

## BOOK NOTES

Structured abstracts of information on newly published books, computer programs, selected Web sites, and other material are provided in this portion of *Medical Writings*. "Order phone" numbers and Web sites can be used to place orders directly with publishers.

### Antiviral Agents, Vaccines, and Immunotherapies

Tyring SK. 424 pages. New York: Marcel Dekker; 2005. \$189.95. ISBN 0824754085. Order at [www.dekker.com](http://www.dekker.com).

**Field of medicine:** Virology, infectious diseases, and immunology.

**Format:** Hardcover book.

**Audience:** Clinicians and scientists working in the fields of virology, infectious diseases, and immunology.

**Purpose:** To enhance clinicians' and scientists' knowledge and understanding of current management strategies for viral diseases and the prospects of future advances. Antiviral therapy is an important subject because several major viral infections lack adequate therapy. In some situations, treatments exist, but they are limited by substantial toxicity.

**Content:** The book reviews recent advances in antiretroviral therapies, general antiviral therapies, antiviral vaccines, and immunotherapies that are used to prevent and treat viral infections. Chapter 1 reviews the current status of antiviral therapy. It discusses future needs and highlights the importance of public health measures and vaccine development. The chapter's introduction discusses customized vaccines and antiviral therapy based on assessment of single-nucleotide polymorphisms. Chapter 2 provides an excellent overview of current antiretroviral agents and the mechanisms of action and adverse events of the major agents. Chapter 3 is an extensive overview of the major nonantiretroviral and antiviral agents, including those that work against herpesviruses, respiratory viruses, human papillomavirus, and hepatitis B and C viruses. In addition, this chapter discusses immunomodulation agents, such as interferon- $\alpha$  and imiquimod. Chapter 4, the final chapter, discusses vaccines and immunotherapies, current vaccines against viruses, and investigational products. The chapter briefly addresses polyclonal intravenous immune globulin and monoclonal antibodies. It also summarizes the recommended immunization schedule for adults issued by The Advisory Committee on Immunization Practices and provides the childhood and adolescent schedules for vaccination.

**Highlights:** This is a brief but excellent, well-referenced review of antiviral therapy. It puts the current state of knowledge in perspective, while highlighting the directions for future work. The material is presented systematically, is easy to read and understand, and includes well-organized tables. It spans from molecular structures and mechanisms of action to practical aspects of drug availability, and it discusses the economic impact of antiviral treatment. Finally, the book provides a unique clinician–investigator perspective.

**Limitations:** While the book is comprehensive, some areas lack details. It is difficult to capture all aspects of antiviral management in a book of this size. More details in areas such as vaccination might further improve future editions of this text. Similarly, replacing the current schematic figures with better-quality illustrations might be more reader-friendly and instructive.

**Related reading:** Several related texts could supplement specific topics in the book: Knipe and colleagues' *Fields Virology*, 4th edition (Lippincott Williams & Wilkins, 2001), and Stiehm's *Immunologic Disorders in Infants & Children*, 5th edition (WB Saunders, 2004). In addition, up-to-date information on the evolving field of antiretroviral agents is available from the U.S. Department of Health and Human Services (<http://aidsinfo.nih.gov/drugs>).

**Reviewers:** Upton D. Allen, MBBS, MSc, and Chaim M. Roifman, MD, Infection, Immunity, Injury and Repair Program, The Hospital for Sick Children and the University of Toronto, Toronto, Ontario, Canada.

### Cardiopulmonary Resuscitation

Ornato JP, Peberdy MA, eds. 764 pages. Totowa, NJ; Humana; 2005. \$185.00. ISBN 1588292835. Order at [www.humanapress.com](http://www.humanapress.com).

**Field of medicine:** Cardiopulmonary resuscitation.

**Format:** Hardcover book.

**Audience:** Clinicians caring for patients who have had cardiac arrest and those interested in an updated understanding of advances and future directions in resuscitation.

**Purpose:** To review current therapeutic interventions and devices in the management of cardiac arrest, physiologic derangements that accompany cardiac arrest, and future potential therapeutic advances.

**Content:** The book covers a wide range of topics, including cardiac arrest in specific situations such as trauma, drowning, hypothermia, lightning strike, and pregnancy. Pharmacologic therapy and electrical therapy, including both pacing and defibrillation, are reviewed. Post-resuscitation management is discussed, including therapeutic hypothermia and postarrest myocardial dysfunction.

**Highlights:** The authors present alternatives to standard cardiopulmonary resuscitation (CPR) techniques (although as yet unproven clinically), including the use of various devices designed to enhance blood flow during CPR. Public access defibrillation, a topic of great current interest, is reviewed in terms of implementation.

**Limitations:** It remains unknown at this time whether many of the interventions and devices described here affect patient outcome in terms of neurologically intact long-term survival. This is particularly true of many of the devices intended to enhance blood flow during cardiac arrest. Readers must therefore be cautious and even skeptical about the possibility of benefit from these interventions and devices. Promising experimental and even early clinical findings in many areas of resuscitation await confirmation of survival benefit.

**Related reading:** The most definitive text in this area, now being updated, is Paradis and colleagues' *Cardiac Arrest: The Science and Practice of Resuscitation Medicine* (Williams & Wilkins, 1996). Although many advances have occurred since publication of this text, it remains a source of much information still fully applicable to the art and science of resuscitation.

**Reviewer:** Roger D. White, MD, Mayo Clinic College of Medicine, Rochester, Minnesota.