The book is recommended to both scientists just beginning glycoanalysis as well as to experts in the field. It certainly belongs in the laboratory and the libraries of both academia and industry.

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Pharmacology of Antimuscarinic Agents. By Laszlo Gyermek. CRC Press, Boca Raton, FL. 1997. xx + 501 pp. 16 × 24 cm. ISBN 0-8493-8559-8. $129.95.

This book is an extensive review on different aspects of the origin, history, pharmacology, and uses of antimuscarinic agents. The author devoted different sections to (1) mechanisms of action of antimuscarinic agents; (2) tropane alkaloids in their pharmacological actions on different organs innervated by parasympathetic nervous systems; (3) central effects of atropine including modification of behavior; (4) semisynthetic derivations of tropane alkaloids; (5) synthetic antimuscarinic agents; (6) clinical pharmacology and therapeutic uses; and (7) toxicity of standard antimuscarinic agents, atropine.

Modern developments in drug design have provided sensitive antagonists for muscarinic receptors in different tissues. These antagonists have become useful to subdivide muscarinic receptors into four (M_1−M_4) and possibly five or more subtypes. Several antimuscarinic antagonists are selective (not specific) to one subtype of muscarinic receptors. The author has made a special effort to list different antimuscarinic agents and their selectivity, if any, to the muscarinic receptor subtypes. Antagonists at M_1−M_4 receptor sites may be useful in the treatment of hypersecretion of exocrine glands (M_1), bradycardiac heart syndrome (M_2), abnormalities of smooth muscle functions of visceral organs (M_3), and smooth muscle spasms of respiratory tract (M_4), respectively. The selective use of M_5 receptor antagonists is not yet defined. There is need for the development of selective antimuscarinic agents for the muscarinic receptors in different locations of central nervous system. The author is successful in bringing together information on the antimuscarinic agents selective to different types of muscarinic receptor. This volume will provide a necessary stimulus to create more research in developing new specific antimuscarinic agents to different subtypes of muscarinic receptors.

An extensive list of referenes (114 pages) to discuss the pharmacology of antimuscarinic agents (359 pages) makes this book a rich resource on this topic. According to the author, his list of references may not be complete, so other authors whose work was not cited were invited to submit necessary information and references. Some references on structure−activity relationships may have been omitted. However, it does not fall short of meeting the requirements of many scholars interested in this subject matter.

In general, this book represents an excellent effort on the part of the author to present well-written authoritative information on antimuscarinic agents. The book is a useful addition to any medical library which serves teachers, researchers, and medical personnel who use anti-muscarinic agents. The book is recommended for biomedical scientists in pharmacology and drug-development professions.

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Approaches to Design and Synthesis of Antiparasitic Drugs. By Satyavan Sharma. Edited by Nitya Anand. Elsevier Science B.V., Amsterdam. 1997. xi + 511 pp. 17 × 25 cm. ISBN 0-444-89476-4. $265.75.

This book is Volume 25 in the "Pharmacochemistry Library" series edited by H. Timmerman. A descriptive introduction to parasitic diseases is presented in Chapter 1. The remainder of the book is divided into two sections, the first on anthelmintic agents and the second on antiprotozoal agents. Chapters 2−12 form the Anthelmintic Section (278 pages) and are titled Biochemical Targets for Anthelmintic Activity, Natural Products, Organometallics, Piperazines, Tetrahydropyrimidines, Imidazothiazoles, Benzimidazoles, Salicylanilides, Nitroaryl Compounds, Tetrahydroquinolines and Isoquinolines, and Miscellaneous Anthelmintics. Chapters 13−21 form the Antiprotozoal Section (163 pages) and are titled Biochemical Targets for Antiprotozoal Activity, Natural Products, Organometallics, Quinolines, Nitroheterocycles, Antifolates, Bisamidines, Haloacetamides, and Miscellaneous Antiprotozoals. There is an adquate subject index, but no author index.

As is apparent, the chapters are conveniently organized according to structural class. Most of the chapters, especially those in the anthelmintic section, are divided into five major subheadings: (1) Introduction; (2) SAR; (3) Synthesis; (4) Biological Activity; and (5) Mode of Action. However in some chapters, especially those in the antiprotozoal section, not a word is mentioned about mode of action. This flaw is exemplified in the chapter on antiprotozoal quinolines in which an assessment of the voluminous literature on the mode of action of chloroquine and other 4-aminoquinolines has been entirely omitted.

Although the quality of this single-author text is quite good, the book is somewhat dated as the most recent references are from the early 1990s. For example, there is no mention of the naphthoquinone drug atovaquone,

and only a very brief mention is made of the many synthetic antimalarial peroxides, a topic which surely deserved a chapter of its own.

This book is well organized in a format likely to appeal to a medicinal chemist. One of its strengths is that it provides a useful description of the synthesis of antiparasitic agents in a single volume. However, given its broad scope and limited size, this volume does not provide an in-depth review of any one structural class of antiparasitic drugs and, despite its title, gives few new insights in antiparasitic drug design.

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