researchers in the field of mucus-clearance disorders.

Mark R Elkins BPhty MHSc
Department of Respiratory Medicine,
Royal Prince Alfred Hospital
Sydney, Australia

Recent Advances in the Pathophysiology of COPD. Trevor T Hansel and Peter J Barnes, editors. (*Progress in Inflammation Research* series, Michael J Parnham, series editor). Basel: Birkhäuser Verlag. 2004. Hard cover, illustrated, 231 pages, $169.

Until recently, research into chronic obstructive pulmonary disease (COPD) had been neglected, as compared to the efforts expended to address issues in asthma. This small multi-author text, edited by Trevor Hansel and Peter Barnes, is another welcome sign that COPD is beginning to receive research attention appropriate to its growing public health importance. The book is a compilation of 12 chapters that cover a broad range of COPD issues, each prepared by an expert or experts in the field. Topics range from the genetics of COPD, in the first chapter, to the new drugs for COPD, based on advances in pathophysiology, in the last. The information presented is suitable for a small audience of respiratory-interested readers; the information is somewhat removed from the clinical setting, despite its chapters on "Lung Function in COPD" and "Computed Tomography Scans in COPD," and would seem to target researchers and research students in the subject. As part of the *Progress in Inflammation Research* series, it has a place in every COPD researcher's library.

Each chapter provides an overview rather than an exhaustive review of its subject, with chapters averaging 20 pages, including references (approximately 50 references in most instances). Chapter 1 offers a review of COPD phenotypes, approaches to identify susceptibility genes, candidate genes studied in COPD, and the future of genetics of COPD. In other words, it explains the basics, states our current knowledge, and gives us perspectives—the approach taken throughout the book. The chapters on pathology, lung function, and computed tomography cover a more general view of the issue.

The next 3 chapters, "Oxidative Stress in COPD," "Proteinases in COPD," and "Mucus Hypersecretion in COPD," are specifically related to the role of products released from inflammatory cells, and also enzymes, mediators, and inhibitors in COPD.

The next 2 chapters review 2 research and clinical technologies that are widely used to asses respiratory inflammation: bronchoalveolar lavage and induced sputum collection and examination. There is also a chapter about a more recently developed, noninvasive way to monitor lung inflammation: the assessment of exhaled gases and condensates, including nitric oxide and exhaled breath condensate.

Chapters on systemic features of COPD and pulmonary rehabilitation offer clinically pertinent information, though the former is more closely linked to inflammation issues than the latter. The concept of COPD as a disease not limited to the lung parenchyma but also having systemic features is welcome in a book on inflammatory mechanisms of lung disease.

The last chapter, "New Drugs for COPD Based on Advances in Pathophysiology," describes the need for new drugs and the rationale for them, and, based on the pathophysiology of COPD, identifies potential targets for novel pharmacotherapies. Smoking cessation, immunosuppressants, antioxidants, inducible nitric oxide synthase inhibitors, inhibitors of cell signaling, protease inhibitors, mucoregulators, leukotriene B4 (LTB_4) inhibitors, adhesion-molecule blockers, anti-fibrotic therapy, and alveolar repair all receive attention. This review of the current alternatives and the future directions is a great conclusion to the book.

Despite its virtues, one limitation of this book should be noted. As good as its text is, the illustrations are minimal and in most chapters limited to simple black-and-white diagrams. This paucity of illustrations is striking in some chapters. The chapter on computed tomography in COPD has just 2 small images. The chapter on pathology has none.

Marcelo Tadday Rodrigues MD
Kenneth R Chapman MD MSc
Asthma Centre and Pulmonary
Rehabilitation Program
Toronto Western Hospital
University Health Network
University of Toronto
Toronto, Ontario, Canada

Essentials of Pediatric Intensive Care. Charles G Stack FRCA and Patrick Dobbs FRCA. London: Greenwich Medical Media/Cambridge University Press. 2004. Soft cover, 241 pages, $24.99.

The handbook **Essentials of Pediatric Intensive Care**, by Charles Stack and Patrick Dobbs, is described by the authors as a guide for those practitioners who do short-term rotations in caring for critically ill children or who look after children transiently before the children are transferred to a pediatric intensive care unit (PICU). The book is divided into 3 sections, beginning with the section on the basic precepts of pediatric critical care, followed by a section on specific problems encountered in the PICU. The book closes with a guide to medications commonly used in the PICU.

The greatest challenge for a reviewer is to attempt to read the book with the eye of the intended audience. This is made more challenging when the field practiced by the reviewer is reduced to a handy compendium designed for the novice to pull from a white coat and reference. I fear I may have been unable to put aside my fondness for the complexity of the field, and so my review may be biased from that standpoint. However, the perspective of a novice demands that a handbook should guide not simply by reviewing the field, but by encouraging investigation when the handbook may not be a sufficient source.

The first section, on basic concepts in pediatric critical care, includes chapters on the physiologic and anatomical differences between the young and old, neonatal problems in the PICU, resuscitation, trauma, airway and ventilation, circulation and rhythm disturbances, sedation and analgesia, fluids and electrolytes, transportation, and the death of children. These chapters represent a fairly well-rounded introduction to the broad principles encountered in the PICU.

In the first chapter, "Differences Between the Child, the Neonate and the Adult," the authors review respiratory, cardiac, neurologic, and other physiologic and pharmacologic differences between these groups. Although in this short chapter the authors list many of the important differences between the 3 age groups, in the attempt to present these principles as a collection of lists, the inherent summarizing simplifies complex principles and drains controversy and debate from the subject.

The following chapter, on neonatal problems, is brief; it enumerates some of the