

**Study Guide #7, 10/25-10/27:
Medicine in the 18th Century**

Blake, John B. "The Inoculation Controversy in Boston, 1721-1722." *New England Quarterly* 25 (1952): 489-506.

Buchan, William. *Domestic Medicine Or, A Treatise on the Prevention and Cure of Diseases By Regimen and Simple Medicines*. Exeter: J.B. Williams, 1785.
Excerpts: Preface, Introduction, Diseases of the Stomach, Knowledge and Cure of Diseases, Consumptions, Smallpox & Inoculation, Bleeding. Full text at <http://www.americanrevolution.org/medicine.html>

Kopperman, Paul. "'Venerate the Lancet': Benjamin Rush's Yellow Fever Therapy in Context." *Bulletin of the History of Medicine* 78 (2004): 539-574.

The readings this week continue to explore the issues raised last week. How did colonists explain disease? How did they respond to it? What kind of therapeutic systems existed? Who were healers? How did a patient choose what kind of healer to see? What would the experience of patients have been like? Did the treatments work? As before, don't simply dismiss colonial therapeutics as naïve, unscientific, misguided, etc. Try to understand how these systems functioned: what were the sources of healers' authority? Why did people have faith in remedies? What areas were controversial, and what were accepted? Continue to pay attention to the underlying problem of disease: what diseases were prevalent (and concerning) for colonial patients and healers?

The readings focus on what we now call infectious diseases: Blake discusses smallpox, Kopperman yellow fever, and the excerpts from Buchan focus on tuberculosis and smallpox. In what ways did epidemics pose unique challenges for patients, healers, and societies?

Warning: the selection from Buchan is quite long, but it should not take long to read (big print!). Read selectively, focusing on the issues described below.

Blake, "Inoculation Controversy": John Blake, a physician, was one of the leading historians of medicine in the 1950s and 1960s. This article is probably his most famous work. He describes what happened when smallpox struck Boston in 1721, triggering a vigorous and violent debate about the practice of inoculation. Unlike vaccination, which uses a virus derived from cowpox to provide protection against smallpox (a safe technique, since cowpox does not cause serious disease in humans), inoculation used live smallpox virus: the goal was to infect a person in a controlled way to induce a mild case of smallpox, hoping that this would have lower mortality than smallpox introduced the natural way. As you can imagine, this technique provoked fierce controversy. Pay attention to

the professional identities of the people involved. Who first proposed the technique? Who was opposed to the technique? What arguments were marshaled on both sides of the debate? What were the roles of ministers, physicians, government officials, and mobs? What were the sources, and credibility, of medical knowledge? How was the medical controversy resolved? How did the antagonists attempt to demonstrate or undermine the efficacy of the technique? Immunization remains controversial today (as seen in the recent outbreak of polio among the Amish). Are any of the issues similar?

Buchan, *Domestic Medicine*: William Buchan (1729-1805) received his medical license in England in 1758. He initially worked in a series of orphanages and became an expert on the care of children. In 1769 he published *Domestic Medicine or Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine*. Targeted for a general audience (the WebMD of its day), *Domestic Medicine* was immensely successful: it sold 80,000 copies over 19 editions in England; it was translated into all European languages except Russian; it remained a widely used medical guide in the British colonies, and then in the United States, well into the 19th century. On the basis of this success, Buchan became a prominent physician in London and was buried in Westminster Abbey in 1805. Written for a popular audience, it is an ideal introduction into medical theory and practice in the 18th century. Throughout this material, pay attention to several issues. What theories of disease does he propose? What evidence can you find for humoral theories? Other theories? Similarly, what would it like to be a patient reading this book? Would you accept his recommendations about regimen (e.g. diet, exercise). Could you make the remedies? Would they be expensive? What would they taste like? Read each section with specific things in mind. *Preface*: in this preface to the second edition, Buchan defends himself against critics who argued that medical knowledge should not be made available to the public. How does he justify doing so (e.g. p. 8)? *Introduction*: Buchan continues this argument, now targeting his general audience. He explains the many things that will be gained by improving overall medical literacy (e.g. pp. 13-14, 20, 23). Do these arguments still apply to day? Think about the role of WebMD. *Diseases of the Laborious, Sedentary, and Studious*: this is an early example of occupational health. Buchan describes the specific health risks faced by people in different occupations (e.g. miners, plumbers, etc.). Do you face similar risks in the labs you work in? Pay most attention to the risks faced by the studious (pp. 44-52; some of this relies on knowing the risks faced by sedentary people). Do your studies cause headaches, eye strain, consumption, gout, edema, delirium, and madness? Do his recommendations for healthful studying sound right? *Knowledge and Cure of Diseases*: how does Buchan define disease (p. 53)? How does his definition fit with ones proposed in lecture? *Consumptions* (i.e. most often pulmonary tuberculosis): how does Buchan explain the increase consumption in England in the 18th century (pp. 60-61 -- you should all be

experts in explaining its decrease in the 20th century...)? What range of remedies does he propose? Would these have been realistic for the rich? For the poor? I was struck by his discussion of the relative merits of asses' milk, breast milk, and cow's milk (p. 67). *Smallpox*: this section is particularly relevant in light of Blake's essay on the inoculation controversy. How easy would it have been for patients and families to follow his treatment recommendations? Why is he such a fan of inoculation (pp. 90-102)? What is his plan for increasing the implementation of inoculation? *Surgery*: focus here on the sections on bleeding (e.g. p. 107). When is it recommended? Why does he think it would work?

Kopperman, "Venerate the Lancet": Paul Kopperman, a historian at Oregon State University, describes the medical theories and practices of Benjamin Rush (1746-1813). Rush graduated from Princeton at age 15 and studied medicine in Philadelphia, Edinburgh, London, and Paris. He returned to Philadelphia and (at age 23) became the first professor of chemistry in America. He developed a thriving medical practice and became active in many areas of colonial life: he was a leading abolitionist, signed the Declaration of Independence, served as Surgeon-General of the Army during the Revolution and, for thirty years after the war, was the pre-eminent doctor in Philadelphia and the United States. Among his many accomplishments, Rush is especially famous (or infamous) for his advocacy of what has been called "heroic medicine," the use of powerful purgatives and extensive bloodletting to cure his patients. Many modern historians and doctors have derided Rush, arguing that his treatments were both ineffective and exceedingly dangerous. Kopperman seeks to explain how and why Rush became an advocate of such extreme therapeutics. As you read this article, do not get bogged down in the details. Pay attention to several issues. How did Rush get trained as a physician? What was the role of theory and empiricism in his medical practice (p. 550)? What were the sources of his medical knowledge (p. 552)? What was his feeling about the "healing power of nature" (pp. 555-7)? How did he classify fevers, and how did this influence his treatments (p. 560-3)? Rush was convinced that his treatments were effective. What was the source of his confidence (p. 572)? How do doctors now determine if treatments are effective?