

Book Reviews

Handbook of Drug Metabolism. Edited by Thomas F. Woolf. Marcel Dekker, New York. 1999. xi + 596 pp. 18 × 26 cm. ISBN 0-8247-0229-8. \$225.00.

This book provides a broadly based introduction to both basic and applied aspects of drug metabolism. Although the nominal format is that of a series of individual reviews organized into four sections, the first two sections ("Part 1 Fundamental Aspects of Drug Metabolism" and "Part 2 Factors Affecting Drug Metabolism") blend well to provide fundamental concepts in biotransformation, pharmacokinetics, hepatic function and morphology, pharmacogenetics, and the induction and inhibition of drug-metabolizing enzymes. An example of the connections among chapters in the first two sections involves the fundamental principles relevant to enzymes that are active in the biotransformation of drugs. While the chapters in Part 1 primarily deal with oxidative biotransformations and glucuronidation, the reviews in Part 2 incorporate less detailed fundamental aspects of a much larger array of major drug-metabolizing enzymes. These basic principles are covered in the context of individual chapters focusing on inhibition, induction, and drug interactions as well as within a chapter that deals with drug metabolism in pulmonary tissues.

Part 3, entitled "Technologies", focuses on the application of a variety of methods to the study of drug metabolism. Examples of the technologies presented include various uses of recombinant DNA techniques,

subcellular fractions, hepatocytes, isolated perfused liver preparations, Caco-2 cells, and isolated enzymes. The chapters of this section provide clear descriptions of methodology with an appropriate balance of theoretical principles and specific laboratory protocols. Finally, Part 4, entitled "Metabolism in Drug Discovery and Development", comprises two chapters that focus on preclinical and clinical drug metabolism studies. These chapters highlight various contemporary applications of drug metabolism studies in the identification and development of drug candidates in the pharmaceutical industry.

Both the index and the detailed outlines of each chapter provide ready access to individual topics, and the chapters are thoroughly referenced, with citations generally updated through 1997. While the book would serve well as a textbook for a graduate course in drug metabolism, the price may preclude widespread use for this purpose. Nonetheless, this book will clearly serve as a valuable reference text for a broad spectrum of researchers in drug metabolism, toxicology, and related areas in both academic and industrial settings.

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