## Archival Resources on the Web—Emily Symonds Stenberg, Assistant Editor

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## The "Human Side of Medicine": Historical Medical Resources Online

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From the well-publicized push to eradicate polio worldwide to the upcoming anniversary of the 1918–1919 influenza epidemic, researchers are increasingly becoming interested in the medical humanities, an emerging field that explores the "human side of medicine." New digital resources available from libraries, medical centers, and museums are becoming invaluable to medical historians and researchers alike by offering new avenues for exploration and encouraging this new field of study. According to Joel Wurl of the National Endowment for the Humanities, "Humanities scholars have recognized the central role of health and medicine in American and world history for several decades, but this is a field of research that remains very much in a state of growth and transformation. One manifestation of this is a recent increase in efforts to preserve and facilitate online access to rich collections of historical documents, images, and publications related to the history of medicine." Wurl's observations are evident in the five projects described below.

Cholera is well documented in the National Library of Medicine's (NLM) digital archives. Outbreaks of epidemic cholera, an extremely contagious diarrheal disease often causing death by dehydration, occurred throughout the world in the nineteenth century. Though mostly under control, cholera was still responsible for over two thousand deaths in South America in 1991. Cholera Online: A Modern Pandemic in Text and Images, http://www.nlm .nih.gov/exhibition/cholera/index.html, provides researchers with a fascinating and comprehensive collection of resources dealing with cholera, including 518 digitized monographs dating from 1817 to 1900. This collection was partially inspired by John Shaw Billings's 1875 work, "Bibliography of Cholera," an extensive bibliography of all published monographs and journal articles on cholera at that time. The majority of the monographic works included in Billings's bibliography were digitized for this archival collection. Cholera Online also provides users with access to thousands of other resources, including videos, journal articles, and visual resources. Under the heading "View the Images," the NLM helps bring to life the story of cholera through pictures of cholera patients, maps marking the paths of the epidemics, photographs and illustrations of physicians working with cholera patients, and prints highlighting the social commentary surrounding the epidemic.

The Philip S. Hench Walter Reed Yellow Fever Collection, http://etext.lib.virginia.edu/healthsci/reed/, at the Claude Moore Health Sciences Library Historical Collections and Services at the University of Virginia, is an excellent resource for information on yellow fever. Initial symptoms of yellow fever include headaches, nose bleeds, and nausea. Eventually, confusion and bleeding set in, followed by organ failure and, ultimately, death. Long plagued by its devastating effects, the United States Army created a Yellow Fever Commission in the early 1900s. Walter Reed, Jessie Lazear, and other members of the commission sought the assistance of Cuban scientist Carlos J. Finlay who first discovered a connection between mosquitoes and yellow fever. As a result of Finley's discovery and the work of the commission, yellow fever was finally conquered. In 1937, Philip S. Hench, a Mayo Clinic physician, began collecting manuscripts, printed materials, photographs, and other research materials to record the history of the yellow fever discovery. Searchable by date, series, subject, and keyword, this comprehensive collection offers researchers a wealth of information with the click of a mouse. Sections entitled "Who's Who" and "Places" help identify Library of Congress name authorities and brief background information on people and places. Some highlights include a fever chart from 1900 showing the progression of Jessie Lazear's yellow fever, which ultimately resulted in his death; papers written by Walter Reed in 1875 on anatomy, hygiene, surgery, and physiology for qualification as a US Army surgeon; and a letter written in 1900 by Reed, in which he recommends human experimentation to study the disease.

Three repositories within the MAC region also provide a wealth of information on the history of disease. First is the University of Michigan's project, **The American Influenza Epidemic of 1918–1919: A Digital Encyclopedia**, http://www.influenzaarchive.org/. Every winter, many prepare for influenza, or the "flu," by getting a vaccine and stocking up on medicine. This disease typically causes fever, aches, and headaches; however, it can become more severe. During the 1918–1919 influenza epidemic, this common disease caused over 650,000 deaths in the United States alone. This rich digital encyclopedia contains over 16,000 documents, photographs, and other materials from

more than 130 archives, libraries, and special collections. The highlight of the encyclopedia is "50 U.S. Cities and Their Stories," which provides background on how the epidemic affected each city, as well as an event timeline and images relating to the city and the epidemic. The website also includes a handy browsing interface divided into four categories: people, places, organizations, and subjects.

Smallpox—almost unheard of today—at one time inflicted global devastation. Smallpox is an infectious disease that results in high fever and a raised red rash. Blindness and permanent scarring or death can result from infection. The World Health Organization estimates that, in the early 1950s, approximately 50 million cases occurred globally each year with an estimated 15 million deaths. As inoculations became more prevalent, those numbers fell to around three million deaths by 1967.3 Researchers looking for information about smallpox should visit the Dittrick Medical History Center at Case Western Reserve University and its online exhibit, Smallpox: A City on the Edge of Disaster, http://www.cwru.edu/artsci/dittrick/ museum/smallpox/smallpox.html. This exhibit provides users with a glimpse into the history and devastating effects of smallpox on the city of Cleveland, Ohio, in the early twentieth century, while highlighting the photographic collections of Homer J. Hartzell and William T. Corlett, two physicians in the Cleveland area who cared for smallpox patients in the early 1900s. These images demonstrate the devastating and permanent effects the horrible disease has on its victims. Visitors to this online exhibit are provided with narratives to help them follow the events leading up to the 1902 smallpox epidemic and through its eventual eradication. While this collection is small in size, it offers users a unique perspective on this global scourge.

Like smallpox, poliomyelitis (or as it was formerly called, infantile paralysis) is also a disease of the past. Prior to the development of two vaccines—an inactivated vaccine and a live virus vaccine—polio affected over 35,000 people in the United States each year during the mid-twentieth century.4 The symptoms of polio ranged from fever, sore throat, and headache to paralysis and death. Today, polio is considered endemic in only three countries (Afghanistan, Nigeria, and Pakistan). The oral polio virus vaccine, which was developed by renowned virologist Dr. Albert B. Sabin while at the University of Cincinnati, played a major role in the eradication of the disease. Approximately 35,000 documents, including correspondence and photographs, from the Hauck Center for the Albert B. Sabin Archives

at the Henry R. Winkler Center for the History of the Health Professions have been digitized and are available for research at http://digitalprojects.libraries.uc.edu/sabin/. The digital collection spans Dr. Sabin's entire career and covers a wide variety of topics such as virology, military and tropical medicine, vaccine development, medical ethics, and international cooperation. Not only did Dr. Sabin invest much of his career in polio, but he also researched a wide range of other diseases, including cancer, toxoplasmosis, measles, Japanese B encephalitis, and dengue and sandfly fever. Along with the digitized materials is a new online exhibit on Dr. Sabin that features an interactive timeline: http://sabin.uc.edu.

As Dr. Albert Sabin once said, "A scientist who is also a human being cannot rest while knowledge which might be used to reduce suffering rests on the shelf." The repositories featured in this article, both within and beyond the MAC region, understand this and have pushed to increase online access to historical medical materials for use by humanities researchers, scientists, and others.

## Notes

- 1. Centre for Medical Humanities, Durham University, Centre for Medical Humanities (blog), accessed April 9, 2013, http://medicalhumanities.wordpress.com/ medical-humanities/.
- 2. Joel Wurl, "Medicine and the Humanities. Part I: The Online Encyclopedia of the 1918-19 Influenza Epidemic," June 14, 2012, accessed April 9, 2013, http://www.neh.gov/divisions/preservation/featuredproject/medicine-and-the-humanities-part-i-theonline-encyclopedia.
- World Health Organization, "Evolution of Public Health Security," accessed April 9, 2013, http://www .who.int/whr/2007/07\_chap1\_en.pdf.
- 4. Centers for Disease Control and Prevention, "What Is Polio?," accessed April 9, 2013, http://www.cdc.gov/ polio/about/.
- 5. Lawrence D. Grouse, "Albert Bruce Sabin," JAMA: Journal of the American Medical Association 269, no. 16 (1993): 2140.