

Models, and Animal COPD Models. The contributors are experts in the field and are actively involved in developing the model systems they describe.

My expectation about such a book would be that each chapter would address the biological relevance of the model being discussed, outline the experimental approach in the model, discuss the model's limitations, and discuss the future of the modeling approach. The introduction section reviews the definitions, clinical manifestations, and epidemiology of exacerbations. Though adequate, this section would have benefited from a description of the relative importance of the various etiologies of asthma and COPD exacerbations, which would have provided context for the subsequent chapters. Another interesting discussion that would add value would be on the overall role of modeling in exacerbation research.

The chapters that deal with the models themselves for the most part met the criteria described above, and provide adequate and up-to-date information. The human asthma models address human rhinovirus models as well as allergen inhalation challenge. The biology of both these models was well addressed, but the chapter on rhinovirus lacked details of the models. The chapters on animal asthma modeling addressed rhinovirus infections, house dust mite exposure, and respiratory syncytial virus. There are a few animal models for rhinovirus, but several cellular models are well described and are adequately discussed. The house dust mite exposure chapter is the longest chapter, and it does an excellent job of describing the models, their historical development, and the underlying philosophy of modeling airway diseases. The chapter on respiratory syncytial virus did not add much to the book, because there were no animal models discussed, and it is basically a review of respiratory-syncytial-virus-induced pulmonary disease and asthma.

The human COPD exacerbation models discussed include lipopolysaccharide challenge and rhinovirus infection. Both of these sections had well written descriptions of the models' biology, experimental details, and results. This is a field that is likely to have exciting developments in the near future.

Another burgeoning field of research is animal COPD models. Cigarette-smoke-induced COPD models and animal models of exacerbations are discussed in 2 separate chapters. The discussion on the smoke-induced COPD model was authoritative and

well written, but it lacked a description of the methods. Animal modeling of COPD exacerbations is just emerging, but the authors did an excellent job of laying the groundwork of how such models should be developed.

In summary, modeling exacerbations of asthma and COPD is a growing research subject, and this book provides an excellent overview of the field and the contemporary knowledge of the biology underlying exacerbations. The book should be useful for investigators interested in asthma and COPD exacerbations and who want to model them as part of their research.

Sanjay Sethi MD

Division of Pulmonary, Critical Care,
and Sleep Medicine
Veterans Affairs Western New York
Healthcare System
State University of New York at Buffalo
Buffalo, New York

The author of this review reports no conflict of interest.

Pleural Diseases, 5th edition. Richard W Light MD. Philadelphia: Wolters Kluwer/Lippincott, Williams & Wilkins. 2007. Hard cover, illustrated, 427 pages, \$139.

Pleural disease is a common clinical entity that may present to general physicians and respiratory physicians alike. This is an expanding field, and a subspecialty within respiratory medicine, so it unsurprising that there have been important recent clinical and basic-science advances.

Pleural Diseases is a well written and thorough textbook by one of the world's leading authorities on pleural disease. It is aimed at respiratory physicians and pleural disease researchers, and it is authoritative and comprehensively referenced. It offers a detailed review of pleural anatomy and physiology in health, the effects of pleural disease on normal lung physiology, and all aspects of clinical pleural disease, and encompasses investigation (radiological, biochemical, microbiological), clinical manifestations, and treatment.

The book has 30 chapters, the first 3 of which address the basic structure and function of the pleural space. Two chapters then cover animal models and cytokines. The rest of the book addresses clinical manifestations and management. There are chapters on radiology, clinical manifestations, and

useful tests, and a well written approach to the patient with pleural disease, which will be particularly relevant to and useful for practicing clinicians. Eighteen chapters cover specific pleural disease syndromes, and the final 3 chapters are devoted to specific procedures associated with pleural disease, such as thoracentesis, pleural biopsy, chest drains, and medical thoracoscopy.

This is the fifth edition of **Pleural Diseases**, which was first published in 2001. Since then there have been substantial advances in the understanding of basic mechanisms, and some landmark clinical studies. The recent advances are covered in excellent detail, and presented in a readable manner. Three new chapters have been added since the previous addition: one on physiological effects of pleural effusion and pneumothorax, one on cytokines in pleural disease, and one on animal models of pleural disease.

The book is well laid out and has clear and appropriate illustrations and tables. Algorithms are often used to good effect, are based on current European and American guidelines, and are likely to be very useful to clinicians.

There is good depth in the subject matter. Common scenarios (eg, transudative pleural effusion, malignant effusion, pleural infection, and pneumothorax) are dealt with thoroughly, current evidence is evaluated, and there are descriptions of pathways for investigation and treatment on the basis of this evidence. Less common and more "esoteric" pleural diseases, such as chylothorax and pleural effusion in pregnancy, are well covered.

The chapter order is lucid. The book starts with basic structure and function, then describes research tools and models, then generic investigations, then the common pleural diseases, then the less-well-known pleural diseases.

Though pleural disease is common, there is relatively little evidence from randomized controlled trials to inform clinicians on optimal treatment or investigation strategy. Where good-quality evidence exists, the book deals with it in detail and presents clear and logical arguments about study findings and conclusions. Where there is a lack of good-quality evidence, the author intelligently summarizes the current evidence, such as it is, and offers a personal opinion on the correct management or investigation strategy. The book occasionally suggests management strategies that are "current

practice” but may not be founded in good-quality evidence (eg, poor prognostic indicators in pleural infection are suggested but have not been consistently borne out by existing studies), and it is the author’s own opinion and conclusions that are quoted. This is both valid—given the lack of evidence—and valuable to clinicians, for whom the opinion of an experienced pleural disease researcher and practitioner is highly valued. It also reflects the poor evidence base in this field.

The book is understandably focused on an American audience. For example, most authorities in pleural disease in Europe would use sterile talc as the agent of first choice for pleurodesis, whereas this book recommends avoiding sterile talc because of concerns about acute respiratory distress syndrome. Recent evidence suggests that acute respiratory distress syndrome is not a common problem with European talc, which

may be related to a difference in particle size between that found Europe and the United States.

The definitive textbook on pleural disease, *Textbook of Pleural Disease*, edited by Light and Lee, brings together a long list of prominent authors from around the world, and deals with every aspect of pleural disease in some detail. **Pleural Diseases** is not as comprehensive or detailed, but it does not attempt to achieve the same aims. This is, rather, a text that thoroughly updates the clinician on the current state of evidence in the practical investigation, management, and research of pleural disease.

In summary, **Pleural Diseases** is an excellent and well referenced book that will bring the reader up to date on important research. It will be valuable for researchers, with good sections on experimental models, recent advances, and important future research directions. The chapters on basic

mechanisms and physiology are well written and essential reading for those entering this field. The book is also an excellent practical companion for practicing clinicians with an interest or substantial practice in pleural disease, and I highly recommend it. The book aims to better the management of patients with pleural disease and to provide an up-to-date reference, and it achieves both of these aims in a readable and well-laid-out format.

**Najib M Rahman BM BCh
MA (oxon) MRCP**

Oxford Centre for Respiratory Medicine
Churchill Hospital
Nuffield Department of Medicine
University of Oxford
Oxford, United Kingdom

The author of this review reports no conflict of interest.