Fasttrack Therapeutics

This book reviews the current state of ocular drug therapy and future therapeutic opportunities for a wide variety of conditions, including Age-related Macular Degeneration, Diabetic Retinopathy and Macular Edema, Glaucoma, and Inherited Retinal Diseases. Retinal diseases are major contributors to moderate or severe vision impairment in adults aged 50 years and older. The respective patient populations for many of these indications is expected to significantly increase as the world population continues to grow older. An improved understanding of the etiological underpinnings of ocular degenerative diseases over the past decade has significantly bolstered ophthalmic drug discovery. In this volume, contributions from leading experts explore the unique challenges faced for ocular drug discovery and delivery providing the reader with detailed information on ocular pharmacokinetics, in vitro, ex vivo and in vivo models for retinal disease pathology and emerging gene therapy treatments. The book is intended for all researchers and clinicians who wish to increase their knowledge on the latest findings in ocular drug therapy.

The sequencing of the human genome and subsequent elucidation of the molecular pathways that are important in the pathology of disease have provided unprecedented opportunities for the development of new therapeutics. Nucleic acid-based drugs have emerged in recent years to yield extremely promising candidates for drug therapy to a wide range of diseases. Advances in Nucleic Acid Therapeutics is a comprehensive review of the latest advances in the field, covering the background of the development of nucleic acids for therapeutic purposes to the array of drug development approaches currently being pursued using antisense, RNAi, aptamer, immune modulatory and other synthetic oligonucleotides. Nucleic acid therapeutics is a field that has been continually innovating to meet the challenges of drug discovery and development; bringing contributions together from leaders at the forefront of progress, this book depicts the many approaches currently being pursued in both academia and industry. A go-to volume for medicinal chemists, Advances in Nucleic Acid Therapeutics provides a broad overview of techniques of contemporary interest in drug discovery.

Proceedings of the American Academy of Anti-Aging Medicine's (A4M) Seventeenth World Congress on Anti-Aging Medicine & Regenerative Biomedical Technologies, Spring, Summer and Winter Sessions (2009 conference year). Also includes Anti-Aging Clinical Protocols, 2010-2011.

This book comprehensively reviews the current state of clinical trial methods in multiple sclerosis treatment, providing investigators, sponsors and specialists with current knowledge of outcome measures and study designs for disease and symptom management. The status of the rapidly evolving field of disease-modifying drugs is presented, with emphasis

on the most promising therapies currently being tested. Experts discuss disease and symptom management for MS subtypes, including neuromyelitis optica and pediatric MS. In addition, key scientific advances in MS pathology, genetics, immunology and epidemiology are presented. The fourth edition has been extensively revised, featuring more than 50% new material. All chapters have been substantially updated to provide current information on rapidly evolving topics and this volume contains 15 new chapters, reflecting the growth of the field in recent years. This book is an essential reference for practitioners caring for MS patients, investigators planning or conducting clinical trials, and clinical trial sponsors.

This book discusses the different regulatory pathways for gene therapy (GT) and cell therapy (CT) medicinal products implemented by national and international bodies throughout the world (e.g. North and South America, Europe, and Asia). Each chapter, authored by experts from various regulatory bodies throughout the international community, walks the reader through the applications of nonclinical research to translational clinical research to licensure for these innovative products. More specifically, each chapter offers insights into fundamental considerations that are essential for developers of CT and GT products, in the areas of product manufacturing, pharmacology and toxicology, and clinical trial design, as well as pertinent "must-know" guidelines and regulations. Regulatory Aspects of Gene Therapy and Cell Therapy Products: A Global Perspective is part of the American Society of Gene and Cell Therapy sub-series of the highly successful Advances in Experimental Medicine and Biology series. It is essential reading for graduate students, clinicians, and researchers interested in gene and cell therapy and the regulation of pharmaceuticals.

The high effectiveness of antibodies as anti-tumor therapeutic agents has led to a burst of research aiming to increase their therapeutic applications by the use of antibodies against new targets, new antibody formats or new combinations. In this e-book we present relevant research depicting the current efforts in the field.

This FASTtrack book covers all the main systems of the body with a summary of therapeutics in these areas. by focusing on the key points of each disease state, this book provides a concise overview of the subject.

‘This new edition of Clinical Pharmacy and Therapeutics was really very helpful when I was doing an MSc course in Advancing Pharmacy Practice and it was really very helpful in all the clinical diseases I have to read for my PBL. I also used it as one of my most reliable reference books for the in-course simulation ward rounds and other clinical case studies. It is a great book to have as a practising clinical or hospital pharmacist or even community pharmacist. It will also be of great use to anyone doing a course in pharmacotherapy. This book will always be of use to you throughout your studentship or when practising after graduation. It is also more portable than most other pharmacotherapy textbooks with the same amount of information.’ Now in its sixth edition, this best-selling, multi-disciplinary textbook continues to draw

on the skills of pharmacists, clinicians and nurses to present optimal drug regimens. The authors integrate an understanding of the disease processes with an appreciation of the pathophysiological processes, clinical pharmacy and the evidence base. Each chapter is co-written by a pharmacist and a clinician, and each chapter begins with key points and ends with cases to test understanding. The sixth edition is now on StudentConsult for the first time, giving online access to the full text. Key points boxes at the beginning of each chapter Case-study boxes throughout the chapters Each chapter co-written by a pharmacist and a clinician In-depth treatment of therapeutics to support pharmaceutical prescribing Logical order and format: key points, epidemiology, aetiology, disease, clinical manifestations, investigations and treatment, drugs used in treatment. Dosage reference sources given where appropriate, along with useful websites and further reading for each chapter. New co-editor, Karen Hodson Over 10 new authors Now in 4-colour On StudentConsult for the first time New chapter on Dementia Many new and revised illustrations Chapters revised to include advances in therapeutics and changes to dose regimens and licensed indications Updated case studies

Novel Designs of Early Phase Trials for Cancer Therapeutics provides a comprehensive review by leaders in the field of the process of drug development, the integration of molecular profiling, the changes in early phase trial designs, and endpoints to optimally develop a new generation of cancer therapeutics. The book discusses topics such as statistical perspectives on cohort expansions, the role and application of molecular profiling and how to integrate biomarkers in early phase trials. Additionally, it discusses how to incorporate patient reported outcomes in phase one trials. This book is a valuable resource for medical oncologists, basic and translational biomedical scientists, and trainees in oncology and pharmacology who are interested in learning how to improve their research by using early phase trials. Brings a comprehensive review and recommendations for new clinical trial designs for modern cancer therapeutics Provides the reader with a better understanding on how to design and implement early phase oncology trials Presents a better and updated understanding of the process of developing new treatments for cancer, the exciting scientific advances and how they are informing drug development

FASTtrack Pharmaceutics – Dosage Form and Design focuses on what you really need to know in order to pass your pharmacy exams. It provides concise, bulleted information, key points, tips and an all-important self-assessment section, including MCQs.

Polymeric Nanomaterials in Nanotherapeutics describes how polymeric nanosensors and nanorobotics are used for biomedical instrumentation, surgery, diagnosis and targeted drug delivery for cancer, pharmacokinetics, monitoring of diabetes and healthcare. Key areas of coverage include drug administration and formulations for targeted delivery and release of active agents (drug molecules) to non-healthy tissues and cells. The book demonstrates how these are applied

to dental work, wound healing, cancer, cardiovascular diseases, neurodegenerative disorders, infectious diseases, chronic inflammatory diseases, metabolic diseases, and more. Methods of administration discussed include oral, dental, topical and transdermal, pulmonary and nasal, ocular, vaginal, and brain drug delivery and targeting. Drug delivery topics treated in several subchapters includes materials for active targeting and cases study of polymeric nanomaterials in clinical trials. The toxicity and regulatory status of therapeutic polymeric nanomaterials are also examined. The book gives a broad perspective on the topic for researchers, postgraduate students and professionals in the biomaterials, biotechnology, and biomedical fields. Shows how the properties of polymeric nanomaterials can be used to create more efficient medical treatments/therapies Demonstrates the potential and range of applications of polymeric nanomaterials in disease prevention, diagnosis, drug development, and for improving treatment outcomes Accurately explains how nanotherapeutics can help in solving problems in the field through the latest technologies and formulations

A concise guide providing the physicochemical background to the design and use of pharmaceutical dosage forms.This FASTtrack book is derived from the textbook Physicochemical Principles of Pharmacy and is designed to be used alongside it for those revision periods when time is short. It includes key points, tips, self assessment questions/answers and memory maps to aid with revision.For the new edition there will be an additional chapter on pharmaceutical nanotechnology.

FASTtrack is a new series of indispensable revision guides created especially for undergraduate pharmacy students. Basic information is provided on all main areas of study for the MPharm in small concise texts. Each title provides a summary of all key information along with diagrams, cases and questions and answers for self assessment. the books are practical, easy to read and well-priced and complement textbooks and aid students with revision for examinations. This specific title is a basic revision guide in Pharmacology covering all systems in the body. This revision guide includes mechanism

Research and innovation in the life sciences is driving rapid growth in agriculture, biomedical science, information science and computing, energy, and other sectors of the U.S. economy. This economic activity, conceptually referred to as the bioeconomy, presents many opportunities to create jobs, improve the quality of life, and continue to drive economic growth. While the United States has been a leader in advancements in the biological sciences, other countries are also actively investing in and expanding their capabilities in this area. Maintaining competitiveness in the bioeconomy is key to maintaining the economic health and security of the United States and other nations. Safeguarding the Bioeconomy evaluates preexisting and potential approaches for assessing the value of the bioeconomy and identifies intangible assets not sufficiently captured or that are missing from U.S. assessments. This study considers strategies for

safeguarding and sustaining the economic activity driven by research and innovation in the life sciences. It also presents ideas for horizon scanning mechanisms to identify new technologies, markets, and data sources that have the potential to drive future development of the bioeconomy.

A revision guide on pharmaceutical and medicinal chemistry. The book covers all aspects of the chemistry of drugs and includes key points, tips, and self-assessment questions to aid in learning.

For nearly half a century, social scientists have made claims that there is a "therapeutic ethos" with extensive influence upon numerous aspects of American society. In Therapeutic Culture, twelve authors address the implications of this ethos and its effects on a wide range of social institutions, extending from the family to schools, and operating in religious behavior and within the legal system. Has there been, as the sociological theorist Philip Rieff argued in 1966, a "triumph of the therapeutic?" If so, in what kinds of institutions has it been most pervasive? At the same time, what aspects of modern culture has it replaced or defeated? Therapeutic Culture addresses these questions, and raises others. Part 1 of this volume examines the emergence of the idea of "authenticity" as it defines the manipulation of emotions and behavior both in the United States and Great Britain. Contributors include Elisabeth Lasch-Quinn, Frank Furedi, Jonathan B. Imber, and Alan Woolfolk. Part 2 illustrates specific cases of the effects of therapeutic culture within institutions, including courts, schools, religious communities, and the "virtual community" of the Internet. Contributors include James L. Nolan, Jr., John Steadman Rice, Felicia Wu Song, and James Tucker. Part 3 extends the analyses of specific social institutions to the broader consequences that have resulted as a therapeutic ethos has taken root in contemporary life. Contributors include Digby Anderson, Ellen Herman, and James Davison Hunter. Part 4 is devoted to a previously unpublished essay by Philip Rieff whose significant influence can be seen in many of the contributions. Rieff revisits the highly controversial confirmation hearings of Supreme Court Associate Justice Clarence Thomas in 1991 and offers ample evidence of the therapeutic uses of politics as well as the political manipulations available within a therapeutic culture to provide a fitting conclusion. This volume establishes a benchmark for further theoretical reflection and empirical research on the nature of therapeutic culture. It will be of interest to sociologists, psychologists, political scientists, and cultural studies specialists. Jonathan B. Imber is editor-in-chief of Society and Class of 1949 Professor in Ethics and professor of sociology at Wellesley College.

This unique volume reports on the largest long-term preventive intervention study ever conducted with children at risk for serious violence and poor life outcomes. From first through 10th grade, Fast Track provided multicomponent interventions to support children, families, and schools in achieving positive social, emotional, and academic outcomes. The book explores the developmental processes associated with early aggression, describes how each component of

FastTrack was developed and implemented, and summarizes outcomes up to 20 years later. Vivid case studies track the impact of comprehensive school- and family-based programming on children's pathways through the elementary and high school years. The concluding chapter offers recommendations for using Fast Track components in future violence prevention initiatives. See also the authors' Social and Emotional Skills Training for Children: The Fast Track Friendship Group Manual, a step-by-step guide to implementing one of the core components of Fast Track.

Aims to show the rationale and role of drug therapy in the management of some common diseases through a consideration of the mechanisms of disease processes in relation to normal function.

This book constitutes the refereed proceedings of the 5th International Conference on Serious Games Development and Applications, SGDA 2014, held in Berlin, Germany, in October 2014. The 14 revised full papers presented together with 4 short papers were carefully reviewed and selected from 31 submissions. The focus of the papers was on the following: games for health, games for medical training, serious games for children, music and sound effects, games for other purposes, and game design and theories.

Improving and Accelerating Therapeutic Development for Nervous System Disorders is the summary of a workshop convened by the IOM Forum on Neuroscience and Nervous System Disorders to examine opportunities to accelerate early phases of drug development for nervous system drug discovery. Workshop participants discussed challenges in neuroscience research for enabling faster entry of potential treatments into first-in-human trials, explored how new and emerging tools and technologies may improve the efficiency of research, and considered mechanisms to facilitate a more effective and efficient development pipeline. There are several challenges to the current drug development pipeline for nervous system disorders. The fundamental etiology and pathophysiology of many nervous system disorders are unknown and the brain is inaccessible to study, making it difficult to develop accurate models. Patient heterogeneity is high, disease pathology can occur years to decades before becoming clinically apparent, and diagnostic and treatment biomarkers are lacking. In addition, the lack of validated targets, limitations related to the predictive validity of animal models - the extent to which the model predicts clinical efficacy - and regulatory barriers can also impede translation and drug development for nervous system disorders. Improving and Accelerating Therapeutic Development for Nervous System Disorders identifies avenues for moving directly from cellular models to human trials, minimizing the need for animal models to test efficacy, and discusses the potential benefits and risks of such an approach. This report is a timely discussion of opportunities to improve early drug development with a focus toward preclinical trials.

A comprehensive look at current drug discovery and development methods—and the roadmap for the future Providing both understanding and guidance in characterizing potential drugs and their production and synthesis, Development of

Therapeutic Agents Handbook gives professionals a basic tool to facilitate research and development within this challenging process. This comprehensive text brings together, in one resource, a compendium of concepts, approaches, methodologies, and limitations that need to be considered in the formulation of therapeutic agents across a range of therapeutic fields. Both a reference and a call to action for the pharmaceutical industry, Development of Therapeutic Agents Handbook examines recent innovations taking shape in the various medical disciplines involved in drug discovery, and shows why these advances need to be embraced universally among researchers to improve their solution strategies. Additional subject matter includes: Extensive coverage and in-depth look into novel treatments and therapeutics Discussion of hot topics like new drugs and nutraceuticals, the discovery and development of vaccines, cancer therapeutics, and market overviews Coverage of therapeutic drug development for specific disease areas, such as cardiology, oncology, breast cancer, and kidney diseases As research in biology, chemistry, medicine, and technology rapidly progresses, it is becoming increasingly important for medical researchers to maintain an up-to-date knowledge base of emerging trends directing promising new therapies. Development of Therapeutic Agents Handbook serves this purpose, acting as both a one-stop reference rich in valid science, and a tool to carve out new pathways in the pursuit of bringing safer and more effective drugs to the marketplace.

The second edition of this innovative work again provides a unique perspective on the clinical discovery process by providing input from experts within the NIH on the principles and practice of clinical research. Molecular medicine, genomics, and proteomics have opened vast opportunities for translation of basic science observations to the bedside through clinical research. As an introductory reference it gives clinical investigators in all fields an awareness of the tools required to ensure research protocols are well designed and comply with the rigorous regulatory requirements necessary to maximize the safety of research subjects. Complete with sections on the history of clinical research and ethics, copious figures and charts, and sample documents it serves as an excellent companion text for any course on clinical research and as a must-have reference for seasoned researchers. *Incorporates new chapters on Managing Conflicts of Interest in Human Subjects Research, Clinical Research from the Patient's Perspective, The Clinical Researcher and the Media, Data Management in Clinical Research, Evaluation of a Protocol Budget, Clinical Research from the Industry Perspective, and Genetics in Clinical Research *Addresses the vast opportunities for translation of basic science observations to the bedside through clinical research *Delves into data management and addresses how to collect data and use it for discovery *Contains valuable, up-to-date information on how to obtain funding from the federal government

From leading authorities, this volume presents a unique evidence-based group intervention for the 10-15% of children who are challenged by peer difficulties in elementary school. The book features 107 engaging full-color reproducible handouts, posters, and other tools. In addition to teaching core social skills (participation, communication, cooperation, good sportsmanship, conflict resolution), the Friendship Group promotes emotional understanding and empathy, self-control, and effective coping with social stressors. Two complete sets of sessions are provided (grades K-2 and 3-5), including step-by-step implementation guidelines. The large-size format facilitates photocopying; purchasers

also get access to a Web page where they can download and print the reproducible materials.

The Business of Healthcare Innovation is the first wide-ranging analysis of business trends in the manufacturing segment of the health care industry. In this leading edge volume, Professor Burns focuses on the key role of the 'producers' as the main source of innovation in health systems. Written by professors of the Wharton School and industry executives, this book provides a detailed overview of the pharmaceutical, biotechnology, genomics/proteomics, medical device and information technology sectors. It analyses the market structures of these sectors as well as the business models and corporate strategies of firms operating within them. Most importantly, the book describes the growing convergence between these sectors and the need for executives in one sector to increasingly draw upon trends in the others. It will be essential reading for students and researchers in the field of health management, and of great interest to strategy scholars, industry practitioners and management consultants.

For this ready reference, the internationally renowned authority in the field, Roland Kontermann, has assembled a team of outstanding contributors from industry and academia to convey the worldwide knowledge on modifying therapeutic proteins in order to optimize their pharmacological potential. The result is a comprehensive work covering all approaches and aspects of the topic in one handy volume, making this indispensable reading for companies and research institutions working on the development of biopharmaceuticals.

Since the publication of the previous edition of this volume, there has been substantial progress in a number of areas of multiple sclerosis (MS) research. Although immunosuppressive treatments continue to be developed and refined, more targeted immunomodulatory therapies are surfacing as we learn more about how the immune system works in health an

Therapeutic risk management of medicines is an authoritative and practical guide on developing, implementing and evaluating risk management plans for medicines globally. It explains how to assess risks and benefit-risk balance, design and roll out risk minimisation and pharmacovigilance activities, and interact effectively with key stakeholders. A more systematic approach for managing the risks of medicines arose following a number of high-profile drug safety incidents and a need for better access to effective but potentially risky treatments. Regulatory requirements have evolved rapidly over the past decade. Risk management plans (RMPs) are mandatory for new medicinal products in the EU and a Risk Evaluation and Mitigation Strategy (REMS) is needed for certain drugs in the US. This book is an easy-to-read resource that complements current regulatory guidance, by exploring key areas and practical implications in greater detail. It is structured into chapters encompassing a background to therapeutic risk management, strategies for developing RMPs, implementation of RMPs, and the continuing evolution of the risk management field.The topic is of critical importance not only to the pharmaceutical and biotechnology industries, but also regulators and healthcare policymakers.Some chapters feature contributions from selected industry experts. An up-to-date practical guide on conceiving, designing, and implementing global therapeutic risk management plans for medicines A number of useful frameworks are presented which add impact to RMPs (Risk Management Plans), together with regional specific information (European Union, United States, and Japan) A comprehensive guide for performing risk management more effectively throughout a product’s life-cycle

Revision guide for students giving points of basic information on applied pharmacy practice followed by questions and answers.

FASTtrack is a new series of indispensable revision guides created especially for undergraduate pharmacy students. Each book focuses on what pharmacy students really need to know in order to pass exams, providing concise, bulleted information, key points, tips and an all-important self-assessment section which includes MCQs, case studies, sample essay questions and worked

examples. Addressing all common ailments, organised by system in alphabetical order, this book provides all the essential information needed for managing symptoms presented in the pharmacy.

Based on the successful textbook, Pharmaceutical Compounding and Dispensing, this book has been designed to assist the student compounder in understanding the key dosage forms encountered within extemporaneous dispensing.

UK pharmacy trainees must take the registration exam at the end of the pre-registration year in order to practice pharmacy in Great Britain. Written by a former question writer for the Society Registration exam, this work contains over 400 open and closed-book questions with descriptive answers, giving the reasoning behind the answers.

Provides a brief account of drug action, as a study or revision aid. The authors have taken a therapeutic area and considered the major classes of drugs, their actions and, to a limited degree, their uses.

Provides a comprehensive review of all types of medical therapeuticdelivery solutions from traditional pharmaceutical therapydevelopment to innovative medical device therapy treatment to therecent advances in cellular and stem cell therapy development • Provides information to potentially allow futuredevelopment of treatments with greater therapeutic potential andcreativity • Includes associated regulatory requirements for thedevelopment of these therapies • Provides a comprehensive developmental overview ontherapeutic delivery solutions • Provides overview information for both the general reader as well as more detailed references forprofessionals and specialists in the field

This book focuses on topics ranging from the economics of drug-resistant infections and the management of antimicrobial use to new information on methods to optimize the selection, route of administration, dosing, and duration of antimicrobial therapies for common infections. In addition to offering ideas on studied programmatic approaches for judi

FASTtrack - Therapeutics