

# [PDF] One Renegade Cell: How Cancer Begins (Science Masters)

**Robert A. Weinberg - pdf download free book**

---

**Books Details:**

Title: One Renegade Cell: How Cancer

Author: Robert A. Weinberg

Released: 1998-01-01

Language:

Pages:

ISBN: 061326486X

ISBN13: 978-0613264860

ASIN: 061326486X



**[CLICK HERE FOR DOWNLOAD](#)**

---

**pdf, mobi, epub, azw, kindle**

## **Description:**

"Cancer wreaks havoc in almost every part of the human body"--Robert Weinberg's opening remark is a chilling reminder of the pervasiveness of an all-too-familiar disease. Cancer touches most families, and if you have ever wondered why, despite so much time, effort, and money, it has proved such a seemingly intractable problem, then read *One Renegade Cell*, Robert Weinberg's masterful explanation. As director of the Oncology Research Laboratory at the Whitehead Institute and professor of Biology at MIT, Weinberg has been at the forefront of cancer research for well over a decade.

Unlike most diseases, cancerous tumors are not foreign invaders but "take on the appearance of

alien life forms, invaders that enter the body through stealth and begin their programs of destruction from within." But as Weinberg shows, these are deceptive appearances. And since he is foremost a scientist, he finds the truth "subtle and endlessly interesting" and manages to convey fascination for something that most of us dread--cancer. Much of the present increase in cancer is due to increased longevity because "given enough time, cancer will strike every human body."

By telling the story of the historical discovery of cancer, Weinberg is able to introduce gradually the intricacies and complications of the genes and proteins involved (oncogenes, tumor suppressor genes, etc.) for the general reader. He characterizes cancer cells as renegade because, unlike normal body cells, they "disregard the needs of the community of cells," they are "selfish and unsociable," and are only interested in "their own proliferative advantage." By comparison, normal cells hold down cell numbers by "inducing them to commit suicide" (apoptosis).

The understanding of cancer has been developed enormously over the last few decades by Weinberg and the worldwide community of researchers. As Weinberg eloquently shows, cancer research and its related disciplines "have moved from substantial ignorance to deep insight." --*Douglas Palmer, Amazon.co.uk* --This text refers to an out of print or unavailable edition of this title.

**From Publishers Weekly** The last 20 years have brought a revolution in cancer research that will profoundly change diagnosis and treatment of the disease, writes Weinberg in this comprehensive but rigorous introduction to the subject. Weinberg, founder of the Whitehead Institute for Cancer Research and a biology professor at MIT, traces the development of previous theories of cancer, and explains that scientists are now certain that cancer is caused when genes are damaged through a succession of mutations. These can result from damage to a cell's DNA inflicted by mutagens (which can be of foreign origin, such as tobacco smoke, or of internal origin); from normal mistakes made when DNA is copied during cell growth; or from defects in the body's DNA repair machinery. Weinberg discusses the roles of chemical carcinogens, retroviruses and heredity in developing cancer, and explains the body's intricate defenses against tumor growth. Though he argues that cancer will never be fully eradicated because so many mutations occur during long lifetimes ("Given enough time, cancer will strike every human body"), Weinberg is optimistic that increasingly sophisticated understanding of cellular functions will yield more effective treatments for those cancers that cannot be prevented. Though some readers might find the technical sections of the book difficult, it readily conveys the challenge and excitement of scientific discovery. Two illustrations.

Copyright 1998 Reed Business Information, Inc. --This text refers to an out of print or unavailable edition of this title.

---

- Title: One Renegade Cell: How Cancer Begins (Science Masters)
- Author: Robert A. Weinberg
- Released: 1998-01-01
- Language:
- Pages: 0
- ISBN: 061326486X
- ISBN13: 978-0613264860

- ASIN: 061326486X
-