne and later with Walter Pitts. His early interests were in brain functioning and mathematical/electrical modeling. But he had a remarkable range of interests that made him the perfect host of a new and young intelligencia that arose out the WWII.

Science in general was reeling from the effects of Kurt Gödels proof of non-solvability within mathematical and logic of parodoxes, followed by Claude Shannon's demonstration of the same process in communications coining the term "Information Theory," and finally from Werner Heisenberg's uncertainty principle of physics. Into this void Frank Fremont-Smith of the Josiah Macy Foundation chose Warren McCulloch as its chair in guiding an ambitious series of conferences to promote meaningful communication across scientific disciplines to restore unity to science. Medicine was not left out and a total of 160 such conferences ensued over 19 years. McCulloch was skyrocketing into the elite in the new science of "cybernetics." He was asked to give talks all over the world and his work became center-stage and he attracted students from all over as well. Cybernetics was a term originally coined by André-Marie Ampère from the Greek word for steersman in an 1834 paper on civil government. The term was revived by James Clerk Maxwell when he discussed the "governors" of engines in 1868. It became popularized however by Norman Wiener of MIT who published his book, Cybernetics: Or the Control and Communication in the Animal and the Machine in 1948. McCulloch was a dynamo of energy and organization and the conferences became legend at the Beekman Hotel on Park Ave. Time, News-Week and Life were all writing articles about the topics of discussion. These conferences discussed the rise of computers, the development of digital technologies, and a whole host of "intelligent technologies" that had America transfixed.

McCulloch's wide-ranging academic interests brought together Shannon, Alan Turing, John von Neumann who literally were developing the world's first computers. Shannon actually brought an electronic rat that could solve mazes to the 9th conference. McCulloch rose to positions at M.I.T., the University of Chicago, and the University of Illinois, Chicago. His own personal oddities and demeanor would eventually be his downfall. Alan Turing in a letter to an associate described McCulloch as "a charlatan" and W. Ross Ashby noted, "McCulloch spoke for an hour. But don't think we have much to learn from him, though he undoubtedly has brains." Donald McKay did join McCulloch in the lab at the Univ. of Illinois, Chicago in 1951. McCulloch once commented at the Macy Conferences that digital machines could be quantized whereas analog machines could not. His explanation is as appropriate and true as any other. Warren McCulloch died at Cambridge on September 24, 1969.

- 1. Describe the early interests of Warren McCulloch and brain theory.
- 2. Discuss how Dr. McCulloch's interests would form a natural bridge to electronic artificial intelligence theorists.
- 3. Explain the difference between analog and digital.

Chlorosis

Robert R. Nesbit, Jr.

Dr. Nesbit is Professor Emeritus of Surgery at the Medical College of Georgia. He retired as Chief of Vascular Surgery in April 2000 and is currently the Director of Medical Student Education for the Department of Surgery. He has been a member of the American Osler Society since 2003.

Chlorosis, "the green sickness", may have been recognized by Hippocrates and was perhaps even described by his predecessors. It was given its name in 1615 and was described by Osler in the first edition of his <u>Principles and Practice of Medicine</u> as "an essential anemia met with chiefly in young girls, characterized by a marked relative diminution of the hemoglobin". He further noted that, "Blondes are more frequently affected than brunettes". The disease was commonly recognized and was portrayed in paintings by 17th century Dutch artists and in the plays of William Shakespeare. Although Osler was aware that the disease could be treated successfully by administration of oral iron compounds, he apparently never did believe that the cause of the disease was iron deficiency - and even in the 9th edition of his text, published in 1919, chlorosis was still described as "an anemia of unknown cause". Its last mention in the text was in the 12th edition where it was said to have "practically disappeared in America" and chlorosis' obituary was noted in *Time Magazine* in 1936. My presentation will describe the rise and fall of chlorosis, particularly as it was described in Osler's text.

- 1. Describe the clinical findings of patients with chlorosis.
- 2. Outline the discussion of chlorosis in Osler's Principles and Practice of Medicine.
- 3. Explain the disappearance of the disease chlorosis.

Letters from Libman: Divining Dispatches from an American Abroad

Rebecca Pinnelas

Rebecca Pinnelas is a first year resident in internal medicine at the Icahn School of Medicine at Mount Sinai in New York. She is a 2014 graduate of Rutgers-New Jersey Medical School where she was elected to the Alpha Omega Alpha Honor Society and the Gold Humanism Honor Society. She is a member of the Medical History Society of New Jersey.

American physician Emanuel Libman (1872-1946) was a generalist with Sherlockian diagnostic skills ("secret-divining eyes" according to Albert Einstein), whose achievements were recognized by both the scientific community and the public. Moreover, many personal aspects of Libman were revealed in an extensive oral history conducted with psychiatrist George L. Engel, a nephew who was raised in his house, and show Libman to be an intensely private person who could be demanding and feared. Yet, Libman as a young physician and investigator remains largely absent in these opposing biographical reflections. His papers housed at the National Library of Medicine contain a series of letters sent home from his year of post-graduate study in Germany and Austria in 1897. His sister, Esther Engel, transcribed his letters into a notebook, creating a window into the experiences of a young American physician abroad.

Libman's letters create a framework for understanding a typical European course of study for American physicians, while tracing his career and personal development. Specifically, his correspondence from abroad highlights his foundational experiences in bacteriology and pathology and explores his encounters with European anti-Semitism. The letters reveal a young doctor interested in history and sightseeing, awed by medical luminaries, concerned about establishing a career, and increasingly aware of intolerance.

Libman fit the description of a prototypical American abroad, described by historian Thomas Bonner as "a graduate male physician from an Eastern city who was interested in a clinical specialty and destined to win a considerable reputation in his profession." After obtaining letters of introduction from pediatrician Henry Koplik, Libman spent extensive time in pediatric infectious disease wards and bacteriological laboratories, most importantly with Theodor Escherich in Gratz. Libman's bacteriological work with blood cultures remains his main contribution to American medicine.

Libman's letters are also brimming with comments on Jewish history and culture in Europe. While he did not write of personally being excluded from opportunities due to his religion, he related the culture of medical clinics in Vienna, lamenting that in one such clinic "the professor who is the most brilliant diagnostician imaginable is an anti-Semite so you see no Jews working in his clinic." Such personal brushes with European anti-Semitism are especially insightful in light of Libman's later involvement in Jewish community causes. Libman headed Manhattan's Emergency Committee in Aid of Displaced Foreign Medical Scientists, spent significant time in his later life addressing the plight of refugees, and was liberal with sponsorship of young Jewish physicians.

- 1. Explain how Libman's European clinic and laboratory experiences laid the foundation for his future work in bacteriology and pathology.
- 2. Examine the widespread practice of European study of American medical students and its impact on American medical education.
- 3. Discuss Libman's experiences with anti-Semitism and his future role on behalf of physician refugees during World War II.

From the "Personal Equation" to the "Double Blind" Study

Scott H. Podolsky

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. He is the author of <u>Pneumonia before Antibiotics: Therapeutic Evaluation and Evolution in Twentieth-Century America</u> (2006), the co-editor, with Charles Bryan, of <u>Oliver Wendell Holmes: Physician and Man of Letters</u> (2009), and the author of <u>The Antibiotic Era: Reform, Resistance, and the Pursuit of a Rational Therapeutics</u> (2014).

In an 1885 review of Nathan Smith Davis' *Lectures on the Principles and Practice of Medicine*, Osler wrote of Davis' failure to find an instance in which alcohol served as a stimulatory cardiac force. Osler continued: "Place this negative statement against the very positive assertions of so many other observers, and we have an illustration of how difficult it is to get at therapeutical truth, and how much must be allowed for the 'personal equation' in the observer."

The "personal equation" would be used by Osler and by many of his contemporaries in many ways, but I will here trace the fascinating 19th and early 20th century use of the term with respect to its connotation of *observer bias*. Indeed, I will argue that the term "personal equation" played a large role in the increasing emphasis on observer blinding in clinical trials from the mid-19th century onward.

The "personal equation" – the variability in recordings from one observer to another – was first described in the early 19th century with respect to astronomers and their recordings of celestial bodies. Lorraine Daston and Peter Galison, in *Objectivity* (2007), have described with respect to the production of 19th-century atlases of all kinds how practice moved from the permission of subjectivity in the attempt to record idealized truths, and towards "mechanical objectivity" and the recording of unfiltered data.

The term was quickly picked up in the medical literature – used in literally hundreds of articles (if in heterogeneous fashion) – at a time when clinicians were attempting to gauge therapeutic efficacy and hoping to control for therapeutic enthusiasm. This was initially most salient in the battles between orthodox and unorthodox medicine, and yielded trials in which observers were "blinded"; but by the end of the 19th and early 20th century, such skepticism and methodological innovation were likewise applied to evaluations of the immunological and pharmacological remedies emerging from an increasingly biomedical orthodox medical profession as well.

By the mid-20th century, such notions would be incorporated into the British Medical Research Council's iconic study of streptomycin for tuberculosis (led by Sir Austin Bradford Hill), as the radiologists reading the chest films were blinded with respect to the therapeutic status of the patients. Such measures would be formally encapsulated within the notion of the "double blind" research study shortly thereafter. But while notions of "blinding" endure today and undergird modern research methodology, the notion of the "personal equation" has been largely forgotten. Studying its rise yields insights into the origins of blinding and the history of the randomized controlled clinical trial itself.

- 1. Identify the origins of attention to the evaluative "personal equation" in 19th-century science and medicine.
- 2. Identify how such notions of the "personal equation" led to the methodological innovation of observer blinding in the conduct of clinical trials.
- 3. Locate William Osler's own use of the term "personal equation" within this larger historical context.

St. Vincent's Clinic: A Student Run Free Clinic That Emphasizes Oslerian Ideals

Jacqueline Posada

Jacqueline Posada graduated from George Washington University with a Bachelor's in Science. She is currently a fourth year medical student at the University of Texas Medical Branch and is pursuing a residency in psychiatry. She is an Osler Student Scholar with the John P. McGovern Academy of Oslerian Medicine and a medical student director at St. Vincent's Student run clinic in Galveston, Texas.

The John P. McGovern Academy of Oslerian Medicine promotes the teachings of Sir William Oslerian at UTMB through its faculty called Osler Scholars and its student members, called Osler Student Scholars, and by supporting the larger academic community with mentors and financial contributions to Osler Student Societies.

This presentation shows how the Osler Academy contributes to the clinical education of medical students attending St. Vincent's Clinic, a student run free medical center in Galveston. The clinic is the second largest student run clinic in the nation and provides free health care to the indigent population of Southeast Texas. From 2013-2014, St. Vincent's recorded 1850 patient visits, offering both primary and specialty care. UTMB medical students provide the majority of patient care with senior students serving as directors. St. Vincent's is considered one of the most active charitable organizations within the UTMB School of Medicine with at least 50% of medical students reporting volunteering during their four years of medical school. The Osler Academy actively supports St. Vincent's through mentorship, volunteerism, and financial aid. Medical students work directly with faculty and the deal with less administrative pressures, thus St. Vincent's offers a more intimate environment for clinical teaching as compared to teaching in the hospital. Faculty, Osler scholars and others from UTMB, regularly volunteer to teach medical students clinical skills while supervising patient care. Extensive bedside teaching occurs at St. Vincent's focusing on medical history taking, physical examination, and developing clinical acumen. For example, faculty will repeat physical exam maneuvers with students explaining the pathophysiology of the findings and discuss affordable treatment options for the patient. In recent years, one faculty Osler Scholar has served as supervising medical director, with Dr. Robert Beach serving as the current medical director, and one Osler Student Scholar, a senior medical student, has served as clinic director. In his writings, Sir William Osler instructed physicians to have a comprehensive view of health: "It is much more important to know what sort of a patient has a disease than what sort of a disease a patient has." At St. Vincent's students learn comprehensive care of the patient, learning to examine both illness and life circumstances. Students are often forced to address the socioeconomic issues and health disparities that influence patients and their course of illness. Due to the relative autonomy of students in the free clinic as compared to the wards, UTMB medical students report their clinical experiences at St. Vincent's result in a more meaningful doctor-patient relationship. The Academy also supports St. Vincent's by allowing Osler Student Societies to use a part of their budgets for charity (e.g. St. Vincent's). Finally, these societies often meet at St. Vincent's with their faculty mentors for clinical experiences outside of organized medical school rotations.

- 1. Examine the impact of the John P. McGovern Academy of Oslerian Medicine on St. Vincent's student run free clinic.
- 2. Explain the clinical experience of UTMB medical students who volunteer at St. Vincent's and how medical students learn comprehensive, patient centered care in the difficult setting of the free clinic.
- 3. Discuss how the Oslerian teachings are practiced at St. Vincent's in the form of bedside teaching by faculty mentors and senior medical students.

Promoting Diversity and Addressing Health Disparities through Teaching about the History of African Americans in the Health Professions

P. Preston Reynolds

P. Preston Reynolds, MD, PhD, MACP is Professor of Medicine at the University of Virginia. She is a historian, educator and clinician. She teaches an undergraduate history course, medical history electives in the school of medicine, and ethics and professionalism seminars with medical students and residents. In 2013, with funding provided by NIHMD, she hosted a conference at the National Academy of Sciences focused on promoting teaching on the history of African American health professionals with leading experts around the country. She recently was awarded Mastership in the American College of Physicians for her work in medical professionalism, medical humanities, and global health and human rights.

African American health professionals have faced enormous barriers to careers in medicine, nursing, dentistry, veterinary medicine, and public health for over 150 years both in the US and in countries around the world. Health disparities have been a historic reality and remain a major problem in American medicine in part, because of low rates in recruitment and matriculation of minorities into the health professions. This paper addresses an innovative strategy to promote careers in the health professions among minority students, through teaching about the history and contributions of African American health professionals.

This paper will describe both a semester-long course focusing on the impact of race in medicine and the history and contributions of African American health professionals: physicians, dentists, nurses, lay midwives and public health professionals. It will also feature an on-line resource, called CHAAMP, which serves as a resource of materials for use in teaching, scholarship and public programming.

The 10-module semester-long course looks at notions of race, and how racism and discrimination have shaped health professions education and health care delivery in America. The rise and growth of Black hospitals, Black medical and dental schools and Black nurses training programs are explored to demonstrate how African American health professionals worked to create training opportunities and health care access for minority persons. Critical events, such as The Great Depression, World War II and the Civil Rights Movement are used to illustrate how social events helped to slow and accelerate reform of discriminatory policies and practices. Lastly, the course returns to initiatives to reduce health disparities both nationally and globally and the contributions of minority health professionals to lead these efforts.

The talk with also describe a newly developed on-line resource, CHAAMP, that houses primary and secondary historical resources, curricula, and a rich bibliography to promote the integration of the contributions of minority health professionals into humanities teaching and health professions education across the disciplines. http://CHAAMP.virginia.edu

- 1. Describe on-line curricular resources on the history and contributions of African American health professionals.
- 2. Describe on-line exhibit resources on the history and contributions of African American health professionals.
- 3. Discuss how history curricula can be an effective tool in shaping the career development of minority youth.

Osler, Abbott, Barriers to Women in Medicine and Congenital Heart Disease

George Sarka

George Sarka is an Associate Clinical Professor of Medicine at UCLA; Multispecialist at the California State University, Northridge; President of the California Neurological Society, Past Governor of the ACP, Past President of the LA Neurological Society and a Diplomate in 11 subspecialties. He received his MDCM from McGill University in 1980, MPH/DrPH from UCLA in 2003/2013.

Maude Elizabeth Seymour Abbott (1869-1940) was not unlike William Osler: an educator, innovator, iconoclast, pioneer, researcher and a role model for physicians, especially for women in the fields of science and medicine. She graduated from the Faculty of Arts at McGill University (1890) but her dream of attending medical school at McGill was thwarted due to her gender, a typical barrier at that time. Although she launched a public campaign to offer medical courses for women at McGill with support from the public press, her cause fell on deaf ears at McGill. Resolute in her determination to become a physician, Maude Abbott, the sole woman at Bishop's Medical College, earned her medical degree in 1894. Ironically, due to her collaboration with Osler and her outstanding research and publications on congenital heart disease, McGill eventually awarded her MD, CM (honoris causa, 1910) and an LLD (1936). As the assistant curator for the McGill Medical Museum (1898) and curator (1901), she developed a classification system for thousands of uncatalogued medical specimens, including heart defects and introduced the novel idea of using the museum as a tool in the teaching of pathology.

As a respected colleague of William Osler, she was asked to contribute to his textbook, *System on Modern Medicine* (1908) regarding the chapter on "Congenital Heart Disease," which he declared as the best thing he had ever read on the subject. Even more impressive, Maude Abbott was the only woman of Osler's 104 authors for that edition of his textbook, enhancing both her reputation and career as an expert in the field of congenital heart disease.

She served as permanent international secretary of the International Association of Medical Museums and editor of its journal (1907-1938), and published over a hundred papers on pathology as well as histories of medicine and nursing. Her *Atlas of Congenital Heart Disease* (1936) containing over thousand cases became the basis of information on modern heart surgery. Apart from 2 years, her entire career was at McGill where, though world famous, she was never promoted beyond the rank of assistant professor. The life of Maude Abbott serves to exemplify the barriers to women in the field of medicine during that era and Osler's recognition and promotion of medical talent regardless of gender.

- 1. Augment the participant's knowledge regarding Maude Abbott and her medical relationship to William Osler.
- 2. Examine the contributions of Maude Abbott in the field of congenital heart disease.
- 3. Discuss the barriers for women in medicine and the early roles Maude Abbott and William Osler played during that era.

John M.T. Finney: Distinguished Surgeon and Oslerphile

Marvin J. Stone

Marvin J. Stone, MD, MACP is a past president of the American Osler Society. He is Professor of Internal Medicine and Humanities in Medicine at Texas A&M College of Medicine and received the Outstanding Faculty Award in Internal Medicine from the Class of 2014. He is also Clinical Professor of Humanities at the University of Texas at Dallas.

John Finney (1863-1942), the son of a clergyman, was born on a plantation near Natchez, Mississippi in the midst of a Civil War battle. An outstanding athlete, he was the only person to play football for both Princeton and Harvard. After receiving his MD from Harvard, he interned at Massachusetts General Hospital and then went to Baltimore to become one of the first interns at the new Johns Hopkins Hospital. He met Osler the day the hospital opened and became a lifelong admirer of "the Chief." Finney specialized in gastrointestinal surgery and was recognized for his expertise in the field. In a letter to a physician colleague whose father was seriously ill with an abdominal tumor, Osler recommended surgical exploration by Finney and wrote "you could not be in better hands...Finney has been most successful and his judgment is so good..." Finney served for 33 years under William Halsted at Hopkins and received only one compliment from him. After Halsted's death, Finney was offered the Chair of Surgery at Johns Hopkins but turned it down. He was a founder and first president of the American College of Surgeons. He also served as president of the American Surgical Association and the Society of Clinical Surgery. Finney became Chief Surgical Consultant for the Allied Expeditionary Forces in WWI and developed new methods of caring for the wounded. He was decorated by the United States, France and Belgium.

- 1. Discuss Finney's background before entering medicine.
- 2. Contrast Finney's relationship with Osler and Halsted.
- 3. Evaluate Finney's accomplishments in surgery.

Oslerian Pathology and Museology in Texas

Paula Summerly

Dr. Summerly's academic background is in the history of medicine, paleopathology and fine art photography. She has curated historical medical exhibits for the Hunterian Museum, University of Glasgow and the Wellcome Trust, London. Dr. Summerly is currently the Research Project Manager of the "Old Red" Medical Museum project at the University of Texas Medical Branch, Galveston.

Texas has always had a strong connection with the American Osler Society; as it was co-founded by John. P. McGovern, MD (1921-2007). The State's historical connections with Sir William Osler are less well documented. This paper explores the genealogical, archival and museological connections between Osler and Galveston, Texas.

During the early 1880s George Dock, MD (1860-1951) studied medicine under Osler at the University of Pennsylvania, beginning what Marilyn Miller Baker described in her book entitled *The History of Pathology in Texas* (1996) as a "genealogical tradition" that would link the master and his students across Texas. Dock served as a pathologist at the Texas Medical College and Hospital from 1888 to 1891.

A recent archival find, housed in the Truman G. Blocker, Jr. History of Medicine Collections, Moody Medical Library, at the University of Texas Medical Branch, Galveston (UTMB) has established a second connection with Osler. Allen J. Smith, MD (1863-1926) also studied under Osler at the University of Pennsylvania. Osler examined and graded Smith's *Medical News Prize* winning essay entitled: *A Mycological Method for the Recognition and Approximate Quantitative Estimation of Sewage Contamination in Water, with a description of a New Species of Chromogenic Bacillus* (1886). Smith was UTMB's first Professor of Pathology from 1891.

As Ellen B. Koch described in her publication entitled: *Historical Perspectives on Pathology in Houston and Galveston* (1998) Dock and Smith "embodied a growing dichotomy in pathology that has persisted to this day." One tradition (advocated by Dock) emphasized laboratory tests and quantitative measures; the other (employed by Smith) relied on descriptive pathology.

Osler emphasized the importance of practical medical education, and the museum played a key role in this process. Maude Abbott's curatorial practice at the Medical Museum of McGill University was influenced by Osler. Both Dock and Smith founded and curated pathological museums whilst in Galveston. Unfortunately, nothing survives of Dock's museum, however some of Smith's specimens may form part of the UTMB's historical pathological collection. This presentation will also aim to identify Osler's influence on Smith's curatorial practice. Abbott corresponded with Smith's successor, Paul Brindley, MD (1896-1954) pathologist and curator of the former pathological museum at UTMB.

- 1. Examine Osler's genealogical, pathological and museological tradition in Galveston, Texas.
- 2. Outline the archival and museological collections that link Osler to Galveston, Texas.
- 3. Discuss the importance of the museum in Oslerian medical education.

William Osler and Stonewall Jackson: A Footnote to History

Henry Travers

Dr. Travers, a recently retired pathologist who has served in the Navy (including Desert Shield/Desert Storm), was active in the College of American Pathologists and the World Association of Societies of Pathology and Laboratory Medicine.

The Evolution of Modern Medicine, the posthumous publication of Osler's 1913 Silliman Lectures, contained an unusual footnote asserting Confederate General Thomas J. (Stonewall) Jackson's belief in astrology. Was the assertion true? Did Osler write the footnote and, if so, why?

The footnote summarizes an episode described in the autobiographical *Keel and Saddle* published in 1872 by Grace Revere Osler's second cousin, General Joseph Warren Revere. The accuracy of General Revere's recollections of meeting Jackson on a Mississippi riverboat in 1852 was challenged by General Jubal Early who irrefutably established that Jackson was never there. Based on this and other evidence, Revere's detailed quotations of Jackson's astrological beliefs and his story of Jackson sending Revere a horoscope predicting the events at Chancellorsville could only be imaginary.

To determine the author of the footnote, one must round up the usual suspects: Osler himself, Lady Osler, and the editors of the manuscript after Osler's death (Fielding Garrison, Harvey Cushing, Leonard Mackall and Edward Streeter) as well as two others who offered corrections (WW Francis and Charles Singer). Based on the character of the footnote, I originally considered Osler himself the most unlikely author. Nonetheless, there exists in the Osler Library at McGill University the galleys of the Silliman Lectures (BO7652) and there, on page 232, in Osler's handwriting, is a version of the footnote.

The handwritten version differs, however, from that published in *The Evolution of Modern Medicine*. The latter included the publication year and location of *Keel and Saddle* and the day of the Chancellorsville battle when Revere allegedly saw Jackson. Further, it modified the handwritten "...Revere saw Jackson's death" to a more factual "...Revere saw Jackson mortally wounded".

Why would Osler have inserted what is essentially an anecdote, obliquely related to the topic? Could its source from within a great historical family including both his wife and son be the reason? Exactly what pointed Osler to *Keel and Saddle* during his editing of the galleys is speculative.

That Osler's new footnote (likely made sometime between late 1913 and early 1917) referred to Jackson's *death* suggests Osler had a copy of *Keel and Saddle* close at hand. It is most likely that the subsequent correction came from the manuscript's editors. Among these, Garrison, a brother-in-arms to John Shaw Billings, the great friend of Hunter McGuire (Jackson's physician during the last days of his life) likely knew of Revere's tale. If it were Garrison who corrected Osler's footnote, it is hard to conceive he was not aware of evidence against its truth.

- 1. List three characteristics of typical footnotes in Osler's *The Evolution of Modern Medicine*.
- 2. Explain the significance of the discrepancies between Osler's handwritten footnote regarding Stonewall Jackson's astrological beliefs and the final form of the footnote in the published edition(s) of *The Evolution of Modern Medicine*.
- 3. Outline the evidence against the factual truth of Osler's assertion of astrological beliefs by Stonewall Jackson.

Rudolph Matas, M.D.: 'The Surgical Osler'

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 has retired from the practice of cardiothoracic and vascular surgery and lives in Greenville, Mississippi and Dauphin Island, Alabama.

Rudolph Matas is one of the greatest surgeons America has ever produced. He was a giant, not only in surgery, but in the medical profession. His long lifespan witnessed Union gunboats on the Mississippi River and the first atomic bomb. His contributions to medicine and surgery are renowned and include early belief in the mosquito theory of yellow fever, endoaneurysmorrhaphy, and intratracheal insufflation. His entire professional career was spent in New Orleans where he was a leading citizen. He was always associated with Tulane University School of Medicine (Chairman, Dept. of Surgery, 1895-1927). His bibliography lists approx. 600 entries and he was a prolific reader, being fluent in seven languages. Will Mayo called him the world's best educated physician. His knowledge was encyclopedic and his home was considered a library. He was dedicated to and involved in organized medicine as a means to lifelong learning. No venue was too small or insignificant and he was a member of practically every surgical association in the world. Matas helped reform the provision of medical care and elevated hospital care for improved patient welfare.

Matas was equally well known as a master teacher and for his kindness, compassion, and humanism. He unceasingly used his knowledge of the history of medicine to teach those under his tutelage and influence. He knew the historical evolution of any clinical subject and many of his writings, like Osler's, remain timeless and relevant. Matas and Osler were never more than a few degrees of separation from each other. They were contemporaries, valued friends, and warm colleagues. It was Osler who solidified Matas' professional immortality when he coined the title "that modern Antyllus" to describe him. Matas had great respect for the Hopkins experience.

Matas and Osler shared many characteristics of the medical/surgical and literary/historical life — dedication to medicine, love of literature, desire to write and publish, and devout humanism. Not unlike Osler, Matas overcame physical hardship and personal loss to live this life to the fullest. Matas' intellect and innovation transformed surgery and his integrity helped elevate medicine to its status as a learned profession as few others have done. He was a physician and surgeon of the highest order and one of the profession's greatest teachers and mentors. As such, Rudolph Matas can be considered 'The Surgical Osler' and he, like Osler, remains a model to emulate today.

- 1. Understand the contributions of Matas to medicine and surgery.
- 2. Examine the impact of Matas' professional life on the profession in the context of his lifespan and location.
- 3. Compare the kindred similarities and subtle differences between Matas and Osler.

The Gift of a Book from the AOS and the Spoor of Previous Owners

John W. K. Ward

John Ward is a retired family doctor with a lifelong interest in medical history. A fellow of both the RCPEdin. and the RCGP he is a past president of both the British Society for the History of Medicine and the Osler Club of London. He has lectured widely in Britain and North America on medical history, family medicine and Johnsonian subjects. He was chairman of the LAC for AOS Oxford 2014.

After the dinner in a marquee in Green-Templeton College on 13th May 2014 the AOS President, Pam Miller, presented the author and his wife with the splendid present of a volume which contained "A Pocket Companion for Oxford" (1768) bound with "Cantabrigia Depicta" (1763). These books are a guiding delight to late 18th Century Oxford and Cambridge but represent more since the front pages of each book are inscribed in Latin; the Oxford one with "Sum ex Libris Montacuti Pennington e Donis Matris carissime ejus March 31 1776" and the Cambridge one with "Montagu Pennington. Ex donis carissimi fra 1776 Thomae Pennington."

With my major interest in the 18th century, particularly in Johnsonian studies, inevitably I began to search the identities of Montagu Pennington, his mother and brother and this paper reports an interesting journey to the world of Johnson, the "Bluestockings" such as Elizabeth Montagu and Elizabeth Carter and to the academic activities of contemporary clerical life.

Montagu and Thomas Pennington were nephews of Elizabeth Carter, their mother's sister and multilingual authoress and poet, best remembered nowadays through Samuel Johnson's slightly disparaging tribute that she "could make a pudding as well as translate Epictetus from the Greek, and work a handkerchief as well as compose a poem". Both men entered clerical life following university. Montagu, educated at Trinity College, Oxford held various rectorships in Kent, especially in Deal, and in addition to writing religious works and poems spent much of his life publishing biographies, letters, poems and memoirs of Elizabeth Carter. For his part the younger brother, Thomas Pennington, studied at Trinity and Clare Colleges, Cambridge and then made three long trips to Europe which formed the basis for his book, "A Journey into Various Parts of Europe". Following marriage he became vicar of Thorley.

In researching this paper various places connected to the Penningtons have been visited leading to the discovery of their way of life, their homes, churches, memorials and graves and these sites will be illustrated and discussed.

- 1. Explain the importance of the "Bluestockings".
- 2. Outline the careers of the Pennington brothers.
- 3. Consider the advantages of owning a book as opposed to reading by electronic means.

The John P. McGovern Lectureship

Albert Rupert Jonsen	2001	Kenneth M. Ludmerer
Edward Janavel Huth	2002	James K. Cassedy
Joanne Trautmann Banks	2003	Sir Richard Doll
John Nicholas Walton	2004	William F. Bynum
E. A. Vastyan	2005	Karen Hein
Daniel Michael Fox	2006	Joseph Jack Fins
William C. Beck	2007	Abraham Verghese
Anne Hudson Jones	2008	Charles E. Rosenberg
David Hamilton	2009	Patrick A. McKee
Sherwin B. Nuland	2010	Nuala P. Kenny
David J. Rothman	2011	Rosemary A. Stevens
Roger James Bulger	2012	C. David Naylor
Paul Potter	2013	Bert Hansen
John David Stobo	2014	Sir Donald Irvine
Gert Henry Brieger	2015	Rolando Del Maestro
	Edward Janavel Huth Joanne Trautmann Banks John Nicholas Walton E. A. Vastyan Daniel Michael Fox William C. Beck Anne Hudson Jones David Hamilton Sherwin B. Nuland David J. Rothman Roger James Bulger Paul Potter John David Stobo	Edward Janavel Huth 2002 Joanne Trautmann Banks 2003 John Nicholas Walton 2004 E. A. Vastyan 2005 Daniel Michael Fox 2006 William C. Beck 2007 Anne Hudson Jones 2008 David Hamilton 2009 Sherwin B. Nuland 2010 David J. Rothman 2011 Roger James Bulger 2012 Paul Potter 2013 John David Stobo 2014

Recipients of the Lifetime Achievement Award

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	J. Michael Bliss
2012	Jeremiah A. Barondess
2013	John C. Carson
2014	T. Jock Murray

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William B. Bean•	1970-1971	Robert E. Rakel	1993-1994
George T. Harrell•	1971-1972	Kenneth M. Ludmerer	1994-1995
Thomas M. Durant•	1972-1973	Charles F. Wooley	1995-1996
John P. McGovern•	1973-1974	Billy F. Andrews	1996-1997
Edward C. Rosenow, Jr.	1974-1975	Eugene H. Conner	1997-1998
A. McGehee Harvey ■	1975-1976	Richard J. Kahn	1998-1999
Raymond D. Pruitt•	1976-1977	Dee J. Canale	1999-2000
Martin M. Cummings•	1977-1978	Mark E. Silverman•	2000-2001
Earl F. Nation•	1978-1979	John C. Carson	2001-2002
Irving A. Beck•	1979-1980	Lawrence D. Longo	2002-2003
Peter D. Olch•	1980-1981	Marvin J. Stone	2003-2004
William C. Gibson•	1981-1982	Chester R. Burns	2004-2005
R. Palmer Howard•	1982-1983	Claus A. Pierach	2005-2006
Jeremiah A. Barondess	1983-1984	T. Jock Murray	2006-2007
K. Garth Huston•	1984-1985	Francis A. Neelon	2007-2008
William B. Spaulding•	1985-1986	Joseph W. Lella	2008-2009
Charles G. Roland	1986-1987	John Noble	2009-2010
Robert P. Hudson•	1987-1988	Charles S. Bryan	2010-2011
W. Bruce Fye	1988-1989	J. Michael Bliss	2011-2012
Richard L. Golden	1989-1990	Sandra W. Moss	2012-2013
Jack D. Key	1990-1991	Pamela J. Miller	2013-2014
Paul D. Kligfield	1991-1992	Herbert M. Swick	2014-2015
Alvin E. Rodin•	1992-1993		

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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
2009 - 2012	R. Dennis Bastron	Paul S. Mueller
2012 - 2014	R. Dennis Bastron	
2012 - 2017		Christopher J. Boes
2014 - 2017	C. Joan Richardson	-

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SHIGEAKI HINOHARA (1983)

Tokyo, Japan

JOHN D. STOBO (2005) San Rafael, California

JOHN N. WALTON (1989)

Belford, Northumberland, England

Charter Members

* Emeritus

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FRED B. ROGERS* (1970) Trenton, New Jersey

Elected Members

NITIN K. AHUJA (2011) Baltimore, Maryland

JACK B. ALPERIN (2004)

Galveston, Texas

CHARLES T. AMBROSE* (1998)

Lexington, Kentucky

BILLY F. ANDREWS (1972)

Floyds Knobs, Indiana

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

J. MICHAEL BLISS (1996)

Toronto, Ontario, Canada

CHRISTOPHER J. BOES (2010) Rochester, Minnesota

W. BRYANT BOUTWELL (2005)

Houston, Texas

MICHAEL BRENER (2011)

Baltimore, Maryland

CHARLES S. BRYAN (1994) Columbia, South Carolina

JOHN D. BULLOCK (2008) Kettering, 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\

MARGARET COCKS (2012)

Long Beach, California

EUGENE H. CONNER* (1980)

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BARRY COOPER (2000)

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, JR.* (2000)

Macon, Georgia

PETER E. DANS* (2002)

Cockeysville, Maryland

SAKTI DAS (1998)

Lafayette, California

ANAND P. DATE (2002) Middlesex, United Kingdom

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ALLAN J. DENNIS, JR.* (2005)	CONRAD C. FULKERSON (2001)	WILLIAM H. JARRETT, II (1998)
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NICHOLAS DEWEY* (1981)	J. MICHAEL FULLER (2009)	NEIL JENKINS (2008)
Santa Barbara, California	Greenville, South Carolina	Nashport, Ohio
CHRISTOPHER F. DIBBLE (2011)	W. BRUCE FYE (1975)	H. MICHAEL JONES (2006)
Carrboro, North Carolina	Rochester, Minnesota	Chapel Hill, North Carolina
LAUREL E. DREVLOW (2006)	CHRISTOPHER G. GOETZ (2000)	ROBERT J. T. JOY* (1981)
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JACALYN M. DUFFIN (1998)	JOHN T. GOLDEN (1999)	RICHARD J. KAHN (1981)
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GEORGE C. EBERS (1985)	RICHARD L. GOLDEN* (1980)	ANAND B. KARNAD (1998)
Bayfield, Ontario, Canada	Centerport, New York	San Antonio, Texas
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Reston, Virginia	Grandview, New York	Baltimore, Maryland
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Chevy Chase, Maryland	Rochester, Minnesota	Port Jefferson Station, New York
MICHAEL EMMETT (2003)	STEPHEN B. GREENBERG (1997)	ELTON R. KERR (1989)
Dallas, Texas	Houston, Texas	Richland, Washington
LYNN C. EPSTEIN* (1999)	JEREMY A. GREENE (2013)	JACK D. KEY* (1979)
Bristol, Rhode Island	Baltimore, Maryland	Sandia Park, New Mexico
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Pittsburgh, Pennsylvania	Augusta, Georgia	New York, New York
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Las Vegas, Nevada	Melrose, Minnesota	Richardson, Texas
MEGHAN A. FEELY (2011)	SIMON HANFT (2006)	IRVING KUSHNER (2012)
Short Hills, New Jersey	New York, New York	Shaker Heights, Ohio
ANDREW Z. FENVES (2005)	H. ALEXANDER HEGGTVEIT* (1982)	ROBERT A. KYLE (2007)
Boston, Massachusetts	Hamilton, Ontario, Canada	Rochester, Minnesota
GARY B. FERNGREN (1996)	ERNEST B. HOOK (2014)	DOUGLAS J. LANSKA (2014)
Corvallis, Oregon	San Rafael, California	Tomah, Wisconsin
JOSEPH J. FINS (2009)	PERRY HOOKMAN (1999)	S. ROBERT LATHAN* (2002)
New York, New York	Potomac, Maryland	Atlanta, Georgia
EUGENE S. FLAMM* (1998)	JOEL D. HOWELL (1987)	KATHERINE LATIMER (2011)
New York, New York	Ann Arbor, Michigan	Bethesda, Maryland
THOMAS W. FRANK (2010)	KRISTIN M. HUNTOON (2013)	JOSEPH W. LELLA (1998)
APO, AE	Columbus, Ohio	London, Ontario, Canada
RICHARD S. FRASER (2012)	K. GARTH HUSTON, JR. (1992)	ROBERT I. LEVY* (2007)
Montreal, Quebec, Canada	Leucadia, California	Baltimore, Maryland
HERBERT L. FRED* (1984)	EDWARD J. HUTH* (1988)	LAWRENCE D. LONGO (1976)
Houston, Texas	Bryn Mawr, Pennsylvania	Redlands, California
J. GORDON FRIERSON (2009)	BRUCE J. INNES* (2001)	KENNETH M. LUDMERER (1983)
Palo Alto, California	Macon, Georgia	St. Louis, Missouri
ABRAHAM FUKS (1999)	ALEXANDRA ISTL (2014)	CARL E. LUNDSTROM (2011)
Montreal, Quebec, Canada	London, Ontario, Canada	Rochester, Minnesota

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

* Emeritus

CHRISTOPHER M. LYONS (2012)	ROBERT R. NESBIT, JR. (2003)	GEORGE SARKA (2009)
Montreal, Quebec, Canada	Augusta, Georgia	Laguna Hills, California
C. RONALD MACKENZIE (2014)	JOHN NOBLE* (1993)	AMIT SHARMA (2009)
New York, New York	Boston, Massachusetts	Highland Park, New Jersey
MICHAEL H. MALLOY (2014)	ROBERT K. OLDHAM (1982)	CHRISTOPHER B. SHIELDS* (1989)
Galveston, Texas	Fort Myers, Florida	Louisville, Kentucky
ERIC L. MATTESON (2011)	MICHAEL F. O'ROURKE* (1996)	BARRY D. SILVERMAN (1997)
Rochester, Minnesota	Sydney, Australia	Atlanta, Georgia
CHRYSSA N. K. McALISTER (2009)	BRUCE R. PARKER* (1995)	RUSSELL L. SILVERSTEIN (2005)
Kitchener, Ontario, Canada	San Francisco, California	Dallas, Texas
VIVIAN C. McALISTER (2010)	CLYDE PARTIN, JR. (1999)	WILLIAM A. SMITH, JR. (2000)
London, Ontario, Canada	Atlanta, Georgia	Fulton, Kentucky
PAUL R. McHUGH* (1990)	STEVEN J. PEITZMAN (2002)	THOMAS C. SODEMAN (2012)
Baltimore, Maryland	Philadelphia, Pennsylvania	Toledo, Ohio
NEIL McINTYRE* (1995) Woodford Green, Essex, England	COURTNEY PENDLETON (2010) Baltimore, Maryland	WILLIAM A. SODEMAN, JR.* (1998) Toledo, Ohio
LAURA McLAFFERTY (2011)	CLAUS A. PIERACH (1991)	MARVIN J. STONE (1990)
Marlton, New Jersey	Minneapolis, Minnesota	Dallas, Texas
WILLIAM O. McMILLAN, JR. (1995)	CYNTHIA D. PITCOCK (1992)	ROB H. STONE (2008)
Wilmington, North Carolina	Memphis, Tennessee	West Hills, California
ROBERT G. MENNEL (1999)	SCOTT H. PODOLSKY (2010)	JOHN T. STROH (2012)
Dallas, Texas	Boston, Massachusetts	Washington, District of Columbia
M. ALAN MENTER* (2004)	BETH PREMINGER (2000)	HERBERT M. SWICK (2000)
Dallas, Texas	New York, New York	Missoula, Montana
PAMELA J. MILLER (2003)	MABEL L. PURKERSON* (2003)	RAMYA TAKKELLAPATI (2013)
Westmount, Quebec, Canada	St. Louis, Missouri	Baltimore, Maryland
J. MARIO MOLINA (2008)	TONSE N. K. RAJU (1999)	BARBARA L. THOMPSON (2012)
Long Beach, California	Gaithersburg, Maryland	Galveston, Texas
MICHAEL E. MORAN (2004)	ROBERT E. RAKEL (1983)	JOSHUA C. TOMPKINS (2013)
Aiken, South Carolina	Houston, Texas	Los Angeles, California
DANIEL D. MORGAN (2000)	MICHAEL A. E. RAMSAY (2006)	JAMES E. TOOLE* (1976)
Fremont, California	Dallas, Texas	Winston-Salem, North Carolina
SANDRA W. MOSS (2002)	P. PRESTON REYNOLDS (1998)	MICHAEL TROTTER (2013)
Metuchen, New Jersey	Charlottesville, Virginia	Greenville, Mississippi
PAUL S. MUELLER (2003)	C. JOAN RICHARDSON (2008)	JOHN T. TRUMAN* (2000)
Rochester, Minnesota	Galveston, Texas	North Andover, Massachusetts
SEAN B. MURPHY* (2002)	CHARLES S. ROBERTS (2004)	JOSEPH B. VANDER VEER, JR. (2003)
Westmount, Quebec, Canada	Charleston, South Carolina	Devon, Pennsylvania
T. JOCK MURRAY* (1992)	WILLIAM C. ROBERTS* (2000)	HECTOR O. VENTURA (1999)
Halifax, Nova Scotia, Canada	Dallas, Texas	Metairie, Louisiana
ANDREW T. NADELL (1986)	LOREN A. ROLAK (1995)	SARA E. WALKER (2012)
Burlingame, California	Marshfield, Wisconsin	Las Cruces, New Mexico
FRANCIS A. NEELON* (1992)	MILTON G. ROXANAS (2012)	JOHN W. K. WARD (2003)
Durham, North Carolina	Wahroonga, New South Wales, Australia	Abingdon, Oxfordshire, England

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

* Emeritus

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, JR. (2010)

Calgary, Alberta, Canada

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)

MARIAN FRANCIS KELEN

(1922-2014)

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)

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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)

VICTOR A. McKUSICK

(1921-2008)

CHARLES G. ROLAND

(1933-2009)

WILLIAM C. GIBSON

(1914-2009)

MARTIN M. CUMMINGS

(1920-2011)

ILZA VEITH (1912-2013)

Deceased Members of the American Osler Society Elected Members

ARTHUR D. KELLY IRVING A. BECK FREDERICK B. WAGNER, JR. (1901-1976)(1911-1997)(1916-2004)CLARK T. SAWIN MARSHALL N. FULTON THOMAS A. WARTHIN (1899-1977) (1909-1997) (1934-2004) I. N. DUBIN EDWARD W. HOOK, JR. A. BENEDICT SCHNEIDER (1913-1981)(1924-1998) (1914-2004)GEORGE E. GIFFORD, JR. STEWART G. WOLFE JAMES A. KNIGHT (1930-1981) (1918-1998) (1914 - 2005) LAWRENCE C. McHENRY, JR. NORMAN SCHAFTEL G. R. PATERSON (1929-1985)(1914-1998)(1919-2005)W. WATSON BUCHANAN GEORGE E. BURCH DANIEL B. STONE (1910-1986) (1925-1998) (1930-2006) K. GARTH HUSTON ALVIN E. RODIN CHESTER R. BURNS (1926-1987) (1926-1999) (1937-2006) ROBERT AUSTRIAN GORDON W. JONES GARFIELD J. TOURNEY (1915-1987) (1927-1999) (1916-2007) CHARLES S. JUDD, JR. R. CARMICHAEL TILGHMAN CHARLES F. WOOLEY (1904-1999) (1920-1987) (1930-2008) ROBERT J. MOES STANLEY W. JACKSON M. GEORGE JACOBY (1905-1988) (1920-2000) (1920-2008) S. GORDON ROSS SAUL JARCHO MARK E. SILVERMAN (1899-1990) (1906-2000) (1939-2008) MAURICE A. SCHNITKER LLOYD W. KITCHENS, JR. ROBERT U. MASSEY (1905-1990)(1946-2001) (1922-2008) ROBERT E. BEAMISH JAMES V. WARREN ARTHUR GRYFE (1915-1990) (1916-2001) (1935-2009) NICHOLAS E. DAVIES ARNOLD G. ROGERS LEON Z. SAUNDERS (1926-1991)(1925-2001) (1920-2009)PETER D. OLCH FREDERICK W. BARNES CHESTER R. BURNS (1930-1991) (1909-2001) (1937-2006)JOHN Z. BOWERS WALTER D. HANKINS ROBERT AUSTRIAN (1910-2001) (1913-1993) (1916-2007) CHARLES F. WOOLEY WILLIAM B. SPAULDING ROY SELBY (1930-2008) (1922-1993)(1930-2002)LEWIS THOMAS E. CARWILE LEROY M. GEORGE JACOBY (1933-2002)(1920-2008) (1913-1993)HOWARD B. BURCHELL RODERICK K. CALVERLEY ROBERT M. KARK (1938-1995) (1911-2002) (1908-2009) DYKES CORDELL CARLETON B. CHAPMAN HARRIS D. RILEY, JR. (1944-1996)(1915-2002) (1924-2010) DAVID M. MUMFORD D. GERAINT JAMES LUTHER C. BECK (1909-1996)(1927-2003) (1922-2010) HASKELL F. NORMAN ALEX SAKULA ROBERT C. KIMBROUGH, III

(1941-2010)

(1917-2003)

(1915-1996)

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

C. PETER W. WARREN WILLIAM S. HAUBRICH KENNETH G. SWAN (1940-2011) (1923-2012) (1934-2014)

J. WILLIS HURST EDMUND PELLEGRINO ROBERT P. HUDSON (1920-2011) (1920-2013) (1926-2014)

WILLIAM H. FEINDEL PAUL G. DYMENT PHILIP W. LEON (1944-2012) (1918-2014) (1935-2014)

OM P. SHARMA ROBERT P. TURK STANLEY M. ARONSON

(1936-2012) (1931-2014) (1922-2015)