

BOOK REVIEW

A Contagious Cause: The American Hunt for Cancer Viruses and the Rise of Molecular Biology by Robin Wolfe Scheffler

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This book traces how a seemingly futile quest to identify a virus responsible for human cancer laid the groundwork for the "molecularization" of biology and medicine in the United States.

In the early 1900s, notions of cancer as a contagious disease and discovery of viruses causing animal tumours raised hopes for therapeutic intervention. This challenged the authority of cancer doctors and questioned the role of research in medical schools. State involvement in cancer research was limited, while philanthropists lobbied government to pursue the promise of making cancer curable.

Scheffler argues that the mid-century resolution was a tacit "biomedical settlement" in which federal government, rather than intervening in the medical marketplace, fostered public welfare by funding promising biomedical research. In the 1960s, the advent of chemotherapy to treat childhood leukaemia stimulated a hunt for new remedies. Growing in political and financial clout, the National Cancer Institute launched an ambitious programme to identify a human leukaemia virus as a target for vaccination, bolstered by the success of polio vaccination. This brought new "big science" organizational approaches, such as contract research, that underpinned a "War on Cancer".

Although the 1970s "cancer moonshot" failed to achieve its primary objective, a new cadre of molecular biologists driven by the pursuit of knowledge exploited the new-found infrastructure and generous funding to progress original fields of research exploring oncogenes, retroviruses and other viruses causing human cancers with direct implications for diagnosis, prevention and treatment.

A Contagious Cause describes in detail the complex interplay of science, medicine and politics against the changing background of American society. The author skilfully builds his case without getting lost in the minutiae and draws on a wide range of primary and secondary sources; indeed, the notes and bibliography make up about a third of the book. The writing is admirably fluid and, while some chapters take effort simply because of the volume of detail presented, the text is well signposted and leavened with photographs, diagrams, cartoons, posters and advertisements.

This substantial work of scholarship cogently demonstrates what the author calls the "cycles of concern, hope, mobilization, frustration and redefinition" that characterize the modern biomedical endeavour. It is relevant to anyone interested in how scientific research played into healthcare in the 20th century and serves as an antidote to simplistic interpretations of medical advances.

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