

ers are barely mentioned (eg, atrial fibrillation).

The second edition of **Sleep Apnea: Implications in Cardiovascular and Cerebrovascular Disease** reflects the great advances made in this area in the last 10 years. However, it also reflects our still incomplete understanding of the impact of sleep apnea on overall health. This edition will bring those interested up to date in this area, and will help to define what needs to be done in the coming years.

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Tuberculosis: The Essentials, 4th edition. Mario C Raviglione, editor. *Lung Biology in Health and Disease* series, volume 231, Claude Lenfant, executive editor. New York: Informa; 2010. Hard cover, 400 pages, \$299.95.

Although respiratory therapists and many other healthcare professionals in the United States may see a case of active tuberculosis (TB) only on occasion, TB remains one of the leading causes of death worldwide; approximately 2 million people die of TB annually, while 2 billion people (one third of the world's population), are infected with *Mycobacterium tuberculosis*. The current epidemiology underscores that TB is one of the most important pathogens in the world today. Indeed, in many areas in the United States a devastating global epidemic continues to present local health challenges. International cities are especially vulnerable to TB, while the globalization of economy and society continues and the epidemic of TB in many countries in the world has not been controlled.

Tuberculosis: The Essentials, 4th edition, is an important textbook to review the global issues of TB control. This new edition, edited by Raviglione, discusses the new developments and updates in knowledge since the last one published in 2006. This textbook is part of the National Institutes of Health's *Lung Biology in Health and Disease* series (executive editor Claude Lenfant). This is a multi-author textbook and many authors are internationally distin-

guished experts in the field. The book has a hard cover, 390 pages, and 15 chapters

The book is most suitable for pulmonologists, infectious disease specialists, and public health practitioners involved in the field of TB, especially international TB control. On the other hand, its advanced content may be less attractive for general physicians, respiratory therapists, and other healthcare professionals who do not often encounter the issues related to TB.

There are complete and current reference lists at the end of each chapter. Most chapters contain many tables and figures that highlight important points in the text. The index is comprehensive and accurate.

The first 3 chapters describe the epidemiology and pathogenesis of TB. The authors from the World Health Organization discuss the global TB epidemic, which disproportionately affects many resource-limited countries. There is a well-thought-out discussion on a model of TB pathogenesis and epidemiology, focusing on the risk factors for TB exposure as well as TB progression from latent TB infection, with 348 references. The third chapter updates us on the recent knowledge and new insights of basic science concerning TB pathogenesis.

The next 2 chapters deal with clinical aspects (diagnosis and treatment) of TB management. The chapter on TB diagnosis includes the new technologies, such as microscopic-observation drug-susceptibility (MODS) assay, molecular methods to detect *M. tuberculosis* and its drug resistance, and interferon-gamma release assays (IGRA). However, it emphasizes the importance of clinical suspicion of TB and underscores that the diagnosis of TB is a complex clinical exercise that requires integration of all available information.

The chapter on TB treatment describes the history of the development of TB chemotherapy, the current use of TB medications and regimens (the combination of drugs and duration), the role of directly observed therapy (DOT), and treatment in special situations and extrapulmonary TB. The next 7 chapters discuss the critical issues of global TB control; the interaction between human immunodeficiency virus (HIV) and TB, and drug-resistant TB, especially multi-drug-resistant TB and extensively-drug-resistant TB. The World Health Organization's new Stop TB Strategy recognizes that the epidemic of HIV and the spread of drug-resistant TB are the greatest threats to global TB control. While 15% of new cases of TB

in the world are estimated to occur among people living with HIV, implementation of the "Three I's for HIV/TB" is emphasized: Intensified TB case finding, Isoniazid preventive therapy, and TB Infection control. The chapter on diagnosis and treatment of drug-resistant TB reviews the new challenges that the emergence of multi-drug-resistant TB and extensively-drug-resistant TB have presented and the efforts to control the development of drug-resistant TB and the spread of the disease.

The last 3 chapters of the book review current knowledge and address the key items of TB control on the horizon: new diagnostics, new drugs, and TB vaccine.

There are a few areas that can be improved. First, the typeface may not be the easiest to read, perhaps because of a long sentence line, instead of 2 separated columns. Second, there are some illustrations in which the color prints would have been more beneficial (eg, World Health Organization statistics and graphs, pathology slides) but I understand the cost issue.

In summary, **Tuberculosis: The Essentials**, 4th edition, is a valuable reference textbook for clinicians and policy makers who are interested in global TB control activities. As the research of TB, especially at the global level, has become a dynamic field, this book also provides the research scientists with the updated knowledge and the tools to develop innovative approaches for TB control research.

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Respiratory Care Exam Review: Review for the Entry Level and Advanced Exams, 3rd edition. Gary Persing RRT. St Louis: Saunders/Elsevier. 2010. Soft cover, 288 pages, \$69.95.

In the fall of every year in my respiratory therapy program, I encourage the seniors to fastidiously review material prior to taking the board examinations for respiratory therapists. When they ask what they should study, I reflect on the breadth and depth of material that one must review to be truly

Essential Cell Biology. The Biology of Cancer. Case Studies in Cancer. Janeway's Immunobiology.Â Chronic Obstructive Pulmonary Disease Exacerbations covers the definition, diagnosis, epidemiology, mechanisms, and treatment associated with COPD exacerbations. This text also addresses imaging and how it plays a pivotal role in the diagnosis and study of exacerbations. Written by today's top Respiratory Infections.Â Mario C. Raviglione May 31, 2017. Every second a new person is exposed to tuberculosis (TB). Each untreated TB-infected person will infect 10-15 people every year. Following the success of its predecessor, this new edition of Tuberculosis: The Essentials scrutinizes the new discoveries and observations of the key aspects of the Executive Executive Executive Editor: Editor: Editor: Claude Claude Claude Lenfant Lenfant Lenfant. Tuberculosis Tuberculosis Tuberculosis Fourth Fourth Fourth Edition Edition Edition The The The Essentials Essentials Essentials. Raviglione Raviglione Raviglione.Â The readership of the series of monographs Lung Biology in Health and Disease have surely noted that this volume, edited by Dr. Mario C. Raviglione and titled Tuberculosis: The Essentials, is the fourth edition of a "subseries on tuberculosis" that began in 1993. In addition, a number of other volumes in the series, which may not include the word tuberculosis in the title, have chapters relevant to this lung disease. It should be noted that this series "Lung Biology in Health and Disease" has produced 13 "14 volumes on sleep, the first being volume 21, Sleep Apnea. Over the years, a body of original literature, including substantial epidemiologic evidence and demonstrations of pathophysiology, has established sleep apnea as both a risk factor and a consequence of cardiac and neurologic disease. In this volume, the emphasis in the words of the editors is on "critical synthesis...of new information linking sleep apnea to the major disease burdens facing developing and developed nations." There are four parts