pragmatic compendium of the state of the art of CT for various common and uncommon airway disorders in adults and children; and an introduction to new and emerging techniques that are not yet standard practice. To these ends the editors have succeeded mightily.

As is often the case, when such a varied collection of contributors is brought together for a focused textbook project, the burden of contextual flow falls upon the lead editors. This book is divided into 4 parts. The first part is an introductory section on airway physiology, anatomy, pathology, and anatomical and functional seeking imaging methods. The next section is on large airway disorders and adults. The third section is on small airways disorders and adults. The final section is on pediatric large and small airway disorders. The editors quite successfully managed the overall content flow and section and chapter organization; each chapter has a similar look and feel.

The editors have done a superb job in covering this field in its entirety, based on the state of the art. Some of the information will probably be new to readers with an interest in airway imaging. Much of the material can be found in other imaging textbooks, but not nearly to the breadth, depth, and extent in this beautiful book. Although the technology in this field is advancing fairly quickly, the "shelf-life" of this book should be fairly long.

I unhesitatingly recommend this book to all those who have a special interest in airways diseases.

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Fishman's Pulmonary Diseases and Disorders, 4th edition. Alfred P Fishman, editor in chief; Jack A Elias, Jay A Fishman, Michael A Grippi, Robert M Senior, Allan I Pack, co-editors. New York: McGraw-Hill. 2008. Hard cover, 2 volumes, 2,740 pages, color illustrations. $425.

At first, the invitation to review the fourth edition of **Fishman's Pulmonary Diseases and Disorders** seemed daunting, considering that this beautifully bound, 2-volume text has grown to 8 kg, 2,734 pages, and 157 chapters authored by the world's leading experts in lung disease. The primary editor, Alfred Fishman, is a pioneer and senior statesman in pulmonary physiology. The 1980 first edition shepherded me through my fellowship. Now closer to the end than the beginning of my career, the chance to explore the fourth edition offered nostalgia and an opportunity to brush up on fundamental principles of lung disease. For my effort, I was not disappointed. This book is a giant in its field and provides a comprehensive resource for anyone interested in understanding pulmonary medicine thoroughly, deeply, and comprehensively. But I get ahead of myself.

In approaching the review, I chose the perspective of the RESPIRATORY CARE readership: respiratory therapists, and physicians and scientists with a major interest in respiratory care. I also kept in mind our new era of "information management," wherein the rapid electronic publication of new discoveries with nearly immediate access to information at the point of care is becoming technologically feasible and widely expected. In a crowded field of Internet information purveyors, a general textbook must provide substantial value and fill a unique niche to be successful. From this perspective I examined the general organization of the book. The text's 17 parts divide the book into physiologic functional principles, diagnostic procedures, signs, symptoms, and disease conditions. The opening sections on physiological principles is so well written and comprehensive that it provides a road map for all that follows. The pages are color-coded to help the reader navigate between different sections. The publisher did not include a CD-ROM or provide a Web-based repository for online access to the book's materials, but this omission is not relevant, because this is a major text that is not intended for quick "look ups" on a computer screen. It requires serious attention and thoughtful commitment of time.

The book focuses on pulmonary medicine, but because "pure" pulmonary practice encompasses some aspects of critical care, 8% of the pages present information on acute respiratory failure, which is the subject of the 17th and final part. This section covers mechanical ventilation, intubation, ethics, hemodynamic monitoring, and other critical care topics primarily of interest to clinicians in respiratory intensive care units. Brief discussions scattered elsewhere in the book present other aspects of critical care. For instance, a chapter on surgery discusses chest trauma. Diving injuries, thermal burns, and air embolism are discussed in chapters on environmental and occupational disorders. Critical care management of asthma is presented in the chapter on asthma, and management of massive pulmonary embolism is discussed in the chapter on pulmonary embolism. This organization complicates access to critical care topics because they are so widely distributed. However, this is not a general critical care textbook, but a book on pulmonary medicine, which encompasses only a subset of critical care topics. RESPIRATORY CARE readers may actually prefer this presentation because the critical care information, although limited in scope, is presented in depth by leading experts who integrate pathophysiologic principles that are commonly abbreviated in general critical care texts.

The book, however, also occasionally splits topics and tucks the parts into different sections. For instance, empyema as a "pleural" condition is in the section on "lung" infections rather than the "pleural" section where it belongs. Similarly, mediastinitis is in the section on lung infection rather than the one on the mediastinum. Consequently, these important conditions receive only brief discussions by authors who seem more versed in pulmonary infections than what appears to be "add-on" topics for their chapter assignments. Although similar examples exist, the most important topics get solid coverage in appropriate locations, and the extensive index assists in finding the few errantly placed text segments.

As the book's greatest strength, the list of contributors is prestigious. Weibel wrote the chapter on functional design of the lung, Altose on pulmonary mechanics, Wagner on gas exchange, and Reynolds on lung defense mechanisms. Those and other contributors to this book are the pioneers who defined the subjects of their chapters or now conduct the most important research. Many editors of pulmonary books enlist authors who are conveniently located in the editor's institution, but Fishman sought out elite authorities, based on expertise rather than professional address. This strength cannot be overstated, and it indicates Fishman's influence and prestige that he could enlist so many world experts.

As might be anticipated in a book with over 240 international contributors, the topics are covered in great depth but the chap-

ters were not produced in a uniform format. The absence of signposts (eg, pull-outs with key points, standardized headings) or standardized sequencing of information (eg, clinical manifestations, laboratory findings, imaging findings, et cetera) in the chapters challenges readers to follow complex discussions. The chapter formats seem to reflect each author's writing style.

The chapters' tables and table headings also differ considerably in style. Some tables present information clearly, in a manner that stands on its own, whereas others may be difficult to understand without reading the accompanying text. Tables borrowed from scientific articles represent many of the latter instances. Also, similar chapters present tabular information completely differently. For instance, the chapter on asthma lists drugs, indications, and dosages, whereas the chapter on chronic obstructive pulmonary disease lists only drugs, and in a manner that could lead to administration errors; the table could make it seem that theophylline is commonly used for chronic obstructive pulmonary disease.

Figure formatting is also inconsistent. Some chapters present treatments in easily understandable algorithms, whereas others present therapies in complicated tables or only in the text. These format differences were especially irksome in adjacent chapters that cover similar disorders. For instance, the chapter on pulmonary arterial hypertension does not provide figures to explain drug management, in contrast to the chapter on pulmonary thromboembolic disease, which is replete with algorithms and tables of diagnostic rules. The figure legends occasionally miss opportunities to explain the figure's contents. For instance, the legend for one chest radiograph simply states "Organizing pneumonitis in a patient with bird fancier's disease," and does not identify the radiographic features readers should note. The number of figures also varies. The chapter on pulmonary manifestations of the collagen vascular diseases make extensive use of photomicrographs and radiographs, whereas the chapter on idiopathic pulmonary fibrosis has largely dense text with few figures. When present, however, the color and gray-scale figures are magnificently reproduced and complement the text beautifully. For instance, the chapters on chest imaging, cytopathology, and dermatologic manifestations of lung disease could be free-standing books.

The reference list provides insight into the currency of a book's information. To be fair, the time from manuscript submission to book publication is measured in years. Considering that Fishman's is a momentous encyclopedic work it is not surprising that the most recent references are from 2006, and in some chapters the latest references are from 2005. The publication delay explains why some chapters omit important current information. The chapter on asthma, for instance, uses the old classification system based on asthma severity rather than control (as proposed in 2007 guideline updates). Although these guideline revisions became available after this book's publication, the authors could have anticipated the updates and listed the guidelines' Web sites. There are other examples of omitted information on cutting-edge topics: not much is presented on airway stents or bronchoscopic ultrasound, and only a few sentences mention pleural effusions after cardiac surgery.

This book's reference lists have other issues. Most of the chapters provide suggested-reading lists but no text call-outs to specific citations; this prevents readers from knowing on what papers the authors base their views. A few chapters use the customary system of call-outs and a numbered citation list. The suggested-reading lists could be improved by identifying the articles as reviews, original contributions, important related readings, or clinical practice guidelines. As they are presented, the reader must scan every list to guess which articles are worth reading—a tough assignment considering that some chapters have 50 or more references.

As in most large books with multiple authors, some statements conflict with statements elsewhere in the book, and these conflicts require reconciliation. For instance, the recommendations (in separate chapters) on diagnosis and treatment of arteriovenous malformations differ markedly. The chapter on principles of antibiotic use and selection of empirical therapy for pneumonia does not always agree with the chapter on acute bronchitis and community-acquired pneumonia, and these 2 chapters have considerable overlap.

So, does this book provide value for clinicians and scientists primarily interested in respiratory care and does it fill a gap in our computer-based information-management era? I believe it definitely does. No other available book on pulmonary medicine provides such a strong scientific foundation for understanding lung function and respiratory disease as does **Fishman's** in its opening sections. I have looked for other concise yet comprehensive reviews of dyspnea and control of ventilation, but have found none that rival this book. The later chapters that focus on specific lung conditions build on that scientific foundation. I emphasize that some of the book's features will challenge casual readers, and this book is not for everyone. But a committed life-long learner of pulmonary medicine willing to dive into the book can gain a comprehensive understanding of our field in a manner not allowed by online resources. Although I increasingly access electronic information as I run between patients, I will use **Fishman's** when I need to really *learn* a subject rather than simply identify a clinically relevant fact; this is the "information gap" that authoritative books will always be needed to fill.

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Mechanical Ventilation, 2nd edition. Neil R MacIntyre MD FAARC, Richard D Branson MSc RRT FAARC. St Louis: Saunders Elsevier. 2009. Soft cover, 243 illustrations, 528 pages, $74.95.

Mechanical Ventilation is an outstanding text from the moment one starts to read it. Edited by 2 of the thought-leaders in mechanical ventilation, Neil MacIntyre and Richard Branson, the text has 25 chapters, 24 of which have been updated and newly referenced to reflect new technologies and evidence since the first edition. A new chapter on "unique patient populations" has been added. At 449 pages, plus an additional 15 pages dedicated to case studies, it is an easily accessible text that, for all but the most advanced clinicians, will serve as an excellent reference for complete everyday knowledge of mechanical ventilation. It is the most succinct, yet still clinically complete and useful review of mechanical ventilation I have seen. Throughout it remains true to the evidence, with little editorial bias, yet provides expert advice on topics about which our knowledge is limited. The chapters are