Miller Principles Drug Design

Models for Assessing Drug Absorption and MetabolismDynamic Combinatorial ChemistryDrug Discovery and Development - E-BookForthcoming BooksVA PractitionerQSAR and Molecular Modeling Studies in Heterocyclic Drugs IApplications of Pharmacokinetic Principles in Drug DevelopmentRemington's Pharmaceutical SciencesComprehensive Medicinal Chemistry IIComputational Methods in Drug DesignSelectivity in De Novo Drug DesignAddiction Research MethodsAnnals of ForestryPrinciples of Research Design and Drug Literature Evaluation, Second EditionAdaptive Systems in Drug DesignMaking and Using AntibodiesBiometals and Ligands for Anticancer Drug DesignStructure-Based Drug DesignSmith and Williams' Introduction to the Principles of Drug Design and ActionAn Introduction to Medicinal ChemistryManaging the Drug Discovery ProcessMass Spectrometry in Drug Metabolism and DispositionAntisense Drug TechnologyCollege of OptometyAdvanced computer-assisted techniques in drug discoveryConcepts and Strategies in New Drug DevelopmentAmerican Miller and ProcessorThermodynamics and Kinetics of Drug BindingPrinciples of Package DevelopmentGreen Approaches in Medicinal Chemistry for Sustainable Drug DesignPrinciples and Perspectives in Drug BioavailabilityMedical Principles and PracticeRemingtonBurger's Medicinal Chemistry and Drug Discovery, Drug DiscoveryDoody's Rating ServicePrinciples of Drug ActionWalter and Miller's

Textbook of Radiotherapy E-bookThe Chemotherapy Source BookGreen Chemistry Strategies for Drug DiscoveryPrinciples of Clinical Pharmacology

Models for Assessing Drug Absorption and Metabolism

This book examines the background, industrial context, process, analytical methodology, and technology of metabolite identification. It emphasizes the applications of metabolite identification in drug research. While primarily a textbook, the book also functions as a comprehensive reference to those in the industry. The authors have worked closely together and combine complementary backgrounds to bring technical and cultural awareness to this very important endeavor while serving to address needs within academia and industry It also contains a variety of problem sets following specific sections in the text.

Dynamic Combinatorial Chemistry

A comprehensive textbook of radiotherapy and related radiation physics and oncology for use by all those concerned with the uses of radiation and cytotoxic drugs in the treatment of patients with malignant disease. Walter & Miller's Textbook of Radiotherapy has become the core text for therapeutic radiography students and an important introductory text for trainee radiologists and clinical physicists. The book is divided into two parts: the first

covers underlying principles of physics, and the second is a systematic review by tumour site concentrating on the role of radiotherapy in the treatment of malignant disease and setting its use in context with chemotherapy and surgery. The 7th edition continues the tradition of bringing the physics and clinical application of radiation for therapy together at entry level and is completely revised to take into account the huge technological advances in radiotherapy treatment since publication of the previous edition. *Imaging is now an essential part of radiotherapy, relevant for both the treatment and preparation of a patient's treatment. Radionuclide imaging and X-ray imaging have been expanded to MRI and PET, along with some use of ultrasound. *Treatment planning dose prediction - the basis and application of modern computational calculations are explained for modern treatment delivery systems. The role of the algorithm for dose prediction is central to ensure speedy and accurate calculations for treatment. *Quality Control *Quality Systems The book is supported by Evolve electronic resources: sample plans, additional diagnostic images and clinical photographs.

Drug Discovery and Development - E-Book

Publisher's Note: Products purchased from Third Party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitlements included with the product. An essential text for any Pharmacy Research Design/Drug

Literature course Principles of Research Design and Drug Literature Evaluation, Second Edition is a unique resource that provides a balanced approach covering critical elements of clinical research, biostatistical principles, and scientific literature evaluation techniques for evidence-based medicine. It is the ideal foundation for professional pharmacy students and a key resource for pharmacy residents, research fellows, practitioners, and clinical researchers. This highly accessible text provides comprehensive course content that meets or exceeds the curriculum standards set forth by the Accreditation Council for Pharmacy Education (ACPE). Written by expert authors specializing in pharmacy practice and research, this valuable text will provide pharmacy students and practitioners with a thorough understanding of the principles and practices of drug literature evaluation with a strong grounding in research and biostatistical principles.

Forthcoming Books

Antibodies are an indispensable tool in the study of biology and medicine. Making and Using Antibodies: A Practical Handbook presents techniques in a single, comprehensive source for the production and use of antibodies. It enables researchers to immediately access lab-tested, proven protocols. Written and edited by an elite team of scienti

VA Practitioner

Addiction Research Methods' is a comprehensive

handbook for health professionals, policy-makers and researchers working and training in the field of addiction. The book provides a clear, comprehensive and practical guide to research design, methods and analysis within the context of the field of alcohol and other drugs. The reader is introduced to fundamental principles and key issues; and is orientated to available sources of information and key literature. Written by a team of internationally acclaimed contributors, the book is divided into six major sections: Introduction; Research Design; Basic Toolbox; Biological Models; Specialist Methods; and Analytical Methods. Each chapter offers an introduction to the background and development of the discipline in question, its key features and applications, how it compares to other methods/analyses and its advantages and limitations. FEATURES List of useful websites and assistive technology. Case study examples List of useful hermeneutics Recommended reading list Contains exercises to help the reader to develop their skills.

QSAR and Molecular Modeling Studies in Heterocyclic Drugs I

Applications of Pharmacokinetic Principles in Drug Development

Remington's Pharmaceutical Sciences

Comprehensive Medicinal Chemistry II

Computational Methods in Drug Design

Managing the Drug Discovery Process: How to Make It More Efficient and Cost-Effective thoroughly examines the current state of pharmaceutical research and development by providing chemistry-based perspectives on biomedical research, drug hunting and innovation. The book also considers the interplay of stakeholders, consumers, and the drug firm with attendant factors, including those that are technical, legal, economic, demographic, political, social, ecological, and infrastructural. Since drug research can be a high-risk, high-payoff industry, it is important to researchers to effectively and strategically manage the drug discovery process. This book takes a closer look at increasing pre-approval costs for new drugs and examines not only why these increases occur, but also how they can be overcome to ensure a robust pharmacoeconomic future. Written in an engaging manner and including memorable insights, this book is aimed at redirecting the drug discovery process to make it more efficient and cost-effective in order to achieve the goal of saving countless more lives through science. A valuable and compelling resource, this is a must-read for all students and researchers in academia and the pharmaceutical industry. Considers drug discovery in multiple R&D venues, including big pharma, large biotech, start-up ventures, academia, and nonprofit research institutes Analyzes the organization of pharmaceutical R&D, taking into

account human resources considerations like recruitment and configuration, management of discovery and development processes, and the coordination of internal research within, and beyond, the organization, including outsourced work Presents a consistent, well-connected, and logical dialogue that readers will find both comprehensive and approachable

Selectivity in De Novo Drug Design

Structure-Based Drug Design brings together scientists working on different aspects of the subject, demonstrating the necessary collaboration and interdisciplinary approach to this complex area. The focus is on X-ray crystallographic and computational approaches. The general aspects of these approaches are introduced in the first six articles. The remaining articles provide examples of the application of X-ray crystallography, molecular modelling, molecular dynamics, QSAR, database analysis, and homology modelling. The papers cover a wealth of interesting problems in the design of new and enhanced pharmaceuticals.

Addiction Research Methods

Annals of Forestry

This volume provides an introduction to medicinal chemistry. It covers basic principles and background, and describes the general tactics and strategies

involved in developing an effective drug.

Principles of Research Design and Drug Literature Evaluation, Second Edition

Adaptive Systems in Drug Design

The use of powerful computers has revolutionized molecular design and drug discovery. Thoroughly researched and well-structured, this comprehensive handbook covers highly effective and efficient techniques in 3D-QSAR and advanced statistical analysis. The emphasis is on showing users how to apply these methods and avoid costly and time-consuming methodical errors. Topics covered include * combination of statistical methods and molecular modeling tools * rational use of databases * advanced statistical techniques * neural networks and expert systems in molecular design This book addresses the practitioner in industry and research, as well as the novice wishing to become acquainted with modern tools in medicinal chemistry.

Making and Using Antibodies

Since the first edition of "Principles of Packaging Development" was published, the packaging industry has undergone many profound changes. These have included the virtual elimination of cellophane and its replacement with oriented polypropylene as a carton overwrap, fluid milk in blow-molded HDPE bottles, PET beverage bottles, cookie bags and cartons lined with

polyolefin coextrusions instead of waxed glassine, and bread in reclosable polyolefin and coextruded film bags. New phrases have also worked their way into the lexicon of the practic ing packaging technologist, such as "child resistance" and "tamper evident. " This most popular text on packaging demanded updating. How these phrases and ideas have affected the industry in the 1980s and how they will probably alter its course in the future are treated. New concepts of packaging system planning and forecasting tech niques are intruding into package management, and new chapters will introduce them to the reader. The years have added a certain degree of maturity to the packaging industry. Not only have the original authors broadened their per spectives and changed professional responsibilities, we have also in cluded a third co-author, Dr. Aaron L. Brody, whose experience in the industry, academic background, and erudite insights into the very na ture of packaging have added an unparalled degree of depth to this book. We would like to thank David L.

Biometals and Ligands for Anticancer Drug Design

Structure-Based Drug Design

This state-of-the-art reference provides comprehensive coverage of the development of antisense oligonucleotides to inhibit cancer cells as well as those involved in infectious, inflammatory, and immune-mediated diseases-highlighting new tools

and technologies in medicinal chemistry, RNA biochemistry, and molecular and cellular biology to produce new therapeutic compounds. Presents previously unpublished data on the use of antisense technology to dissect pharmacological processes and confirm the roles of various genes! Showcasing the benefits of antisense drug use, including reduced toxicity and earlier disease detection, Antisense Drug Technology discusses novel formulations of antisense drugs practical methods to design effective isotype selective inhibitors molecular mechanisms of antisense drugs mRNA as a current biological template modern postreceptor binding mechanisms and more! With contributions by over 60 seasoned experts in the field and containing more than 3000 helpful references, tables, drawings, and photographs, Antisense Drug Technology is an illuminating source for organic, medicinal, and pharmaceutical chemists; biochemists; geneticists; hematologists; oncologists; molecular and cell biologists; virologists; immunologists; and medical school and graduate students in these disciplines.

Smith and Williams' Introduction to the Principles of Drug Design and Action

Advances in knowledge and technology have revolutionized the process of drug development, making it possible to design drugs for a given target or disease. Building on the foundation laid by the previous three editions, Smith and Williams Introduction to the Principles of Drug Design and Action, Fourth Edition includes the latest informatio

An Introduction to Medicinal Chemistry

The modern pharmacopeia has enormous power to alleviate disease, and owes its existence almost entirely to the work of the pharmaceutical industry. This book provides an introduction to the way the industry goes about the discovery and development of new drugs. The first part gives a brief historical account from its origins in the mediaeval apothecaries' trade, and discusses the changing understanding of what we mean by disease, and what therapy aims to achieve, as well as summarising case histories of the discovery and development of some important drugs. The second part focuses on the science and technology involved in the discovery process: the stages by which a promising new chemical entity is identified, from the starting point of a medical need and an idea for addressing it. A chapter on biopharmaceuticals, whose discovery and development tend to follow routes somewhat different from synthetic compounds, is included here, as well as accounts of patent issues that arise in the discovery phase, and a chapter on research management in this environment. The third section of the book deals with drug development: the work that has to be undertaken to turn the drug candidate that emerges from the discovery process into a product on the market. The definitive introduction to how a pharmaceutical company goes about its business of discovering and developing drugs. The second edition has a new editor: Professor Raymond Hill ● non-executive director of Addex Pharmaceuticals, Covagen and of Orexo AB ● Visiting Industrial

Professor of Pharmacology in the University of Bristol ● Visiting Professor in the School of Medical and Health Sciences at the University of Surrey ● Visiting Professor in Physiology and Pharmacology at the University of Strathclyde ● President and Chair of the Council of the British Pharmacological Society ● member of the Nuffield Council on Bioethics and the Advisory Council on Misuse of Drugs. New to this edition: Completely rewritten chapter on The Role of Medicinal Chemistry in the Drug Discovery Process. New topic - DMPK Optimization Strategy in drug discovery. New chapter on Scaffolds: Small globular proteins as antibody substitutes. Totally updated chapters on Intellectual Property and Marketing 50 new illustrations in full colour Features Accessible, general guide to pharmaceutical research and development. Examines the interfaces between cost and social benefit, quality control and mass production, regulatory bodies, patent management, and all interdisciplinary intersections essential to effective drug development. Written by a strong team of scientists with long experience in the pharmaceutical industry. Solid overview of all the steps from lab bench to market in an easy-to-understand way which will be accessible to non-specialists. From customer reviews of the previous edition: ‘ it will have everything you need to know on this module. Deeply referenced and, thus, deeply reliable. Highly Commended in the medicine category of the BMA 2006 medical book competition Winner of the Royal Society of Medicine Library Prize for Medical Book of the Year

Managing the Drug Discovery Process

Effective techniques for applying Dynamic Combinatorial Chemistry In a relatively short period, Dynamic Combinatorial Chemistry (DCC) has grown from proof-of-concept experiments in a few isolated labs to a broad conceptual framework with applications to an exceptional range of problems in molecular recognition, lead compound identification, catalyst design, nanotechnology, polymer science, and others. Bringing together a group of respected experts, this overview explains how chemists can apply DCC and fragment-based library methods to lead generation for drug discovery and molecular recognition in bioorganic chemistry and materials science. Chapters cover: Basic theory Approaches to binding in proteins and nucleic acids Molecular recognition Self-sorting Catalyst discovery Materials discovery Analytical chemistry challenges A comprehensive, single-source reference about DCC methods and applications including aspects of fragment-based drug discovery, this is a core reference that will spark the development of new solutions and strategies for chemists building structure libraries and designing compounds and materials.

Mass Spectrometry in Drug Metabolism and Disposition

The incorporation of Green Chemistry is a relatively new phenomenon in the drug discovery discipline, since the scale that chemists operate on in drug

discovery is smaller than those of process and manufacturing chemistry. The necessary metrics are more difficult to obtain in drug discovery due to the diversity of reactions conducted. However, pharmaceutical companies are realizing that incorporation of green chemistry techniques at earlier stages of drug development can speed the development of a drug candidate. Written by experts who have pioneered green chemistry efforts within their own institutions, this book provides a practical guide for both academic and industrial labs wanting to know where to start with introducing greener approaches for greatest return on investment. The Editors have taken a comprehensive approach to the topic, covering the entire drug discovery process from molecule conception, through synthesis, formulation and toxicology with specific examples and case studies where green chemistry strategies have been implemented. Emerging techniques for performing greener drug discovery chemistry are addressed as well as cutting-edge topics like biologics discovery and continuous processing. Moreover, important surrounding issues such as intellectual property are included. This book serves as a practical guide for both academic and industrial chemists who work across the breadth of the drug discovery discipline. Ultimately, readers will learn how to incorporate green chemistry strategies into their everyday workflow without slowing down their science.

Antisense Drug Technology

College of Optomety

The first edition of Comprehensive Medicinal Chemistry was published in 1990 and very well received. Comprehensive Medicinal Chemistry II is much more than a simple updating of the contents of the first edition. Completely revised and expanded, this new edition has been refocused to reflect the significant developments and changes over the past decade in genomics, proteomics, bioinformatics, combinatorial chemistry, high-throughput screening and pharmacology, and more. The content comprises the most up-to-date, authoritative and comprehensive reference text on contemporary medicinal chemistry and drug research, covering major therapeutic classes and targets, research strategy and organisation, high-throughput technologies, computer-assisted design, ADME and selected case histories. It is this coverage of the strategy, technologies, principles and applications of medicinal chemistry in a single work that will make Comprehensive Medicinal Chemistry II a unique work of reference and a single point of entry to the literature for pharmaceutical and biotechnology scientists of all disciplines and for many industry executives as well.Comprehensive Medicinal Chemistry II will be available online in 2007 via the proven platform ScienceDirect providing the user with enhanced features such as cross-referencing and dynamic linking. * Comprehensively reviews - for the first time in one single work - the strategies, technologies, principles and applications of modern medicinal chemistry * Provides a global and current perspective of today's drug discovery process and

discusses the major therapeutic classes and targets * Includes a unique collection of case studies and personal assays reviewing the discovery and development of key drugs

Advanced computer-assisted techniques in drug discovery

This practical reference for medicinal and pharmaceutical chemists combines the theoretical background with modern methods as well as applications from recent lead finding and optimization projects. Divided into two parts on the thermodynamics and kinetics of drug-receptor interaction, the text provides the conceptual and methodological basis for characterizing binding mechanisms for drugs and other bioactive molecules. It covers all currently used methods, from experimental approaches, such as ITC or SPR, right up to the latest computational methods. Case studies of real-life lead or drug development projects are also included so readers can apply the methods learned to their own projects. Finally, the benefits of a thorough binding mode analysis for any drug development project are summarized in an outlook chapter written by the editors.

Concepts and Strategies in New Drug Development

American Miller and Processor

Thermodynamics and Kinetics of Drug Binding

Biometals & Ligands for Anticancer Drug Design - Molecular Mechanisms of Superoxide Dismutase Models Antitumor Effects

Principles of Package Development

Major concepts in the field of drug design are described in this book, with a strong focus on complex adaptive systems. Special emphasis is placed on neural network applications and evolutionary algorithms. The book is meant to complement a text on computational chemistry and bioinformatices and to present some new challenging ideas. A conceptual framework is presented for the use of adaptive systems and evolutionary algorithms, then the concept of chemical space is discussed and numerous examples of algorithms for classical unsupervised projection methods are given. The use of evolutionary algorithms and artificial neural networks in quantitative structure- activity relationships is discussed, and the drug-likeness concepts is explained. A final chapter examines the utility of evolutionary method in de novo molecular design. Schneider teaches cheminformatics at Johann Wolfgang Goethe University in Germany. So is affiliated with F. Hoffman-La Roche, Inc. Annotation copyrighted by Book News, Inc., Portland, OR

Green Approaches in Medicinal Chemistry for Sustainable Drug Design

This is Volume 1: Drug Discovery, of Burger's Medicinal Chemistry and Drug Discovery, 6th Edition. This new volume contains critical new chapters on Virtual Screening, Bioinformatics and Chemical Information Computing Systems in Drug Discovery. To purchase the entire 6 volume set, please refer to ISBN 0-471-37032-0. For a complete list of articles and contributors as well as FREE sample chapters from this new 6th Edition please visit: www.mrw.interscience.wiley.com/bmcdd

Principles and Perspectives in Drug Bioavailability

Medical Principles and Practice

Remington

Burger's Medicinal Chemistry and Drug Discovery, Drug Discovery

For more than 100 years, this textbook has been the definitive reference for all aspects of the science and practice of pharmacy, and is used for pharmaceutics, therapeutics and pharmacy practice courses in primary curricula. Since the first edition was published, pharmacists have used this book as a key one-stop reference. This updated edition covers many education and practice issues, from the history of

pharmacy and ethics, to industrial pharmacy and pharmacy practice. New to the edition are expanded sections on pharmacy administration and patient care, which include new topics such as: nutrition in pharmacy practice; self care and home diagnostic products; health care delivery systems and interdisciplinary care; and home health patient care. Also, information has been condensed into one volume for greater portability and convenience.

Doody's Rating Service

The updated Third Edition of The Chemotherapy Source Book is the most current and comprehensive reference on cancer chemotherapy. It brings together pharmacologic and patient management information in one source that practitioners can consult for any question encountered in the delivery of chemotherapy. This edition features increased information on the expanding use of high-dose therapy for various cancers, including breast cancer, leukemias, multiple myeloma, Hodgkin's disease, non-Hodgkin's lymphoma, lung cancer, and ovarian cancer. Coverage also includes new material on monoclonal antibodies, monoclonal antibody therapy, and breast, colon, and lung cancers, and information on five new drugs approved since the Second Edition. A Brandon-Hill recommended title.

Principles of Drug Action

Pharmaceutical scientists in industry and academia will appreciate this single reference for its detailed

experimental procedures for conducting biopharmaceutical studies. This well-illustrated guide allows them to establish, validate, and implement commonly used in situ and in vitro model systems. Chapters provide ready access to these methodologies for studies of the intestinal, buccal, nasal and respiratory, vaginal, ocular, and dermal epithelium as well as the endothelial and elimination barriers.

Walter and Miller's Textbook of Radiotherapy E-book

This revised second edition covers the pharmacologic principles underlying the individualization of patient therapy and contemporary drug development, focusing on the fundamentals that underlie the clinical use and contemporary development of pharmaceuticals. Authors drawn from academia, the pharmaceutical industry and government agencies cover the spectrum of material, including pharmacokinetic practice questions, covered by the basic science section of the certifying examination offered by the American Board of Clinical Pharmacology. This unique reference is recommended by the Board as a study text and includes modules on drug discovery and development to assist students as well as practicing pharmacologists. Unique breadth of coverage ranging from drug discovery and development to individualization and quality assessment of drug therapy Unusual cohesive of presentation that stems from author participation in an ongoing popular NIH course Instructive linkage of

pharmacokinetic theory and applications with provision of sample problems for self-study Wide-ranging perspective of authors drawn from the ranks of Federal agencies, academia and the pharmaceutical industry Expanded coverage of pharmacogenetics Expanded coverage of drug transporters and their role in interactions Inclusion of new material on enzyme induction mechanisms in chapters on drug metabolism and drug interactions A new chapter on drug discovery that focuses on oncologic agents Inclusion of therapeutic antibodies in chapter on biotechnology products

The Chemotherapy Source Book

Green Chemistry Strategies for Drug Discovery

This volume is an important advancement in the application ofpharmacokinetic (PK) and pharmacodynamic (PO) principles to . drug development. The series of topics presented deal with the application of these tools to everyday decisions that a pharmaceutical scientist encounters. The ability to integrate these topics using PK and PO methods has optimized drug development pathways in the clinic. New technologies in the areas of in vitro assays that are more predictive of human absorption and metabolism and advancement in bioanalytical assays are leading the way to minimize drug failures in later, more expensive clinical development programs. of Pharmacokinetics and pharmacodynamics have

become an important component understanding the drug action on the body and is becoming increasingly important in drug labeling due to it's potential for predicting drug behavior in populations that may be difficult to study in adequate numbers during drug development. The ability to correlate drug exposure to effect and model it during the drug development value chain provides valuable insight into optimizing the next steps to derive maximum information from each study. These principles and modeling techniques have resulted in an expanded and integrated view of PK and PO and have led to the expectations that we may be able to optimally design clinical trials and eventually lead us to identifying the optimal therapy for the patient, while minimizing cost and speeding up drug development. There is wide utility for the book both as a text and as a reference.

Principles of Clinical Pharmacology

Extensive experimentation and high failure rates are a well-recognised downside to the drug discovery process, with the resultant high levels of inefficiency and waste producing a negative environmental impact. Sustainable and Green Approaches in Medicinal Chemistry reveals how medicinal and green chemistry can work together to directly address this issue. After providing essential context to the growth of green chemistry in relation to drug discovery in Part 1, the book goes on to identify a broad range of practical methods and synthesis techniques in Part 2. Part 3 reveals how medicinal chemistry techniques can be used to improve efficiency, mitigate failure

and increase the environmental benignity of the entire drug discovery process, whilst Parts 4 and 5 discuss natural products and microwave-induced chemistry. Finally, the role of computers in drug discovery is explored in Part 6. Identifies novel and cost effective green medicinal chemistry approaches for improved efficiency and sustainability Reflects on techniques for a broad range of compounds and materials Highlights sustainable and green chemistry pathways for molecular synthesis