

Book Reviews

The Biology of Cancer. By Robert Weinberg. New York, New York: Garland Science; 2006, 850 pp. \$149.95 Hardcover.

The Biology of Cancer by Robert Weinberg is a textbook aimed at graduate biology and medical students. It covers the basic biology of cancer at the molecular and cellular level. The book begins with a brief history of the field of cancer biology as it spawned from accelerated research after World War II and into the mid-70s, when cancer biology really took off as an independent field of research. The following chapters cover the basics of cell biology and explore how many of these mechanisms are altered in different types of cancer.

The main aim of the book is to gather what has been discovered about cancer in the past 30 years and begin to distill this information into underlying laws and principles that emerge from the large amount of data collected. The book does a great job in not only presenting the facts of what has been established but also highlighting the questions that remain in the field. In a sense, the textbook is like a large collection of review articles covering everything from apoptosis to receptor signaling to mitosis and spindle assembly.

The book covers an immense amount of material and is best used as a reference to review the basic principles of different aspects of cancer biology. The book contains a CD-ROM that has many additional figures and tables in Powerpoint format and some movies that correspond to each chapter. In addition, like most textbooks, the end of each chapter contains study questions useful to evaluate understanding of the presented topic.

I would highly recommend this book to any graduate or medical student inter-

ested in reviewing the fundamentals of cancer biology. The book is well-written, engaging, and covers a huge amount of material and a variety of topics. It will continue to be a useful aid to have in your library for years to come, as many of the basic concepts should remain relatively accurate even as the field advances. Since this field is rapidly advancing, a new edition will be needed shortly, but for now, this book represents the latest collection of knowledge in the field of cancer biology.

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The Bioterrorism Sourcebook. By Michael R. Grey and Kenneth R. Spaeth. New York, New York: McGraw Hill Professional; 2006, 549 pp. \$62.95 Paperback.

Based on its attention-catching title, *The Bioterrorism Sourcebook* brings to mind a how-to guide similar to *The Anarchist's Cookbook*, which some consider an instruction manual for terrorists. However, *The Bioterrorism Sourcebook* is instead an informative tool for dealing with the effects of a bioterrorist attack. Written by two medical doctors with master's degrees in public health, the text is intended for a public health personnel audience.

Although bioterrorism is an extensive subject, the authors succeed in covering a wide variety of issues while imparting a substantial amount of information. Events in bioterrorist history are covered, as well as the preparedness of current federal and local emergency response systems. Numerous BCN agents from anthrax to mycotox-

ins to yellow fever are given their due. Also helpful is the comprehensive index and the “Dosing Regimens” section, which includes recommended drug therapies for exposure to BCN weapons.

The text has a broad scope, organized into five logical sections (Clinical Principles and Practices; Infectious Agents; Biotoxins and Category B and C Agents; Chemical Weapons; and Nuclear and Radiation Syndromes), each composed of chapters surveying more specific examples. Most chapters open with a “clinical vignette” or include a historical incident of note, providing a helpful real-world perspective as to the effects a biological, chemical, or nuclear (BCN) agent may have on the population. Each chapter also contains a brief background of the agent, pathogenesis, means of transmission, a diagnostic checklist of symptoms, and current methods of treatment. Illustrations and photographs are useful for identification of visible symptoms.

In a post 9/11-world, and with events such as North Korea’s revelation of nuclear tests, there is a great need for texts like *The Bioterrorism Sourcebook*. Unfortunately, these are few and far between.

The Bioterrorism Sourcebook would be best viewed as an introductory primer in preparing healthcare professionals for a bioterrorist attack. While thorough and informative, this text is just the first step in promoting awareness of BCN agents and readying the community as a whole for potential threats.

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Developmental Biology. Eighth edition. By Scott F. Gilbert. Massachusetts: Sinauer Associates Inc.; 2006, 751 pp. \$114.95 Hardcover.

Developmental Biology is, from the start, a text geared toward students. Instead of filling a book with dense text that leaves the reader with a headache, Gilbert has

adopted a writing style that is easy to follow and does not require a wealth of knowledge to understand. That is, this is a text geared toward undergraduates who have received training in general biology. Graduate and medical students may find some of the topics to be slightly basic, but Gilbert does include discussions of many of the recent developments in the field as well as the methods employed in reaching those new findings. Thus, much of the text would be a worthwhile read even for higher level students looking for a solid introduction to the field of developmental biology that they may have missed as undergraduates.

Everyone should enjoy the vast array of figures presented throughout the text that complement the passages and further create a fantastic integration of the classic topics of developmental biology with some of the more recent studies that corroborate or call for modifications of previous theories. Gilbert takes the time to introduce the reader to some of history’s pioneering biologists, which helps provide a unique perspective with which to understand their scientific contributions. After spending close to a quarter of the text explaining the basics of the field (great for undergraduates), Gilbert gives an in-depth description of all of the phases of embryonic development, including descriptions of how cells differentiate and miraculously form organs at the right location — along with descriptions and images of what happens when they don’t find the right location. Also included are modern hot topics like stem cells (and their all-important niches), sex determination in the brain (and how many factors beyond the X and Y chromosomes relate to it), and a short description of aging (including an discussion of an interesting medusa that is arguably immortal).

Gilbert devotes the final section of the text to explaining why developmental biology is important to scientists in other fields. Medical students will find the descriptions of Down syndrome, disease states involving pleiotropy, the effects of teratogens, the potential uses of adult stem cells, and the issue of prenatal diagnosis of genetic diseases to

The bioterrorism sourcebook. Authors: Michael R. Grey, MD, MPH; Kenneth R. Spaeth, MD, MPH. Bibliographic Data: McGraw-Hill Companies, 2006. ISBN: 0-07-144086-0, 549 pages, soft cover, US \$59.00. [Back to Top](#) | [Article Outline](#). Reviewer's Expert Opinion: Description: This is a comprehensive but concise guideline for prevention, identification, and treatment of bioterrorism threats, primarily from the health care worker's perspective. Terkko Navigator is a medical library community for the University of Helsinki and Helsinki University Central Hospital. Personalize your own library of feeds, journals, books, links and more [â†](#) [â†](#).