University of Miami Department of History Spring 2005

History 591. The History of Modern Medicine

Thursday s 5:00 - 7:30 pm

Room: Stanford Residential College 105

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Description

The history of modern medicine is often told as a simple tale of progress. In ancient times, people relied on magical thinking to explain disease and attempt cures. This continued until sometime in the 18th century, when physicians sought to understand illness using empirical science. By the end of the 19th century, the story concludes, the research laboratory began to offer therapies that actually worked. The technological triumphs of our modern hospitals and machines seem obvious: over the last two hundred years, the infant mortality rate has declined 100 fold, and our average lifespan has more than doubled.

The story, however, is not quite so simple. While some physician-historians have written heroic tales of men conquering disease, more recently historians and sociologists have postulated a number of startling ideas: scientists are much less certain and much more human than commonly assumed; the connections between science and medicine are tenuous at best; our longer life spans owe little to modern medicine; the authority of physicians is often more harmful than helpful.

In this course we will examine a variety of different approaches to the history of modern medicine. We will meet weekly to discuss a set of readings organized around a common theme. Since the success of this course depends on individual preparation, each of us must do all the readings and come to class prepared to discuss them.

Requirements

Your grade will be based 66% on class participation, 11% on the midterm (in-class essay exam on February 25th), and 22% on the final paper (6-8 page essay based on common sources; due Monday, May 2nd).

You may also submit one or two short papers for extra credit to augment your participation grade. This is designed to help students who tend to be less vocal in class discussions, but anyone may submit an essay during any week (maximum of two papers). These essays should summarize and critique the week's readings, much as we do in class. They should be 3-5 pages long and are due the day the readings are to be discussed.

Syllabus

- (1) **January 20** *Introduction*
- (2) **January 27** *The Scientist as Hero* Sinclair Lewis, *Arrowsmith* (New York: New American Library, 1962 [1924]).
- (3) **February 3** The Scientific Revolution
 - J.B. Morrell, "Internalism," (p.211) and J.B. Morrell, "Externalism," (p. 145) in W.F. Bynum, E.J. Browne, and Roy Porter, eds., *Dictionary of the History of Science* (Princeton: Princeton University Press, 1981).
 - Steven Shapin, *The Scientific Revolution* (University of Chicago: Chicago, 1996), 1-8 and 15-21.
 - Boris Hessen, "The Social and Economic Roots of Newton's *Principia*," in Bukharin et al, eds. *Science at the Crossroads* (London: Cassell, 1971 [1935]), 151-76.
 - Robert Merton, "The Puritan Spur to Science," in Merton, *The Sociology of Science* (Chicago, 1973 [1938]), 228-253.
- (4) **February 10** The Importance of Scientific Theory
 - Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago IL: University of Chicago Press, 1962) [esp. chs. 1-3, 6-9].
- (5) **February 17** The Importance of Scientific Experiments
 - David Bloor, "Sociology of (Scientific) Knowledge," in Bynum et al, *Dictionary of the History of Science* (Princeton: Princeton University Press, 1981).
 - Steven Shapin, "Pump and Circumstance: Robert Boyle's Literary Technology," *Social Studies of Science* 1984 14:481-520.
 - Bruno Latour and Steve Woolgar, "An Anthropologist Visits the Laboratory," in Latour and Woolgar, *Laboratory Life* (Beverly Hills: Sage, 1979), 43-90.
- (6) **February 24 Midterm** *Case study: Louis Pasteur*
 - Erwin H. Ackerknecht, "Microbiology," in Ackerknecht, *A Short History of Medicine* (Baltimore: Johns Hopkins University, 1982), 175-185.
 - John Farley and Gerald Geison, "Science, Politics and Spontaneous Generation in Nineteenth Century France: The Pasteur-Pouchet Debate," *Bulletin of the History of Medicine* 1974 48:161-198.
 - Bruno Latour, "Give Me a Laboratory and I Will Raise the World," in Karin Knorr-Cetina and Michael Mulkay, eds, *Science Observed* (London: Beverly Hills, 1983), 141-170.
- (7) **March 3** *I. Midterm Review: Who was Louis Pasteur?* Review midterm exam.

II. From Science to Medicine

Gerald Geison, "Divided We Stand: Physiologists and Clinicians in the American Context," in Judith W. Leavitt and Ronald L. Numbers, eds., *Sickness and Health in America* 3rd Ed. (Madison: The University of Wisconsin Press, 1997), 115-129 [hereafter, Leavitt and Numbers].

Naomi Rogers, "Dirt, Flies, and Immigrants: Explaining the Epidemiology of Poliomyelitis, 1900-1916," in Leavitt and Numbers, 543-54.

(8) **March 10** *Therapeutics*

- Charles Rosenberg, "The Therapeutic Revolution: Medicine, Meaning, and Social Change in Nineteenth-Century America," in Rosenberg and Morris Vogel, eds, *The Therapeutic Revolution: Essays in the Social History of American Medicine* (Pennsylvania, 1979), 3-25.
- John Harley Warner, "From Specificity to Universalism in Medical Therapeutics: Transformation in the 19th-Century United States," in Leavitt and Numbers, 87-101. John Parascandola, "The Introduction of Antibiotics into Therapeutics," in Leavitt and

March 17 Spring Break

Numbers, 102-112.

(9) **March 24** *The Mortality Transition*

- Leavitt and Numbers, "Sickness and Health in America: An Overview," in Leavitt and Numbers, 3-10.
- Thomas McKeown, "Medical Achievement," in McKeown, *The Role of Medicine: Dream, Mirage, or Nemesis?* (Princeton University Press, 1979), 91-107.
- "Pictorial Essay on Sickness and Health in America," in Leavitt and Numbers, 295-306.
- Gretchen A. Condran, Henry Williams, and Rose A. Cheney, "The Decline in Mortality in Philadelphia From 1870 to 1930: The Role of Municipal Services," in Leavitt and Numbers, 452-466.
- Nancy Tomes, "The Private Side of Public Health: Sanitary Science, Domestic Hygiene, and the Germ Theory, 1870-1900," in Leavitt and Numbers, 506-528.

(10) **March 31** The Authority of Medicine

- Ronald L. Numbers, "The Fall and Rise of the American Medical Profession," in Leavitt and Numbers, 225-236.
- Robert P. Hudson, Abraham Flexner in Perspective: American Medical Education, 1865-1910," in Leavitt and Numbers, 200-210.
- John C. Burnham, "American Medicine's Golden Age: What Happened to It?" in Leavitt and Numbers, 284-294.

(11) **April 7** *Medicine, Politics, and Policy*

- Alan Brandt, "The Cigarette, Risk, and American Culture," in Leavitt and Numbers, 494-505.
- Daniel M. Fox and Judith Stone, "Black Lung: Miners' Militancy and Medical Uncertainty, 1968-1972," in Leavitt and Numbers, 32-44.
- Ronald L. Numbers, "The Third Party: Health Insurance in America," in Leavitt and Numbers, 233-247????.

(12) **April 14** *Race in Science and Medicine*

Allan M. Brandt, "Racism and Research: The Case of the Tuskegee Syphilis Study," in Leavitt and Numbers, 392-404.

- Stephen Jay Gould, *The Mismeasure of Man* Chapter 5 The Hereditarian Theory of IQ (NY: WW Norton, 1996) 176-263.
- (13) **April 21** *Gender in Science and Medicine*
 - Carroll Smith-Rosenberg and Charles Rosenberg, "The Female Animal: Medical and Biological Views of Woman and Her Role in Nineteenth Century America" *Journal of American History* 1973 40:332-356.
 - Laurel Thatcher Ulrich, "Martha Moore Ballard and the Medical Challenge to Midwifery," in Leavitt and Numbers, 72-84.
 - Judith Walzer Leavitt, "'A Worrying Profession': The Domestic Environment of Medical Practice in Mid-19th-Century America," in Leavitt and Numbers, 145-60.
- (14) **April 28** A Case Study in Medicine and Politics: AIDS
 - Robert C. Gallo and Luc Montagnier, "The Discovery of HIV as the Cause of AIDS," *New England Journal of Medicine* 2003 349:2283-85.
 - Elizabeth Fee and Nancy Krieger, "Understanding AIDS: Historical Interpretations and the Limits of Biomedical Individualism," *American Journal of Public Health* 1993 83:1477-86.
 - Bert Hansen, "American Physicians' 'Discovery' of Homosexuals, 1880-1900: A new Diagnosis in a Changing Society," in Leavitt and Numbers, 13-31.
 - Allan M. Brandt, "AIDS in Historical Perspective: Four Lessons from the History of Sexually Transmitted Diseases," in Leavitt and Numbers, 426-433.
 - Charles E. Rosenberg, "Disease and Social Order in America: Perceptions and Expectations," in Elizabeth Fee and Daniel M. Fox, eds., *AIDS: The Burdens of History* (Berkeley: University of California Press, 1988), 10-32.
 - James H. Jones, "Aids: Is It Genocide?" in his *Bad Blood* (NY: Free Press, 1993), 220-41.

Final paper due Monday, May 3, 2003 by 5 pm (Stanford front desk).