inspections in Iraq, and thereby offers a welcome historical perspective on recent problems. There is a thoughtful analysis of the defence position at the Nuremberg Medical Trial, considering the comparison between human experiments in Nazi Germany to coercive experiments in the United States, and how subsequently the "shadow of Nuremberg" acted as a brake on experimental excesses. He sheds light on a series of issues subjected to military secrecy, such as Operation Paperclip with its employing of Germans whose record under Nazism remained suspect, and the nonprosecution of Japanese atrocities involving biological warfare experiments.

By the mid-1950s military researchers were engaged in reckless tests on human subjects, as practice deviated from a policy informed by the Nuremberg Code and—in theory—requiring a volunteer understanding the degree of risk. Large-scale experiments on radiation contamination were conducted. when combat-readiness overcame ethical scruples. Uranium miners were another vulnerable group for field tests. In June 1966, Bacillus globigii was introduced in the New York City subway. The analysis contains welcome references to the experiences of subjects, raising issues of the quality of consent obtained. This enables one to assess malaria experiments in US penitentiaries, cited in Nuremberg. The account is forward looking with recent interviews with volunteers at Fort Detrick, 'as well as looking to the current state of compensation claims. Moreno urges that files be opened to assess the Federal record on biological and chemical experiments, just as for the US Advisory Commission on Radiation Experiments, which is an international model of correct procedure. Accessible, and readable, this is a thoughtprovoking and disturbing book, which merits wide attention among the research community and general public.

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Robert Richardson, Heart and scalpel: a history of cardiac surgery, rev. ed., London, Quiller Press, 2001, pp. viii, 310, illus., £18.50 (hardback 1-899163-70-0).

Heart and Scalpel is a chronology of firsts, a litany to heroes, sung in the language of warfare where disease is the enemy, surgeons make assaults and attacks, facing victory or defeat. The language is evocative, "the curtain rises", the drama is described and may end with an advance or retreat, success, failure, or the "brilliant flickers of a dying fire". As I read it, I found myself realizing that the book is itself a piece of the history of medicine. It first appeared in the UK as The surgeon's heart in 1969 and in the USA as The scalpel and the heart in 1970. It was written by a doctor in the 1960s and is filled with optimism surrounding the burgeoning technical and scientific medicine of those days. It describes the mood I encountered then as a young doctor in Guy's Hospital, surrounded by the very events Richardson describes and the same people who populate the last part of his account. This was the high point of the post-war wave of medical triumphalism.

Richardson relies for his sources almost entirely on the contemporary medical literature, as does Raymond Hurt in The history of cardiothoracic surgery (New York, 1996), overall the better book. The method is characteristic of doctors' histories. One flaw is that these medical accounts are written by the surgeons themselves and there is no validation, nor a mechanism to set right the inevitable bias in what they choose to record of their deeds. We trust that their accounts of the events they describe are tolerably accurate, but we can be sure that much that happened went unwritten. Furthermore, the same process of peer review designed to ensure reliability of the science constrains the content into contemporary received wisdom. But in the areas where I know the subject well, and have researched it in detail from original sources outside medical journals,

Richardson gives a very fair account. The literature is cited comprehensively and this book is an indexed source of references. I found little that I would dispute in fact or interpretation.

But another criticism of his and Hurt's method of searching and reading the literature is that it finds the footsteps in the sand pointing our way, while in truth, at the time the source papers were written, the "way ahead" was not evident. Footprints in the trampled ground of trial and error lead to all points of the compass. It reaches faintly ludicrous proportions in the fable of the third-century Saints Cosmas and Damian and the swapping of white and black men's legs. This has become an obligatory opener to many review articles and theses on organ transplantation, as if it has any real bearing on the history of science or the ideas of Vladimir Petrovitch Demikhov, Alexis Carell, Willem Kolff, Peter Medawar, Norman Shumway, and Christiaan Barnard.

Richardson faced the difficulty of including events occurring right up to the time of going to press. I recognized the difficulty of describing current practice as "history" when I was commissioned to write the chapter on cardiac surgery for the book British cardiology in the twentienth century (London, 2000). For instance Richardson records the cardiac transplants of 1967 and 1968 in the first edition of 1969. This latter part of the book is more journalism than historiography but it is here that it came to life for me. For remote events outside his immediate knowledge and experience Richardson does no better than provide a very well ordered and well referenced description of what surgeons did and how the practice he saw in the 1960s was built up. The 1950s and 1960s he describes with the immediacy of a man who was there and knew the debates. He did not know that there was to be a moratorium on transplantation for about ten years and then that it would become part of established practice, so his story is fresh and

vivid, untrammelled by a knowledge of subsequent events, interpretation of which sometimes interferes with his accounts of more remote history where he sees the need to explain "why they got it wrong". In summary, this is a well indexed and well referenced overview of the perceived landmarks in heart surgery, with good explanations of the medical terms and implications, which will be a useful resource for anyone interested in this area.

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Keith Wailoo, Dying in the city of the blues: sickle cell anemia and the politics of race and health, Chapel Hill, University of North Carolina Press, 2001, pp. xi, 338, illus., £29.50, \$34.95 (hardback 0-8078-2584-0), £14.50, \$16.95 (paperback 0-8078-4896-4).

This is a complex book that can be read on several levels. On the surface it is a book about the history of sickle cell anaemia (SCA) in Memphis, Tennessee, the "city of the blues". But it is much more than that. Wailoo tells us about Memphis' sickle cell history in the context of the disease's twentieth-century national history. That national history, and therefore the local Memphis history, is not, in Wailoo's telling of it, just a story of scientific developments and medical care for those with the disease. As the book's subtitle suggests, Wailoo shows how the changes in scientific and medical understanding of SCA were part of a larger story that includes issues of race, politics, and economics. Claiming that "conventional histories of disease tend to follow only the professional scientists and physicians who, it is assumed, played key roles in shaping the lives of the infirm" and that "the traditional narrative for sickle cell disease dwells on the search for scientific understanding" (p. 4), Wailoo wishes to