and mid-brain, disorders of the hypothalamus, Kleine-Levin syndrome, Prader-Willi syndrome, diffuse organic neurologic disorders, and rare disorders such as African sleeping sickness. The author also lucidly describes the disease processes of common disorders such as Parkinson's disease, and how the disease impacts sleep. This aspect of the book would be highly useful to a respiratory therapist to provide optimal care of patients with secondary sleep disorders that arise from neurologic diseases and other medical disorders. This section also includes a nice description of how sleep can influence respiratory conditions, including asthma, chronic bronchitis, chronic obstructive pulmonary disease, cystic fibrosis, and parenchymal lung diseases.

The book is very well organized from a topical standpoint, though sometimes the subheadings and the subsubheadings are difficult to distinguish from each other. The subsubheadings are in italics, which I think readers will find helpful, especially in the chapter on motor disorders, where it is not always clear whether clinical features are specific for one disease or many. The references are up to date into 2005. An example is in the first chapter's review of the classification of sleep disorders, which was released in April of 2005. The index is carefully cross-indexed, which makes it very easy to find a diagnosis or symptom and find the appropriate material in the text.

In conclusion, **Sleep Medicine: A Guide to Sleep and Its Disorders** is an up-to-date, easy-to-read, well-organized text that examines sleep and wake mechanisms and frequent presenting symptoms of sleep disorders. It will serve as a reference for respiratory therapists, especially when patients with different sleep disorders come to the laboratory for evaluation. Although it does not focus on the technical aspects of sleep medicine, it does provide an easy-to-understand introduction to the spectrum of sleep disorders.

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Cystic Fibrosis in the 21st Century. Andrew Bush, Eric WFW Alton, Jane C Davies, Uta Griesenbach, Adam Jaffe, editors. *Progress in Respiratory Research*, volume 34, CT Bolliger, series editor. Basel, Switzerland: S Karger. 2006. Hard cover, illustrated, 329 pages, $180.

This is an imperiously named textbook, considering that the 21st Century was only 4 years old when these chapters were written. But once you get past that hyperbole and into the book, you will find it beautifully written and well organized. Many of the world's experts have been brought together to produce this superb reference.

There are 40 short and well-referenced chapters, which cover all aspects of the science and clinical care of the patient with cystic fibrosis. Each chapter provides a concise and up-to-date review. However, only Chapter 38 has direct clinical relevance to the practice of respiratory care. That chapter is a "must-read" for all respiratory therapists who care for patients with cystic fibrosis.

The book is well illustrated and comprehensive. The first half of the book will be a hard slog for readers who are not basic scientists. Unfortunately, some of the clinical chapters are not quite as up to date or accurate as is the basic-science half of the book. As an example, Chapter 23, on lung transplantation, has a number of inaccuracies in its explanation of the pathogenesis of cystic fibrosis lung disease This book best serves as a reference text. The research directions are stated clearly, and for the most part the clinical recommendations are sound and evidence-based. This book is an outstanding reference for scientists and will be of interest to physicians who care for patients with cystic fibrosis, but it will be of passing interest for respiratory therapists who primarily provide clinical care for persons with cystic fibrosis.

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Lung Surfactant Function and Disorder. Kaushik Nag, editor. *Lung Biology in Health and Disease*, volume 201, Claude Lenfant, executive editor. Boca Raton, Florida: Taylor & Francis. 2005. Hard cover, illustrated, 493 pages, $199.95.

Volume 201 of the *Lung Biology in Health and Disease* series is devoted to lung surfactant function and disorder. It covers all major areas of research about lung surfactant, including chemistry, biochemistry, physics, genetics, computer science, physiology, and medicine. The book has 19 chapters and 3 parts. Each chapter is written by several well-known investigators, and the authors hail from many parts of the world.

Part 1 consists of chapters on the composition, structure, and function of lung surfactant. Surfactant phospholipids composition in children changes both with postnatal development and with disease. The first part of Chapter 1 describes surfactant phospholipids molecular species in adult lungs, and during fetal and postnatal development. The last part of this chapter discusses modification of surfactant phospholipids molecular species in various lung diseases. Chapter 2 discusses surfactant composition, synthesis, and secretion. This chapter emphasizes how temperature regulates the biophysical properties of surfactant and discusses in detail the factors that regulate secretion of surfactant, such as ventilation, phorbol esters, vasopressin, lipoproteins, and adrenergic and cholinergic agonists. Both Chapters 1 and 2 are valuable for learning the basics of surfactant.

The next 2 chapters are dedicated to hydrophilic surfactant proteins, surfactant proteins A and D. The discussion covers detailed structure, tissue distribution, and function of these proteins in the context of other structurally related proteins such as mannose-binding lectin and the first component of complement C1q. There is specific emphasis on various domains of these proteins, which, after binding to surfactant and microbial membranes and alveolar and inflammatory cells, perform different functions, ranging from protection against alveolar collapse to innate host defense. Several receptors and/or binding proteins for surfactant proteins A and D are also discussed.

Chapter 5 addresses the importance of hydrophobic surfactant proteins B and C: their evolutionary origin, biological and clinical importance, and structure-function relationships. All 3 chapters on surfactant pro-