

In a crowded landscape of anesthesiology textbooks, from comprehensive and specialty tomes to quick-access online resources, every work should be judged by what specific niche it fills. No resource can meet the needs of all audiences; each should be judged by how it serves its intended audience.

Reviewing the newly updated version of Stoelting’s Pharmacology and Physiology in Anesthetic Practice, 5th Edition and considering its intended audience are easy. The authors, recognized experts in their fields, and creators of numerous other textbooks and chapters on these subjects succeeded at accomplishing their stated goal of providing a broad and substantial overview of physiology and pharmacology that is both clinically relevant and highly readable.

Since the last edition, the chapters have been reorganized; after initial introductory overview of chapters on physiology and pharmacology principles, the subsequent chapters are now grouped by organ system. The organ system physiology chapters contain the essential knowledge that an anesthesiologist should know. Clarity is a writing skill of the highest order, and the authors have mastered this such that an astute freshman in college should be able to grasp many of these concepts and garner a rich appreciation of the applied clinical physiology. If you seek a concise, broad overview of physiology, look no further. The depth is, generally speaking, sufficient for clinical practice and should whet the appetite for long stretches of reading, a handbook or an e-book through a computer screen is no substitute for the “real thing.”

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The chapters on organ system pharmacology are of a similar high caliber; however, presenting an overview of clinical pharmacology is a notably greater challenge. The “basics of pharmacology” chapter crisply presents critical and highly clinically applicable pharmacologic principles for the practicing anesthesiologist. Unlike the physiology chapters, however, the technical complexity makes it a bit inaccessible to those who have had no exposure to pharmacology. Chapters on drugs we administer daily, such as volatile anesthetics, intravenous hypnotics, and analgesics are right on target and should be praised for their efficiency and clarity. Other chapters, such as those on neuroleptics or chemotherapy, attempt to provide a general overview and brief synopses on a vast number of drug classes we encounter, rather than administer, and on specific examples in common use. They achieve their aims and add the occasional clinical pearl. However, there will be fewer generalizable concepts to be learned, and one might feel inundated with many specific details, which may be unavoidable in this discipline. When used as a clinical reference, the descriptions are succinct and useful although they occasionally inadequately cover perianesthesia concerns or drug–drug interactions. The use of two indices, one for drugs and the other for subjects, makes referencing fast and easy.

In total, this book achieves its goal, fills it niche quite well, and is highly recommended. It nicely supplements or supplants similar portions of the major anesthesiology textbooks. It is very well suited for those anesthesiologists who want a highly readable, concise review of physiology and pharmacology and may best serve those who feel distant from their training. It is also very well suited for medical students and nonphysician anesthesia providers, as well as other clinicians seeking to improve their understanding of clinical physiology.

The 3rd edition of the accompanying handbook, Stoelting’s Handbook of Pharmacology and Physiology in Anesthetic Practice, is a distilled, bullet-point version of the larger text. Each chapter is written by the same author(s) as in the larger text, and the reductions are well chosen. Numerous figures, tables, illustrations, and the use of color headings make it visually pleasing and an efficient quick-use resource. It is well suited for teaching purposes and for clinical use, and although it is unlikely that some of the topics will need to be quickly accessed during clinical care, they are invaluable for bedside teaching.

Each book also includes access to an electronic version of itself. The e-version of the larger text may be both more accessible and readable than the e-version of the handbook. The e-versions, presented using the Inkling platform, provide visually pleasing content available on desktop computers or through Apple or Android apps. These also include full-text search and full-resolution figures, as well as the option to download a copy of individual chapters or the entire text for use without an active Internet connection. The handbook presents a better value at $74.99 than the larger text at $169.99, but for long stretches of reading, a handbook or an e-book through a computer screen is no substitute for the “real thing.”

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