

20th Annual Spring Meeting

Anesthesia History Association

May 1–3, 2014

The Dearborn Inn—A Marriott Hotel
20301 Oakwood Boulevard, Dearborn, MI 48124

Program Chair

Douglas R. Bacon, MD, MA, Professor and Chair of Anesthesiology,
Wayne State University School of Medicine, Detroit, MI

Overview

The program is intended to present work related of historical events and individuals who contributed to advances in anesthesia, medicine, ethics, and the allied health sciences. Meetings of the Anesthesia History Association offer a mechanism for celebrating, recognizing, and documenting significant contributions in these fields.

Target Audience

This meeting is designed primarily for physicians, nurses, medical students, historians and anyone interested in medical history.

Objectives

At the completion of this meeting, participants should be able to:

1. Learn about contributions made by individuals to the development of anesthesia.
2. Learn about key events related to history of anesthesia.
3. Develop useful perspectives on ethics as related to medical experimentation during the World Wars.
4. Develop new skills related to research methodology as applied to historical investigations.

Director for Continuing

Sivasenthil Arumugam, M.D., Department of Anesthesiology, Saint Francis
Hospital and Medical Center, Hartford, Connecticut

Volunteer Council for the Detroit Institute of Arts Museum Tour

TBD

Accreditation for Physicians

Saint Francis Hospital & Medical Center is accredited by the Connecticut State Medical Society to sponsor continuing medical education for physicians. This Conference has been approved by Saint Francis Hospital & Medical Center for a maximum of 16.5 hours of Category 1 credit towards the AMA Physician's Recognition Award™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Invited Speakers (in order of presentation)

David J. Wilkinson, MBBS—President, World Federation of Societies of Anesthesiologists Laureate, Wood Library Museum of Anesthesiology, Park Ridge, IL

Julia M. Rosenbloom, MD—Winner of the 2013 C. Ronald Stephen, MD Resident Essay Competition.

Sandra Kopp, MD—Associate Professor of Anesthesiology, Mayo Clinic, Rochester, MN

The Honorable Michael Duggan—Mayor, Detroit, MI

Larry Stephenson, MD—Emeritus Fred Webber Professor of Surgery, Wayne State University School of Medicine, Author, *Detroit Surgeons: A 300 Year History*

Faculty:

Justin Caramiciu, BA, Manisha Desai, MD, Ramon F. Martin, MD, Sukumar Desai, MD, George Bause, MD, Franklin Scamman, MD, Anthony Kovac, MD, B Yalsou, MD, Kathy Schlecht, DO, John A Fox, MD, Moshin S. Shafi, BA, Yvon F. Bryan, MD, Hirosato Kikuchi, MD, PhD, Koji Fujio, MD, PhD, Lallitha Sundararaman, A. Aponte-Feliciano, D. McInnis, Amanda Xi, BA, Hyun Kee Chung, MD, Eugene Verkhovsky, BS, Ian Mizrahi, MD, Bradley Smith, MD, John Severinghaus, MD

Moderators:

Douglas R. Bacon, MD, MA, Mark Schroeder, MDH. Michael Marsh, MD, Kathy Schlect, DO, Joffer Hakim, MD, Manisha Desai, MD, Elie Chidiac, MD, Bradley E. Smith, MD, Patrick D. Bridge, PhD

Financial Support:

Registration Fee

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Program

Thursday, May 1, 2014

- 2:00–5:00 pm** PM Registration—Sun Porch, past the lobby across from entrance
- 3:00 pm** Anesthesia History Association Council Meeting – Fairlane Room
- 5:00–5:30 pm** Board Busses to Detroit Institute of Arts for Welcome Reception and tour
- 6:00–9:00 pm** Detroit Institute for the Arts Reception
- 9:00 pm** Board Busses for return to the Dearborn Inn

Friday, May 2, 2014

- 7:00–8:00 am** **Continental Breakfast—FAIRLANE ROOM**
- 7:45–8:00 am** **Opening Welcome**—Patrick D. Bridge, Ph.D., Associate Dean of Undergraduate Medical Education
- 8:00–9:00 am** **Opening Plenary Session Guest Lecture — RIVER ROUGE ROOM**
Electrical Anesthesia is an Alternative to Local Anesthetics
 David J. Wilkinson, MBBS, President, World Federation of Societies of Anesthesiologists, Laureate, Wood Library Museum of Anesthesiology

Douglas R. Bacon, M.D., M.A — Moderator

—RIVER ROUGE ROOM

- 9:00–9:30 am** *History of Medicine in US Medical School Curricula*
 Justin Caramiciu, David Arcella, M.D., Manisha S. Desai, M.D.
- 9:30–10:00 am** *Was Anesthesiology a Leader in the Graduate Medical Education of Women, Minorities and International Medical Graduates in the United States?*
 Ramon F. Martin, M.D., Ph.D., Sukumar P. Desai, M.D.

10:00–10:30 am *Securing the Future of the History of Anaesthesia:
A Discussion of an International Initiative and Potential US Contributions*
Douglas R. Bacon, M.D., M.A., M. Wulf Strätling, M.D., Ph.D, aFRCA,
Christine Ball, M.D., David J. Wilkinson, MBBS

*Patrick D. Bridge, Ph.D., Associate Dean of Undergraduate Medical
Education — Moderator*

10:30–10:45 am **Coffee Break—FAIRLANE ROOM**

10:45–11:45 am **C. Ronald Stephen Essay Contest Winner 2013**
*Toward an Understanding of the Equality of Pain: Crawford Long and the
Development of Anesthesia in Antebellum Georgia*
Julia M. Rosenbloom, M.D.

Bradley E. Smith, M.D., President AQHA — Moderator

12:00–1:30 pm **Lunch—FAIRLANE ROOM**

4TH Patrick Sim, MLS Memorial Lecture
Does Studying the Past Really Help Us See the Future More Clearly?
Sandra Kopp, M.D.

Douglas R. Bacon, M.D., M.A. — Moderator

—RIVER ROUGE ROOM

1:30–2:00 pm *Hyperventilating Against Nitrous Oxide: W.G.A. Bonwill, DDS, MD*
George Bause, M.D., M.P.H.

2:00–2:30 pm *John W. Severinghaus, M.D., A Gadgeteer of the First Order*
Franklin L. Scamman, M.D.

2:30–3:00 pm *Development of a web site devoted entirely to Medicine in the First World
War*
A Kovac MD, F Holmes MD MA, G Holmes MD, J Casey MA, D McInnis BA,
N Hulston MA, K Chinn

Elie Chidiac, M.D. — Moderator

—**GROSSE POINTE ROOM**

- 1:30–2:00 pm** *Etymology of Anesthesia and Proposed Terms Alike*
B. Yaldou, M.D., K. Schlecht, D.O.
- 2:00–2:30 pm** *Three Portraits, Two Artists, and One Harvard Department of Anaesthesia:
Art Capturing Reality?*
John A. Fox, M.D., Erin Poor, M.A., Sukumar P. Desai, M.D.
- 2:30–3:00 pm** *The Portrayal of Anesthesiologists in Feature Films: Is it real or raw deal on
reel?*
Moshin S. Shafi, B.A., Yvon F. Bryan, M.D.
- Manisha Desai, M.D. — Moderator*
- 3:00–3:15 pm** **Coffee Break—FAIRLANE ROOM**

—**RIVER ROUGE ROOM**

- 3:15–3:45 pm** *Seishu-No-Sato, Home and Hospital of Seishu Hanaoka*
Hirosato Kikuchi, M.D., Ph.D., Koji Fujio, M.D., Ph.D.
- 3:45–4:15 pm** *LAVOISIER’S DILEMMA SOLVED BY CONFIRMING OLD CAVENDISH REPORT*
—An updated version of the 2013 ISHA and ISOTT reports on Michael
Servetus and the discovery of oxygen
John W Severinghaus, MD, Professor Emeritus Anesthesia UCSF
- Joffer Hakim, M.D., Moderator*

—**GROSSE POINTE ROOM**

- 3:15–3:45 pm** *Witnesses to the First Public Demonstration of Ether—Their Roles and
Subsequent Careers*
Lalitha Sundararaman, M.D., Sukumar P. Desai, M.D.
- 3:45–4:15 pm** Horace Wells was His Hero: W. Harry Archer, Oral Surgeon and Anesthesia
Historian
A. Aponte-Feliciano, A. Kovac, D. McInnis
- Kathy Schlecht, D.O., Moderator*
- 6:30–9:00 PM** **Dinner—FAIRLANE ROOM**
The Future of Detroit
HONORABLE MICHAEL DUGGAN, Mayor of Detroit
Douglas R. Bacon, M.D., M.A. — Moderator

Saturday May 3, 2014

- 7:00–8:00 am** **Continental Breakfast—FAIRLANE ROOM**
- 8:00–9:00 am** **Guest Lecture — RIVER ROUGE ROOM**
Detroit Surgeons: A 300 Year History
 Larry W. Stephenson, M.D., Emeritus Fred Webber Professor of Surgery,
 Wayne State University School of Medicine

H. Michael Marsh, M.D. — Moderator
- 9:00–9:30 am** *Dogliotti's Principle—the Test of Time*
 Amanda Xi, Kathy D. Schlect, D.O.
- 9:30 am–10:00 am** *A Surgeon Passionate About Pediatric Regional Anesthesia*
 Hyun Kee Chung, M.D., Manisha Desai, M.D.
- 10:00–10:30 am** *Fungal Steroid Epidemic: A New Episode of Woolley and Roe?*
 Eugene Verkhovsky, Douglas R. Bacon, M.D., M.A.

Mark Schroeder, M.D. — Moderator
- 10:30–10:45 am** **Coffee Break—FAIRLANE ROOM**
- RIVER ROUGE ROOM**
- 10:45–11:15 am** *Establishment of the Department of Anaesthesia at Harvard
 Medical School—1969*
 Ian Mizrahi, M.D., Sukumar P. Desai, MD
- 11:15–11:45 am** *Henry K. Beecher was Distantly Related to Rev. Lyman Beecher*
 Bradley E. Smith, M.D., George E. Battit, M.D.

William Hammonds, M.D. — Moderator
- 11:45 am–1:00 pm** **Closing Remarks and Lunch**

History of Medicine in US Medical School Curricula

Justin Caramiciu • David Arcella, MD • Manisha S. Desai, MD

Introduction: Courses related to history of medicine [HOM] are not always included in the curriculum of US medical schools. We examined the proportion of medical schools that offered such courses and the nature of faculty and departments devoted to such instruction. We explain why HOM fails to attract the attention it deserves, and suggest remedial action.

Methods: An online survey was sent to officials from every medical school in the U.S. [n=119]. We solicited information about elective HOM courses offered, the year of study during which these courses were offered, and the presence of a department of history of medicine department. Non-responders were contacted by phone to elicit the same information. History of medicine electives included didactic sessions and seminars for which academic credits were awarded.

Results: We obtained responses from 101 out of 119 medical schools (85%). Forty five (37%) medical school curricula included formal lectures or weekly seminars. Of these, five (11%) curricula required HOM instruction, while it was elective in the other 32 schools (89%). Eighteen (15%) medical schools reported independent departments dedicated to HOM. Lack of interest in HOM among faculty members, obligatory clinical training hours, and decreased student interest were reported to be responsible for limited inclusion of courses in HOM.

Conclusions: Substantial barriers exist within the academic medical community towards a wider acceptance of the importance of HOM. We enumerate and discuss several causes for the observed lack of interest and offer a multipronged remedial course of action.

University of Massachusetts Medical School, Worcester, Massachusetts

Was Anesthesiology a Leader in the Graduate Medical Education of Women, Minorities and International Medical Graduates in the United States?

Ramon F. Martin, MD, PhD • Sukumar P. Desai, MD

Background: A picture of Ralph Waters' Aqua Alumni as well as a listing of the residents he trained reveals a diverse group that included women and international medical graduates (IMG's). This is unlike the pictures of medical and surgical house staff from the same time period seen in most hospital hallways. The top branches of the Aqua Alumni Family Tree trace Ralph Waters' influence to several countries outside of the US. This ran counter to the nationalistic, isolationist tendencies in America in the early to mid-1900s. Ralph Waters taught Anesthesia to anyone who would travel to Madison, Wisconsin.

Aim: To determine if Ralph Waters' approach to selecting and educating residents in Anesthesiology resulted in nationwide differences in the percentage of residents who were either female, IMG's or minority compared to other specialties.

Resources: ACGME Graduate Medical Education Data Resource Book 2002–2013, JAMA—yearly summary articles: Approved Internships and Residencies 1950–1975, Medical Education 1900–1960, Graduate Medical Education 1950–2001, and the Journal of Medical Education.

Methodology: Yearly summary statistics for female, IMG's and Afro-American residents in the specialties of Anesthesiology (Anes), Internal Medicine (Int Med), Pathology (Path), Pediatrics (Peds) and Surgery (Surg) were compiled and compared.

Results: As a % of residents, Anes, Peds and Path had more women than Int Med and Surg from 1971 to 1975. By 1980, Int Med had a comparable %. Surg did not increase the % of women until 2003. In 1954, Surg had the highest % of IMG's. By 1962, Anes, Path and Peds had a higher % and remained so until 1975. This has been followed by a steady decline. Int Med has seen a slow increase in the % of IMG's. The number of Afro-Americans has and continues to be a small percentage for all specialties. There has been a slow, uniform increase in this percentage for all residencies.

Conclusion: The evolution of graduate medical education in the 20th century starts with the Flexner Report, includes a continued debate about the number of IMG's who should be educated in the United States, charts the rise of formal residencies and specialties and belatedly accepts women and minorities. Compared to Int Med and Surg, Anes initially accepted a greater percentage of women and IMG's as residents. While Ralph Waters directly educated only a small number of residents, his ideas probably had a nationwide impact.

Department of Anaesthesia, Harvard Medical School, Brigham and Women's Hospital, Boston, Massachusetts

Securing the Future of the History of Anaesthesia: *A discussion of an International Initiative and potential US-contributions*

**Douglas R. Bacon, MD, MA¹ • M. Wulf Strätling, MD, PhD, aFRCA²
 Christine Ball, MD³ • David J. Wilkinson, MB BS⁴**

Background: On the 8th International Symposium on the History of Anaesthesia (ISHA, Sydney, Australia, 22nd – 25th January 2013) an international initiative “Securing the future for the History of Anaesthesia” was launched. The purpose of this follow-up presentation on the Annual Spring Meeting of the Anaesthesia History Association (Dearborn, Michigan, 1st – 3rd May 2014) is to provide a platform among leading US-experts on the History of Anaesthesia for further discussion and initial consultation.

The questions raised are, whether there is cause to be concerned about the future of our scientific sub-discipline, whether or to what extent such concerns could be addressed by carefully orchestrated initiatives and what contributions the primarily US-based communities could provide.

Outline: The presentation will briefly analyze and explain, why the History of Anaesthesia continues to be a highly attractive discipline for research and education. After this, a considerable number of serious problems and challenges are identified. These lead the founder-group of experts behind this initiative to raise grave concerns about the future of our medico-historical sub-discipline. Finally, a selection of potential initiatives to address such problems will be outlined, focusing on the fields of education and research-strategy.

Ample room will be given for an (inter)national and multi-disciplinary discussion and consultation among the colleagues and experts present. The aim is to establish, whether our perception and analysis of the problems are commonly shared, whether and to what extent a consensus can be reached and what, if anything should be done about the issues raised, notably by cooperation on an (inter)national level.

¹*Chair of Anesthesiology, Wayne State University School of Medicine, Detroit, USA; 6th Laureate in the History of Anesthesiology by the American Society of Anesthesiologists / Wood Library Museum.*

²*President of the World Federation of Societies of Anaesthesiologists (WFSA); 5th Laureate in the History of Anesthesiology by the American Society of Anesthesiologists / Wood Library Museum.*

³*Dr. Chris Ball, Consultant Anaesthetist, Alfred Hospital; Honorary Curator of the Geoffrey Kaye Museum of Anaesthetic History, ANZCA, Melbourne, Australia.*

⁴*Dr. M. Wulf Strätling, Consultant Anaesthetist (Cardiff and Vale University Health Board). Hon. Reader in Anaesthesiology and in History, Theory and Ethics in Medicine (Lübeck University, Germany).*

Toward an Understanding of the Equality of Pain: *Crawford Long and the Development of Anesthesia in Antebellum Georgia*

Julia M. Rosenbloom, MD

Dr. Crawford Long's career illustrates the complicated intersection of science, sympathy, medical experimentation, race, and gender within the history of anesthesia in the United States. In 1842, Long became the first documented US physician to use ether for surgery: instead of treating surgical pain through intoxication, or more simply through tolerance, he administered this organic compound to produce amnesia and analgesia.

Like many nineteenth-century medical treatments, ether was unknown and untested, and Long's use of it was itself an experiment from both a medical and a social point of view. In a radical departure from his contemporaries who primarily used black slaves as test subjects for expanding medical knowledge, Long first delivered surgical anesthesia to James Venable, a white male from a wealthy and prominent Southern family. Long's experience with Venable allowed him to refine and improve his anesthetic technique for the benefit of his second patient, an enslaved black child. Long, however, was not immune to contemporary ideas about using the socially vulnerable for medical experimentation: he performed his next surgeries on a black slave child and a white woman with and without anesthesia to ascertain the analgesic benefit of ether. Long's complex relationship with ether identifies both an acceptance of racialized and gendered experimentation reflective of contemporary thinking and a radical expression of equality in the context of medical development and understandings of pain. Significantly, the common thread that runs throughout all these experiments is that pain, and its treatment, is universal.

Anesthesia Residency Program, Yale-New Haven Hospital, New Haven, Connecticut

Hyperventilating against Nitrous Oxide:

W.G.A. Bonwill, DDS, MD

George S. Bause, MD, MPH

The son of a physician, William Gibson Arlington Bonwill (1833-1899) was born in Camden, New Jersey and educated in the public schools. He worked as a carpenter, cabinetmaker, store clerk, and schoolteacher. Bonwill apprenticed in dentistry for 6 months with a Camden dentist, Dr. Samuel Neal, and then 12 months with two Baltimore dentists, Drs. Chapin Harris and A. A. Blandy. Bonwill practiced dentistry in Dover, Delaware (1854-1871) and then Philadelphia, Pennsylvania (1871-1899). After earning his D.D.S. from the Pennsylvania College of Dental Surgery (1866), Dr. Bonwill received his M.D. from Jefferson Medical College. (1,2)

Beyond his genius in the “mechanical arts”, Dr. Bonwill was an accomplished poet and sculptor. The layman appreciates button-laced shoes, the safety pin, and steel riveting devices as inventions improved by or adapted from Dr. Bonwill. A master at working gold or amalgam into dental works of art, Dr. Bonwill designed both the modern dental articulator and his eponymous Bonwill triangle, studied even today by dentists worldwide.(1,2)

On November 17, 1875, Dr. Bonwill’s “The Air an Anaesthetic” was read at the Franklin Institute in Philadelphia.(3) On May 12, 1880, Dr. Bonwill delivered “Rapid Breathing as a Pain Obtunder in Minor Surgery, Obstetrics, the General Practice of Medicine and of Dentistry” to the Philadelphia County Medical Society. Between the readings of these papers, dentists and physicians worldwide had begun using Dr. Bonwill’s “rapid breathing” techniques to produce analgesia for dental extractions, obstetrical labor, and short surgical procedures.(4)

In 1894 Dr. Bonwill reported that “in an experience of twenty years I have not used an anesthetic in my office, although I have an instrument holding one hundred gallons of nitrous oxide.... My opinion is that if I could have introduced rapid breathing as a pain obtunder before nitrous oxide came out, you would all be using it.”(5)

References:

1. N.A. Dr. William Gibson Arlington Bonwill. *Dental Cosmos* 1899; 41: 1200-1204
2. N.A. Dr. W. G. A. Bonwill. *Dental Items of Interest* 1897; 19: 395-398
3. Bonwill WGA. The air an anaesthetic. *Philadelphia Journal of Dental Science* 1876; 3: 57-61
4. Bonwill WGA. Rapid breathing as a pain obtunder in minor surgery, obstetrics, the general practice of medicine and of dentistry. *Philadelphia Medical Times* 1880 [Jul 17]; 10: 519-520
5. N.A. Midwinter Fair Dental Congress. *Pacific Coast Dentist* 1894; 2: 415-433

Clinical Associate Professor, Schools of Medicine and of Dental Medicine, Case Western Reserve University, Cleveland, OH; Honorary Curator, Wood Library-Museum of Anesthesiology, Park Ridge, IL

John W. Severinghaus, MD: *A Gadgeteer of the First Order* **Franklin L. Scamman, MD**

It takes a series of unusual events to create one of Anesthesia's greatest inventors and physiologists. Born of a physician father whose office was adjacent to Ralph Waters' at the University of Wisconsin, JWS grew up in an academic and stimulating environment. His college education started at Haverford and finished at MIT in physics. Being drafted, he joined the physics group at MIT, working on radar. Of Quaker background and shocked by the loss of life with the bombing of Hiroshima, he determined to become a doctor. Wisconsin had lost half of its entering class due to a delay in releasing candidates from active duty. He was accepted immediately without an interview or standard tests. After 2 years, realizing that U of W did not have enough clinical contact, he transferred to the College of Physicians and Surgeons. After completing a 2-year internship in Cooperstown, NY, where he published his first paper—on determination of blood calcium by flame photometry—he started looking for a biophysics postdoctoral fellowship. Upon visiting Philadelphia, he was captivated by Robert Dripps and started his anesthesia residency there in January, 1952. One of his successful projects was determining the uptake of nitrous oxide using a Beckman oxygen analyzer and a bell spirometer. Dripps, recognizing his research ability, that summer directed him to the laboratory of Julius Comroe for a year where he worked on dead space. Faced with the doctor draft, in July 1953, he became the Director of Anesthesia Research at the brand-new Division of Anesthesia at NIH for 3 years. Wanting to finish his training in anesthesia, in the summer of 1956, he joined Stuart Cullen at Iowa. It was here, during a meeting of the American Physiological Association in August of 1957, Comroe, who had just established the Cardiovascular Research Institute at the University of California, San Francisco, was looking for someone to head up Anesthesia there. He asked Severinghaus and JWS said, as the story goes, "Stu." Comroe said, "Stu who?" JWS introduced Comroe to Cullen and within hours, Cullen had agreed to start a new anesthesia department at UCSF and JWS followed in 1958 to establish anesthesia research in both that department and the CVRI where he spent the rest of his career, retiring in 1991. While at NIH, JWS heard of the work of Stowe on the measurement of CO₂ using a pH electrode and a membrane to cover it. Knowing chemistry, JWS improved its performance by adding bicarbonate under the membrane and thus became the inventor of the "Severinghaus CO₂ electrode." Also, learning of the work of Clark on an oxygen electrode, he incorporated it and a pH electrode into a temperature-controlled bath to make the first blood gas machine that now resides in the Smithsonian. Looking for a use of his new device, JWS became interested in high-altitude physiology and the adaptation of respiratory control. For many years, he traveled to high altitude, studying the changes in cerebral spinal fluid pH and control of ventilation. As mass spectrometers became clinically available, he invented the process of monitoring several operating rooms with just one central machine. In later years, he became interested in pulse oximetry and established a laboratory to study various manufacturers' instruments in volunteers who allowed their saturations to be lowered below 50%. This lab is still active today.

The recipient of many honors, JWS received the first Excellence in Research Award from the ASA in 1986, gave the inaugural Severinghaus Lecture on Translational Science at the ASA meeting in 2008, and has received many international fellowships and doctorates.

I had the privilege of being one of JWS' fellows in 1972-73. I built an analog computer to automate the determination of the ventilatory response to hypoxia and CO₂ that we took to La Paz, Bolivia. We also studied oxygen waves in cat cerebral cortex.

When asked by Tom Hornbein what he wanted to be remembered for, JWS replied primarily as a physiologist who enjoyed being a gadgeteer his entire life. He and his wife of 66 years, Elinor, reside in Ross, CA.

References: Living History Interview with Tom Hornbein from the ASA Pender Collection; JWS Lecture on Translational Science, ASA Meeting 2008; Interviews with and material provided by JWS.

Department of Anesthesia, University of Iowa, Iowa City, Iowa

Development of a Web Site Devoted Entirely to Medicine in the First World War

A Kovac MD¹ • F Holmes MD MA² • G Holmes MD²
J Casey MA³ • D McInnis BA² • N Hulston MA² • K Chinn⁴

Introduction: World War One (WW1) has been very important to Kansas University Medical Center (KUMC) as many physicians, surgeons, and nurses who left the Kansas City area for France in 1918 with Base Hospital #28 were associated with the KUMC Medical and Nursing Schools and university hospital before and after their military service. During WW1, Base Hospital #28 was a 2,500 bed military general hospital from Kansas City located at Limoges, France. The core data and records of Base Hospital #28 are located at The National WW 1 Museum, Kansas City, MO. These extensive records include a variety of reports, patient and hospital records, x-rays, statistical data, and over 1,000 black and white images from photo albums and scrapbooks detailing medical and hospital practice at the hospital. Diaries of physicians and nurses who served in France in 1918, are also held in the archives of KUMC as well as the National WW1 museum.

First World War Medicine Study Group: Since 2009, the *First World War Medicine Study Group*, has comprised faculty, support staff, and others who have been examining hospital and medical practice on the Western Front during The Great War of 1914 to 1918. The group's primary aim is to increase and expand the study of regional primary source materials with presentations and publications as appropriate and possible. Collectively, this group has given 35 presentations and lectures, 5 posters, and published 2 articles in scholarly journals. A secondary aim is to encourage and assist other academics and scholars in the study of WW1 Medicine.

Archived Materials: The basic primary source materials used by this group are in the archives of the National WW1 Museum and KUMC. Much of this catalogued and scanned material is available to be thoroughly examined and used by scholars interested in medicine in WW1. Other collections in the Kansas City Metro Area relevant to Medicine in WW1 also include the regional branch of the National Archives, and libraries at the University of Kansas, University of Missouri at Kansas City and Linda Hall library.

Website Development: Faculty at KUMC joined together in 2013 to develop "a website, "Medicine in the First World War" as a cooperative venture with The National WW1 Museum. KUMC is the host institution. The web development and management group at KUMC assisted with the creation of the web site. Presently, ten essays of approximately one thousand words each with accompanying images about Base Hospital #28 form the core of the website. It is hoped that the years from 2014 until 2018 will see additional essays of all possible medical topics added to the website, making it a large web based compendium of First World War Medicine studies.

Using the web and power point slides, this presentation will demonstrate the web site and discuss how it may be incorporated into a medical history education curriculum.

Acknowledgement: For the joint web sponsorship, special thanks to the National World War I Museum, Kansas City, MO and the Department of the History and Philosophy of Medicine, Kansas University Medical Center, Kansas City, KS.

*Departments of Anesthesiology,¹ History and Philosophy of Medicine² and Information Technology,⁴
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Etymology of Anesthesia and Proposed Terms Alike

B. Yaldou, MD • K. Schlecht, DO

Background Information: As with any significant development, the work of many scholars has contributed to the growth of the medical profession termed anesthesiology. Initially appearing in the inaugural edition of Encyclopedia Britannica as “a privation of the senses” in 1771, popular use of the word anesthesia was postponed to nearly three quarters of a century later.¹ It was a letter dated November 21, 1846 in which Oliver Wendell Holmes declared to William Morton, of Ether Day fame, that he should term his new development “anaesthesia” which “signifies insensibility.”¹ Soon after, “anesthesia” became the chosen word so to speak, despite an abundance of additional options that did not quite catch on; and thankfully so.

Aim: Exploration of ‘Anesthesia,’ an expression mouths of millions have repeated and the less appealing alternatives that are now history.

Resources: Internet, Wood Library Museum, William Beaumont Medical Library

Results: On November 2, 1846, Morton arranged a meeting to discuss a descriptive name for his desensitizing preparation; in attendance was Holmes.¹ It was here where Morton chose letheon, so termed for the river Lethe of Hades, home to Greek mythology’s departed, “whose waters cause drinkers to forget their past.”^{1,2} Letheon however, was to be Morton’s trade name for his combination of oil of orange and sulfuric ether and therefore, in actuality, was not an appropriate suitor to describe a state of insensibility.^{3,4} Popularized in many writings, Morton’s distasteful desire to become wealthy from his concoction never materialized and letheon has since become an afterthought in any sense, with only references to the river itself published in our current dictionaries.^{3,5}

Around the same time, in the mid-nineteenth century, hebetization was proposed to describe Morton’s findings, though specifics behind the word are lacking.³ A personal communication between Charles Roland of Mayo Clinic and John T. Martin was published in Anesthesia and Analgesia in May-June 1976, of which Martin was the Associate Editor at the time. The article titled “Let’s Call It Hebetization,” was centered on the very topic of what could have been had ‘anesthesia’ not been chosen, with mention of becoming a “hebetiziologist” and the equally unappealing possibility of a “Journal of Hebetization and Analgesia.” Review of hebetization falls short in current dictionaries, although ‘hebetate’ can be found to be defined as “to make dull or obtuse,” linking hebetization to insensibility but still far from the current definition of anesthesia.²

Other unacceptable words proposed in Holmes’s infamous letter to Morton were anti-neuric, aneuric, neuro-leptic, neurolepsia, and neuro-estasis; mentioned by Holmes as likely being too anatomical, an observation most would agree upon at present.¹ A current search conducted of Merriam-Webster’s dictionary is devoid of all terms outside of neuroleptic, commonly known to those in the medical profession as “antipsychotic.”² Additionally, over twenty previously utilized terms are listed by Stanley Sykes in Essays on the First Hundred Years of Anesthesia, stated to be either “clumsy” or “cacophonous” alternatives to ‘anesthesia.’⁵

Conclusion: The present dictionary definition of anesthesia listed in Britannica's Merriam-Webster's Dictionary is "loss of feeling in a person's body or part of the body through the use of drugs," a short and simple definition of a word with an intriguing history.²

References:

1. Sanchez, GC. Lexicographic History of Anesthesia. *Journal of Clinical Anesthesia* 1996 8: 435-438.
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Three Portraits, Two Artists, and One Harvard Department of Anaesthesia: *Art Capturing Reality?*

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Background: Many forms of art accurately depict physical attributes of their subjects. But how precisely do portraits capture personal, emotional, and behavioral aspects of individuals holding leadership positions in academic departments of anesthesiology?

Methods: We examine portraits of the first three academic chairmen of anesthesiology in our department – Leroy D. Vandam, Benjamin G. Covino, and Simon Gelman. We correlate their depiction with known behavior and idiosyncrasies of these leaders.

Results: We found that the artists were remarkably astute in their observations and that they successfully captured both physical and emotional aspects of their subjects. Moreover, in one instance, significant early life experiences were added to the composition with subtlety. Individuals familiar with these chairmen and their management styles can easily appreciate the techniques employed by the artists.

Summary: We conclude that art successfully depicted emotional and executive attributes of these three academic anesthesia chairmen.

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The Portrayal of Anesthesiologists in Feature Films: *Is it real or a raw deal on reel?*

Mohsin S. Shafi, BA • Yvon F. Bryan, MD

Introduction: Physicians have often been depicted as arrogant, egotistical, and uncompassionate their patient's wellbeing in modern films (1). Though they play a critical role in the operating room and high-risk scenarios, anesthesiologists are often overshadowed by the presence and focus placed on surgeons. This may be due to the fact that anesthesiology is a medical specialty that is still in its infancy when compared to other medical specialties (2). In works of fiction, anesthesiologists are depicted as being lazy, error-prone, servile, cowardly, and inferior to other physicians and surgeons (3). Numerous recreated scenes in films are depicted with a lot of reality, such as car chases and gun scenes; however, operating rooms scenes lack realism regarding the anesthesiologist's role, particularly in regards to the accuracy in monitoring and use of equipment. There seems to be a lack of films portraying the anesthesiologist as a protagonist or a hero. We viewed a collection of films in order to determine stereotypes and perceptions of anesthesiologists by patients, physicians, and other hospital personnel.

Methods: We searched for featured films in which an anesthesiologist had a significant role. We used searchable terms such as ("anesthesiologists depicted in the movies", "Anesthesiologist/s", "Anesthesia", "Anaesthetist", etc.) on websites such as, Google, Anesthesia Goes to Hollywood, Notes of an Anesthesiologist, and the International Movie Database (IMDb). The research librarian at the Wood Library assisted in these film searches. Movies were excluded if they were in foreign languages. They were viewed either on DVD, online, or via Amazon. We examined the perception of the anesthesiologist by the surgeon, patient, and other personnel. Positive or negative personal characteristics of anesthesiologists were classified according to the surgeon's view, such as ignorance and inferiority, and the patient's or public's perspective, such as laziness or being compassionate. In addition, we examined the anesthesiologist's role regarding use of monitors and medical equipment.

Results: 6 films were found, five were viewed and analyzed, and one (Anaesthesia 1938) was not examined due to the content being on the history of anesthesia of ancient civilizations. The movies were 4 American (Coma 1978, Anesthesia 2006, Awake 2007, and The Paralyzing Agent 2009) and one British (Green for Danger 1946). The anesthesiologist was the main character in 2 movies (The Paralyzing Agent 2009 and Green for Danger 1946) and had a supporting and/or minor role in 3 movies (Coma 1978, Anesthesia 2006, and Awake 2007). Negative attributes in the films, from the physician's or colleague's views, were inferior, arrogant, cold, servile, ignorant, and cowardly. Positive characteristics attributed to anesthesiologists were compassion, easily accepting authority, and avoiding conflict. Negative attributes from the patient's or public's perspective were that the anesthesiologist was prone to error, lazy, no regard for the rules, selfish, and disregarded patient care.

Discussion: Our brief review of feature films was similar to fiction literature, in which anesthesiologists were not portrayed positively regardless of the time period (3). In contrast to the

other films, *Green for Danger* and *Awake* depicted the anesthesiologist as compassionate. Despite the fact that medications and technology had evolved, anesthesiologists were viewed as lazy and prone to making errors. Anesthesiologists were also seen as multitasking, frantic, and preoccupied. The role of the anesthesiologist was counter to reality since the anesthesiologist was responsible for the patient as a whole, while the surgeons focused on the particular area of the body. Anesthesiologists may be portrayed negatively because people do not have enough knowledge on the role anesthesiologists play; many think anesthesiologists only put patients to sleep. In summary, patients focused on the surgeon fixing their medical problem, labeling the surgeon as the hero, while denying anesthesiologists credit for their role. For anesthesiologists to be depicted in a positive and realistic fashion, anesthesiologists should become consultants to movie producers to accurately portray the operating room and resuscitation scenes. By providing writers constructive criticism, film makers could be granted access to the OR, in the form of a backstage pass, to see what actually occurs or learning realism through simulation.

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Seishu-No-Sato: *Home and Hospital of Seishu Hanaoka* **Hirosato Kikuchi, MD, PhD • Koji Fujio, MD, PhD**

Seishu Hanaoka (1976.11.30-1835.11.21) is the doctor who successfully performed the first recorded surgical operation under general anesthesia with Ma-Futsu-San on October 13, 1804. For educational purposes as well as studying his medical charts, he dictated every operation to the doctors who came from all over Japan to learn from him.

On the height along the Kinokawa River, the Seishu-No-Sato, house and hospital of Seishu Hanaoka is located (coordinates: 34.28034, 135.441384). It was restored in April, 1999, at the same site by the Society for honoring Seishu Hanaoka. It is located about 22.7 miles (36.6km) from Kansai International Airport (KIX), Osaka and 17 miles (27.5km) from Wakayama Railway Station.

Seishu-No-Sato consists of Flower Hill Museum exhibiting surgical instruments and his belongings, and of Shun-Rin-Ken (his residence, hospital and some other facilities) where the near-by graveyard of the Hanaoka is located. The original main house (hospital and residence) and warehouse were restored. In the hospital, surgical features, guest rooms where he made lectures to doctors (pupils) and a pharmacy are exhibited using wax dolls. Besides the main house, a nurse house, pupils residence and the stable were reconstructed. The home page shows a part of this house and museum (<http://seishu.sakura.ne.jp/index.shtml>), though no English page was constructed. Additionally, with his own money, he led construction of a reservoir, the Kaito Ike, for farmers to protect them from drought.

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Lavoisier's Dilemma Solved by Confirming Old Cavendish Report: *An updated version of the 2013 ISHA and ISOTT reports on Michael Servetus and the discovery of oxygen*

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I have recently learned that during the last century, historians have discovered and published that between the 13th and 18th century at least 8 scientists discovered that the air we breathe contains something we need and use. Ibn al Nafis (1213-1288) in Cairo accurately described the pulmonary circulation and its effect on blood color. His writings were rediscovered in 1924. Michael Servetus (1511-1553) pestered John Calvin and wrote a book hoping to remove the trinity doctrine from the reformation, for which he was burned at the stake. In 1953, his book was found to contain an accurate description of the pulmonary circulation and blood color change in the lung. Michael Sendivogius (1566–1636) in Prague identified the gas made by heating saltpeter as the part of air he named “The Food of Life” (O₂). Andrew Szydlo, a Polish-English chemistry teacher in London, rediscovered his writings in 1990. John Mayow (1641–1679) found that 1/5th of air was a special gas he named “spiritus nitro aereus” (O₂) but was forgotten due to phlogiston theory until 1955. In 1771, Carl Wilhelm Scheele (1742-1786) generated “Fire Air” (O₂) by heating silver carbonate but failed to promptly publish. A letter he wrote to Lavoisier in 1774 was publically revealed in 1993. On August 1st 1774, Joseph Priestley (1733-1804) discovered and promptly published that he made dephlogisticated air (O₂) by heating red mercuric calc. Mice could live in it and it brightened a flame. When Antoine Lavoisier (1743-1794) read his report in 1775 he began studying this new gas. In 1777 he named it principe oxygen but referred to it as vital air. After 9 years of studying its chemistry, Lavoisier was stalled, still unable to prove it was a new element. In 1783, the Royal Society invited Henry Cavendish in London, a wealthy but shy and reclusive skilled scientist to review and discuss a paper he had written in 1766 claiming that when he slowly burned “inflammable air” (H₂), pure water was deposited on the walls of his glass vessel. No one believed him because water was an element that could not be generated. The Society secretary Charles Bragden reported the new interest in Cavendish to Lavoisier. On June 24th, 1783 he burned inflammable gas and made water! Stunned, he understood the universal error: He announced that water is a compound of two gases he named oxygen and hydrogen. That is the birth date of modern chemistry to which Cavendish had provided the key. Cavendish has not been sufficiently credited by science historians.

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Witnesses to the First Public Demonstration of Ether— *Their Roles and Subsequent Careers*

Lalitha Sundararaman, MD • Sukumar P. Desai, MD

Background: The audience on October 16, 1846 included physicians, surgeons, medical students, an ex-patient, and a journalist. A previous attempt at pain relief during dental extraction had been deemed a failure, yet an undercurrent of hope likely prevailed. We examine the lives and careers of the individuals who were witness to this marvelous gift to suffering humanity and how the momentous occasion affected their lives.

Methods: Published material in the public domain was consulted for this study.

Results: Many physicians were impressed by Morton and continued to work with him. Others were physicians at Massachusetts General or students at Harvard Medical School. A reporter and daguerreotypist were invited but chose not to attend the demonstration to their regret later. An ex-patient had been invited by Morton to be present. After the successful demonstration, Morton's pursuit of a patent and attempts to obtain personal financial gain were deemed unprofessional. He was implicated in financial scandals as well. Furthermore, in subsequent years Morton, Horace Wells, Charles Jackson, and Crawford Long waged a long battle for the credit for the discovery of anesthesia. Surgeon Henry Jacob Bigelow may be considered anesthesia's and Morton's strongest spokesperson. John Collins Warren too was very supportive of Morton. The careers of most others were largely unaffected by Ether Day.

Conclusions: Despite bearing witness to one of the greatest advances in medicine, the event left the careers of the majority of individuals unaffected. Exceptions include WTG Morton, and surgeons Henry Jacob Bigelow John Collins Warren.

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Horace Wells was His Hero: *W. Harry Archer, Oral Surgeon and Anesthesia Historian*

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Introduction: In the early 1930's, as oral surgery was developing as a specialty, one man dedicated to the development of and considered to be the father of oral surgery training programs was William Harry Archer. In the process, he wrote numerous textbooks on oral surgery and dental anesthesia. While Archer traveled the world lecturing on oral surgery; his hobby of anesthesia history also made him famous worldwide. Much of what we now know about Horace Wells is due to Archer's efforts. As Wells' biographer, Archer spent months unraveling the history behind the discoverer and discovery of nitrous oxide. Archer was fascinated solving the puzzle of how, when and why Wells was motivated to study and experiment with nitrous oxide in the mid-1800s.

Research Methodology: Internet and Library research of Archer's personal documents, letters and photographs at the Countway Medical Library in Boston, MA.

Results: W. Harry Archer was an oral surgeon born in Ambridge, Pennsylvania on March 6, 1905 to William Harry Archer and Marie Morris. In 1927, he began the private practice of oral surgery after graduating from the University of Pittsburg Dental School. As a staff oral surgeon at Magee-Women's hospital in Pittsburg, PA, he rose up the academic ranks to become Chief of the Oral Surgery division of the Dental School in 1941. Very active in the American Dental Association (ADA), he encouraged efforts to improve, promote and expand dental care and oral surgery in hospitals, while at the same time improving the quality and standards of dental departments. In 1944, Archer worked on the first committee on hospital dental services which was created to design basic standards for hospital dental departments. He also assisted the Council of Dental Education of the ADA to establish minimum requirements for hospital dental internships and oral surgery residency training programs. He was part of the group assigned to evaluate and certify the first dental departments in the country to receive certifications from the ADA. He traveled world-wide to educate and assist in dental surgery development, growth, certification and the education of other professionals in the art of oral surgery. However, another of Archer's passions was a deep interest of anesthesia history. Archer was an avid collector and proponent of Horace Wells' as the first discoverer of anesthesia. He collected multiple letters and information published in dental journals to show the world that indeed Horace Wells was his hero and that Wells was the first man to discover, demonstrate, and proclaim the marvels of anesthesia.

Conclusion: W. Harry Archer was a pioneer in oral surgery, post graduate education, dental and oral surgery training and anesthesia history. A leader in oral surgery, he was also the biographer of Horace Wells documenting Wells' contribution to the discovery of anesthesia.

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Dogliotti's Principle –The Test of Time

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Background: Although Achille Mario Dogliotti was not the first to inject local anesthetic into the epidural space; he is credited with the popularization of epidural anesthesia due to his “loss of resistance” technique. Despite the subsequent invention of numerous techniques and devices, Dogliotti’s principle remains a standard technique used today.

Aim: To provide a review of the Dogliotti Principle and its popularization of the epidural technique.

Resources: Ms. Felicia A. Reilly graciously contributed to our references from the Wood Library-Museum. Librarian Donna Marshall of the William Beaumont Health System was invaluable in obtaining numerous articles referenced by this abstract.

Results: In 1885, J. Leonard Corning was the first to describe “a procedure in therapy which, so far as I am aware, possesses the merit of novelty” that of neuraxial anesthesia and his apparent inadvertent administration of epidural anesthesia¹. The first accounts using the caudal approach were independently reported by French physicians Cathelin and Sicard in 1901^{2,3}. The Spanish surgeon Fidel Pages described the lumbar approach to the epidural space in 1921⁴. He was killed in a traffic accident before his work could be translated or disseminated. On April 18, 1931, Achille Mario Dogliotti MD published his “loss of resistance” method to locate the epidural space in an Italian journal⁵. Popularization did not occur until Professor Dogliotti traveled to New York City to instruct his audience: “The technique has been made easy and simple,” at the International Anesthesia Research Society’s Eleventh Annual Congress of Anesthetists, October 17-21, 1932. His famous address was later published in *Anesthesia and Analgesia* March-April 1933⁶. Eugen Aburel – known as the “father of continuous regional anesthesia in obstetrics” adopted Dogliotti’s lumbar epidural technique for application to the obstetric population and published his work in 1938⁷.

Albeit not inclusive; numerous approaches to identify the epidural space have since been described in the literature: Ruiz and Guiterrez’s “hanging drop” – the disappearance of a drop of fluid from the external end of the needle - in 1932⁸. In 1950, R.R. Macintosh introduced his balloon technique by attaching a small rubber balloon to needle and watching for it to decrease in size as an indication of epidural space access⁹. Doctor Macintosh also credits technician Mr. Salt for designing a “spring-loaded sylet” to locate the extradural space in 1953¹⁰. Massey Dawkins’ described the use of an ‘air bubble’ in 1963¹¹. In 1971, Sagarnaga reported placing a diaphragm on a syringe to amplify the hissing sound created upon entrance of the epidural space^{12, 13}. Anis Baraka’s “Running Infusion Drip” – a saline infusion connected to a needle begins to ‘drip’ as the epidural space is pierced-in 1972¹⁴. Randall Cork et al. reported on an ultrasonic localization of the epidural space in 1980¹⁵. Jacobs and Tierney described a dual technique combining Dogliotti’s loss of resistance technique with auditory amplification in 1997¹³. Recently, Lechner TJ and associates described an acoustic puncture assist device to identify the epidural space¹⁶.

Conclusion: Numerous individuals have contributed to the field of epidural anesthesia over the last century. Although Fidel Pages has since received posthumous recognition for the lumbar approach

to the epidural space, we continue to honor Achille Mario Dogliotti, for his contribution by naming the “loss of resistance” principle after him. The Dogliotti Principle has endured the test of time.

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A Surgeon Passionate about Pediatric Regional Anesthesia

Hyun kee Chung, MD • Manisha S. Desai, MD

Introduction: Robert Emmett Farr is frequently cited as the first to describe the use of axillary brachial plexus anesthesia in children. A surgeon from Minneapolis, Minnesota, he passionately believed that regional anesthesia was superior to general anesthesia. He wrote extensively, promoting regional techniques, including local infiltration for pyloromyotomy, and caudal block. Pediatric anesthesia texts from the early 1900's suggest that brachial plexus anesthesia for children was not accepted as a reliable alternative to general, and nerve blocks for postoperative pain control were rarely mentioned. Undeterred, Farr continued promoting his view that regional anesthesia was the future of surgery. We examine how Farr promoted regional anesthesia in children, in a small way changing surgical practice and improving clinical care.

Methods: Published material in the public domain was the basis of our historical sources.

Results: In 1884, William Halsted first demonstrated the efficacy of brachial plexus block when cocaine was injected under direct vision. In 1911, Hirschel reported successful axillary plexus block after percutaneous injection. In 1920, Farr was the first to report experience with brachial plexus anesthesia in children. Although his article, published in *Archives of Pediatrics*, was not widely circulated among anesthesiologists, his enthusiasm for regional anesthesia techniques resulted in many publications on the subject. Farr was one of the first true advocates of pediatric regional anesthesia.

The “dangers” of general anesthesia was often cited as the major advantage of regional over general. “Many children were in a bad condition following the use of general anesthetic and the anesthetic often decided the issue,” was a statement made in support of regional over general by Dr. Farr. The implication that regional anesthesia is safer than general is not valid in modern times, but in 1920 this may have been the case.

Farr cited safety and wide applicability of regional anesthesia as its many advantages, especially in severely ill children. He was unafraid of challenging traditional techniques, and he was confident that sooner or later, advantages of regional anesthesia would be recognized.

Conclusions: Clinical advances come about when individuals challenge conventional thinking and persevere with their passionate ideas. Pediatric regional anesthesia was fortunate in finding such a champion in the form of surgeon Robert Emmett Farr.

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Fungal Steroid Epidemic: A New Episode of Woolley and Roe **Eugene Verkhovsky • Douglas R. Bacon, MD, MA**

Are our practice standards set through evidence and research or by reactionary emotions? The recent tragedy of the fungal steroid contamination has sent shockwaves through the press, politics, and medicine. It would not be unreasonable to view the recent severe cuts in CMS reimbursement and the medical community's apprehension of interventional pain procedures this year to at least be in part a consequence of the unrelated contamination. To gain perspective of the irrationality and danger of such poor hindsight this paper will parallel the rise and subsequent fall of spinal anesthesia in the early twentieth century in response to the well-publicized accident of Woolley and Roe in the United Kingdom. While the events that led to each event were distinct, the large role of politics and subsequent effect on practice standards are undeniable.

In the quarter century that followed Labat's 1923 article in *Regional Anesthesia* which claimed to provide a method for spinal anesthesia without the toxicity of cocaine, neuraxial blocks became the most commonly used method of administering intraoperative anesthesia and analgesia. As its use increased so too did the incidence of associated risks and complications. Legitimate concerns were debated regarding safety, and modifications to practice standards were made for years as new data presented. This debate and the use of spinal anesthesia virtually ceased for decades abruptly following the events of a single tragic day in one operating room. The tragic case of Woolley and Roe, two gentlemen who became paraplegic due to a tragic human error, changed the face of anesthesiology for decades. Yet ironically this case was almost entirely the result of negative attention and national politics, but almost nothing to do with the actual spinal anesthesia that was administered.

The 2012 fungal steroid contamination has left dozens dead and several hundred patients infected; owners of the New England Compounding Center (NECC) are currently facing criminal charges in addition to agreeing on a 100-million dollar settlement. The emotions stirred by the tragedy and exacerbated by the press, resulted in regulators and politicians at every level searching for ways to assuage the public's fears. Unfortunately the process allowed critics of epidural steroid injections for the treatment of chronic pain to become more vocal, echoing similar sentiments as the critics of spinal anesthesia after the Woolley and Roe.

Both events in the history of anesthesiology were tragic not only for the patients that directly suffered but also for the many potential patients that no longer had the option of the procedure in question. While the fall of spinal anesthesia after Woolley and Roe was mitigated by the concurrent and tremendous improvements in general anesthesia, the current decline in the use of steroids for chronic pain does not share a similar improvement in alternative modalities.

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Establishment of the Department of Anaesthesia at Harvard Medical School - 1969

Ilan Mizrahi, MD • Sukumar P. Desai, MD

Background: The first academic departments of anesthesia were established at the University of Wisconsin-Madison in 1927, with Ralph M. Waters named as chairman, and in the UK at Oxford University in 1937, with Robert Macintosh as chairman. Compared to these early departments, more than three decades would pass before Harvard Medical School decided it was time to establish a department of anaesthesia, in 1969. We examine the forces on both sides of the issue, for and against, and how they played out in the late 1960s.

Methods: Published articles, books, interviews, biographical and autobiographical notes, as well as reports of department and medical school committee meetings were examined to obtain information relevant to our investigation.

Results: The late 1960s were an ideal time for the chiefs of anesthesia at the various Harvard teaching hospitals to make a strong argument in favor of establishment of an independent department of anaesthesia. Though strongly opposed by Francis Daniels Moore, Chief of Surgery at Peter Bent Brigham Hospital, an independent department at Harvard was established in 1969.

Conclusions: An increase in the body of knowledge in the discipline, as well as the establishment of professional associations, credentialing boards, training programs, textbooks, and academic activities in the 1960s provided overwhelming support for the establishment of an independent department of anaesthesia at one of the most tradition-bound universities in the US – Harvard.

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Henry K. Beecher (HKB) was Distantly Related to Rev. Lyman Beecher (LB)

By **Bradley E. Smith, MD¹** • **George E. Battit, MD²**

Henry Knowles Beecher, M.D. (1904 – 1976), Henry Isaiah Dorr Professor of Anesthesiology, Harvard University, once wrote “...a portrait of Lyman Beecher {LB}...a member of my family.....for I am keenly interested in these matters of the family...”.¹ Gionfriddo² traced and published HKB’s genealogy to 1802 without demonstrating a direct family connection between HKB and LB. This report extends that genealogy to a common ancestor, Joseph Beecher (ca 1665 – 1723) with comments.

HKB was certainly one of the most prominent personalities in the history of Anesthesiology. He held the first endowed University Chair in Anesthesiology. For his efforts in WWII battlefield injuries he received the Legion of Merit from the United States, and the Legion d’Honneur from France. He was one of seven founders of the Association of University Anaesthetists (sic). Many of his students and protégés exerted tremendous influence in the establishment of Anesthesiology as an academic entity.³

Although his accomplishments in Anesthesiology are many, some would assert that his contributions to clinical research methodology and to medical ethics are the enduring foundation for his rightful place in history. He and colleagues revolutionized clinical research by their introduction of the “double blind” principle. He was among the first to explore and establish modern concepts of pain. His activism concerning protection of research subjects led to the universal establishment of Institutional Review Boards. He initiated the ongoing discussion to define death and dying. These crusades led to the establishment of the now prestigious “Henry K. Beecher Award” of the Hastings Center for Bioethics.^{3,4,5}

On the other hand, there are multiple paradoxes in his life and behavior, and more than a few who do not subscribe to his unreserved praise.⁶ Among these paradoxes is his major role in possibly unethical early research into the effects of LSD, sponsored by the U.S. government.⁷ However, the focus of this report is his genealogy and the many transformations of his name initiated by HKB during his lifetime.

The name given HKB at his birth in Kansas in 1904 was Harry Knowles Unangst. He applied to Harvard Medical School as Harry Knowles Beecher Unangst (there is no evidence that “Beecher” was added by any legal proceeding.) In 1928 HKB was granted a legal name change to Harry Knowles Unangst Beecher by a Kansas court. Next, by his common usage, he dropped the “Unangst” altogether and finally, again by usage, not legal action, he always used “Henry”, not “Harry” in all his academic activities⁶, but was always “Harry” to his close friends.

The podium presentation of this report will include a traditional genealogy diagram of the families of HKB and LB, and the children of LB, Harriet Beecher Stowe (HBS), Henry Ward Beecher (HWB), Charles Beecher (CB), and Mary Foote Beecher Perkins (MFBP). The new diagram displays that the

only genealogic connection between HKB and LB was through HKB's maternal great-grandmother Mariah (Mary) Beecher Kerley (1802 – 1898) to their common ancestor, Joseph Beecher (b: ca 1665 - d: 1728). Why then did HKB change his name to Beecher?

Speculation: the study of Kansas state history was required for Kansas schoolchildren in those days. Gionfriddo offers the theory that the prominent historic role of LB nationally and HWB in the "Bloody Kansas" conflicts ("Beecher's Bibles" {rifles}) may have made a strong impression on young HKB, as undoubtedly would have "Uncle Tom's Cabin" by HBS,² and young Harry would certainly have known of Lieutenant Frederick Beecher (the son of CB). Frederick was the hero of the "Battle of Beecher's Island" when 55 Kansas "Scouts" fought hundreds of Cheyenne tribesmen in 1868. Frederick was featured in Kansas history books and in wildly popular contemporary literature.⁸

In 1928 the current ease and methodology of genealogy research was not even yet a dream. HKB knew of his maternal great-grandmother as "Mary", not "Mariah" Beecher Kerley, born in Connecticut. Lacking modern genealogy research resources, HKB might have mistaken his "Mary", born in 1802, for LB's daughter Mary (MFBP), born in 1805 only a few miles from his "Mary". Although other speculations concerning his affinity for the Beecher name have been offered, there is no sound evidence supporting any of the hypotheticals described here or elsewhere.

Thus, HKB was NOT descended from LB as some have speculated. HKB and LB WERE distant cousins, but their nearest common forebear lived over 200 years before HKB and over 100 before LB.

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