Literature

Multidrug Resistance in Cancer Cells, Molecular, Biochemical, Physiological and Biological Aspects, edited by S Gupta and T Tsuruo, John Wiley and Sons, Chichester, 1996, pp 507, £80

Multidrug resistance is one of the major concerns for scientists dealing with anticancer chemotherapy. This book regroups 31 chapters by 72 contributors. Part I is devoted to characterization, expression and functions of transporters in MDR. It is divided into three sections. Section A deals with molecular characterization of transporter genes, Section B with biochemical properties of multidrug-resistant cells, and Section C with expression of multidrug resistance gene and P-glycoprotein in normal tissues. Part II is devoted to the reversal of multidrug resistance and is divided into two sections dealing with strategies for modifying multidrug resistance and clinical reversal of multidrug resistance. Each chapter is followed by recent references and an index is provided.

Drug Prototypes and their Exploitation, by W Sneader, John Wiley and Sons, Chichester, 1996, pp 800, £80

This book is based upon a new approach of the history of the discovery of drugs. Its purpose is to "document the modern evolution of real therapeutics via the structural movement from one product to another and to yet another". Prototypes are identified and a sort of family tree is drawn showing how families of drugs have been developed. After an introduction dealing with sources of drug prototypes, the book is divided into six parts: Prototypes from studies on minerals and inorganic chemicals; Prototypes from studies on plants; Prototypes from studies on animals or humans; Prototypes from microorganisms; Prototypes from the screening of synthetic compounds; and Prototypes discovered through serendipity. References both to recent publications in scientific journals and to ancient documents such as the Ebers Papyrus or the De Materia Medica by Dioscorides make this book original and pleasant to read.

Burger's Medicinal Chemistry and Drug Discovery, 5th edition, Volume 2: Therapeutic Agents, edited by ME Wolff, John Wiley and Sons, New York, 1996, pp 670, £150

Editing the fifth edition of the famous Burger's Medicinal Chemistry and drug discovery caused many difficulties to Manfred E Wolff. First, he had to choose between two different ways to design the book: to confine chapters to a particular disease or to a particular therapeutic modality. He finally "decided to be undecided". The second question was whether to collect each subject area into a single volume or not. For technical reasons the second alternative was chosen. This new edition had to take account of the major changes which appeared in medicinal chemistry during last decade. The progress of molecular biology and its applications and the increase of the amount of publications had to be taken into account. The second volume of the series is divided in three parts. Part I deals with gastrointestinal drugs (cholinergics, anticholinergic drugs and gastric proton pump inhibitors). Part II is devoted to cardiovascular drugs (cardiac drugs, antihypertensive agents, phenoxyacetic acid and uricosuric diuretics, diuretic and uricosuric agents). Part III discusses chemotherapeutic agents and evokes various series of drugs (aminoglycoside, macrolide, glycopeptide and miscellaneous antibacterial antibiotics, sulfonamides and sulfones, antimycobacterial agents and antifungal agents). An index is provided at the end of the volume.

Structure and Function of 7TM Receptors (Alfred Benzon Symposium 39), edited by TW Schwartz, SA Hjorth and JS Kastrup, Munksgaard, DK Copenhagen, 1996, pp 432, DKK 400.00 excl VAT

Seven transmembrane segment (7TM) receptors or G-protein coupled receptors are important proteins in endocrinology and pharmacology. These proteins constitute the molecular signal transduction drugs taken by humans act on 7TM receptors. This volume is devoted to 7-TM proteins and especially their structure and function as the basis for drug development. Emphasis is centered around the elusive dynamic interactions in the lipid bilayer of receptor segments with each other, interactions of receptors with intra- and extracellular ligands and with drugs. The contributions are gathered in five sections: G-Protein structure and receptor interactions; constitutive activation, desensitization and resensitization of 7TM receptors; biophysical approaches towards understanding inter- and intramolecular interactions of receptors and ligands in the lipid bilayer; molecular biology studies of receptor-ligand interactions; and receptor-based or model-based design and development of new ligands and drugs.

Antiviral Drug Resistance, edited by DD Richman, John Wiley and Sons, Chichester, 1996, pp 314, £50

Eighteen authors have contributed 14 chapters dealing with antiviral drug resistance. Picornaviruses, influenza A viruses, herpes simplex virus and varicella zoster virus, cytomegalovirus and HIV are evoked. The mechanisms of drug resistance and drug action, genetics of drug resistance, cross-resistance, X-ray crystallographic structural aspects of resistance are treated as well as the clinical aspects of resistance.

P2 Purinoceptors: Localization, Function and Transduction mechanisms (Ciba Foundation Symposium 198), edited by DJ Chadwick and JA Goode, John Wiley and Sons, Chichester, 1996, pp 336, £52.50

This book consists of the proceedings of the *Symposium on P2 Purinoceptors: Localization, Function and Transduction Mechanisms* held at the Ciba Foundation, London, 11–13 July 1995. Nineteen contributions deal with various aspects of the research on P2 purinoceptors. Specific topics include receptor pharmacology, transduction mechanisms, the cloning and expression of genes for the P2 purinoceptor subtypes and the distribution and biological roles of P2 purinoceptors. The possibilities afforded by P2 purinoceptor ligands as potential therapeutic entities are also discussed.