
The editors dedicated this book to “interventional pulmonologists throughout the world-past, present and future.” According to the European Respiratory Society and American Thoracic Society, the interventional pulmonology subspecialty encompasses “the art and science of medicine as related to the performance of diagnostic and invasive therapeutic procedures that require additional training and expertise beyond that required in a standard pulmonary medicine training program.” These procedures include bronchoscopic and pleuropneumonic techniques used to diagnose and treat a spectrum of thoracic disorders. Interventional pulmonologists might encounter patients with a variety of clinical disorders causing dyspnea, cough, hemoptysis, wheezing, stridor, or respiratory insufficiency. Patients may have manifestations of connective-tissue disease, primary lung cancer, or symptoms related to other neoplastic disorders, trauma and burn injury, foreign-body inhalation, iatrogenic disease, and perioperative complications.

From this perspective, the authors of Interventional Pulmonary Medicine accomplished their goal of thoroughly covering the topic. They do that from a procedure-centric rather than a patient-centric point of view. While the intended readership is composed of physicians specializing in airway or pleural procedures, in this field, like in sports or business, one is only as good as one’s team. For that reason, certain aspects of the book (eg, the chapter on sedation, analgesia, and anesthesia for airway procedures) will be particularly useful to therapists and nurses.

Most comprehensive textbooks on interventional pulmonology are more than 3 to 10 years old. In a field where technology and understanding of disease processes has advanced substantially within the last 5 years, there is a need for an updated text-book and thus the publication of this book is timely.

This multi-author text is volume 230 of the Lung Biology in Health and Disease series, with Lenfant as executive editor. Divided into 16 chapters, this hard-cover book is written by 27 different experts. The lack of cohesion among chapters is noticeable despite the editors’ effort to implement a rigid structure. The book uses a procedure-based rather than disease-specific table of contents and is not presented in a case-based format.

The opening chapter provides a review and an update on rigid bronchoscopy instruments and has a different structure from the subsequent chapters. Some chapters address only one intervention (eg, airway stents), while others include 3 or 4 procedures more or less related to each other (eg, laser bronchoscopy, electrosurgery, argon plasma coagulation, and micro-debrider). Certain procedure-related sections include the following headings: history, scientific basis, technical aspects, indications and complications, while others include a different format: introduction, background, literature, limitations, and conclusions.

The book does examine the full spectrum of the available interventional pulmonology procedures, including therapeutic bronchoscopy, advanced diagnostic bronchoscopy, and medical thoracoscopy, and several related procedures. The book is slim, compared with the previous edition from 2004 (257 versus 689 pages). While many chapters from the previous edition have been removed, in its current format this book is more readable and its size may allow one to fit it in a large pocket of a medical coat. The most original contributions to this volume are the chapters on bronchoscopic treatment of asthma and COPD. These are new and important additions, given the prevalence and the global burden of these disorders. In a more concise manner, compared with the previous edition, the book addresses novel optical and acoustic technologies for early diagnosis and staging of lung cancer. Guidelines for training in interventional pulmonology are addressed in a chapter on education. The “Advanced Bronchoscopic Techniques for Diagnosis of Peripheral Pulmonary Lesions” and “Bronchoscopic Treatment of Peripheral Pulmonary Nodules” chapters are also new additions and presented in an original format. They address recent advances and novel concepts in minimally invasive bronchoscopic interventions such as ultrathin bronchoscopy, electromagnetic navigation, endobronchial ultrasound as well as the bronchoscopic placement of markers to assist surgical resection or radiation therapy for pulmonary nodules, intra-tumoral injection of chemotherapeutic agents, and bronchoscopic-guided radiofrequency ablation.

Throughout the chapters, there are useful tables summarizing biological effects of laser applications, differential diagnosis of central airway obstruction, indications and complications of various endobronchial therapies, and diagnostic yields of medical thoracoscopy for pleural effusions, to mention just a few. At the conclusion of each chapter there is an up-to-date list of references. In fact, virtually all chapters are well referenced and function as evidence-based reviews.

The pictures differ in quality and they are all in black-and-white. While this format may be adequate when the authors illustrate various instruments used in interventional pulmonology, it is not useful for understanding many bronchoscopic and thoracic images presented. Given the relatively small size of the book, many bronchoscopic pictures are very small, which further limits interpretation. For those wishing to quickly review a particular procedure or technology, a comprehensive index is included. For those interested in a particular disease entity it would have been beneficial to incorporate more disease-specific terms in the index.

This is a great book for the busy health-care providers who desire a concise answer to an interventional pulmonary procedure-related question. On a personal note, I will continue to use electronic databases and reference materials as the main resource for my clinical and research activities. I have already used this book, however, and I will continue to use it as a resource of well ref-
enanced reviews of interventional pulmonary procedures.

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How to Write, Publish, and Present in the Health Sciences: A Guide for Clinicians and Laboratory Researchers.

When I received the invitation to review this book, I noticed that it was written by Thomas Lang. He coauthored, with Michelle Secic, an earlier book that I admire, “How to Report Statistics in Medicine” (first edition 1997, second edition 2006), which was also published by the ACP [American College of Physicians] Press. I use that book as a reference myself and cite it as a resource for others. So I jumped at the chance to read another book by him, and this new book exceeded my expectations.

Given the new book’s title, it is not surprising that most chapter headings start with “How to” (eg, how to write effectively; how to write efficiently; how to display data in tables and graphs; how to write an abstract; how to write a grant proposal; how to write a journal article reporting original research; how to prepare drawings and photographs for publication; how to document biomedical images for publication; how to publish in a scientific journal; how to prepare and present a scientific poster; and how to prepare and present slides). The book also includes an overview of writing and publishing in the health sciences and a chapter on ethics in research and publishing.

Only one chapter overlaps between the old and new books. In this more recent book Lang gives a paragraph-by-paragraph description of how to write a report of original research, but refers to his earlier book for similar descriptions of “randomized controlled trials, cohort and longitudinal studies, case-control studies, surveys and cross-sectional studies, systematic reviews and meta-analyses, diagnostic test characteris-
tics, time-to-event (survival) analyses, economic evaluations (eg, cost-effectiveness analyses), decision analyses, and clinical practice guidelines” (page 158).

Lang addresses both clinicians and laboratory researchers who need to write, publish, or present to advance their careers. He uses examples and cites journals from both fields. His chapter on documenting biomedical images for publication has separate sections for clinical images and laboratory images. He also contrasts the conventions between the fields. He explains that most checklists for abstracts apply to clinical research, but not laboratory research; basic science journals are more likely than clinical journals to allow titles with declarative sentences giving results; and life science journals use different citation formats than social science, nursing, or basic science journals.

Lang’s diverse experience shows in his sound advice, practical tips, and range of knowledge. He has edited and written about medicine and science and also taught scientific editing and writing. He advises young academics that books or book chapters rarely count as scholarly activity, and advises author groups to appoint a writing coordinator. He warns that journals may require authors to convert software field codes; posters made up of panels are easier to handle on a plane than posters in a mailing tube; and slides in portrait format may run off the screen when projected. Lang helped develop standards for reporting medical research, and so knows the consensus guidelines. He has taught medical writing internationally, so is familiar with United States, European, and Japanese policies on submitting nucleotide or amino acid sequence data, and with the Chinese Editology Society of Science Periodicals.

Lang disagrees with the medical writing establishment very gently. Checklists of requirements for reporting abstracts try to assess “the quality or validity of the research, rather than the adequacy of the abstract in communicating the relevance of the research to the intended readers” (page 102). “Journals using the AMA [American Medical Association] Manual of Style usually specify that conclusions not be indicated in the introduction, but a case can be made that they should be …” (page 149).

Lang gives his opinions subtly. “[Investigators] found that trials with structured abstracts were no more completely reported than were trials with unstructured abstracts. Oh well…” (page 107). “Some journals require industry-conducted statistical analysis to be verified by an independent statistician as a condition of publication. Curiously, no such condition is made for analyses by university-based statisticians” (page 155). After describing criticisms of medical communication companies, he merely says, “These practices are unethical, of course, but still common enough to be of concern” (page 200).

I wish Lang expressed his views more strongly and editorialized more. For instance, he could give strong warnings to authors about journals with publication charges and pay-for-publication journals. Since case reports are the fall-back for trainees fulfilling a requirement to publish, Lang’s list of 4 journals that publish only case reports would seem to be very helpful. However, he does not mention that one of those journals requires an annual fellowship fee of $185 for submitting a report, or that another has an article processing charge of $790 for articles accepted for publication.

Lang illustrates concepts with examples, but he could have given more. He describes cases of suppressed research findings and early release of information critical to public health. However, he also could have described cases of publishing manipulated images and of failure to disclose conflicts of interest.

Lang describes some background research, but he could have told more. He cites investigations on how the Health Insurance Portability and Accountability Act affects research, how trial registries affect publication, and the prevalence of ghost authors. However, he also could have cited investigations on the role of the last author in different specialities, how redundant publication affects meta-analyses, and the prevalence of ghost authorship. He applies “lessons from … evidence-based writing and editing” (page 29), but does not tell us how that evidence was obtained or what it showed.

Since the book was written almost entirely by a single author, there is little overlap between chapters, and that overlap is cross-referenced. (Kevin DaSilva provided information and images for the section on documenting laboratory images.) Lang refers the reader to http://www.PhDposters.com for illustrations of posters. In fact, 5 of the 9 poster examples in this book also appear on that web site. While Lang cites each
investigator as the poster’s source, he might have explained the relationship between him and http://www.PhDposters.com better.

An appendix contains “The Value of Systematic Reviews as Research Activities in Medical Education,” based on an article Lang published previously. While the topic is interesting, it seems irrelevant to the scope of this book.

A book titled “How to Write, Publish and Present” should do those things exceptionally well, and Lang and the ACP Press met the challenge. The book is printed on clean white matte paper. The table of contents is listed twice, first in an abbreviated version, then in an expanded version. Switching between the 2 is like clicking on a web link. Plenty of white space allows wide margins, with quotations from Confucius, Socrates, Abe Lincoln, Edward Tufte, Ansel Adams, James Thurber, and others.

The reference numbers, bullets, and subheads are in a subdued contrasting color. The typefaces and type sizes being described are used to illustrate the point. The colors in photographs, posters, and slides reproduced well. The index is complete, with helpful cross-references between initialisms and expanded terms. For instance, the index includes both GIF and Graphic Interchange Format. The only errors I noticed were the outlining in Table 4-6: misaligned hanging indents in references numbered above 9; arrows possibly left out of a Program Evaluation and Review Technique (PERT) chart (Figure 6-2); and a few journal names not being italicized.

Published in 2010, the book is up to date, with references and web site accession dates through 2009. Lang’s advice suits the current mode of writing. He suggests that “if a paragraph takes up more than one computer screen, consider breaking it into 2 or more paragraphs” (page 45) and notes that dot charts and box plots can be created in word processing programs. He includes discussions of electronic publications, submitting a manuscript online, and digital imaging.

This book is comprehensive and useful to a wide audience. Unlike many books on scientific writing and publishing, this one includes chapters on preparing posters and slides. Its advice and examples apply to both clinicians and basic scientists. If I had to choose one book on this topic, this is the one I would pick.

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Critical Care Medicine: The Essentials is brought to us again by Drs Marini and Wheeler. This is the fourth edition of the book. The first edition was published in 1989, and since then the book has assumed its place as one of the core textbooks of critical care medicine. The authors describe the book as an in-depth overview of critical care medicine. While attempting to remain clear and concise, their goal was not to create a quick-look reference book to be carried on rounds; rather they wished to present a comprehensive overview of critical care medicine. I would argue they largely accomplished this goal.

Critical Care Medicine: The Essentials is divided into 2 sections. Section 1, entitled “Techniques and Methods in Critical Care,” comprises 19 chapters. The initial chapters describe in detail cardiopulmonary physiology, both the normal and abnormal, and how to measure cardiac and pulmonary function. This is an important starting place, as good practitioners of critical care must be good physiologists. Our field requires a solid understanding of normal physiology and of how to measure the body’s responses when things go awry. For example, Chapter 2 provides a detailed description of hemodynamic monitoring, including use of the pulmonary artery catheter. This is an excellent discussion of the pulmonary artery catheter. The use of this tool has dropped dramatically over the last several years, and many clinicians are losing the ability (or not even learning) to understand and interpret pulmonary artery catheter measurements. The authors provide a good review of this information. Perhaps as important, they discuss insertion techniques, troubleshooting, and how to verify the accuracy of measurements. Section 1 continues with chapters ranging from mechanical ventilation to disorders of acid-base and electrolytes. The chapters on mechanical ventilation are well organized. The depth of material covered will be of use to both the student who has not yet had an introduction to mechanical ventilation and the practicing clinician trying to understand the ever increasing number of new ventilation modes.

General supportive care and quality improvement are discussed at the end of Section 1. Chapters focusing on these topics are welcome, as our understanding of the value of an interdisciplinary critical care team and effective communication within the intensive care unit continues to grow. Furthermore, discussions of cost-containment are becoming extremely important as we enter into a new era of health-care reform.

Section 2, entitled “Medical and Surgical Crises,” has 19 chapters and focuses more on specific medical events commonly seen within the intensive care unit. When I first picked up the book I began reading from the beginning. While this provided a good review of cardiopulmonary physiology, I soon found myself jumping around from chapter to chapter, depending on the particular clinical questions I had. For example, upon taking care of a patient with potential non-convulsive seizures following a cardiopulmonary arrest I turned to chapter 34, on neurological emergencies. Later, I opened to chapter 26 to review infections in the immunocompromised host. I think most readers will utilize the book in a similar fashion. Fortunately the book is well organized and the reader can easily open it to relevant sections. Chapters are generally organized by organ system. Within each chapter there are easily identified sections dedicated to the illnesses one might expect to see in the intensive care unit. Chapters build upon each other and flow well, but are also thorough enough to stand alone. Each chapter also begins with a list of numbered key points. These numbers can also be found in the margins throughout the same chapter. I found this particularly useful. I could scan the key points at the beginning of each chapter and if I had questions about one of the key points I could rapidly search the chapter to find the associated number in the margin.

The primary audience for this book is medical students and residents. However, I believe the book provides more than enough
depth to be useful to even the most seasoned critical care clinician. The authors use a great number of tables and figures to supplement the text throughout the book. These are especially helpful throughout the physiology chapters, and for the most part are well explained. The tables provide summaries of information, and the figures provide visual explanations of what can be difficult concepts for many readers to grasp. However, some figures remained difficult to understand even after rereading the text and figure legends several times. Furthermore, given the breadth of knowledge the authors are attempting to convey, the book can sometimes be dense and difficult to read. Since the book is advertised as ideally suited for students and residents, it would have been helpful to try to further simplify some concepts when possible. The text has more typographical errors than I would have expected, but they rarely detract from concepts being discussed.

Rather than a collection of chapters authored by different people, Critical Care Medicine: The Essentials was written entirely by Drs Marini and Wheeler. The advantage of having a limited number of authors is the single voice woven throughout the entire book. The reader does not have to adjust to chapters written by different authors with varying styles. However, one potential down side is that the authors’ opinions and biases are carried throughout the entire book rather than exposing the reader to a number of different views. Even the authors admit they have “tried to extract what seem to be those grounding bits of knowledge that have shaped and reshaped our own approach to daily practice,” and that their “tips and tricks . . . have been sprinkled liberally throughout [the book].”

This is the fourth edition of Critical Care Medicine: The Essentials. The third edition was published in December 2005. In comparison, 8 years passed between each of the previous editions. The fourth edition touts an enhanced discussion of abdominal computed tomography, new advanced cardiac life support guidelines, and a few other new topics. I did not think the new material in the fourth edition was substantive enough to justify purchasing it if you own the third edition. However, for the reader who either has an older version or does not yet have an intensive care reference text, Critical Care Medicine: The Essentials should definitely be considered.

In summary, Critical Care Medicine: The Essentials provides a thorough review of cardiopulmonary physiology, an understanding of which is crucial for the expert critical care clinician. The text also provides comprehensive analyses of critical care methods and well-covered discussions of the medical and surgical problems seen among intensive care patients. I would recommend this book as a reference text for all with an interest in critical care.

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