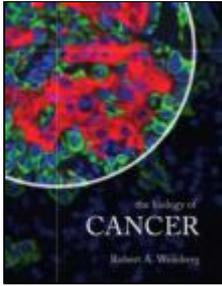


## The Biology of Cancer

Robert A. Weinberg



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This is an impressively thoughtful, beautifully balanced analysis of where we stand today in the critical attempt to understand, and thereby defeat cancer as a scourge on humanity. Not only is it the perfect text for a serious course on cancer biology, it should be read by every cancer researcher - *Bruce Alberts, University of California, San Francisco, USA*

*The Biology of Cancer* is a new textbook for undergraduate and graduate biology students as well as medical students studying the molecular and cellular bases of cancer. The book presents the principles of cancer biology in an organized, cogent, and in-depth manner. The clarity of writing and the lucid full-colour art program make the book accessible and engaging. The information unfolds through the presentation of key experiments which give readers a sense of discovery and provides insights into the conceptual foundation underlying modern cancer biology.

*The Biology of Cancer* synthesizes the findings of three decades of recent cancer research and proposes a conceptual framework from which to teach about these discoveries. It provides the necessary structure, organization, and content for a course on cancer biology for advanced undergraduates and beginning doctoral students. The book is comprehensive and offers many pedagogical features to assist teaching and learning. The book includes many recent and topical references, and is intended to empower the student to move directly into the primary research literature.

The text is up-to-date and provides current information on topics such as tumour stem cells and recently introduced chemotherapeutics. State-of-the-art techniques are discussed throughout. Modern biomedical research is explored, helping readers to hone their analytical abilities and to assimilate and think clearly about complex biological processes. *The Biology of Cancer* provides insights into many aspects of immunology, developmental biology, and neurobiology.

The exceptional full-colour art program contains many images published for the first time. The book is extensively illustrated with schematic drawings, micrographs, computer-generated models and graphs. The pieces were chosen to support and clarify the concepts, as well as to supply additional interest.

Besides its value as a textbook, *The Biology of Cancer* will be a useful reference for individuals working in biomedical laboratories, and for clinical professionals.

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#### Author Biography:

Dr. Robert A. Weinberg is a founding member of the Whitehead Institute for Biomedical Research and the Daniel K. Ludwig Professor for Cancer Research at the Massachusetts Institute of Technology (MIT). He is an internationally recognized authority on the genetic basis of human cancer.

Dr. Weinberg and his colleagues isolated the first human cancer-causing gene, the ras oncogene, and the first known tumor suppressor gene, Rb, the retinoblastoma gene. The principal goal of his research program is to determine how oncogenes, their normal counterparts (proto-oncogenes), and tumor suppressor genes fit together in the complex circuitry that controls cell growth. More recently, his group has succeeded in creating the first genetically defined human cancer cells. He is particularly interested in applying this knowledge to improve the diagnosis and treatment of breast cancer.

Dr. Weinberg is the author or editor of five books and more than 325 articles. His