

or even a luxury flat that cost a small fortune. The hospital mirrored the class-based society of the period and it is thought provoking to consider that these divisions may once again be on the rise as private health insurance becomes more popular in Denmark, allowing those who can pay to jump the queue.

By 1897, the hospital was outmoded. The buildings were beginning to look worn and did not meet the new standards for hygiene in patient care. The arrangement of having a 'tea kitchen' in the ward was symptomatic. The small room served as a space for preparing food, dish-washing, the cleaning of spit cups and urinals, a wardrobe for staff, linen deposit, and privy. The wards were also overcrowded and patients often had to share beds. Still, the hospital was successful in one respect: new ideas about hygiene had revolutionised surgery and minimised puerperal fever. A wonderful photograph, one of many, captures this important change showing six doctors, each dressed in white shirt, waistcoat and tie, scrubbing their hands with soap and nailbrushes in front of a wash-basin.

In 1910, the hospital, now named 'Rigshospitalet', moved to a new site outside the old town. The new buildings had water, water closets and electricity. In 1970, these buildings were torn down and replaced by a high-rise block which experienced a short period of fame before the ongoing turmoil in the Danish healthcare system began. Healthcare and health politics became a main issue in the media. The image of the Danish healthcare system as the 'World's best' cracked and patients' rights became the order of the day. By the turn of the twenty-first century, Rigshospitalet was no longer considered a 'factory', but a 'service company' in which issues of quality control had become paramount. The hospital was now accredited according to international goals for patient care, including measurements of patient satisfaction and investigations of near-miss situations designed to minimise hospital accidents. Despite the ongoing debate and changes in the structure of the hospital, it was evident that patient care had been

revolutionised over the previous hundred years. The average bed-stay was reduced from forty days to five, and the productivity of the hospital had increased fifty-fold. A lot of incurable and dangerous diseases had either been eradicated or their treatment had become routine, and several new treatments, some unthinkable in 1897, had seen the light of the day, for example, heart transplantation and artificial insemination.

Anne Løkke's very fine book is well written, beautifully illustrated and succeeds in telling a rich and varied history sensitive to the complex character of hospital life. The snapshots from each century seem to be chosen with care and are perfectly combined with descriptions of the different stages of the hospital's history. Twenty-one tables and figures of statistical information, primarily patient data, are introduced on relevant pages and explained thoroughly in the narrative. The book is a convincing and moving history.

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Gerald Kutcher, *Contested Medicine: Cancer and the Military* (Chicago: University of Chicago Press, 2009), pp. x + 247, £24.00, hardback ISBN: 978-0-226-464531-9.

Contested Medicine brings a fresh perspective to a notorious and important story. Drawing upon his experience as a radiation medicine specialist, the historian Gerald Kutcher examines Eugene Saenger's 1960s and early 1970s work with total-body irradiation (TBI) at the University of Cincinnati. Saenger and his colleagues traced the metabolic and psychological effects TBI had on patients with advanced cancers; this work was funded by the US Department of Defense, which wanted to know what would happen to the combat performance of American soldiers exposed to radiation. Kutcher uses the TBI story to anchor his consideration of two fundamental and intertwined elements of post-war biomedicine:

the contested nature of therapeutic research amidst new systems of knowledge production (the clinical trial), and the development of biomedical ethics as a form of governance and a set of practices. By examining how Saenger's work was supported, justified, experienced, rationalised, scrutinised, and judged, Kutcher also helps us reconsider how we make sense of historical medical scandals, both in their initial contexts, and as they have been understood and used by later actors.

The book begins with three short chapters establishing the context for Saenger's TBI work and the themes of Kutcher's analysis. The first outlines how the clinical trial came to dominate post-war medical investigation, while the second reviews medical discussions among mid-century medical authorities about what constituted ethical research conduct and how it could be sustained. Kutcher then reviews the melding of military and medical questions in the 1950s discussions of radiotherapy for sick patients, and of radiation injury to healthy soldiers. The bulk of the book's analysis, though, comes in its middle section, which considers what the TBI studies meant to multiple constituencies, including the doctors and researchers who conducted the studies, and the peer review committees that recast the studies to pass new governmental research regulations. Chapter 5 is especially insightful and original, using one patient's experience to show what TBI meant to and for those who served unknowingly as 'proxy soldiers'. Here, Kutcher's medical expertise enhances his analysis, as he reconstructs patient experience through fine detail and thoughtful speculation. Finally, the book concludes by tracking how Saenger's work was recast yet again by those criticising it, first in the exposés of the 1970s and then again in the 1990s by a new set of authorities – the bioethicists of the Advisory Commission on Human Radiation Experiments (ACHRE). Kutcher parses the ACHRE's deliberations to show that bioethicists also found it nearly impossible to determine whether Saenger's work was medical or military, whether it was motivated primarily by therapeutic concerns or

by research questions, and what ethical criteria could be used to judge past conduct. The fluid identity and ever-changing nature of the TBI studies meant they defied historical and ethical attempts to classify them, and ultimately, to deliver a definitive verdict on their moral status. That fluidity is far from unique in biomedicine – which, as Kutcher concludes, means that the prescriptive rules usually offered by bioethics 'are limited in what they can accomplish' (p. 211).

In *Contested Medicine*, Kutcher has produced a book that successfully demonstrates how researchers, institutions, and ethical authorities managed (or failed to manage) the 'tensions between research imperatives and therapeutic necessities' (p. 6) characteristic of biomedicine. At times, Kutcher summarises what his sources say when the reader might want to hear more from the source materials themselves, but on the whole, the book is very well written.

Contested Medicine will thus be a valuable resource for scholars interested in post-war medicine and science and, though its focus is on an American story, the book's analytical framework is strong enough to make it of interest to those who work on other national contexts.

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James S. Olson, *Making Cancer History: Disease and Discovery at the University of Texas MD Anderson Cancer Center* (Baltimore: Johns Hopkins University Press, 2009), pp. xiv + 369, £19.00/\$35.00, hardback, ISBN: 978-0-8018-9056-7.

This is a book unsure of its audience. Olson is a history professor in Texas, and has written a fine history of cancer for historians and students – *Bathsheba's Breast: Women, Cancer and History* (Baltimore: The Johns Hopkins University Press, 2002), and thus one expects good things of an in-depth study of