

rise of human behaviour genetics, and the history of research on familial dysautonomia, the role of social organization and technology in both creating and eliminating a genetic disease.

Organizing the book around five quite disparate cases could have resulted in something of a hodgepodge. However, the studies are linked by several themes. Thus running through the discussion of each case are reflections on the question of how nearly all disease came to be understood as genetic disease. Lindee explores how this idea became crystallized during the 1960s and 1970s in texts, scientific and clinical practice, and public policy, and she considers what it meant and continues to mean for researchers, patients, and the public at large.

In general, I found her arguments convincing, but I have a small quibble with the effort to fit the newborn screening case into this periodization. In the 1960s and 1970s, as Lindee herself notes, PKU was generally characterized as a treatable form of mental retardation, with genetics barely figuring in legislative and other debates surrounding screening, nor were many geneticists initially enthusiastic about efforts to mandate the test. It was only in the 1980s that PKU came to be commonly viewed as a success of *genetic* medicine, a reframing that in my view followed and served to validate the trend described in this book (a trend encapsulated by Abby Lippmann's term "geneticization").

A second theme uniting the individual cases concerns the varied types of work and workers involved in medical-genetic research. Thus Lindee argues that the production of scientific knowledge is a community project involving not just researchers, but also research subjects, patients and their families. She emphasizes that non-scientists have often functioned as active research collaborators, as crucial sources of knowledge and funds, and sometimes as validators of researchers' claims. Thus, in her account, scientific authority is more dispersed than it is often assumed to be and forms of labour not usually characterized as "scientific research" are shown to be integral to the enterprise and made visible. The resulting

insight into the structure and organization of contemporary biomedicine is one of the chief contributions of this original and important new book.

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**Stanley Finger,** *Doctor Franklin's medicine*, Philadelphia, University of Pennsylvania Press, 2006, pp. xiii, 379, illus., £26.00, \$39.95 (hardback 13-978-0-8122-3913-3).

Benjamin Franklin and medicine was an excellent idea for a book, and Stanley Finger has executed the project admirably. As patient, advisor, author, publisher, inventor, and inquisitor, medicine permeated Franklin's life. Franklin was a quintessential Enlightenment figure, an optimist who considered that medicine (along with printing, the study of electricity, and the designing of spectacles and stoves) was among the best practical pursuits through which the human lot might be improved. Franklin took on new medical interests throughout life thus making him a perfect subject for the historian.

Franklin's changing concerns mirror innovations in eighteenth-century medicine and allow Finger to tell a chronological tale weaving together medical developments and biography in a most unforced fashion. In 1733 the young printer in Philadelphia published *Poor Richard*, an almanac full of maxims and medical advice. He promoted smallpox inoculation with characteristic relish and good sense—that is he never seemed to let any medical novelty blind him to its deficiencies. He experimented with electricity as a cure for palsies and his natural scepticism prevented his embracing it with the sort of enthusiasm that fired John Wesley. He studied lead poisoning and music therapy. He conducted an investigation into mesmerism which he viewed with the same steely doubt that marked all he did. In his old age he suffered from gout and experimented unsuccessfully with cures for it.

These many things, Finger relates with pleasing thoroughness, plying the reader with sufficient background detail to make for comprehension but not so much as to spoil the plot. The most striking thing that emerges from this biography is that Franklin was one of the first modern citizens of the United States and, indeed, the western world. He took completely seriously the doctrine of *mens sana in corpore sano* and cultivated his body as a means of fostering a serious republican mind. In this respect, like so many Enlightenment figures, he also looked back to ancient political and medical models; not that he was a solemn or solitary figure: quite the reverse. He was a jovial, clubbable chap, who saw in conviviality a natural route to social harmony—much like the Scots who clearly warmed to him. His advocacy of knowledge of the management of the six non-naturals placed him firmly among both the ancients and the moderns. He was a vigorous swimmer, promoted the virtues of fresh air, trees and forests, and was a kindly presence and knowing intellectual critic around serious-minded folk like Joseph Priestley. Knowledge of medicine in the broadest sense, he clearly believed, fostered the life of society, and here is the difference with the ancients: like the young French reformers such as Pierre Cabanis, with whom he spent much time, he saw medicine as a social institution, not simply a form of knowledge and practice to be used for individual betterment. This excellent book lacks nothing except Franklin's most memorable aphorism: "Beer is living proof that God loves us and wants us to be happy".

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**Michael Bliss,** *Harvey Cushing: a life in surgery*, New York, Oxford University Press, 2005, pp. xii, 591, illus., \$40.00 (hardback 0-19-516989-1).

Anyone who has read John Fulton's biography of Harvey Cushing (1869–1939), or

dug through the mountains of Cushing's surviving papers, will appreciate Michael Bliss's study, *Harvey Cushing: a life in surgery*. Bliss, with that characteristic verve and detailed finesse which distinguished his earlier biography of William Osler, has produced yet another fine portrait that will delight various audiences. Although historians of medicine will undoubtedly have more to add about Cushing's life and legacy, there can be no denying that this volume reveals much about the life of this American surgeon and scholar.

Given the extent of the archival collections from Cushing's life, it is amazing how little historical attention has been paid to him as a figure, and to what his papers reveal about modern American medicine. Other than a few edited books, an excellent dissertation by Ock-Joo Kim, and several scholarly articles, the major secondary sources on Cushing have remained the 1946 "official biography" by Fulton and Elizabeth Thomson's 1950 study. Though each is useful, as Bliss notes, both suffer from limitations, including choices of literary style, lack of access to primary sources, and rather adulatory authorial voices. By contrast, Bliss, in what he describes as an attempt at "Fitzgeraldian sensibility", uses wide-ranging sources to document an ambitious, perplexing, and often tumultuous, private and professional life (p. x).

In concise vignettes, Bliss traces Cushing's life. Born in Cleveland, Ohio, Cushing was the tenth child of a medical dynasty—and thus, as one might expect, enjoyed numerous advantages from this privileged social background, including education at Yale, Harvard, and Johns Hopkins, where he was trained by many of American medicine's most important figures. Subsequent chapters portray Cushing's early medical career, the development of his surgical manner and prowess, deductive mind, and clinical research. From the "birth of neurosurgery" through the travails and even "inauspicious" brain-snatching involved in his pioneering research on *The pituitary body and its disorders*, Bliss illustrates moments in Cushing's