

## Book Reviews

**Peptide and Protein Drug Delivery.** Edited by Vincent H. L. Lee. Marcel Dekker, New York, 1991, xvi + 891 pp. ISBN 0-8247-7896-0. \$150.00.

This book is comprised of a total of 22 chapters, which are divided into three parts. Part 1, "Fundamentals," is the most comprehensive and lengthy (484-page) section of the book. It covers the basic concepts related to peptide and protein drug delivery including the synthesis, physical biochemistry, and analysis of peptide and protein drugs. The enzymatic and mechanical barriers for the transportation of peptide and protein drugs across biological membranes and the pharmacokinetics of these drugs are also presented in this first part of the book as separate chapters. Part 2, "Routes of Delivery," deals with the commonly studied routes of administration for peptide and protein drugs. Parenteral (injectable), buccal, rectal, nasal, vaginal, transdermal, and oral routes are covered, each as an independent chapter. In most cases, a theoretical background with anatomical and physiological concepts specific to the route is provided. The methodologies to study each route of delivery together with examples of peptide and protein drugs are provided. The authors have also identified the differences between the delivery of small organic molecules and that of protein drugs. Problems encountered specific to the latter, due to their instability and large molecular size, are addressed in several chapters. Part 3, "Practical Considerations," is the shortest (139 pages) of the three parts and is composed of six chapters. The first three chapters in Part 3 cover the modern formulation aspects of drug delivery, such as mucoadhesion and controlled delivery, that can be applied to peptide and protein drugs. The preformulation considerations are also dealt with, in this part, as a separate chapter. The last three chapters of the book cover the toxicity, immunogenicity, and extension of circulation half-life of protein and peptide drugs and the regulatory perspectives of their delivery.

This is a very ambitious book in a very timely area of research and development in pharmaceutical sciences. The book is well organized and the chapters are well written, with very few textual errors. Each chapter is self-contained, with a numbered list of references following the text. There is a considerable variety of chapter authors drawn from both academic and industrial scientists, who have been active in their respective areas of peptide and protein research. The topic coverage is indeed comprehensive and provides an excellent overview of the subject at hand, as well as substantial depth in the individual chapters. This book will be very useful as a reference book by scientists in pharmaceutical, biochemical, biotechnological, and related areas. It is also recommended as a textbook for graduate courses in pharmaceuticals, biotechnology, medicinal chemistry, and molecular biology.

Hayat Alkan-Onyuksel  
Bruce L. Currie  
College of Pharmacy  
University of Illinois at Chicago  
Chicago, Illinois 60612

**Pharmacy Ethics.** By Mickey Smith, Steven Strauss, H. John Baldwin, and Kelly T. Alberts. Pharmaceutical Products Press, New York, 1991, xv + 555 pp., ISBN 1-56024-172-1, \$27.95 (paperback).

This book is divided into two parts: Part I, Readings in Pharmacy Practice, includes sections on Introduction, Social Values and Ethics, Health Care Delivery, Social Issues, and Applications to Medications and Pharmacy Practice; and Part II, Ethical Reasoning in Pharmacy, includes Cases and Commentary. The Introduction includes a historical background and describes also the legal relationships to ethical considerations. Both the American Pharmaceutical Association Code of Ethics and the Code of Ethics of the American Society of Consultant Pharmacists are presented. Social Values and Ethics includes The WHO Definition of "Health," Who Shall Live, AIDS in Context: Ethical and Social Implications, and Old Age and New Policy, among others, as chapter headings. Under Health Care Delivery appear Drugs and the Right to Happiness, Drug Rationing, The Right to Health Care—Gains and Gaps, A Patient's Bill of Rights, and Consumer's Bill of Rights, along with several others. The section on Social Issues includes chapters on Capital Punishment and the Responsible Pharmacist, Life-Sustaining Treatment: Refusing It, Withdrawing It, Withholding It, Maintaining It, Should Doctors Kill Patients?, The Sexual Revolution and the Pill, and The Search for a Safe Intoxicant. Under Applications to Medications and Pharmacy Practice, several subsections are presented, which include Pharmacist/Patient Relations, Profession or Business?, Medications and Their Uses, and Pharmacists' Decisions. Part II, on cases, includes 10 detailed cases with commentary and 15 brief cases.

Part I of this book is presented in a very unusual format in that it is an anthology of previously published articles or excerpts from reference materials which have been written by a variety of authors. However, 23 of the 69 articles were written by the senior editor, Mickey Smith. *Pharmacy Ethics* is intended to be a textbook for pharmacy students studying ethics at a beginning level, but can also provide an excellent introduction to the subject to any reader. The cases are very well chosen and are thought provoking. They should effectively serve as the starting point for interesting discussions inside and outside of the classroom.

In summary, this book is an important compilation of the literature on ethics as it pertains to pharmacy. It should serve as a very useful textbook or supplemental reading text for courses in ethics or for the integration of ethics topics and concepts throughout the pharmacy curriculum. It should certainly be recommended for all health science libraries and any library serving a college or school of pharmacy. The soft-cover edition is also inexpensive enough that many pharmacy practitioners and educators will want to obtain a copy for their personal library.

Bruce L. Currie  
College of Pharmacy  
University of Illinois at Chicago  
Chicago, Illinois 60612