far too little work on developing and testing interventions to help people prevent or manage disease.

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Acute Respiratory Distress Syndrome. Michael A Matthay, editor. (Lung Biology in Health and Disease series, volume 179, Claude Lenfant, executive editor.) New York: Marcel Dekker. 2003. Hard cover, illustrated, 657 pages, $195.

This book is an invaluable resource for pulmonologists and critical care clinicians seeking a technical and comprehensive review of the acute respiratory distress syndrome (ARDS). The book's editor, Michael Matthay, is a leading authority on the topic and has successfully assembled an eclectic compilation of work from both well-established academicians and up-and-coming contributors to the field. Overall, I found this to be a well-balanced review of both basic scientific and clinical research on the syndrome, providing relevant information for academic physicians and private clinicians alike. Although I do not think this text is highly geared toward the practicing nurse or respiratory therapist, the chapters on diagnosis, therapy, and ventilator management could make this a valuable reference text for any practicing clinician.

In all, there are 23 well-chosen and logically arranged chapters, the first of which defines ARDS and its relevant risk factors, followed by chapters that describe the epidemiologic, radiographic, and pathologic features of the syndrome. The next series of chapters summarize the numerous biological signaling cascades involved in the pathogenesis of ARDS and ventilator-induced lung injury. These are followed by a set of chapters that examine recent genetic studies that suggest inheritable risks for the syndrome. The text then moves on to a series of clinically relevant chapters on treatment of sepsis-related ARDS and potential interventions, such as modulation of vascular tone, glucocorticoid therapy, surfactant therapy, and prone positioning. This is followed by a comprehensive summary of approaches to mechanical ventilation of patients with ARDS and a brief but important summary of the recently described viral illness, severe acute respiratory syndrome (SARS). Finally, there is a brief concluding chapter (by the editor) on promising new directions in the field. Although there is some redundancy and overlap in content, the chapters are well organized and do not seem to suffer from the fractured arrangement often characteristic of multiple-author texts.

Although I found most of the chapters informative and comprehensively referenced, some were more memorable for their educational appeal. For instance, the chapter that defines ARDS and acute lung injury (ALI) is a well-organized summary that illustrates the complexities of defining and classifying such a heterogeneous disorder without confusing the reader. This chapter concludes with a clear and concise summary of the syndrome's risk factors for morbidity and mortality.

The 2 chapters on the pathogenesis of ALI were wisely organized as separate summaries of laboratory-based animal experiments and clinical studies. Both chapters are comprehensive yet easily readable synopses of research on the roles of neutrophils, cytokines, and oxidant and procoagulant pathways in the development of ARDS. The chapter that summarizes the pathogenesis of ventilator-induced lung injury was a wise inclusion by the editor; it illustrates the important continuum between ALI and the effects of the mechanical ventilation, which is both an essential life-saving measure in the management of ALI and, paradoxically, a contributor to ALI/ARDS morbidity and mortality. This is yet another comprehensive summary of past and present research into the potential mechanisms of injury from mechanical ventilation, covering both its direct effects on the lung and its indirect effect on mortality through its contribution to multi-organ dysfunction.

I was pleasantly surprised by how much I learned from the chapter on the heat shock response pathways in ALI. The authors nicely outline the objectives of the chapter and fulfill them, making a complex topic more easily understood by the novice microbiologist. Although the chapter on fibroproliferation in ALI is an essential inclusion and is exhaustively referenced (197 references), I found it a bit difficult to follow. I found subsequent chapters, however, on alveolar fluid clearance, modulation of pulmonary vascular tone, glucocorticoid and surfactant therapy, and prone-positioning to all be well referenced and easily readable. The chapter on management of mechanical ventilation is an especially well referenced and organized summary of conventional (low tidal volume, noninvasive) and less conventional (high-frequency, inverse ratio, pressure-release) modes of mechanical ventilation, as well as influential research findings in the field.

In all, I found this book fairly easy to read cover-to-cover, but for most readers this will more likely provide a valuable reference source for chapters outlining the seminal studies in their respective fields. The book expanded both my general knowledge of ARDS and my reference library for future academic efforts. I strongly encourage anyone pursuing an academic career in pulmonary or critical care medicine to purchase this text, but I would equally encourage full-time clinicians to consider this text if they plan to manage patients with ALI and ARDS.

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Non-Neoplastic Advanced Lung Disease. Janet R Maurer, editor. (Lung Biology in Health and Disease series, volume 176, Claude Lenfant, executive editor.) New York: Marcel Dekker. 2003. Hard cover, illustrated, 817 pages, $195.

Reviewing the complex topic of advanced non-neoplastic lung disease, its pathophysiology, clinical manifestations, and management approaches is a difficult assignment, but **Non-Neoplastic Advanced Lung Disease** (the 176th volume in the Lung Biology in Health and Disease series), edited by Janet Maurer, has accomplished the task; it is a thorough and systematic review.

The first 3 chapters review the pathology of obstructive airway diseases, interstitial disorders, and pulmonary vascular diseases. The macroscopic and microscopic features of these diseases are described, and their respective clinical correlations are reviewed. These chapters include representative photographs of parenchymal and airway specimens as well as photomicrographs that illustrate the histologic features of the conditions.