

informative book *Medizin im Nationalsozialismus. Ein Arbeitsbuch* in 1980, when the subsequent years saw him being driven out of the profession and into private scholarship.

Not surprisingly, despite its bold title, *Medizin und Verbrechen* is not really about medicine and crimes in general, but on the peculiar entanglement of the two during the years of National Socialism. It is not a Festschrift in the usual sense either, but rather a homage of friends, currently active scholars, and people who have been witnesses of East and West Germany's reluctance to find out about, face and prosecute medical crimes committed under National Socialism.

An objection to the volume could be that an assessment under the heading of "crimes" sets a fairly narrow frame for the history of medicine in the National Socialist period: it leaves aside questions about the transformation of "normal" science and medicine in the era that are quite essential, for example, in the recent re-evaluation of the history of the Kaiser-Wilhelm-Gesellschaft. Still, the editor Christoph Kopke has assembled an interesting and well rounded volume. An opening essay on Wuttke's career by the Ulm psychiatrist Friedemann Pfäfflin is followed by a series of papers that mostly document recent or almost recent research. Heinz Faulstich gives a shorter version of his work on starvation in German psychiatric asylums, Thomas Oleschläger writes on the relationship between racial hygiene and abortions, Susanne Hahn on geriatric care, Annette Schäfer on conscript labour, Achim Thom on National Socialist science policy and cancer research, Günther Grau on medical evaluations of homosexuality, Christoph Kopke provides a biographical sketch of the Nazi-physician Ernst Günther Schenck, Klaus Drobisch writes on medical crimes in early (pre-1937) concentration camps, Claudia Schoppmann on lesbian women in concentration camps, the editor Kopke and Gerhardt Schultz on criminal

experimentation with chemical weapons (Lost), and finally Karl-Heinz Roth and Angelika Ebbinghaus on surgical experiments in the camps.

The volume closes with two remarkable contributions on the post-war prosecution of medical crimes in East and West Germany. Both are written by two formerly active prosecuting attorneys from both states, Willi Dressen and Günther Wieland. They offer a fascinating combination of historical expertise and witness account. Dressen's contribution in particular gives a truly chilling picture of the 1960s and 1970s when, in the West, attempts at legal prosecution met with stiff resistance from medical and political élites.

Even if not all the research presented in the volume is entirely new, most of the contributions are research based and many of them display a high awareness not only for Nazi doctors, but for their victims. What is equally remarkable is that the still very different research traditions of East and West Germany are present. Completed with a select bibliography of Wuttke's works and an index, the volume does certainly live up to the occasion.

Christoph Gradmann,
Ruprecht-Karls-Universität Heidelberg

Jonathan D Moreno, *Undue risk: secret state experiments on humans*, New York and London, Routledge, 2001, pp. xx, 371, £11.95 (paperback 0-415-92835-4).

Tensions between science and ethics have bedevilled twentieth-century clinical research. Jonathan Moreno has mustered crucial evidence in a thought-provoking account. He re-appraises classic instances, such as Walter Reed's yellow fever experiments, in the light of recently revealed episodes, and the malaria experiments on Jewish refugees in Australia. He takes us right up to the Gulf war and weapons

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 non-prosecution 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 thought-provoking and disturbing book, which merits wide attention among the research community and general public.

Paul Weindling,
Oxford Brookes University

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,