be well served to learn from the collective wisdom of these authors.

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Clinical Respiratory Medicine, 3rd edition. Richard K Albert, Stephen G Spiro, and James R Jett. *Expert Consult* series. Philadelphia: Mosby Elsevier. 2008. Hard cover, illustrated, 1,032 pages, $169.

Medical textbooks are generally used for one of 2 purposes: to research a particular clinical question, or to educate a reader in a particular subject, who would be approaching the material early in his or her education. To accomplish one of these 2 goals I would consider a necessity in any work; to do both should be the purpose of a good medical textbook or reference book. But to do both, in an approachable way, and as a "good read," I regard as uncommon. Thankfully, the third edition of **Clinical Respiratory Medicine** manages these 2 goals in a remarkably well rounded and yet concise way. To summarize the field of respiratory medicine in a little less than 1,000 pages is no small feat; I wondered when initially approaching this text, what was excluded? What was minimized? Surely there must be some glaringly obvious holes. But, remarkably, I could find none. While some chapters did avoid a detailed discussion of pathophysiology (ie, those dealing with pulmonary manifestations of disease, or interstitial lung disease), this was appropriate to the intended audience, and still provided enough depth such that clinicians such as myself did not at all feel "dumbed down."

From basic chest imaging and common clinical conditions such as chronic obstructive pulmonary disease and cough, to more advanced topics such as interstitial lung disease and mediastinal disorders, **Clinical Respiratory Medicine** covers pulmonary medicine in a thorough way and yet manages to avoid focusing on minutiae; one is never in danger of losing the forest for the trees. While written in a logical fashion, I found most chapters to be approachable enough such that newcomers to pulmonary medicine would not be put off. Respiratory therapists, medical students, residents, nurses, and primary care physicians should all find the subject matter appropriate and informative. Overall, the topic grouping was, I felt, excellent, and seemed intuitive in progression if one were to read the book cover to cover, as I did. Additionally, the "foundation" of the book is solid: the typeset is clear, the pages are well laid out, and the figures and tables are (for the most part) excellent; information is presented logically, with supplemental reference "boxes" frequently scattered about in a rational and presentable fashion. Finally, in a manner I found refreshing, most chapters ended with a discussion of questions or controversies, thus both encouraging critical thinking, and avoiding a pitfall of the typical "preachy" style some textbooks fall into. Understanding that all we know is not, in fact, all we can know, is an important point that can be missed, at least in the initial stages of one's clinical training.

My introduction to the textbook was, appropriately enough, with radiology. I found this chapter to be outstanding, both in its format and in the very idea itself. I personally have found that most beginning students in pulmonary medicine approach the field in terms of chest imaging. Chapter 1 is a superb introduction to basic chest radiography, and provides enough depth that I found myself (perhaps somewhat embarrassingly) still learning several things about the field. While not exhaustive by any means, this chapter is a stepping stone for the chapters to come, and provides some initial reference to topics one will be exploring in more depth later. Well rounded, concise, and with many excellent radiographs for additional reference, I found Chapter 1 a true highlight, and I plan to use it for teaching purposes.

Subsequent chapters are organized around themes; basic physiology, clinical techniques, mechanical ventilation, common symptoms, infectious disease, airway diseases, and interstitial lung disease (termed diffuse lung disease in this book) are but a few of the topics covered. Pulmonary physiology was well done, I thought. Key to so much in clinical reasoning, a good understanding of physiology can aid greatly in truly understanding disease processes, rather than simply memorizing signs and symptoms. Chapter 19 in particular was a standout, and did an excellent job of discussing hypoxemia; I especially appreciated the discussion on "hypoxic respiratory drive," which, I am embarrassed to say, I too learned in residency somehow (before unlearning in fellowship quite rapidly). I did, however, feel that some of the descriptions in Chapter 5 "bogged down" a bit in equations and mathematics, and could be slightly above the reading level of a beginning reader. Respiratory therapists, however, will probably find this chapter highly informative and reinforcing of what they have already been taught in the classroom.

Similarly, the discussion of pulmonary circulation and shock (Chapter 6), is outstanding. Good basic science is coupled with clear clinical reference, thus effectively "bridging" the book-to-bedside chasm that all newcomers to clinical medicine must cross. I found all mathematical references to be appropriate, with numerous graphs and tables placed as an adjunct to the text; they did not at all distract from the underlying discussion. Unfortunately, the very next chapter moves in exactly the opposite direction; many students struggle with acid/base physiology, and while an inorganic chemistry student would probably feel right at home in this chapter, I felt the science was inappropriately emphasized. Beginning students (or even those of us in clinical practice) benefit from clinically relevant approaches that can assist in patient care. I quickly became lost in this chapter, and found it not at all helpful in teaching the application of acid/base at the bedside. I would recommend that those searching for a good discussion of acid/base physiology look elsewhere.

It was with relief that I moved on from Chapter 7, and thankfully found that almost all of the subsequent chapters return to this book's strength: clear explanations with excellent clinical applicability. Even the chapter on immunology managed this (which I found remarkable after my own experience with this topic in medical school). Knowing what to include, and what to exclude, was this chapter's strength, so as not to overwhelm the reader with information. Subsequent descriptions of bedside techniques in respiratory medicine and ventilator management were appropriate to those being introduced to the topic for the first time, but would obviously not be a good reference for more experienced clinicians. For teaching purposes, I found the chapter on ventilators to be useful, and in particular the graphic descriptions of intrinsic positive end-expiratory pressure (auto-PEEP). I would have appreciated a more in-depth dis-

cussion of noninvasive ventilation, especially given the rapidly growing use of this modality. Understanding the uses of bi-level positive airway pressure (BiPAP) is important, but I would have liked a more explicit discussion on when not to use this modality, and when it could in fact be harmful.

Primary physicians and mid-levels will appreciate section VI, a discussion of common respiratory symptoms and their causes. While I doubt that the chapter on chronic cough will do much to slow the onset of referrals to my own practice for this complaint, it was both concise and well written. The infectious diseases chapters are also very well done, with the chapter on opportunistic infection being an especially good review. I would recommend it for residents in training, or even for hospitalists treating immunocompromised patients, as a worthwhile read. The discussions on cystic fibrosis and lung cancer were also excellent, with good graphics and tables being especially important when reviewing lung cancer staging.

Though almost all the radiographs were clear and well reproduced, Chapter 69 had exceptions; the discussion of pleural disease and pneumothorax was superb, but the radiographs were less clear. I found it difficult to appreciate the issues being described in some of the representative films, which in this chapter is an important point. I also found a relative dearth of such pictures; when referencing radiographic abnormalities, I would have found more films helpful. For example, discussing tension pneumothorax is important, but showing a representative film of it should be even more so (to aid in clinical recognition). Why the films in Chapter 1 were so much better and more numerous is unclear; hopefully, this can be addressed in a subsequent edition.

Among the other chapters I will probably be borrowing for teaching purposes is Chapter 71. Acute respiratory distress syndrome remains a common problem in the intensive care unit, and I remain astonished at the number of centers that do not use lung-protective ventilation for this clinical condition. While I accept that there are different perspectives on our current body of literature, I have yet to see an alternative ventilatory strategy demonstrate a mortality benefit for acute respiratory distress syndrome. If anything, the authors of this chapter "soft-sell" this point, although they do include a discussion of the controversies about lung-protective ventilation at the end of the chapter. A thorough discussion of other potential modalities, with mention of alternative ventilatory modes, rounds out this chapter, which I regard as a must-read for respiratory therapists and pulmonary clinicians.

As mentioned previously, I found the discussions on controversies at the ends of the chapters to be most enlightening; however, when it came to the discussion of diffuse lung diseases (interstitial lung disease), I thought that more attention could have been paid to this topic. Overall a good discussion was held in Chapter 50, dealing with the idiopathic interstitial pneumonias. I especially appreciated the computed tomography images placed next to the pathology slides, to allow for a better visual relationship between the two. However, I would have liked more information about the many things we don't understand about usual interstitial pneumonia and interstitial pulmonary fibrosis. For example, how important is a tissue diagnosis? What data support the American Thoracic Society's treatment recommendations, when the authors admit that there is no "established optimal treatment"? One might mention that there is no basis in evidence for any treatment whatsoever, although anecdotal case studies abound (interstitial pulmonary fibrosis is admittedly a difficult entity to study). Are there circumstances when the risks of treatment outweigh the benefits? From a clinician's perspective, the interstitial lung diseases in general (and interstitial pulmonary fibrosis in particular) remain poorly understood; I would have liked this basic framework to shape the chapter's discussion.

These points notwithstanding, I overall found the third edition of **Clinical Respiratory Medicine** to be a remarkably well written and well organized textbook. It is an impressive work, with appropriate and thorough discussions of complex topics, written in such a way as to remain approachable for neophytes and experienced clinicians alike. This can be a difficult balance to strike, and perhaps one that was not always accomplished perfectly, but one that was managed overall quite admirably. I would recommend this work to respiratory therapists, nurses, resident physicians, and even primary care physicians looking to expand their knowledge of pulmonary medicine.

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Bronchopulmonary Dysplasia. Steven H Abman, editor. *Lung Biology in Health and Disease* series, volume 240, Claude Lenfant, executive editor. New York: Informa Healthcare. 2010. Hard cover, 512 pages, illustrated, $269.95.

Bronchopulmonary dysplasia (BPD), also referred to as chronic lung disease, is the most important respiratory complication of prematurity. Despite the advent of antenatal corticosteroid therapy, exogenous surfactant replacement therapy, sophisticated mechanical ventilation, and continuous monitoring techniques, 30–40% of infants with birth weight < 1,500 g develop BPD. Its incidence is inversely related to gestational age, and its etiology and pathogenesis are clearly multifactorial and incompletely understood.

Bronchopulmonary Dysplasia is the latest volume in the *Lung Biology in Health and Disease* series and comprehensively examines 4 aspects of this disorder: mechanisms of lung growth and development, mechanisms of disrupted lung development and repair in the pathobiology of BPD, clinical aspects of BPD and its management, and emerging therapies. The monograph has 27 chapters, each authored by different contributors. Abman certainly enlisted an all-star cast of 50 contributors, who are international and multidiscipline in scope, including neonatologists, pediatric pulmonologists, basic scientists, and epidemiologists.

The book appears to be written for pulmonologists, critical care specialists, and pediatricians who care for infants with BPD. The first half of the work deals primarily with basic science and genetic and inflammatory mediators that play important roles in the pathogenesis of the disease. These are well written, and although they set the stage for translational research, they may be a bit too complex for the average reader, especially those unfamiliar with the language of molecular biology. Nevertheless, they are an excellent reference source.