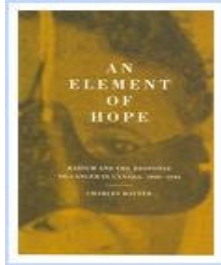


## BOOK REVIEW



**An Element of Hope: Radium and the Response to Cancer in Canada, 1900-1940**, by Charles Hayter

McGill-Queen's University Press,  
2005, xiv + 273 pages  
ISBN 0-7735-2869-5  
\$70.00

The 1898 discovery of radium represented one of the monumental advances in medicine, and paved the way for the emergence of novel fields such as nuclear physics and cancer therapy. In his book *An Element of Hope: Radium and the Response to Cancer in Canada, 1900-1940*, Charles Hayter examines the development of cancer programs in Canada and concomitantly illustrates the hopes, disappointments and struggles that accompanied the use of radium in cancer treatment. His book depicts the compelling historical timeframe that witnessed the entry of radium into the medical establishment, a time characterized by renewed optimism in medicine and research, and describes how the use of radium was introduced on empirical grounds, not through experiment in the laboratory but through experience in the clinic. The hopes placed in this element in the early days are probably best illustrated by the words of a Montreal physician who stated that without radium, the world would be uninhabitable, and by the initial belief that radium was to cancer a magic bullet.

Hayter outlines important moments from the history of radium and features prominent personalities who made essential contributions to the field. His book provides a testimony of the devotion and undertaking required for the development and shaping of the cancer care system. The 1922 opening of the Institut du Radium rendered to Montreal the first institutionalized cancer treatment with radium in Canada. Then, the establishment of the comprehensive cancer program in Saskatchewan was followed by the birth of similar programs in other Canadian provinces. The introduction of the Roentgen as the unit of radiation exposure, at the 1928 International Congress of Radiology in Stockholm, represented a tremendous step towards

ensuring better treatment consistency. In 1938 the creation of the Canadian Society for the Control of Cancer raised hopes for a better coordination and communication between the various cancer control programs throughout Canada, and the 1943 establishment of the Ontario Cancer Treatment and Research Foundation transformed former institutes into cancer clinics that represented the predecessors of today's cancer system.

Statistics was a discipline that fundamentally impacted cancer management, and the contribution of statisticians to the analysis of cancer data represents a crucial part of the book. Frederick Hoffman has revealed an increase in cancer mortality between 1900 and 1924, and Hardisty Sellers, medical statistician at the Ontario Department of Health, provided quantitative evidence of the weaknesses of the cancer program, such as geographic inequalities in access to treatment, the low proportion of cancer patients seen in clinics, the large number of people at an advanced stage upon hospital admission, and treatment variability across the province.

The provincial jurisdiction over healthcare and the diverse medical, social and political environments resulted in some places in Canada implementing provincial programs, while others implemented institutional programs not only for cancer treatment but also for the management of other diseases. The text highlights characteristics of the Canadian health care system and conflicts between state and private medicine that marked the development of cancer programs. The conflicts over the control of radon in Manitoba and Ontario illustrate some of the problems the early cancer control programs had to face, and provide several valuable lessons for our days.

Charles Hayter illustrates the long and arduous path that over the years has shaped cancer programs and the use of radium in Canada. His book provides an important teaching for clinicians and researchers coming from most diverse fields, best illustrated by the words of Ralph Waldo Emerson: Do not go where the path may lead, go instead where there is no path and leave a trail.

**Richard Stein** received his M.D. in 1996 at the Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania. After practicing medicine for two years, he entered graduate school and in May 2005 received his Ph.D. in Biochemistry and Molecular Genetics at the University of Alabama at Birmingham. He is currently a research associate at the University of Wisconsin-Madison. He is the recipient of the American Medical Association's Physician's Recognition Award and was also recipient of the Outstanding Graduate Student Award upon completion of his Ph.D.