

Pharmacology. Principles and Practice. Edited by Miles Hacker, Kenneth Bachmann, and William Messer. Academic Press, Burlington, MA. 2010. xi + 594 pp. 22 × 28 cm. ISBN 978-0-12-369521-5. \$89.95.

In the preface to the book the editors note that there is a paucity of textbooks that deal with pharmacology as a science rather than as a reservoir of therapeutic information for clinical practitioners. This book is intended to remedy this deficiency, and in general, it is a successful accomplishment. The 21 multiauthored chapters cover such diverse topics as (inter alia) dosage forms, membrane structure and phenomena, receptor sites, ion channels, drug distribution and metabolism, pharmacokinetics, and role(s) of medicinal chemistry and chemists in the drug discovery process. The chapter on drug discovery presents some illustrative case studies that should be of some little interest to the reader. All of the chapters are grounded on basic science concepts rather than on a patient-oriented approach. The book is aimed at students in pharmacology, although the editors' suggestion that the volume is suitable for advanced undergraduate students may be a bit of an overstatement. Additionally there is much information relevant to the interests of graduate students in medicinal chemistry, and many of the chapters utilize chemical concepts as a part of and basis for the narrative and explanations.

Chapters are well written with few typos or other obvious errors. There is lavish use of multicolored graphs,

diagrams, and illustrations that facilitate comprehension of the topics covered. It is noteworthy that there are no literature citations interspersed throughout the narrative in any chapter (which citations tend to make reading for comprehension somewhat tedious), but there are useful literature references listed at the end of the chapters. A minor annoyance to this reviewer was the constant use by some authors of large numbers of unfamiliar, highly specialized abbreviations (“... MPTP is activated to MPP⁺ by MAO-B”). Definitions of these abbreviations are provided in the text, but they are still difficult to retain as the reader proceeds through the narrative.

Overall, this book is an excellent treatment of pharmacology as a science, and it can be recommended as a reference/textbook for graduate students in pharmacology and in medicinal chemistry as well as for medicinal chemistry researchers who have had limited exposure to pharmacology.

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