

University of Pennsylvania Schools of Medicine. In addition, each chapter was vetted by a physician and a pharmacist.

The text is divided into 17 sections consisting of 67 chapters. Although the titles are similar to those in previous editions, a new section has been added on ophthalmology, the renal and cardiovascular sections have been combined given the therapeutic overlap in these areas, and the section on water, salts, and ions has been deleted.

The chapter on renal transport of organic compounds has been eliminated, while new chapters have been added on gene therapy, serotonin receptor agonists and antagonists, migraine, central nervous system degenerative disorders, and ocular pharmacology. In addition, the discussion of drugs used for the treatment of psychiatric disorders is now divided into two chapters, one dealing with psychosis and anxiety and the other with depression and mania, reflecting the increasing number of selective agents for treating these conditions.

The appendices on prescription writing and pharmacokinetic data of individual drugs have been revised and, in the case of the latter, expanded considerably.

Another new feature is a Prospectus at the end of most chapters. Described in these three or four paragraphs is the direction of research in the area and new therapeutic targets. These overviews may be of particular interest to medicinal chemists.

Following certain chapters, in particular those dealing with chemotherapeutic agents, there are cross references to *Harrison's Principles of Internal Medicine*, also published by McGraw-Hill. This guidance should be of value to medical students and residents who commonly use both texts when seeking guidance on a matter of therapeutics.

Important features retained include the use of larger type for topics of particular relevance to therapeutics and a limited bibliography with emphasis on monographs and reviews.

The new editors have done an outstanding job in revising and updating this venerable text. As before, medicinal chemists will find this work indispensable as a source of fundamental and contemporary information on therapeutic agents. While the current trend in pharmacology texts is to minimize discussions of pharmacophores and structure-activity relationships, these topics remain a hallmark of *Goodman and Gilman's Pharmacological Basis of Therapeutics*. As in the past, this volume will be an important text and reference for graduate and medical students, residents, practicing physicians, and anyone conducting research in the biomedical sciences.

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Textbook of Biochemistry With Clinical Correlations. Fourth Edition. Edited by Thomas M. Devlin. Wiley-Liss, Inc., New York. 1997. xxvii + 1186 pp. 22.5 × 28.5 cm. ISBN 0-471-15451-2. \$84.95.

The *Fourth Edition of Devlin's Biochemistry* textbook has been completely rewritten by active educators expert in their field of presentation. The purposes of this edition, like those of its predecessors, remain to present the biochemistry of mammalian cells, to relate these events at the cellular level to the subsequent physiological processes in the whole animal, and to cite examples of human diseases deriving from aberrant biochemical processes. A unique feature of the book is a separate section in each chapter that presents clinical correlations that highlight the significance of the biochemistry of each topic to specific clinical problems.

The textbook, consisting of 28 chapters and an appendix, "Review of Organic Chemistry", is organized to facilitate its use in teaching biochemistry. Thus, following an introductory chapter on cell structure, the next four chapters (2-5), deal with the major structural components of cells, i.e. proteins, enzymes, and cell membranes. The next eight chapters (6-13) discuss various aspects of metabolism, e.g. oxidative, carbohydrate, lipid, amino acid, purine, and pyrimidine nucleotide metabolism, and metabolic interrelationships. Chapters 14-19 are concerned with information transfer and its control and describe the structure and synthesis of DNA, RNA, and protein. The next two chapters (20, 21), treat the biochemistry of polypeptide and steroid hormones. A chapter (22) on molecular cell biology follows, and the textbook concludes with six chapters (23-28) dealing with physiological chemistry, i.e. cytochrome P-450 enzymes and xenobiotic metabolism, iron and heme metabolism, gas transport and pH regulation, digestion and absorption, and human nutrition. The appendix provides an easily accessible reference for the nomenclature and structure of organic molecules encountered in biochemistry.

In addition to "Clinical Correlations", each chapter includes a "Question and Answers" and a "Bibliography" section. All illustrations are beautifully presented in four colors.

Textbook of Biochemistry, Fourth Edition is an excellent, up-to-date, and comprehensive treatment of biochemistry. The clearly described material in this text will be valuable to all—from student to advanced professionals—who wish to understand the contemporary concepts of human and mammalian biochemistry.

Staff

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Dictionary of Plant Toxins. Edited by Jeffrey B. Harborne and Herbert Baxter; Associate Editor Gerard P. Moss. John Wiley & Sons, Chichester. 1996. xv + 523 pp. 22 × 28.5 cm. ISBN 0-471-95107-2. \$195.00.

It is always difficult to compile a dictionary of plant toxins when so many of the tropical rain forest plants have been so little studied. In many cases, the pharmacology of the compounds isolated is almost nonexistent. Additionally, the toxicity of a natural product depends upon the dose taken. Such important factors and many others are discussed in a well thought out introduction by Prof. Harborne, accompanied by all of the appropriate references.

The dictionary itself is beautifully organized with structures, chemical names, molecular weights, toxicology, and references presented for each entry. Some 1455 compounds are listed. Indexes listing names of compounds, botanical species, molecular formulas, and common plant names have been supplied.

This dictionary is recommended for all science libraries.

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Annual Review of Pharmacology and Toxicology. Volume 37, 1997. Edited by Arthur K. Cho. Annual Reviews, Inc., Palo Alto, CA. 1997. x + 571 pp. 16 × 23 cm. ISBN 0-8243-0437-3. \$60.00.

This volume contains 20 reviews of about 20–30 pages in length that cover a variety of topics in pharmacology and toxicology. Many of these reviews will be of general interest to medicinal chemists. The chapters “A Rewarding Research Pathway” by Avram Goldstein, “Structure–Based Drug Design: Computational Advances” by Tami J. Marrone, James M. Briggs, and J. Andrew McCammon, and “Structure–Function Aspects in the Nitric Oxide Synthases” by Dennis J. Stuehr will likely be of most general interest. All chapters are well written to introduce the topic and update the subject, and all conclude with thorough and timely references. The book has a comprehensive subject index. Cumulative author and chapter indexes for Volumes 33–37 are also included.

This timely group of reviews will merit perusal by all pharmacologists, toxicologists, medicinal chemists, and others concerned with drug research. Institutional library access to this volume and the entire series is recommended.

Staff

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Books of Interest

Transition Metal Sulfur Chemistry. Biological and Industrial Significance. ACS Symposium Series 653. Edited by Edward I. Stiefel and Kazuko Matsumoto. American Chemical Society, Washington, DC. 1996. xi + 358 pp. 16 × 23.5 cm. ISBN 0-8412-3476-0. \$109.95.

Anticancer Drug Development Guide: Preclinical Screening, Clinical Trials, and Approval. Edited by Beverly A. Teicher. The Humana Press, Totowa, NJ. 1997. xii + 311 pp. 18.5 × 26 cm. ISBN 0-89603-461-5. \$125.00.

Clinical Research in Diabetes and Obesity. Volume 2. Diabetes and Obesity. Edited by Boris Drazin and Robert Rizza. The Humana Press, Totowa, NJ. 1997. xii + 392 pp. 18.5 × 25.5 cm. ISBN 0-89603-492-5. \$139.50.

Clinical Studies in Medical Biochemistry. Edited by Robert H. Glew and Yoshifumi Ninomiya. Oxford University Press, New York. 1997. xiv + 380 pp. 18 × 25.5 cm. ISBN 0-19509929-X. \$39.95.

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