

# History of Medicine in the Western World from the 18<sup>th</sup> century to the present

Joel D. Howell PhD MD

Winter 2015

Monday & Wednesday, 2:30 - 4:00, 1449 Mason

Rev 4 March

"The history of medicine is, in fact, the history of humanity itself, with its ups and downs, its brave aspirations after truth and finality, its pathetic failures. The subject may be treated variously as a pageant, an array of books, a procession of characters, a succession of theories, and exposition of human ineptitude, or the very bone and marrow of cultural history." (Fielding Garrison, *An Introduction to the History of Medicine*)

We shall adopt each of these approaches, and more. Birth, life, illness, and death are universal experiences for all of humankind. How do we think about these experiences? Who do we call to attend childbirth? Who do we call to care for the sick? The answers to these questions have been quite different for different people at different times and in different places.

We will discuss how medical practice has changed. We will consider the perspectives of not only elite healers, but also of typical patients. We will examine the history of ideas and institutions, asking: Who has practiced medicine? How did those practitioners claim legitimacy? How have changes in medical thinking changed the practice of medicine? In so doing we will discuss:

- revolutions in medical knowledge and clinical practice
- transformations in how the human body and disease have been conceptualized
- inventions of tools to treat sick people
- ways that people have experimented on other human beings
- the changing roles of healers in social and cultural context
- the history of institutions such as medical schools and hospitals

**Class structure:** Two 1.5-hour lectures per week; one 1-hour discussion section per week.

The University of Michigan offers many presentations and seminars throughout the semester. When these presentations touch on topics relevant to this class the event will be announced and students will have the opportunity to attend and to obtain limited extra credit (see below). Please feel free to let me know about presentations that you may hear about.

Readings will include both primary and secondary sources. No prerequisites are necessary; any technical medical knowledge necessary will be presented in class.

A coursepack is available at DollarBill. In order to keep the cost of this coursepack reasonable, not all readings are found therein. All of the readings (except for one play, *Miss Evers Boys*) are found on the course CTools site. The CTools site also includes some optional readings, marked “optional,” for students who wish to learn more about a particular subject.

The readings include two plays, *An Enemy of the People* and *Miss Evers’ Boys*, which students should bring to the relevant classes. Please take care to get the original *Enemy of the People*, not the Arthur Miller adaptation. (This play is also available on CTools.)

### **Instructors:**

Faculty: Joel Howell. [jhowell@umich.edu](mailto:jhowell@umich.edu)

Office Hours: Monday 4-5, Wednesday 1:30-2:30, or by appt, 2773 Haven Hall

GSI: David Spreen, [dspreen@umich.edu](mailto:dspreen@umich.edu)

Office Hours:

**Academic Integrity Policy:** History 234 follows the academic integrity guidelines set forth by the College of LSA [<http://www.lsa.umich.edu/academicintegrity/>] and the History Department [<http://www.lsa.umich.edu/history/undergraduate/courses/guidelinesandpolicies>]. Students should familiarize themselves with both of these documents, which explain the standards of academic integrity and clarify the prohibited forms of academic misconduct. The penalties for academic misconduct range from a grade of “0” on the assignment to failure for the course. Cases that the instructor judges to be particularly serious, or those in which the student contests the charge of academic misconduct, will be handled by the office of the Assistant Dean for Undergraduate Education. All cases of deliberate academic misconduct that result in formal sanctions of any kind will be reported to the dean’s office, as required by LSA policy, which also ensures due process rights of appeal for students.

### **Week 1) What is medical history? Jan 7**

*Wednesday:* What is health? What is disease? What is medicine? How can history help us think about assessing medicine’s role (if any) in improving health?

- H. Tristram Engelhardt, Jr., “The Disease of Masturbation: Values and the Concept of Disease,” *Bulletin of the History of Medicine* 48 (1974): 234-248.
- David S. Jones, Scott H. Podolsky, and Jeremy A. Greene, “The Burden of Disease and the Changing Task of Medicine,” *New England Journal of Medicine* 366 (2012): 2333-2338.

### **Week 2) Guns and medicine. Jan 12, 14**

French Revolution, Paris Hospitals, physical diagnosis, bloodletting. Ideas about localizing disease. Impact on medicine in the U.S.

- Jacqueline Duffin, *To See With a Better Eye: a life of R.T. H. Laennec* (Princeton: Princeton University Press, 1998), 209-239.
- Oliver Wendell Holmes, “The Stethoscope Song: a Professional Ballad,” *Poems* (Boston: Ticknor, Reed & Fields, 1850), 272-7.
- P. C. A. Louis, *Researches on the Effects of Bloodletting in some Inflammatory Diseases* (Boston: Hilliard, Gray & Co., 1836), 1-14.

### **Week 3) Experimental Medicine on the frontier. Jan 21**

*Wednesday*: Science and human experimentation on the frontier: Alexis St. Martin and William Beaumont

- William Beaumont, *Experiments and Observations on the Gastric Juice and the Physiology of Digestion* (Plattsburgh: F. P. Allen, 1833), 9-29.

### **Week 4) Childbirth and its challenges. Jan 26, 28**

*Monday*: Childbirth and Death in the Vienna Hospital

- Ignaz Semmelweiss *The Etiology, Concept, and Prophylaxis of Childbed Fever*, trans and ed. K. Codell Carter (Madison: University of Wisconsin Press, 1983), 63-113.

*Wednesday*: Enslaved women, J. Marion Sims, and the search for a cure for vesico-vaginal fistula

- J. Marion Sims, *The Story of My Life* (New York: D. Appleton and Company, 1884), 222-246.
- J. Marion Sims, “Osteo-Sarcoma of the Lower Jaw – Resection of the body of the bone - cure,” *American Journal of the Medical Sciences* 11(1846): 128 -132.

### **Week 5) Laboratory medicine and the germ theory of disease. Feb 2,4**

*Monday*, SNOW DAY!!

*Wednesday*: How did this new idea about disease causation affect medical practice? What difference did it make?

- Sinclair Lewis, *Arrowsmith*, 1925, 83-91.
- Anthony S. Fauci and David M. Morens, “The Perpetual Challenge of Infectious Diseases,” *New England Journal of Medicine* 366 (2012): 454 – 461.
- Henrik Ibsen, *An Enemy of the People* (for in-class reading and discussion).

**Week 6) A revolution in medical education, Hospitals and hospital medicine.** Feb 9, 11

*Monday:* Rise of allopathic medicine, women and minorities in medical schools.

- Kenneth Ludmerer, *Learning to Heal: The Development of American Medical Education* (New York: Basic Books, 1985), 9-28, 166-190.
- Abraham Flexner, *Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching* (New York: Carnegie Foundation, 1910), 3-19, 28-51, 156-166, 243-247.

*Wednesday:* What was a 19<sup>th</sup> century hospital? When, where, and why did the role of the hospital change? How is today’s hospital different?

- Charles E. Rosenberg, *The Care of Strangers: The Rise of America’s Hospital System* (New York: Basic Books, 1987), 15-46, 122-165.
- Susan Reverby, “The Search for the Hospital Yardstick: Nursing and the Rationalization of Hospital Work,” in *Health Care in America: Essays in Social History*, ed. Susan Reverby and David Rosner (Philadelphia: Temple University Press, 1979), 206-225.
- Michael Kimmelman, “In Redesigned Room, Hospital Patients May Feel Better Already,” *New York Times* 21 August 2014.  
<http://www.nytimes.com/2014/08/22/arts/design/in-redesigned-room-hospital-patients-may-feel-better-already.html?module=Search&mabReward=relbias%3Aw%2C%7B%221%22%3A%22RI%3A9%22%7D>

**Week 7: History of the hospital.** Feb 16, 18

*Monday, Wednesday:* Continue discussion of the history of the hospital

**Week 8) New technology and a new disease? Heart attacks.** Feb 23

*Monday:* Different theories used to explain heart disease, focusing on the disease that we now call “heart attack.” Was this a new disease? How should it be diagnosed? How should it be treated?

- William Heberden, *Commentaries on the History and Cure of Diseases* (London, Payne & Foss, 1816), 362-369.
- James Herrick, “Clinical Features of Sudden Obstruction of the Coronary Arteries,” *Journal of the American Medical Association (JAMA)* 59 (1912): 2015-2020.

**\*\*\*MID TERM EXAMINATION: WEDNESDAY, FEB 25\*\*\***

**Week 9) Technology.** March 9,11

*Monday and Wednesday:* How did Western medicine come to be dominated by the ideology of science and technology?

- Joel Howell, *Technology in the Hospital* (Baltimore: Johns Hopkins University Press, 1995), 1-68.
- C. H. T. Crosthwaite, “Roentgen’s Curse,” *Longman’s Magazine* 28 (1896): 469-84.

**Week 10) Specialization, Surgery, Anesthesia.** March 16, 18

*Monday and Wednesday:* The creation of medical specialties. Surgery becomes medical. The introduction of anesthesia.

- Joel Howell, “The Changing Face of Twentieth-century American Cardiology,” *Annals of Internal Medicine* 105 (1986): 772-782.
- Joel Howell, “Reflections on the Past and Future of Primary Care,” *Health Affairs* 29 (2010): 760-65.
- Martin S. Pernick, *A Calculus of Suffering: Pain, Professionalism and Anesthesia in Nineteenth-Century America* (New York: Columbia University Press, 1985), 35-77.
- Henry Jacob Bigelow, “Insensibility during Surgical Operations Produced by Inhalation,” *Boston Medical and Surgical Journal* 35 (November 18, 1846), 309-317.
- Ernest Hemingway, “Indian Camp.”

**Week 11) Race, Geography, and Medicine; Insulin.** March 16, 18

*Monday:* Tuskegee, Guatemala

- Susan M. Reverby, “More than a Metaphor: An Overview of the Scholarship of the Study;” Allan M. Brandt, “Racism and Research;” and “Selected Letters between the United States Public Health Service, the Macon County Health Department, and the Tuskegee Institute, 1932-1972,” all in *Tuskegee’s Truths: Rethinking the Tuskegee Syphilis Study*, ed. Susan Reverby (Chapel Hill: University of North Carolina Press, 2000), 1-11, 15-33, 73-115.
- Jack Coulehan, “My Battle Against Gonorrhea,” *Annals of Internal Medicine* 155 (2011):198-200.
- David Feldshue, *Miss Evers’ Boys* (for an in-class reading and discussion)

*Wednesday:* Discovery of Insulin

- Chris Feudtner, *Bittersweet: Diabetes, Insulin, and the Transformation of Illness* (Chapel Hill: University of North Carolina Press, 2003), 3-29.

**Week 12) War and medicine, new diseases.** March 23, 25

*Monday:* Radiation poisoning

- *The Human Radiation Experiments: Final Report of the President’s Advisory Committee* (Oxford: Oxford University Press, 1996), 113-131 (Ethics Retroscope), 263-467 (Prisoners).
- *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb*

*Wednesday:* Hepatitis, Clinical Ethics

- Joel D. Howell and Rodney A. Hayward, “Writing Willowbrook, Reading Willowbrook: The Recounting of a Medical Experiment,” in *Using Bodies: Humans in the Service of Medical Science in the Twentieth Century* ed. Goodman J, McElligott A, and Marks L (Baltimore: Johns Hopkins, 2003), 190-213.
- Saul Krugman, Joan P. Giles, and Jack Hammond, “Infectious Hepatitis,” *JAMA* 200 (1967): 365-373.
- Saul Krugman, “The Willowbrook Hepatitis Studies Revisited: Ethical Aspects,” *Reviews of Infectious Diseases* 8 (1986): 157-162.

**Week 13) War and Lead.** April 6, 8

*Monday:* Special guest Perrin Selcer : “Is war good for medicine?”

- Perrin Selcer is an Assistant Professor of History and Assistant Professor of Environment, College of LSA

*Wednesday:* lead poisoning

- Gerald Markowitz and David Rosner, *Deceit and Denial: The Deadly Politics of Industrial Pollution* (Berkeley: University of California Press, 2002), 64-108.
- David R. Buchanan and Franklin G. Miller, “Justice and Fairness in the Kennedy Krieger Institute Lead Paint Study: the Ethics of Public Health Research on Less Expensive, Less Effective Interventions,” *American Journal of Public Health* 96 (2006): 781-787.

**Week 14): Transplantation, Ethics, Controversy, and technology.** April 13, 15

*Monday:* Race, transplantation and the growth of clinical ethics; international experimentation; gender and body modification

- Susan E. Lederer, *Flesh and Blood: Organ Transplantation and Blood Transfusion in Twentieth-Century America* (Oxford: Oxford University Press, 2008), 32-67.
- Keith Wailoo, Julie Livingston, Peter Guarnaccia, “Introduction: Chronicles of an Accidental Death,” in *A Death Retold: Jessica Santillan, the Bungled Transplant, and the Paradoxes of Medical Citizenship*, ed Keith Wailoo, Julie Livingston, and Peter Guarnaccia (Chapel Hill: University of North Carolina Press, 2006), 1-16.
- Kelly Hearn, “The Other South American Drug War,” *The Nation* 10 October 2011: 18-22.
- Joyce M. Lee and Joel D. Howell, “Tall Girls: The Social Shaping of a Medical Therapy,” *Archives of Pediatrics* 160 (2006):1035-1039.

*Wednesday:* Special Guest, Matthew Davis: “Historical Reflections on Contemporary Issues in Health Policy”

- Readings tbd
- Matthew Davis is Professor of Pediatrics and Communicable Diseases, Medical School, Professor of Internal Medicine, Medical School, Professor of Public Policy, Gerald R. Ford School of Public Policy, Professor of Health Management and Policy, School of Public Health, and is the Chief Medical Executive of the State of Michigan in the Department of Community Health.

**Week 15) Looking backwards and looking forward.** April 20

- Ezekiel J. Emanuel, “Why I Hope to Die at 75,” *The Atlantic*, October 2014. <http://www.theatlantic.com/features/archive/2014/09/why-i-hope-to-die-at-75/379329/>
- Damon Linker, “Should you hope to Die at 75? Absolutely Not,” *The Week*, 23 September 2014. <http://theweek.com/article/index/268589/should-you-hope-to-die-at-75-absolutely-not>
- David J. Rothman, “Where We Die,” *NEJM* 370 (2014): 2457-60.

## **Evaluation/Grading**

Section Grade: 20%. The section grade will be determined by participation in section discussions. It will start at a “B.” Most section discussions will focus on the critical use of sources to discuss and debate historical questions. Arriving at section having read and thought about the material, and being able intelligently to discuss your thoughts, will result in this grade going up. The section grade will also be based on occasional, unscheduled quizzes.

Attendance/Class Participation: 10%. Attendance is required. While we will not formally take attendance, there will be occasional, short, unannounced quizzes at the start or at the end of the class. Unless your absence has been approved in advance there will not be an opportunity to make up these quizzes.

“Extra credit” may be obtained by taking advantage of occasional learning opportunities around the university. All eligible events will be announced in class and on CTools. If you go to the event and write a paragraph or two about how the presentation related to themes in this class you may obtain an additional 1-3 points for each event. These reports are due no later than one week after the event.

Exams will be made up of short-answer and essay questions.

Midterm Exam (in regularly scheduled class): 25 February: 35%

Final Exam: 30 April (Thursday), 10:30 -12:30: 35%