PHARMACOLOGY, TOXICOLOGY & PHARMACEUTICAL SCIENCE

2017 CATALOG

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Advances in Nanomedicine for the Delivery of Therapeutic Nucleic Acids

Surendra Nimesh
Ramesh Chandra
Nidhi Gupta

WP
WOODHEAD PUBLISHING

A unique exploration of the applications of nanomedicine for the delivery of nucleic acid-based therapeutics.

ISBN: 978-0-08-100557-6
PUB DATE: July 2017
FORMAT: Hardback
PAGES: c. 290
TRIM: 6w x 9h

AUDIENCE
Professors and graduate students in therapeutic nanomedicine; researchers in nanomedicine and nucleic acids

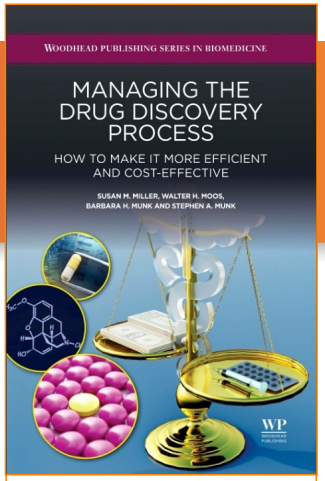
KEY FEATURES

- Provides a complete overview of the applicatiosn of nanomedicine in the delivery of nucleic acids, from characterization of nanoparticles to *in vitro* and *in vivo* studies
- Discusses delivery issues of less well explored nucleic acids like PNAs, Ribozymes, DNAzymes, etc.
- Summarizes the current state of research in nucleic acid delivery, and underscores the future of nanomedicine in this field

DESCRIPTION

Advances in Nanomedicine for the Delivery of Therapeutic Nucleic Acids addresses several issues related to safe and effective delivery of nucleic acids (NAs) using nanoparticles. A further emphasis would be laid on the mechanism of delivery of NAs, the barriers encountered and the strategies adapted to combat them. An exhaustive account of the advantages as well shortcomings of all the delivery vectors being employed in delivery of various NAs will be provided. On final note the regulatory aspects of nanoparticles mediated NA would be discussed, with focus on their clinical relevance.

The design and development of nucleic acid-based therapeutics for the treatment of diseases arising from genetic abnormalities has made significant progress over the past few years. NAs have been widely explored for the treatment of cancer and infectious diseases or to block cell proliferation and thereby caused diseases. Advances in synthetic oligonucleotide chemistry resulted in synthesis of NAs that are relatively stable in in vivo environments. However, cellular targeting and intracellular delivery of NAs still remains a challenge. Further development of NA-,based therapeutics depends on the progress of safe and effective carriers for systemic administration. Nanomedicine has facilitated availability of vectors with diminished cytotoxicity and enhanced efficacy which are rapidly emerging as systems of choice. These vectors protect NAs from enzymatic degradation by forming condensed complexes along with targeted tissue and cellular delivery. During the past few years, a myriad reports have appeared reporting delivery of NAs mediated by nanoparticles. This book will provide an overview of nanoparticles being employed in the in vitro and in vivo delivery of therapeutically relevant NAs like DNA, siRNA, LNA, PNA, etc.



Managing the Drug Discovery Process

How to Make It More Efficient and Cost-Effective

Walter Moos SRI International, Menlo Park, CA, USA and University of California–San Francisco, CA, USA
Susan Miller Department of Pharmaceutical Chemistry, University of California, San Fransisco, CA, USA
Stephen Munk President and CEO, Ash Stevens Inc., Riverview, MI, USA
Barbara Munk Senior Lecturer, Department of Chemistry, Wayne State University, Detroit, MI, USA

ISBN: 978-0-08-100625-2
PUB DATE: December 2016
FORMAT: Hardback
PAGES: c. 506
TRIM: 6w x 9h

AUDIENCE

Researchers and postgraduate students in academia and the pharmaceutical industry

Presents an in-depth examination of the drug discovery process, examining not only the research and development side, but also business perspectives

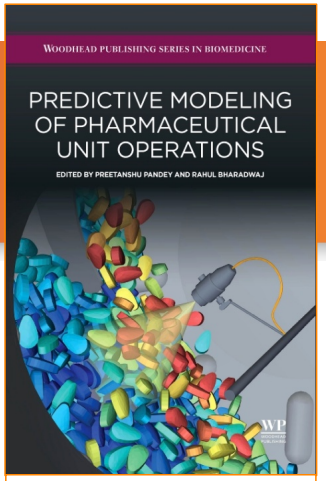
KEY FEATURES

- 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

DESCRIPTION

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.



Predictive Modeling of Pharmaceutical Unit Operations

Edited by: ***Preetanshu Pandey*** Principal Scientist in the Dept. of Drug Product Science and Technology at Bristol-Myers Squibb, New Brunswick, NJ, USA .
Rahul Bharadwaj Vice-President of Engineering and Business Development at Rocky DEM, Inc.

WP WOODHEAD PUBLISHING

This book focuses on modeling techniques commonly used in drug development of solid dosage forms that are pertinent to pharmaceutical unit operations

ISBN: 978-0-08-100154-7
PUB DATE: October 2016
FORMAT: Hardback
PAGES: c. 438
TRIM: 6w x 9h

AUDIENCE

Individuals within the Pharmaceutical, Food, Consumer health and Chemical industries

KEY FEATURES

- Explains the commonly used modeling and simulation tools
- Details the modeling of various unit operations commonly utilized in solid dosage drug product manufacturing
- Practical examples of the application of modeling tools through case studies
- Discussion of modeling techniques used for a risk-based approach to regulatory filings
- Explores the usage of modeling in upcoming areas such as continuous manufacturing and biologics manufacturingBullet points

DESCRIPTION

The use of modeling and simulation tools is rapidly gaining prominence in the pharmaceutical industry covering a wide range of applications. This book focuses on modeling and simulation tools as they pertain to drug product manufacturing processes, although similar principles and tools may apply to many other areas. Modeling tools can improve fundamental process understanding and provide valuable insights into the manufacturing processes, which can result in significant process improvements and cost savings. With FDA mandating the use of Quality by Design (QbD) principles during manufacturing, reliable modeling techniques can help to alleviate the costs associated with such efforts, and be used to create in silico formulation and process design space. This book is geared toward detailing modeling techniques that are utilized for the various unit operations during drug product manufacturing. By way of examples that include case studies, various modeling principles are explained for the nonexpert end users. A discussion on the role of modeling in quality risk management for manufacturing and application of modeling for continuous manufacturing and biologics is also included.

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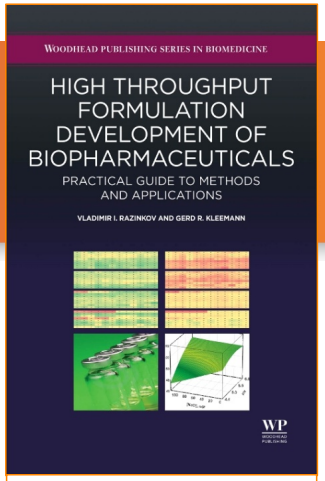

High-Throughput Formulation Development of Biopharmaceuticals

Practical Guide to Methods and Applications

Vladimir I. Razinkov Department of Drug Product Development, Amgen Inc., Seattle, WA, USA
Gerd Kleemann Department of Drug Product Development, Amgen Inc., Seattle, WA, USA

WP WOODHEAD PUBLISHING

A comprehensive description of modern drug formulation development, including pre-formulation screening and refinement of robust formulations during commercialization

KEY FEATURES

- Presents applications of high-throughput methodologies to accelerate drug formulation development
- Provides the latest technologies in the field
- Includes key statistical approaches, such as design of experiment and multivariate data analysis
- Written by highly respected formulation development experts

DESCRIPTION

High Throughput Formulation Development of Biopharmaceuticals: Practical Guide to Methods and Applications provides the latest developments and information on the science of stable and safe drug product formulations, presenting a comprehensive review and detailed description of modern methodologies in the field of formulation development, a process starting with candidate and pre-formulation screening in its early development phase and then progressing to the refinement of robust formulations during commercialization in the later phases of development.

The title covers topics such as experiment design, automation of sample preparation and measurements, high-throughput analytics, stress-inducing methods, statistical analysis of large amounts of formulation study data, emerging technologies, and the presentation of several case studies, along with a concluding summary.

ISBN: 978-1-907568-63-3
PUB DATE: September 2016
FORMAT: Hardback
PAGES: c. 124
TRIM: 6.125w x 9.25h

AUDIENCE

All those biopharmaceutical specialists and scholars with interests around accelerated formulation development, high throughput methodologies, statistical analysis and related technologies

BIOMEDICAL SCIENCE & MEDICINE
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Fundamentals of Biologicals Regulation

Vaccines and Biotechnology Medicines

Rebecca Sheets Principal Consultant and Subject Matter Expert,Grimalkin Partners, Silver Spring, MD, Adjunct Professor, Catholic University of America

This book surveys the regulation of biologicals from an international perspective, building upon foundational information and featuring real-world case studies

ISBN: 978-0-12-809290-3

PUB DATE: May 2017

FORMAT: Paperback

PAGES: c. 208

TRIM: 7.5w x 9.25h

AUDIENCE

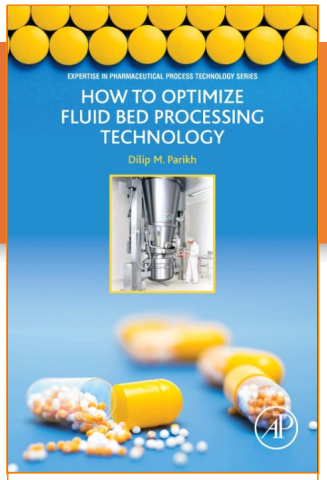
Graduate students and professors in biotechnology, pharmaceutical science and regulatory science programs, regulatory officials, industry professionals

KEY FEATURES

- Provides a broad overview and introduction to the regulatory processes, from product development pathways, through clinical trials and product development stages and beyond
- Includes FDA, EMA, ICH, and WHO recommendations and guidelines so readers can compare and contrast the different regulatory regions with their expectations and understand why they are different
- Contains chapters on some of the exceptions to the process including how biosimilars and in vitro diagnostics are regulated
- Includes numerous case studies, learning activities, and real-world examples across several classes of biotechnological products

DESCRIPTION

Fundamentals of Biologicals Regulation: Vaccines and Biotechnology Medicines serves as an introduction to the international regulatory arena in which biologicals are developed and offers an overview of the processes and insight into the scientific concepts underpinning global regulations. This book will provide multiple levels of readership with guidance on basic concepts, a detailed look at regulatory challenges, and practical insight into how regulators consider regulatory science and regulatory process issues across various regions. With numerous case studies, learning activities, and real-world examples across several classes of biotechnological products, this book is a valuable and comprehensive resource for graduate students, professors, regulatory officials, and industry scientists working with biologicals.



How to Optimize Fluid Bed Processing Technology

Part of the Expertise in Pharmaceutical Process Technology Series

Dilip Parikh General Manager, Measurement Control Corporation (www.mcc-online.com); Owner, Milev LLC (Milev Pharmaceutical Technology Consulting)

A concise overview of the fluid bed granulation process, its necessary equipment, real-world tips, and solutions to common issues

ISBN: 978-0-12-804727-9

PUB DATE: March 2017

FORMAT: Paperback

PAGES: c. 104

TRIM: 6w x 9h

AUDIENCE

Pharmaceutical personnel, from R&D technicians to team leaders and department heads

KEY FEATURES

- Written by an expert in the field with several years of experience in product development, manufacturing, plant operations, and process engineering
- Illustrates when fluid bed granulation is needed, when to use less common fluid bed granulation methods, and the advantages of fluid bed granulation when compared to other granulation techniques
- Offers troubleshooting tips and practical advice for scientists working with this technique

DESCRIPTION

How to Optimize Fluid Bed Processing Technology: Part of the Expertise in Pharmaceutical Process Technology Series addresses the important components of fluid bed granulation, providing answers to problems that commonly arise and using numerous practical examples and case studies as reference.

This book covers the theoretical concepts involved in fluidization, also providing a description of the choice and functionality of equipment. Additional chapters feature key aspects of the technology, including formulation requirements, process variables, process scale-up, troubleshooting, new development, safety, and process evaluation.

Given its discussion of theoretical principles and practical solutions, this is a go-to resource for all those scientists and new researchers working with fluid bed granulation as a unit operation.

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PHARMACOLOGY
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Nanotechnology-Based Approaches for Targeting and Delivery of Drugs and Genes

Edited by: ***Vijay Mishra*** Department of Pharmaceutical Sciences, Dr. H. S. Gour Central University, Sagar, India;
Prashant Kesharwani Department of Pharmaceutical Sciences, Eugene Appelbaum College of Pharmacy and Health Sciences, Wayne State University, Detroit MI, USA;
Mohd Cairul Iqbal Mohd Amin Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia;
Arun Iyer Assistant Professor, Eugene Appelbaum College of Pharmacy and Health Sciences, Wayne State University, Detroit, MI, USA

A detailed look at the latest technologies and strategies in nanomedicine for drug delivery that includes achievements, challenges, and solutions

ISBN: 978-0-12-809717-5
PUB DATE: March 2017
FORMAT: Paperback
PAGES: c. 288
TRIM: 7.5w x 9.25h

AUDIENCE

Graduate and doctoral students and new researchers, professors, pharmaceutical scientists and clinical researchers working in drug and gene targeting and delivery

KEY FEATURES

- Explores a wide range of promising approaches for the diagnosis and treatment of diseases using the latest advances in cutting-edge nanomedical technologies
- Contains contributions from world-renowned experts and researchers working in the area of nanomedicine and drug delivery
- Covers the associated challenges and potential solutions to working with nanotechnology in drug delivery
- Highlights crucial topics, such as biopharmaceutical and toxicity issues, quality by design, drug targeting, and more

DESCRIPTION

Nanotechnology-Based Approaches for Targeting and Delivery of Drugs and Genes provides an overview of the important aspects of nanomedicine in order to illustrate how to design and develop novel and effective drug delivery systems using nanotechnology.

The book is organized into three sections, beginning with an introduction to nanomedicine and its associated issues. Section two discusses the latest technologies in nanomedicine, while the third section covers future developments and challenges in the field.

By focusing on the design, synthesis, and application of a variety of nanocarriers in drug and gene delivery, this book provides pharmaceutical and materials science students, professors, clinical researchers, and industry scientists with a valuable resource aimed at tackling the challenges of delivering drugs and genes in a more targeted manner.

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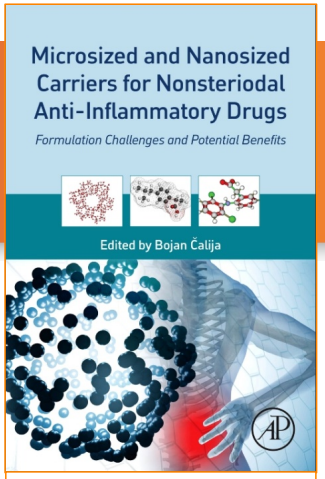

Microsized and Nanosized Carriers for Nonsteroidal Anti-Inflammatory Drugs

Formulation Challenges and Potential Benefits

Edited by: ***Bojan ?alija*** Department of Pharmaceutical Technology and Cosmetology, University of Belgrade - Faculty of Pharmacy, Belgrade, Serbia

Thorough reference on improving the delivery of NSAIDs by encapsulation in microsized and nanosized carriers through a variety of formulation strategies

KEY FEATURES

- Covers a wide range of microsized and nanosized carriers in one resource, including particulate carriers (microparticles, nanoparticles, and zeolites) and the soft colloidal carriers, such as micro-emulsions and nano-emulsions
- Presents the reader with various formulation approaches dependent on the characteristics of the material, model drug, and desired route of administration
- Approaches are based on the latest research in the area and formulation strategies may have broader applications to the encapsulation of other active pharmaceutical ingredients

DESCRIPTION

Microsized and Nanosized Carriers for Nonsteroidal Anti-Inflammatory Drugs: Formulation Challenges and Potential Benefits provides a unique and complete overview of novel formulation strategies for improvement of the delivery of NSAIDs via encapsulation in microsized and nanosized carriers composed of different materials of natural and synthetic origin.

This book presents the latest research on advances and limitations of both microsized and nanosized drug carriers and NSAIDs before discussing the formulation aspects of these drug carriers that are intended for oral, dermal, and transdermal administration of NSAIDs.

In addition, functionality of these materials as potential excipients for microsized and nanosized carriers is discussed and debated. Practical solutions for improving effectiveness of these drugs are included throughout the book, making this an important resource for graduate students, professors, and researchers in the pharmaceutical sciences.

ISBN: 978-0-12-804017-1

PUB DATE: January 2017

FORMAT: Paperback

PAGES: c. 270

TRIM: 6w x 9h

AUDIENCE

Graduate students, academic and industry researchers in the fields of pharmaceutical science and pharmaceutical technology; researchers in applied chemistry and biomolecular sciences

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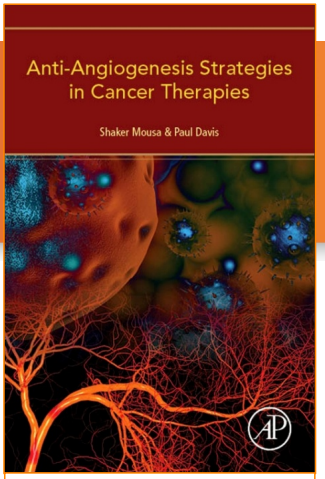

Anti-Angiogenesis Strategies in Cancer Therapeutics

Shaker Mousa Vice Provost for Research and Professor of Pharmacology, Albany College of Pharmacy and Health Sciences, Rensselaer, NY, USA
Paul Davis Professor of Pharmacy, The Pharmaceutical Research Institute, Albany College of Pharmacy and Health Sciences, Rensselaer, NY, USA

Provides a detailed look at the current status and future of discovery and development of novel anti-angiogenesis strategies in oncology

ISBN: 978-0-12-802576-5
PUB DATE: December 2016
FORMAT: Paperback
PAGES: c. 194
TRIM: 7.5w x 9.25h

AUDIENCE

Pharmaceutical scientists and researchers in pharmaceutical and biotechnology companies, oncologists, hematologists, graduate and post-graduate students in these areas and academic faculty

KEY FEATURES

- Covers important preclinical models and clinical trials in the discovery and development of novel anti-angiogenesis agents
- Reviews FDA-approved anti-angiogenesis agents
- Illustrates the value of nanotechnology in improving the utility of anti-angiogenesis agents
- Offers insight into the development of novel anti-angiogenesis agents and future direction in this area

DESCRIPTION

Anti-angiogenesis Strategies in Cancer Therapeutics provides a detailed look at the current status and future directions in the discovery and development of novel anti-angiogenesis strategies in oncology. This book highlights the different mechanisms involved in the modulation of angiogenesis, including inflammation, thrombosis, and microRNA, and shows how nanotechnology can further enhance the potential of existing and new anti-angiogenesis approaches.

Written for industry scientists, researchers, oncologists, hematologists, and professors and students in the field, this comprehensive book covers all aspects of anti-angiogenesis strategies and their differences.

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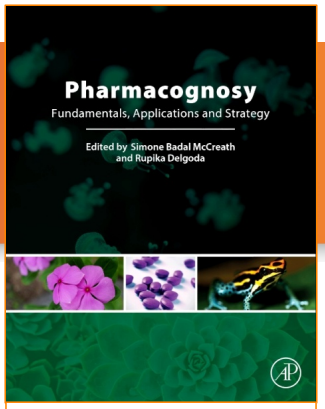

Pharmacognosy

Fundamentals, Applications and Strategies

Simone Badal Mccreath Lecturer & Anticancer Researcher, Biochemistry, Department of Basic Medical Sciences, Faculty of Medical Sciences Teaching & Research Complex University of the West Indies, Mona Campus, Kingston, Jamaica
Rupika Delgoda Director, Natural Products Institute, University of the West Indies, Mona, Jamaica

Covers the main principles of pharmacognosy, along with important safety aspects, trends, therapeutic applications, and how they interact with humans

ISBN: 978-0-12-802104-0
PUB DATE: December 2016
FORMAT: Paperback
PAGES: c. 716
TRIM: 8.5w x 10.875h

AUDIENCE

Students and researchers in the fields of pharmaceutical science, pharmacy and pharmacognosy; students and researchers in medicine, biotechnology, botany, biochemistry and chemistry

KEY FEATURES

- Covers the differences between animal and plant cells to facilitate an easier transition to how the body interacts with these entities
- Contains practice questions and laboratory exercises at the end of every chapter to test learning and retention
- Provides a single source that covers fundamental topics and future strategies, with the goal of enabling further research that will contribute to the overall health and well-being of mankind

DESCRIPTION

Pharmacognosy: Fundamentals, Applications and Strategies explores a basic understanding of the anatomy and physiology of plants and animals, their constituents and metabolites. This book also provides an in-depth look at natural sources from which medicines are derived, their pharmacological and chemical properties, safety aspects, and how they interact with humans.

The book is vital for future research planning, helping readers understand the makeup, function, and metabolites of plants in a way where the history of their usage can be linked to current drug development research, including in vitro, in vivo, and clinical research data.

By focusing on basic principles, current research, and global trends, this book provides a critical resource for students and researchers in the areas of pharmacognosy, pharmacy, botany, medicine, biotechnology, biochemistry, and chemistry.

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A Comprehensive Guide to Toxicology in Nonclinical Drug Development, 2e

Edited by: ***Ali S. Faqi*** Senior Director of Developmental and Reproductive Toxicology, MPI Research, Mattawan, MI, USA

This informative guide on the complex and highly interrelated activities of nonclinical toxicology provides a complete and comprehensive understanding

ISBN: 978-0-12-803620-4

PREVIOUS EDITION ISBN: 9780123878151

PUB DATE: November 2016

FORMAT: Hardback

PAGES: c. 972

TRIM: 8.5w x 10.875h

AUDIENCE

Toxicologists working in nonclinical drug development, toxicology professors and students, regulatory toxicologists, medical and veterinary scientists

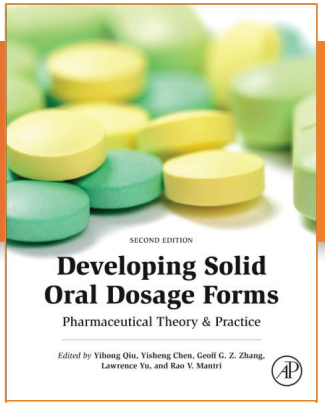
KEY FEATURES

- Provides unique content that is not always covered together in one comprehensive resource, including chapters on stem cells, abuse liability, biomarkers, inhalation toxicology, biostatistics, and more
- Updated with the latest international guidelines for nonclinical toxicology in both small and large molecules
- Incorporates practical examples in order to illustrate day-to-day activities and the expectations associated with working in nonclinical toxicology

DESCRIPTION

A Comprehensive Guide to Toxicology in Nonclinical Drug Development, Second Edition, is a valuable reference designed to provide a complete understanding of all aspects of nonclinical toxicology in the development of small molecules and biologics. This updated edition has been reorganized and expanded to include important topics such as stem cells in nonclinical toxicology, inhalation and dermal toxicology, pitfalls in drug development, biomarkers in toxicology, and more.

Thoroughly updated to reflect the latest scientific advances and with increased coverage of international regulatory guidelines, this second edition is an essential and practical resource for all toxicologists involved in nonclinical testing in industry, academic, and regulatory settings.



Developing Solid Oral Dosage Forms, 2e

Pharmaceutical Theory and Practice

Edited by: ***Yihong Qiu*** PhD, Senior Research Fellow, Oral Drug Products, Manufacturing Science and Technology, AbbVie Inc., North Chicago, IL, USA
Yisheng Chen Vice President, Novast Laboratories, Nantong, China
Geoff G.Z. Zhang Senior Research Fellow, Drug Product Development, Abbvie, Inc., North Chicago, IL, USA
Lawrence Yu Deputy Director, Office of Pharmaceutical Quality, Center for Drug Evaluation and Research, US Food and Drug Administration, Silver Spring, MD
Rao V. Mantri Executive Director, Drug Product Science & Technology, Bristol-Myers Squibb, New Brunswick, NJ, USA

Extensively updated with the latest developments and advances in pharmaceutical product design and development, technologies, and regulatory requirements

ISBN: 978-0-12-802447-8

PREVIOUS EDITION ISBN: 978-0-444-53242-8

PUB DATE: November 2016

FORMAT: Hardback

PAGES: c. 1162

TRIM: 8.5w x 10.875h

AUDIENCE

Pharmaceutical researchers in industry and at academic institutions focused on developing solid dosage forms for drug delivery; professors and students involved in advanced graduate level courses in pharmaceutical sciences programs

KEY FEATURES

- Written and edited by a international team of leading experts with experience and knowledge across industry, academia, and regulatory settings
- Includes new chapters covering the pharmaceutical applications of surface phenomenon, predictive biopharmaceutics and pharmacokinetics, the development of formulations for drug discovery support, and much more
- Presents new case studies throughout, and a section completely devoted to regulatory aspects, including global product regulation and international perspectives

DESCRIPTION

Developing Solid Oral Dosage Forms: Pharmaceutical Theory and Practice, Second Edition illustrates how to develop high-quality, safe, and effective pharmaceutical products by discussing the latest techniques, tools, and scientific advances in preformulation investigation, formulation, process design, characterization, scale-up, and production operations.

This book covers the essential principles of physical pharmacy, biopharmaceutics, and industrial pharmacy, and their application to the research and development process of oral dosage forms. Chapters have been added, combined, deleted, and completely revised as necessary to produce a comprehensive, well-organized, valuable reference for industry professionals and academics engaged in all aspects of the development process.

New and important topics include spray drying, amorphous solid dispersion using hot-melt extrusion, modeling and simulation, bioequivalence of complex modified-released dosage forms, biowaivers, and much more.

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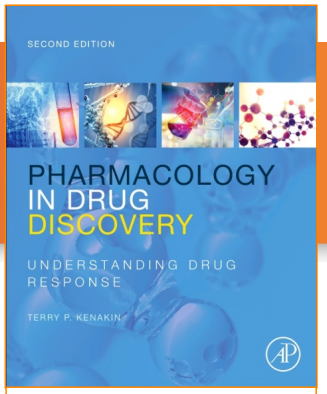

Pharmacology in Drug Discovery and Development, 2e

Understanding Drug Response

Terry Kenakin Professor of Pharmacology, The University of North Carolina School Of Medicine, Chapel Hill, NC, USA

This practical introductory resource enables readers to effectively interpret drug dose-response and make more informed predictions of drug behavior

ISBN: 978-0-12-803752-2

PREVIOUS EDITION ISBN: 9780123848567

PUB DATE: October 2016

FORMAT: Paperback

PAGES: c. 338

TRIM: 7.5w x 9.25h

AUDIENCE

Graduate students, new researchers and professors in pharmacology, as well as scientists (biologists or chemists) who foresee applying pharmacology to the discovery of new drug molecules from either industry or academic standpoints

KEY FEATURES

- Includes example-based cases that illustrate how the pharmacological concepts discussed in this book lead to practical outcomes for further research
- Provides vignettes on those researchers and scientists who have contributed significantly to the fields of pharmacology and drug discovery throughout history
- Offers sample questions throughout the book and an appendix containing answers for self-testing and retention

DESCRIPTION

Pharmacology in Drug Discovery and Development: Understanding Drug Response, Second Edition, is an introductory resource illustrating how pharmacology can be used to furnish the tools necessary to analyze different drug behavior and trace this behavior to its root cause or molecular mechanism of action. The concepts discussed in this book allow for the application of more predictive pharmacological procedures aimed at increasing therapeutic efficacy that will lead to more successful drug development.

Chapters logically build upon one another to show how to characterize the pharmacology of any given molecule and allow for more informed predictions of drug effects in all biological systems. New chapters are dedicated to the interdisciplinary drug discovery environment in both industry and academia, and special techniques involved in new drug screening and lead optimization.

This edition has been fully revised to address the latest advances and research related to real time kinetic assays, pluridimensional efficacy, signaling bias, irreversible and chemical antagonism, allosterically-induced bias, pharmacokinetics and safety, target and pathway validation, and much more. With numerous valuable chapter summaries, detailed references, practical examples and case studies throughout, Dr. Kenakin successfully navigates a highly complex subject, making it accessible for students, professors, and new researchers working in pharmacology and drug discovery.

How to Develop Robust Solid Oral Dosage Forms

From Conception to Post-Approval

Bhavishya Mittal Staff Fellow, Office of Pharmaceutical Quality (OPQ), Center for Drug Evaluation and Research (CDER), US Food and Drug Administration (FDA), Silver Spring, MD, USA

As part of the *Expertise in Pharmaceutical Process Technology* Series, this book uses a hands-on approach to cover the development process of solid oral dosage forms

KEY FEATURES

- Focuses on important topics, such as robustness, bioavailability, formulation design, continuous processing, stability tests, modified release dosage forms, international guidelines, process scale-up, and much more
- Part of the *Expertise in Pharmaceutical Process Technology* series edited by Michael Levin
- Discusses common, real-world problems and offers both theoretical and practical solutions to these everyday issues

DESCRIPTION

How to Develop Robust Solid Oral Dosage Forms from Conception to Post-Approval uses a practical and hands-on approach to cover the development process of solid oral dosage forms in one single source. The book details all of the necessary steps from formulation through the post-approval phase and contains industry case studies, real world advice, and troubleshooting tips.

By merging the latest scientific information with practical instructions, this book provides pharmaceutical scientists in formulation research and development with a concrete look at the key aspects in the development of solid oral dosage forms.

ISBN: 978-0-12-804731-6

PUB DATE: October 2016

FORMAT: Paperback

PAGES: c. 168

TRIM: 6w x 9h

AUDIENCE

Pharmaceutical scientists in formulation and research and development, academic professors and graduate students in pharmaceutical sciences and pharmacology

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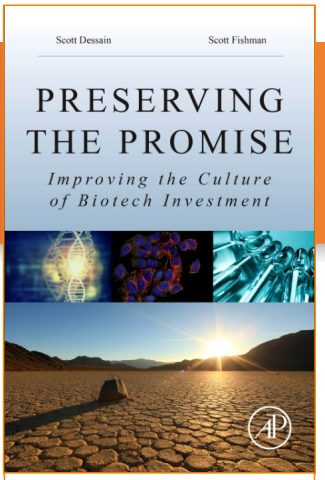

Preserving the Promise

Improving the Culture of Biotech Investment

Scott Dessain MD, PhD, Associate Professor, Lankenau Institute for Medical Research, Wynnewood, PA
Scott M. Fishman MA, President, Ethos LifeScience Advisors, Doylestown, PA

Written by an Angel investor and a Biotech founder, *Preserving the Promise* examines why so many important medical discoveries never reach the clinic, and offers practical alternatives for improving the development process

KEY FEATURES

- Explains why translation of biotech discovery into medicine succeeds so infrequently that it's been dubbed the Valley of Death
- Uncovers specific decision-making strategies that more effectively align incentives, improving clinical and financial outcomes for investors, inventor/entrepreneurs, and patients
- Examines the critical, early stages of commercialization, where technology transfer offices and Angels act as gatekeepers to development, and where tension between short-term financial and long-term clinical aspirations sinks important technologies
- Deconstructs the forces driving biotech, recasts them in a proven conceptual framework, and offers practical guidance for making the system better

DESCRIPTION

Preserving the Promise: Improving the Culture of Biotech Investment critically examines why most biotech startups fail, as they emerge from universities into an ecosystem that inhibits rather than encourages innovation. This "Valley of Death" squanders our public investments in medical research and with them, the promise of longer and healthier lives.

The authors explicate the *Translation Gap* faced by early stage biotech companies, the result of problematic technology transfer and investment practices, and provide specific prescriptions for improving translation of important discoveries into safe and effective therapies.

In *Preserving the Promise*, Dessain and Fishman build on their collective experience as company founders, healthcare investor (Fishman) and physician/scientist (Dessain). The book offers a forward-looking, critical analysis of "conventional wisdom" that encumbers commercialization practices. It exposes the self-defeating habits of drug development in the Valley of Death, that waste money and extinguish innovative technologies through distorted financial incentives.

ISBN: 978-0-12-809216-3
PUB DATE: October 2016
FORMAT: Paperback
PAGES: c. 266
TRIM: 6w x 9h

AUDIENCE

Written for entrepreneurs, Angels and seed-stage investors, technology transfer officers, academic researchers, pharma/biotech and medical device professionals, business developers, economic development and public policy specialists, and all others with a professional or personal stake in human health, *Preserving the Promise* offers a unique, original perspective on how to succeed in getting new drugs and therapies to the clinic

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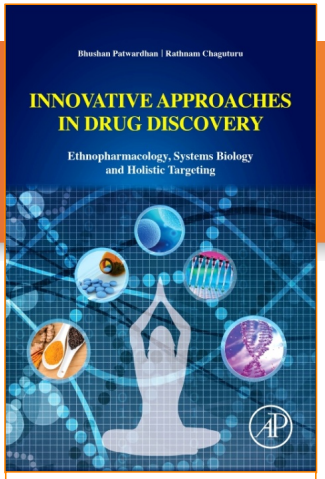

Innovative Approaches in Drug Discovery

Ethnopharmacology, Systems Biology and Holistic Targeting

Bhushan Patwardhan Professor, Interdisciplinary School of Health Sciences and Director, Center for Complementary and Integrative Health Savitribai Phule Pune University Pune, India
Rathnam Chaguturu Founder and CEO, iDDPartners Princeton Junction, NJ, USA

This unique reference promotes the expansion of drug discovery from single-target to multi-target formulations by providing scientific and historical evidence

KEY FEATURES

- Analyzes the reasons behind historical drug failures to provide valuable insights on lessons learned
- Uses current scientific research to promote learning from traditional knowledge systems and through the integration of traditional and western medicines
- Discusses advances in technologies and systems biology to support the transition from formulation discovery to therapeutic discovery

DESCRIPTION

Despite considerable technological advances, the pharmaceutical industry is experiencing a severe innovation deficit, especially in the discovery of new drugs. *Innovative Approaches in Drug Discovery: Ethnopharmacology, Systems Biology and Holistic Targeting* provides a critical review and analysis of health, disease and medicine, and explores possible reasons behind the present crisis in drug discovery. The authors illustrate the benefits of systems biology and pharmacogenomics approaches, and advocate the expansion from disease-centric discovery to person-centric therapeutics involving holistic, multi-target, whole systems approaches. This book lays a path for reigniting pharmaceutical innovation through a disciplined reemergence of pharmacognosy, embracing open innovation models and collaborative, trusted public-private partnerships. With unprecedented advances made in the development of biomedically-relevant tools and technologies, the need is great and the time is now for a renewed commitment towards expanding the repertoire of medicines. By incorporating real-life examples and state-of-the-art reviews, this book provides valuable insights into the discovery and development strategies for professionals, academicians, and students in the pharmaceutical sciences.

ISBN: 978-0-12-801814-9
PUB DATE: October 2016
FORMAT: Paperback
PAGES: c. 442
TRIM: 6w x 9h

AUDIENCE

Scientists, researchers and academics in drug development, natural products, pharmacognosy and pharmacy; professors, graduate students, regulatory authorities, policy makers and health care professionals working in these areas.

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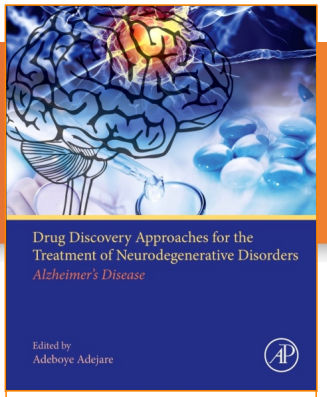

Drug Discovery Approaches for the Treatment of Neurodegenerative Disorders

Alzheimer's Disease

Edited by: ***Adeboye Adejare*** Professor, Pharmaceutical Sciences, Philadelphia College of Pharmacy, University of the Sciences, Philadelphia, PA, USA

This book aims to improve drug discovery and development for neurodegenerative disorders by focusing on current knowledge and strategies in Alzheimer's disease

ISBN: 978-0-12-802810-0

PUB DATE: September 2016

FORMAT: Hardback

PAGES: c. 298

TRIM: 7.5w x 9.25h

AUDIENCE

Professionals involved in the drug discovery process, whether in academia, research institutes or the pharmaceutical industry. This includes scientists who are involved in drug design to those involved in clinical trials

KEY FEATURES

- Provides a compilation of chemical considerations required in drug discovery for the treatment of neurodegenerative disorders
- Examines different classes of compounds currently being used in discovery and development stages
- Explores in vitro and in vivo models with respect to their ability to translate these models to human conditions
- Distills the most significant information across multiple areas of Alzheimer's disease research to provide a single, comprehensive, and balanced resource

DESCRIPTION

Drug Discovery Approaches for the Treatment of Neurodegenerative Disorders: Alzheimer's Disease examines the drug discovery process for neurodegenerative diseases by focusing specifically on Alzheimer's Disease and illustrating the paradigm necessary to ensure future research and treatment success.

The book explores diagnosis, epidemiology, drug discovery strategies, current therapeutics, and much more to provide a holistic approach to the discovery, development, and treatment of Alzheimer's Disease. Through its coverage of the latest research in targeted drug design, preclinical studies, and mouse and rat models, the book is a must-have resource for all pharmaceutical scientists, pharmacologists, neuroscientists, and clinical researchers working in this area. It illustrates why these drugs tend to fail at the clinical stage, and examines Alzheimer's Disease within the overall context of improving the drug discovery process for the treatment of other neurodegenerative disorders.

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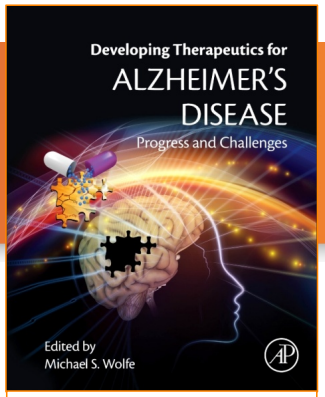

Developing Therapeutics for Alzheimer's Disease

Progress and Challenges

Edited by: ***Michael,S, Wolfe*** Professor of Neurology, Ann Romney Center for Neurologic Diseases, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA

This compilation provides a thorough overview of the latest research and challenges associated with developing therapeutics for Alzheimer's disease

ISBN: 978-0-12-802173-6

PUB DATE: June 2016

FORMAT: Hardback

PAGES: c. 660

TRIM: 7.5w x 9.25h

AUDIENCE

Academic and industry research scientists developing therapeutics for Alzheimer's disease; pharmaceutical executives; venture capitalists; funding and resource allocation strategists; graduate students in pharmacology, neuroscience and other biomedical fields

KEY FEATURES

- Provides a realistic but promising assessment of the potential of various therapeutic approaches to Alzheimer's disease
- Focuses primarily on neuroprotective agents and cognitive enhancers, as well as approaches to targeting the amyloid B-peptide, tau and Apolipoprotein E
- Discusses alternative approaches, preclinical and clinical development issues, related biomarkers and diagnostics, and prevention and nonpharmacological approaches

DESCRIPTION

Developing Therapeutics for Alzheimer's Disease: Progress and Challenges provides a thorough overview of the latest advances toward the development of therapeutics for Alzheimer's disease, along with the major hurdles that still must be overcome and potential solutions to these problems. Despite the lack of progress toward developing therapeutics that can slow or stop the progression of this disease, important discoveries have been made and many promising approaches are advancing in preclinical studies and clinical trials. This book outlines the special challenges related to specific targets and approaches, while presenting a realistic, comprehensive and balanced view of drug discovery and development in this area.

Written by international leaders in the field, the book assesses prospects for the emergence of effective agents and allows readers to better understand the challenges, failures, and future potential for research in Alzheimer's disease. This book is a valuable resource to academic scientists carrying out translational research in Alzheimer's disease, industrial scientists engaged in Alzheimer's drug discovery, executives in biopharmaceutical companies making strategic decisions regarding the direction of internal research and potential outside partnerships, and graduate-level students pursuing courses on Alzheimer's therapeutics.

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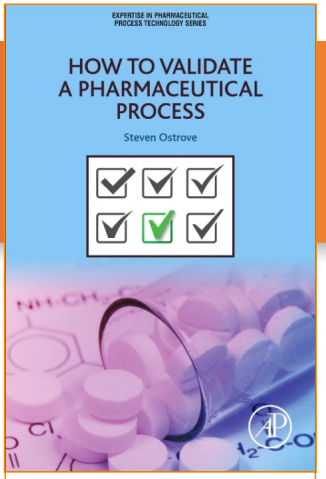

How to Validate a Pharmaceutical Process

Steven Ostrove Ostrove Associates, Inc. Elizabeth, NJ, USA

This essential research companion for practitioners engaged in pharmaceutical process validation features a how-to approach to develop and implement a sustainable pharmaceutical process validation program

KEY FEATURES

- Thoroughly referenced and based on the latest research and literature
- Illustrates the most common issues related to developing and implementing a sustainable process validation program and provides examples on how to be successful
- Covers important topics such as the lifecycle approach, quality by design, risk assessment, critical process parameters, US and international regulatory guidelines, and more

DESCRIPTION

How to Validate a Pharmaceutical Process provides a "how to" approach to developing and implementing a sustainable pharmaceutical process validation program. The latest volume in the *Expertise in Pharmaceutical Process Technology Series,* this book illustrates the methods and reasoning behind processes and protocols. It also addresses practical problems and offers solutions to qualify and validate a pharmaceutical process. Understanding the "why" is critical to a successful and defensible process validation, making this book an essential research companion for all practitioners engaged in pharmaceutical process validation.

ISBN: 978-0-12-804148-2

PUB DATE: June 2016

FORMAT: Paperback

PAGES: c. 200

TRIM: 6w x 9h

AUDIENCE

Pharmaceutical personnel, including research and development professionals, pharmaceutical consultants, team leaders and department heads

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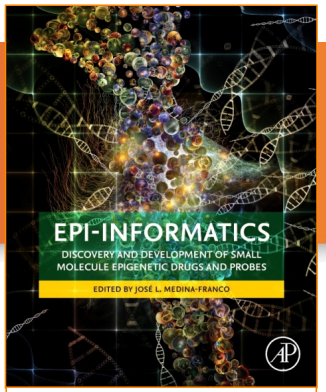


Epi-Informatics

Discovery and Development of Small Molecule Epigenetic Drugs and Probes

Edited by: ***Jose Medina-Franco*** Professor, Department of Pharmacy, Universidad Nacional Autónoma de México, Mexico City, Mexico

This helpful research companion is for those wanting to learn more about computational methodologies in epigenetic drug discovery, including how to conduct research to improve current computational methodologies and accelerate the discovery and development of epi-drugs and epi-probes

ISBN: 978-0-12-802808-7

PUB DATE: April 2016

FORMAT: Paperback

PAGES: c. 424

TRIM: 7.5w x 9.25h

AUDIENCE

Pharmaceutical scientists, medicinal chemists, modelers and informaticians, biological scientists working with epigenetics in industry, academia, and non-for profit organizations working on drug discovery of epi-drugs, as well as graduate students in courses related to epigenetics, drug discovery and development, computer-aided drug design and cancer biology

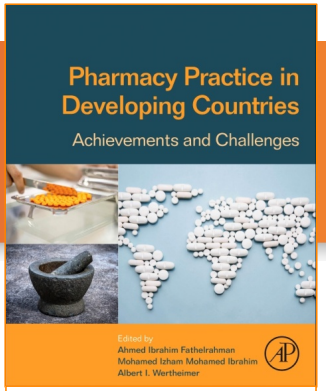
KEY FEATURES

- Focuses on the discovery of epi-drugs as candidates to be used in therapy including combined therapies
- Describes new computational methodologies and screening assays utilizing recent and emerging novel structural data
- Highlights the discovery, development and optimization of epi-probes, which are molecular probes that elucidate epigenetic mechanisms
- Includes important topics such as computational-guided optimization of epi-hits, virtual screening to identify novel compounds for epigenetic targets, development and mining of epigenetic molecular databases, SAR modeling of screening data and much more

DESCRIPTION

Epi-Informatics: Discovery and Development of Small Molecule Epigenetic Drugs and Probes features multidisciplinary strategies with strong computational approaches that have led to the successful discovery and/or optimization of compounds that act as modulators of epigenetic targets. This book is intended for all those using or wanting to learn more about computational methodologies in epigenetic drug discovery, including molecular modelers, informaticians, pharmaceutical scientists, and medicinal chemists.

With a better understanding of different molecular modeling and cheminformatic approaches, readers can incorporate these techniques into their own drug discovery projects that may involve chemical synthesis and medium- or high-throughput screening. In addition, this book highlights the significance of epigenetic targets to the public health for molecular modelers and chemoinformatians. The goal of this reference is to stimulate ongoing multidisciplinary research and to further improve current computational methodologies and workflows in order to accelerate the discovery and development of epi-drugs and epi-probes.



Pharmacy Practice in Developing Countries

Achievements and Challenges

Ahmed Fathelrahman Assistant Professor of Pharmacy Practice and Head of the Department of Pharmacy Practice, Qassim University, Saudi Arabia
Mohamed Ibrahim PhD, Professor of Social & Administrative Pharmacy, College of Pharmacy, Qatar University, Doha, Qatar
Albert Wertheimer Professor of Pharmacy, Department of Pharmacy Practice, School of Pharmacy, Temple University, Philadelphia, PA, USA Editor, Journal of Pharmaceutical Health Services Research

This unique reference offers a detailed review of the history and development of pharmacy practice in developing countries—including their strengths and weaknesses—to provide a valuable comparison aimed at reforming and strengthening pharmacy practice on a global scale

ISBN: 978-0-12-801714-2
PUB DATE: February 2016
FORMAT: Paperback
PAGES: c. 476
TRIM: 7.5w x 9.25h

AUDIENCE

Professors, researchers, practicing pharmacists and pharmacy students globally, public health policy makers

KEY FEATURES

- Uses the latest research and statistics to document the history and development of pharmacy practice in developing countries
- Describes current practice across various pharmacy sectors to supply a valuable comparative analysis across countries in Africa, Asia, Europe, and South America
- Highlights areas of achievement, strengths, uniqueness, and future opportunities to provide a basis for learning and improvement
- Establishes a baseline for best practices and solutions

DESCRIPTION

Pharmacy Practice in Developing Countries: Achievements and Challenges offers a detailed review of the history and development of pharmacy practice in developing countries across Africa, Asia, and South America. Pharmacy practice varies substantially from country to country due to variations in needs and expectations, culture, challenges, policy, regulations, available resources, and other factors.

This book focuses on each country's strengths and achievements, as well as areas of weakness, barriers to improvement and challenges. It sets out to establish a baseline for best practices, taking all of these factors into account and offering solutions and opportunities for the future. This book is a valuable resource for academics, researchers, practicing pharmacists, policy makers, and students involved in pharmacy practice worldwide as it provides lessons learned on a global scale and seeks to advance the pharmacy profession.

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Social Aspects of Drug Discovery, Development and Commercialization

Odilia Osakwe Industrial BioDevelopment Laboratory, UHN-MaRS Centre, Toronto Medical Discovery Tower and Ryerson University, Toronto, Canada
Syed A.A. Rizvi Associate Professor of Pharmaceutical Sciences at the College of Pharmacy, Nova Southeastern University, Fort Lauderdale, FL, USA

This informative book provides a thorough discussion and analysis of the social factors that affect and influence the drug discovery and development processes, including analysis of important new advances, key scientific and strategic issues, and overviews of recent progress in drug development

ISBN: 978-0-12-802220-7
PUB DATE: February 2016
FORMAT: Paperback
PAGES: c. 294
TRIM: 6w x 9h

AUDIENCE

Graduate and postgraduate students in pharmaceutical science, pharmacology and toxicology; policy-makers; professionals with interest in the current, past and future performance of the pharmaceutical market

KEY FEATURES

- Organized in a sequence of interrelated theories and principles that provide the foundation for increased understanding of the relevant social aspects
- Includes analysis of important new advances, key scientific and strategic issues, and overviews of recent progress in drug development
- Provides a global perspective with examples from developed areas, such as the US, Japan, Canada and Europe, as well as faster-growing and emerging economies including Brazil, Russia, India, and China
- Serves as an essential resource for students, professors, and researchers who seek a better understanding of the interface between the pharmaceutical industry, health care systems, and society

DESCRIPTION

Social Aspects of Drug Discovery, Development and Commercialization provides an insightful analysis of the drug discovery and development landscape as it relates to society. This book examines the scientific, legal, philosophical, economic, political, ethical and cultural factors that contribute to drug development. The pharmaceutical industry is under scrutiny to develop safer and more effective drugs in a quicker and more affordable manner. Recent criticism and debates have emphasized varying opinions on the issues concerning the drug discovery and development process.

This book provides thoughtful and valuable discussions and analysis of the social challenges and potential opportunities through all stages of the pharmaceutical process, from inception through marketing. With a unique focus on the social factors that increasingly play a role in how drug development is planned, structured, and executed throughout the drug product lifecycle, this is an essential resource for students, professors, and researchers who seek a better understanding of the interface between the pharmaceutical industry, health care systems, and society.

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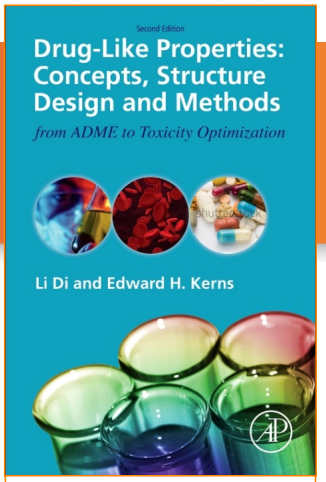


Drug-Like Properties, 2e

Concepts, Structure Design and Methods from ADME to Toxicity Optimization

Li Di Pfizer, East Lyme, CT, USA
Edward Kerns National Institutes of Health, Bethesda, MD, USA

An essential ADMET (absorption, distribution, metabolism, elimination, toxicology) resource for selecting and advancing high quality drug candidates

ISBN: 978-0-12-801076-1

PREVIOUS EDITION ISBN:
978-0-12-369520-8

PUB DATE: January 2016

FORMAT: Hardback

PAGES: c. 560

TRIM: 8.5w x 10.875h

AUDIENCE

Chemists (especially in medicinal chemistry, pharma/drug development, organic synthesis) and Drug researchers (including pharmacologists and toxicologists) in private industry, research centers and government labs. Secondary academic market with chemistry & pharmacology students.

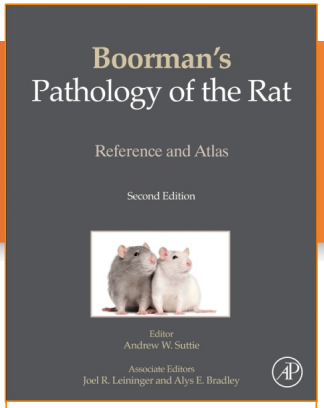
KEY FEATURES

- Provides a comprehensive and valuable working handbook for scientists and students in medicinal chemistry
- Includes expanded coverage of pharmacokinetics fundamentals and effects
- Contains updates throughout, including the authors' recent work in the importance of solubility in drug development; new and currently used property methods, with a reduction of seldom-used methods; and exploration of computational modeling methods

DESCRIPTION

Of the thousands of novel compounds that a drug discovery project team invents and that bind to the therapeutic target, only a fraction have sufficient ADME (absorption, distribution, metabolism, elimination) properties, and acceptable toxicology properties, to become a drug product that will successfully complete human Phase I clinical trials. *Drug-Like Properties: Concepts, Structure Design and Methods from ADME to Toxicity Optimization, Second Edition,* provides scientists and students the background and tools to understand, discover, and develop optimal clinical candidates. This valuable resource explores physiochemical properties, including solubility and permeability, before exploring how compounds are absorbed, distributed, and metabolized safely and stably. Review chapters provide context and underscore the importance of key concepts such as pharmacokinetics, toxicity, the blood-brain barrier, diagnosing drug limitations, prodrugs, and formulation. Building on those foundations, this thoroughly updated revision covers a wide variety of current methods for the screening (high throughput), diagnosis (medium throughput) and in-depth (low throughput) analysis of drug properties for process and product improvement. From conducting key assays for interpretation and structural analysis, the reader learns to implement modification methods and improve each ADME property.

Through valuable case studies, structure-property relationship descriptions, and structure modification strategies, *Drug-Like Properties, Second Edition,* offers tools and methods for ADME/Tox scientists through all aspects of drug research, discovery, design, development, and optimization.



Boorman's Pathology of the Rat, 2e

Reference and Atlas

Edited by: ***Andrew W. Suttie*** Pathology, Covance, Inc, VA, USA
Joel R. Leininger Wil Research,North Carolina, USA
Alys E. Bradley Director of Pathology, Charles River, Edinburgh, Scotland, UK

Through an emphasis on the Sprague-Dawley and Wistar rat strains, this leading book is the most comprehensive pathology reference of its kind

ISBN: 978-0-12-391448-4

PREVIOUS EDITION ISBN: 9780121156404

PUB DATE: June 2017

FORMAT: Hardback

PAGES: c. 688

TRIM: 8.5w x 10.875h

AUDIENCE

Veterinary pathologists, toxicologists, toxicologic pathologists, and laboratory animal researchers using the rat model in laboratories across academia, in the chemical and pharmaceutical industries, and at regulatory agencies

KEY FEATURES

- Contains full, four color photographs from the NTP archive and database and coverage of all rat strains
- Provides an organ-by-organ and system-by-system approach that presents standard diagnostic criteria and basic content on histology and histological changes
- Includes comprehensive and detailed background incidence data
- Presents detailed descriptive content regarding changes in rat models during research

DESCRIPTION

Boorman's Pathology of the Rat: Reference and Atlas, Second Edition, continues its history as the most comprehensive pathology reference on rat strains for researchers across science and medicine using rat models in the laboratory. It offers readers an added emphasis on the Sprague-Dawley and Wistar rat strains that is consistent with current research across academia, government, and industry.

In addition, the book provides standard diagnostic criteria, basic content on histology, histological changes that result from drug toxicity and neoplasm, pathology terminology, and four-color photographs from the NTP archive and database. With updated references and photographs, as well as coverage of all rat strains, this book is not only the standard in the field, but also an invaluable resource for toxicologists, biologists, and other scientists engaged in regulatory toxicology who must make the transition from pathology results to promulgation of meaningful regulations.

Research in the Biomedical Sciences

Transparent and Reproducible

Edited by: ***Michael Curtis*** Reader in Pharmacology, King's College, London, UK
Michael Williams Northwestern University, Chicago, IL, USA

Addresses experimentation, statistical analyses and transparency and reproducibility issues from a didactic, pragmatic and relevant standpoint to fill a meaningful gap in the biomedical literature

ISBN: 978-0-12-804725-5

PUB DATE: June 2017

FORMAT: Paperback

PAGES: c. 200

TRIM: 7.5w x 9.25h

AUDIENCE

Graduate students in biomedical research fields including pharmacology, pharmaceutical science, molecular biology, systems biology and more and early career researchers in academia and the pharmaceutical industry

KEY FEATURES

- Provides a "big picture" perspective that includes the scope of the replicability issue and covers initiatives that have the potential to act as effective solutions
- Offers real world research context for transparent, replicable experimental design, execution and reporting of biomedical research with the potential to address aspects of the translational gap in drug discovery
- Highlights the importance of reproducibility and the necessary changes in biomedical and pharmaceutical research training and incentives to ensure sustainability

DESCRIPTION

Research in the Biomedical Sciences: Transparent and Reproducible documents the widespread concerns related to reproducibility in biomedical research and provides a best practices guide to effective and transparent hypothesis generation, experimental design, reagent standardization (including validation and authentication), statistical analysis and data reporting. ***Research in the Biomedical Sciences*** addresses issues in the perceived value of the existing peer review process and calls for the need for improved transparency in data reporting. It reflects new guidelines for publication that include manuscript checklists, replication/reproducibility initiatives and the potential consequences for the biomedical research community and societal health and well-being if training, mentoring and funding of new generations of researchers and incentives for publications are not improved. This book offers real world examples, insights and solutions to provide a thought-provoking and timely resource for all those learning about or engaged in performing and supervising research across the biomedical sciences.

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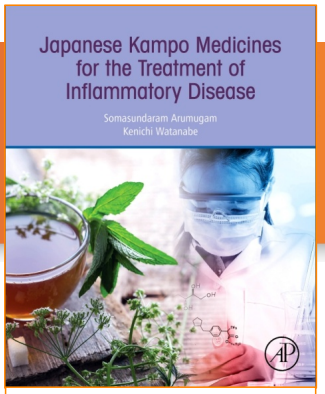

Japanese Kampo Medicines for the Treatment of Common Diseases - Focus on Inflammation

Edited by: ***Somasundaram Arumugam*** Reader, Department of Clinical Pharmacology Niigata University of Pharmacy and Applied Life Science Niigata, Japan
Kenichi Watanabe Professor of Clinical Pharmacology, Niigata University of Pharmacy and Applied Life Sciences Niigata, Japan

ISBN: 978-0-12-809398-6
PUB DATE: June 2017
FORMAT: Paperback
PAGES: c. 328
TRIM: 7.5w x 9.25h

AUDIENCE

Researchers and clinicians involved in natural products research including clinical pharmacologists and pharmacy students

Japanese Kampo Medicines for the Treatment of Inflammatory Disease

KEY FEATURES

- Includes both preclinical and clinical data published from a variety of sources and compiled into one book
- Provides insight for researchers and clinicians on which Kampo medicines will provide the least side effects and offer the most effective therapy for a particular illness
- Offers important data that will help to inform future research and widen practice in this area

DESCRIPTION

Japanese Kampo Medicines for the Treatment of Inflammatory Disease provides researchers and clinicians with a current look at how Kampo medicines can be used to effectively treat inflammatory disorders. Japanese Kampo medicines are a mixture of natural and herbal medicines that are available in Japan for the treatment of various diseases. Given their therapeutic potential, they are often prescribed instead of or alongside allopathic medicines. Kampo medicines are becoming more widespread and have proven effective for the treatment of a variety of inflammatory diseases, such as colitis, dermatitis, myocarditis, hepatitis, cardiomyopathy and nephritis. This book offers background on Japanese Kampo medicines, as well as a compilation of the published scientific data for several different types of Kampo medicines. It is an evidence-based guide for all those involved or interested in the research and practice of Kampo medicine.

Essentials of Chinese Materia Medica and Medical Formulas

Shengyan Xi
Yuewen Gong Doctor of Medical Science and Doctor of Philosophy. He holds the following positions: Professor and Associate Dean (Research) of the College of Pharmacy, Faculty of Health Sciences of the University of Manitoba (Canada). He is a member of the Section of Hepatology of the Department of Internal Medicine of the College of Medicine, Faculty of Health Sciences of the University of Manitoba

Presents the most common substances in Traditional Chinese Medicine with color pictures and concise explanations of use and efficacy

ISBN: 978-0-12-812722-3
PUB DATE: May 2017
FORMAT: Paperback
PAGES: c. 780
TRIM: 8.5w x 10.875h

AUDIENCE

Health care professionals and students training to become health care professionals interested in traditional Chinese Medicines and those interested in natural products that may be derived from TCM. Western physicians and pharmacists and regulatory agencies may be interested in this book

KEY FEATURES

- Includes over 800 Chinese materia medica and 740 medical formulas with their essential information
- Combines 514 color pictures of medicine material crude slices and 255 formulary efficacy analysis pictures
- Organized with concise forms facilitating understanding and memorization

DESCRIPTION

Essentials of Chinese Materia Medica and Medical Formulas presents specific knowledge about the source, medicinal nature, action and application of more than 800 commonly-used Chinese materia medica, as well as the efficacy and application of more than 740 kinds of commonly-used Chinese medical formulas. Notably, all of the content is presented in table form, making the information easier to access, understand, and apply. Each primary herbal medicine is introduced with materia medica color pictures, and each primary formula is introduced with efficacy analysis pictures. The *Essentials of Chinese Materia Medica and Medical Formulas* provides readers with the essential information of Chinese materia medica and formulas and how to use them accurately. The most common Chinese materia medica used in clinics and clinical commonly-used formulas are included. *Essentials of Chinese Materia Medica and Medical Formulas* is an essential reference for traditional medical professionals, those interested in Traditional Chinese Medicine, including advanced undergraduate and postgraduate students.

A Comprehensive and Practical Guide to Clinical Trials

Edited by: ***Delva Shamley*** Senior Research Fellow, Centre of Postgraduate Medical Research and Education, The School of Health and Social Care, Bourenmouth University, Bournemouth, Dorset, UK

ISBN: 978-0-12-804729-3

PUB DATE: April 2017

FORMAT: Paperback

PAGES: c. 216

TRIM: 6w x 9h

AUDIENCE

Clinical research teams from academia and industry across the globe, including study coordinators, project managers, clinical support staff, investigators, data managers and data quality assurance managers

A quick reference guide with tools and case studies that enable effective planning and implementation of clinical trials

KEY FEATURES

- Describes the entire clinical trial management process from start to finish in a step-by-step guide
- Provides best practice elements, including case studies, practical examples, activities, and checklists
- Accompanied by a website with PowerPoint slides and an image bank

DESCRIPTION

A Comprehensive and Practical Guide to Clinical Trials provides an overview of the entire process of clinical research in one thorough and easy-to-read handbook that offers those involved in clinical research a clear understanding of how the components of a study are related.

It focuses on the practical aspects of the preparation and execution of a clinical trial and offers tools and resources to help the entire team understand how their responsibilities tie together with the tasks and duties of other members.

This allows for better planning and prioritization, and can lead to more effective and successful clinical trials. With practical examples, checklists and forms, this book is a useful guide for planning and conducting clinical trials from beginning to end.

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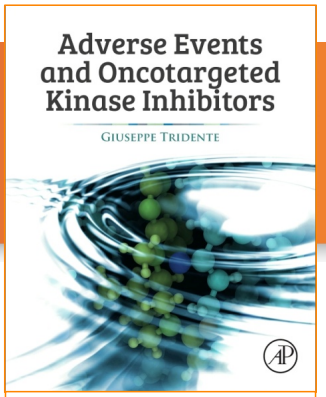

Adverse Events and Oncotargeted Kinase Inhibitors

Giuseppe Tridente MD, Professor Emeritus of Immunology and Pathology, School of Medicine and Surgery, Universita degli Studi di Verona, Italy

Systematically examines safety profiles from numerous sources to inform the latest adverse events associated with a growing class of anti-tumor drugs

ISBN: 978-0-12-809400-6

PUB DATE: March 2017

FORMAT: Hardback

PAGES: c. 600

TRIM: 7.5w x 9.25h

AUDIENCE

Intended for pharmacologists, clinicians and specialists including oncologists, drug safety control officials and drug developers and producers who are working to find effective molecules with the lowest adverse effects profiles; academics involved in drug safety issues and public health professionals

KEY FEATURES

- Offers a unique and comprehensive publication on the adverse events associated with a new and fast-growing class of medicines
- Provides a systematic analysis of adverse events aimed at better prevention through understanding and offering insights for the development of safer drugs
- Uses practical guidelines to establish a leading reference on this class of drugs for educators, researchers, drug developers, clinicians, safety professionals, and more

DESCRIPTION

Adverse Events and Oncotargeted Kinase Inhibitors gathers and evaluates data on adverse events associated with tyrosine kinase inhibitors (TKIs), a powerful anti-tumor drug class that has recently been introduced for human therapy. This book compiles a comprehensive safety profile of each TKI from experiences in official therapeutic indications, also exploring off-label exploratory investigations and postmarketing pharmaceutical surveillance databases.

A brief history of each drug's development and submission is provided, along with a more detailed analysis of the mechanism(s) of action involved in therapeutic activity or related to the insurgence of specific adverse events. Early chapters focus on general characteristics of TKIs, typology, and classification of adverse events, while the final chapters analyze TKIs as AE inducers and classes of AEs by system or organ involvement.

This comprehensive resource compiles and critically reviews all of the relevant safety data for this class of drugs, with the goal of improving the understanding of pathogenesis and facilitating the prevention, monitoring, and management of these adverse events.

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Medicinal Spices and Vegetables from Africa

Therapeutic Potential against Metabolic, Inflammatory, Infectious and Systemic Diseases

Edited by: ***Victor Kuete*** Department of Biochemistry, Faculty of Sciences University of Dschang, Cameroon

ISBN: 978-0-12-809286-6

PUB DATE: February 2017

FORMAT: Paperback

PAGES: c. 488

TRIM: 7.5w x 9.25h

AUDIENCE

Professors, students and researchers in the fields of pharmacology, toxicology, pharmacognosy, phytochemistry, medicine, pharmaceutical biology and ethnopharmacology

Offers a comprehensive guide to the therapeutic potential of common medicinal spices and vegetables found in Africa

KEY FEATURES

- Provides scientific evidence for the potential of medicinal spices and vegetables used in Africa to fight metabolic, inflammatory, and infectious diseases
- Includes a review of the latest methods used to investigate the effects of medicinal plants in the treatment of disease
- Offers an updated resource for students sand scientists in the fields of pharmaceutical science, pharmacognosy, complementary and alternative medicine, ethnopharmacology, phytochemistry, biochemistry, and more

DESCRIPTION

Medicinal Spices and Vegetables from Africa: Therapeutic Potential against Metabolic, Inflammatory, Infectious and Systemic Diseases provides a detailed look at medicinal spices and vegetables that have proven safe-and-effective for consumption and the treatment of diseases, including infectious diseases, cardiovascular disease, and cancer.

It provides pharmacological evidence, such as the latest information related to efficacy and safety data, in vitro and in vivo studies, clinical trials, and more, to illustrate the use of these spices and vegetables as both palliative and alternative treatments with the goal of furthering research in this area to produce safer and more effective drugs.

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Serum Pharmacochemistry of Traditional Chinese Medicine

Technologies, Strategies and Applications

Edited by: ***Xijun Wang*** Professor and General Director, National Traditional Chinese Medicine (TCM) Key Laboratory of Serum Pharmacochemistry, Laboratory of Metabolomics and Chinmedomics Vice President, Heilongjiang University of Chinese Medicine, Harbin, China
Aihua Zhang National Traditional Chinese Medicine (TCM) Key Laboratory of Serum Pharmacochemistry, Laboratory of Metabolomics and Chinmedomics, Harbin, China
Hui Sun National Traditional Chinese Medicine (TCM) Key Laboratory of Serum Pharmacochemistry, Laboratory of Metabolomics and Chinmedomics, Harbin, China

Presents the current state of serum pharmacochemistry of Traditional Chinese Medicine by underscoring experimental methods, analysis techniques, practices, research, and more

ISBN: 978-0-12-811147-5
PUB DATE: January 2017
FORMAT: Paperback
PAGES: c. 356
TRIM: 7.5w x 9.25h

AUDIENCE

Pharmacologists; drug developers; researchers of traditional and herbal medicines; clinicians

KEY FEATURES

- Provides a valuable guide for practitioners of serum pharmacochemistry of Traditional Chinese Medicine, along with insights to its current use and future applications
- Edited and written by leading scientists at the forefront of this research
- Presents well written chapters that include an introduction, description of the method, and identification of chemical constituents, with applications and references to the latest research and literature

DESCRIPTION

Serum Pharmacochemistry of Traditional Chinese Medicine: Technologies, Strategies and Applications provides a valuable and indispensable guide on the latest methods, research advances, and applications in this area. Chapters offer cutting-edge information on pharmacokinetics and pharmacodynamics, analytical chemistry, traditional medicine, natural products, bioinformatics, new technologies, therapeutic applications, and more.

For researchers and students in academia and industry, this book provides a hands-on description of experimental techniques, along with beneficial guidelines to help advance research in the fields of Traditional Chinese Medicine and drug development.

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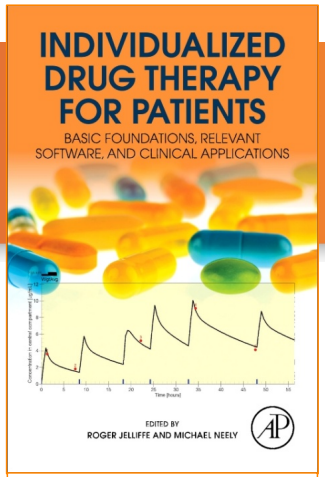

Individualized Drug Therapy for Patients

Basic Foundations, Relevant Software and Clinical Applications

Edited by: ***Roger W Jelliffe*** Professor of Medicine Emeritus, University of Southern California School of Medicine, Los Angeles, CA; Founder and Director Emeritus, Laboratory of Applied Pharmacokinetics and Bioinformatics, University of Southern California, Los Angeles, CA; Consultant in Infectious Diseases, Children's Hospital of Los Angeles, Los Angeles, CA, USA
Michael Neely Associate Professor of Pediatrics and Clinical Scholar, University of Southern California, Los Angeles, CA; Director, Laboratory of Applied Pharmacokinetics and Bioinformatics, Children's Hospital Los Angeles Saban Research Institute, Los Angeles, CA, USA

This practical guide provides clinical pharmacologists, pharmacists, and physicians with a valuable resource to help move traditional drug therapy beyond a memorized ritual to being a thoughtful quantitative process aimed at optimizing therapy for each individual patient

ISBN: 978-0-12-803348-7

PUB DATE: November 2016

FORMAT: Paperback

PAGES: c. 400

TRIM: 7.5w x 9.25h

AUDIENCE

Clinical pharmacologists, pharmacists and physicians

KEY FEATURES

- Uses pharmacokinetic approaches as the tools with which therapy is individualized
- Provides examples using specific software that illustrate how best to apply these approaches and to make sense of the more sophisticated mathematical foundations upon which this book is based
- Incorporates clinical cases throughout to illustrate the real-world benefits of using these approaches
- Focuses on quantitative approaches that maximize the precision with which dosage regimens of potentially toxic drugs can hit a desired therapeutic goal

DESCRIPTION

Individualized Drug Therapy for Patients: Basic Foundations, Relevant Software and Clinical Applications focuses on quantitative approaches that maximize the precision with which dosage regimens of potentially toxic drugs can hit a desired therapeutic goal. This book highlights the best methods that enable individualized drug therapy and provides specific examples on how to incorporate these approaches using software that has been developed for this purpose.

The book discusses where individualized therapy is currently and offers insights to the future. Edited by Roger Jelliffe, MD and Michael Neely, MD, renowned authorities in individualized drug therapy, and with chapters written by international experts, this book provides clinical pharmacologists, pharmacists, and physicians with a valuable and practical resource that takes drug therapy away from a memorized ritual to a thoughtful quantitative process aimed at optimizing therapy for each individual patient.

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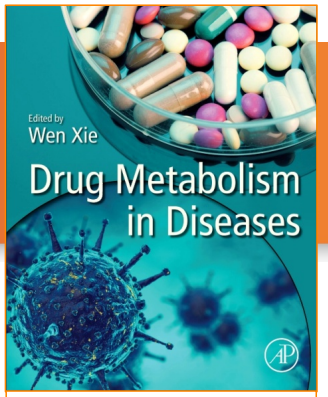

Drug Metabolism in Diseases

Edited by: ***Wen Xie*** Professor of Pharmaceutical Sciences and Pharmacology, The Joseph Koslow Endowed Chair in Pharmaceutical Sciences, School of Pharmacy, University of Pittsburgh, Pittsburgh, PA; Director of the Center for Pharmacogenetics, School of Pharmacy, University of Pittsburgh, Pittsburgh, PA, USA

Provides a single and timely reference dedicated to the current knowledge on different disease states and their effect on drug metabolism

ISBN: 978-0-12-802949-7

PUB DATE: September 2016

FORMAT: Hardback

PAGES: c. 284

TRIM: 7.5w x 9.25h

AUDIENCE

Academic researchers involved in drug metabolism, pharmacology, molecular pharmacology, clinical pharmacology and personalized medicine; industry researchers working in drug metabolism, drug toxicity and drug safety evaluation; and regulatory officials in drug safety

KEY FEATURES

- Written and edited by leaders in drug metabolism from academia and industry
- Covers important topics, such as pharmacogenomics, drug metabolism in transplant patients, xenobiotic receptors, drug metabolism in geriatric and pediatric populations, and more
- Highlights topics of importance in drug discovery and development, and for safe and effective drug use in the clinic

DESCRIPTION

Drug Metabolism in Diseases is a comprehensive reference devoted to the current state of research on the impact of various disease states on drug metabolism. The book contains valuable insights into mechanistic effects and examples of how to accurately predict drug metabolism during these different pathophysiological states.

Each chapter clearly presents the effects of changes in drug metabolism and drug transporters on pharmacokinetics and disposition. This is a unique and useful approach for all those involved in drug discovery and development, and for clinicians and researchers in drug metabolism, pharmacology, and clinical pharmacology.

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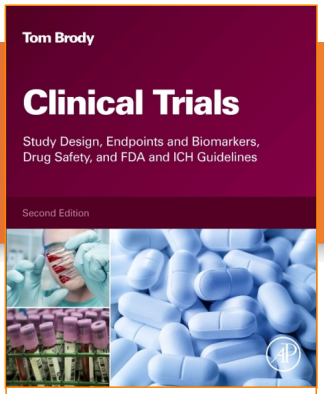


Clinical Trials, 2e

Study Design, Endpoints and Biomarkers, Drug Safety, and FDA and ICH Guidelines

Tom Brody

A hands-on guidebook that integrates the most practical aspects of clinical trial design with important content on laboratory studies of human data, patient safety, regulatory requirements and much more

ISBN: 978-0-12-804217-5

PREVIOUS EDITION ISBN: 9780128102572

PUB DATE: March 2016

FORMAT: Hardback

PAGES: c. 864

TRIM: 7.5w x 9.25h

AUDIENCE

Researchers, physicians, nurses, pharmacists who plan and run clinical trials, members of the American Medical Writers Association, pharmaceutical and biotechnology industry scientists, pharmacology and pharmaceutical science students, pharmacy students and medical students

KEY FEATURES

- Contains new and fully revised material on key topics such as biostatistics, biomarkers, orphan drugs, biosimilars, drug regulations in Europe, drug safety, regulatory approval and more
- Extensively covers the "study schema" and related features of study design
- Incorporates laboratory data from studies on human patients to provide a concrete tool for understanding the concepts in the design and conduct of clinical trials
- Includes decisions made by FDA reviewers when granting approval of a drug as real world learning examples for readers

DESCRIPTION

Clinical Trials, Second Edition, offers those engaged in clinical trial design a valuable and practical guide. This book takes an integrated approach to incorporate biomedical science, laboratory data of human study, endpoint specification, legal and regulatory aspects and much more with the fundamentals of clinical trial design. It provides an overview of the design options along with the specific details of trial design and offers guidance on how to make appropriate choices. Full of numerous examples and now containing actual decisions from FDA reviewers to better inform trial design, the 2nd edition of *Clinical Trials* is a must-have resource for early and mid-career researchers and clinicians who design and conduct clinical trials.

The European Research Management Handbook

Jan Andersen Senior Executive Advisor, Science Research and Innovation,University of Copenhagen, Frederiksberg, Denmark
Kristel Toom Vice Head and Researcher, Estonian Academy of Security Sciences, Tallinn, Estonia
Susi Poli Doctoral EdD Candidate at UCL Institute of Education, London, UK
Pamela F. Miller Director, Sponsored Projects Office, University of California at Berkeley, Berkeley, CA, U.S.A.

Provides frameworks, insight, and guidance on research management and research administration

ISBN: 978-0-12-805059-0
PUB DATE: June 2017
FORMAT: Paperback
PAGES: c. 304
TRIM: 6w x 9h

AUDIENCE

Professional research administrators and support staff in universities and research institutions, Researchers and research groups, and university management as well as those interested in exploring a career in research management or research administration

KEY FEATURES

- Offers a deeper understanding of the research management and administrative landscape through single and collective definitions and experiences
- Provides an overview of the research environment and explores the international research arena
- Discusses some of the most complex issues in research management and administration by covering topics such as ethics, innovation, research impact, organizational structures, and processes for the project life cycle

DESCRIPTION

The European Research Management Handbook addresses the myriad of responsibilities related to research management and administration. The book incorporates narratives from those working in the field to provide insight into the profession. The book also offers a unique perspective on the topic by incorporating global perspectives to address the growing interdisciplinary nature of research collaboration.

The European Research Management Handbook outlines practical advice for those in the research management and administration profession at all levels of experience. It is also a useful tool that research institutions and research groups can use to assist in planning and streamlining their research support.

Research

A Career Guide for Scientists

Teresa M. Evans PhD, Director, the Office of Career Development, Graduate School of Biomedical Sciences, University of Texas Health and Science Center at San Antonio, San Antonio, TX, USA
Natalie Lundsteen PhD, Director of Graduate Career Development, Graduate School of Biomedical Sciences, University of Texas Southwestern Medical Center, Dallas, TX, USA
Nathan L. Vanderford PhD, MBA, Assistant Professor, Department of Toxicology and Cancer Biology; Assistant Dean for Academic Development, College of Medicine; Assistant Director for Research, Markey Cancer Center, University of Kentucky, Lexington, KY, USA

Inside knowledge on how to effectively leverage skill sets to take that next step in your career

ISBN: 978-0-12-804297-7
PUB DATE: June 2017
FORMAT: Paperback
PAGES: c. 288
TRIM: 6w x 9h

AUDIENCE

Graduate, medical, and postdoctoral students across the Sciences as well as faculty, advisors, industry professionals, societies, and other organizations who are involved in career counselling, science education programs, and/or mentorship programs. Graduates and professionals in other STEM areas

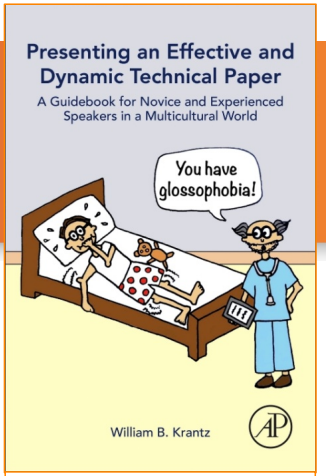
KEY FEATURES

- Fills the knowledge gap in career planning practices for students and early career researchers in the STEM fields, particularly those in the sciences
- Provides global perspectives on seeking career opportunities outside of the United States
- Includes strategies for how to market your transferable skill sets, network, and maximize informational interviews

DESCRIPTION

ReSearch is a career planning guide and practical tool for graduate students and postdocs in the pursuit of any career. This book provides step-by-step processes for the assessment of career goals and the actions that can be taken in order to achieve them. *ReSearch* includes chapters on the basics of career planning, determining unique selling points, and navigating work-life concerns. This book also includes narratives from a number of perspectives to showcase the variety of career options available.

ReSearch is written by experts with inside knowledge of how to effectively leverage skills in order to take that next step in your career, whether you are a recent graduate or are interested in transitioning into something new. This book is also a valuable resource for advisors and careers counselors who mentor students and postdocs about their career plans.



Presenting an Effective and Dynamic Technical Paper

A Guidebook for Novice and Experienced Speakers in a Multicultural World

William B. Krantz President's Teaching Scholar and Professor Emeritus, University of Colorado, Boulder, CO, USA; Rieveschl Ohio Eminent Scholar and Professor Emeritus, University of Cincinnati, Cincinnati,OH, USA

A practical, compact guidebook covering the 'nuts and bolts' of effective public speaking from a cross-cultural perspective

ISBN: 978-0-12-805418-5

PUB DATE: November 2016

FORMAT: Paperback

PAGES: c. 96

TRIM: 6w x 9h

AUDIENCE

Students and researchers across the sciences interested in improving their oral communication skills; in particular non-native English speakers

KEY FEATURES

- Discusses best practices in putting together an effective talk
- Focuses on leveraging the speaker's existing skillsets to develop the delivery style that works best for that individual
- Features one-page quick reference guides for giving both formal oral and informal poster presentations
- Addresses cross-cultural communication, as well as particular concerns for non-native English speakers
- Includes a companion site with tools and video examples of formal and informal presentations for further self-guidance

DESCRIPTION

Presenting an Effective and Dynamic Technical Paper: A Guidebook for Novice and Experienced Speakers in a Multicultural World is intended for inexperienced speakers as well as those aspiring to improve their communication skills in making either formal or informal presentations on a technical subject.

The book focuses on how to make presentations to a cross-cultural audience, including such tactics as how to list the names of the co-authors on your presentation, how to handle eye contact and use humor, both of which can differ across the global spectrum of cultures. The cross-cultural focus of this book relates not only to the audience, but also to the speaker. This book also includes helpful tips for non-native English speakers.

Creating a Culture of Accessibility in the Sciences

Mahadeo A. Sukhai Research Fellow and Team Leader, University Health Network, Princess Margaret Hospital, Ontario Cancer Institute, Toronto, ON, Canada
Chelsea E. Mohler Research Consultant, National Educational Association of Disabled Students, Ottawa, ON, Canada

As a comprehensive guide, this book provides insights and advice on integrating students with disabilities into the STEM fields, with each chapter featuring research and best practices that are interwoven with experiential narratives

ISBN: 978-0-12-804037-9
PUB DATE: December 2016
FORMAT: Paperback
PAGES: c. 316
TRIM: 6w x 9h

AUDIENCE

University faculty, academic administrators, disability office staff, students with disabilities, and industry professionals in STEM and related disciplines. Additional markets include related academic and professional organizations as well as those involved in professional development training and workshops

KEY FEATURES

- Offers a global perspective on making research or work spaces accessible for students with disabilities in the STEM fields
- Discusses best practices on accommodating and supporting students and demonstrates how these practices can be translated across disciplines
- Enhances faculty knowledge of inclusive teaching practices, adaptive equipment, accessibility features, and accommodations in science laboratories, which would enable the safe participation of students with disabilities
- Provides advice for students with disabilities on disclosure and mentoring

DESCRIPTION

Creating a Culture of Accessibility in the Sciences provides insights and advice on integrating students with disabilities into the STEM fields. Each chapter features research and best practices that are interwoven with experiential narratives.

The book is reflective of the diversity of STEM disciplines (life and physical sciences, engineering, and mathematics), and is also reflective of cross-disability perspectives (physical, sensory, learning, mental health, chronic medical and developmental disabilities).

It is a useful resource for STEM faculty and university administrators working with students with disabilities, as well as STEM industry professionals interested in accommodating employees with disabilities.

Technical Career Survival Handbook

100 Things You Need To Know

Peter Burke P.E, Consulting Engineer, Self-Employed

This practical guide provides the information needed to survive a technical career, enabling prospective candidates and those currently in technical careers to explore all technical education possibilities, industries, disciplines, and specialties

KEY FEATURES

- Offers insights on how to pursue and navigate a technical career
- Discusses job searches, interviews, offers, and counteroffers
- Includes day-to-day, in the trenches, job situations that may arise and best practices on how to address them

DESCRIPTION

Technical Career Survival Handbook: 100 Things You Need To Know provides the information needed to survive a technical career, enabling prospective technical career candidates and those currently in technical careers to explore all technical education possibilities, industries, disciplines, and specialties.

This handbook better equips the reader to deal with the tough situations and decisions they have to make throughout their career. Topics include preparing for the workforce, employment challenges, and dealing with on the job situations. This book is a practical guidebook for scientists, engineers, and technicians who apply the principles of science and mathematics to develop practical solutions to technical problems.

ISBN: 978-0-12-809372-6

PUB DATE: November 2016

FORMAT: Paperback

PAGES: c. 268

TRIM: 6w x 9h

AUDIENCE

Scientists, engineers, and technicians who apply the principles of science and mathematics to develop practical solutions to technical problems.

Leadership Lessons for Health Care Providers

Frank James Lexa Chair, ACR Commission on Practice Leadership and Chairman of the Board, Radiology Leadership Institute Project Faculty, Spain; East Asia Regional Manager, the Global Consulting Practicum & Adjunct Professor of Marketing, The Wharton School, Philadelphia, PA, USA

This thought-provoking book provides a solid introduction to the nature of medical leadership, addressing common situations that physicians and allied health professionals encounter and providing tactics for handling common leadership conundrums and increasing leadership abilities

ISBN: 978-0-12-801866-8

PUB DATE: September 2016

FORMAT: Paperback

PAGES: c. 214

TRIM: 6w x 9h

AUDIENCE

Physicians and allied health professionals.Additional markets include related graduate and postgraduate programs, academic and professional organizations as well as those involved in professional development training and workshops

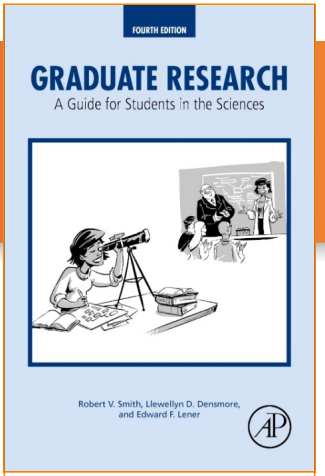
KEY FEATURES

- Discusses and offers practical advice on a number of leadership development topics including levels of leadership, different styles and techniques, dealing with conflict, making hard decisions, and setting priorities
- Includes valuable insight from leaders and specialists in the health care field
- Directs readers to additional leadership resources as next steps

DESCRIPTION

The rapid changes in health care including novel technologies as well as the changing economic, political, and social landscapes are all forcing physicians as well as most types of health care practitioners to re-think their role in leadership. This is particularly true in the US in recent years, but the same issues are widely prevalent affecting health care workers around the globe. Developing capable medical leaders who can navigate these challenges will be essential.

Physicians and other health care practitioners usually receive little or no leadership training in the course of their education. At the next steps in their training: internship, residency and fellowship, gaining clinical acumen takes precedence over developing other skills that are at the core of leadership training. *Leadership Lessons for Health Care Providers* will allow all types of health professionals to gain a better understanding of what leadership is, how to develop their skills while still early in their careers, how to understand and handle common leadership conundrums and chart a path towards increasing their leadership capabilities as they reach mid-career and beyond. This book will provide a great start for those who are interested in learning more about leadership and includes recommendations for next steps at all stages in leadership work.



Graduate Research, 4e

A Guide for Students in the Sciences

Robert V. Smith Collaborative Brain Trust University Consulting (CBT UC), Sacramento, CA, USA
Llewellyn D. Densmore Department of Biological Sciences, Texas Tech University, Lubbock, TX, USA
Edward F. Lener University Libraries, Virginia Tech, Blacksburg, VA, USA

This newly revised go-to resource is for graduate researchers at all stages of study and covers a range of topics including writing and preparation of research proposals, developing and refining teaching skills, and ethics and compliance areas such as research involving human subjects and animals

KEY FEATURES

- Discusses a broad range of topics including time management, library and literature work, and grant support
- Includes a new chapter on career planning and development with advice on careers in academia, government, and the private sector
- Contains chapters that promote the development of a varied set of communication skills
- Greatly expanded treatment of graduate study and research in international settings

DESCRIPTION

Graduate Research is an all-in-one resource for prospective and matriculated graduate students in the sciences. The newly revised edition includes updates to every chapter. *Graduate Research* covers a range of topics including writing and preparation of research proposals, developing and refining teaching skills, and ethics and compliance areas such as research involving human subjects and animals.

Graduate Research helps readers navigate the multidimensional and interdisciplinary world of scientific research and it is an invaluable resource for graduate researchers as well as those in advising or mentoring roles.

ISBN: 978-0-12-803749-2
PREVIOUS EDITION ISBN: 9780295977058
PUB DATE: February 2016
FORMAT: Paperback
PAGES: c. 288
TRIM: 6w x 9h

AUDIENCE

Graduate student, graduate advisors, and mentors across the Sciences

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PROFESSIONAL AND CAREER DEVELOPMENT
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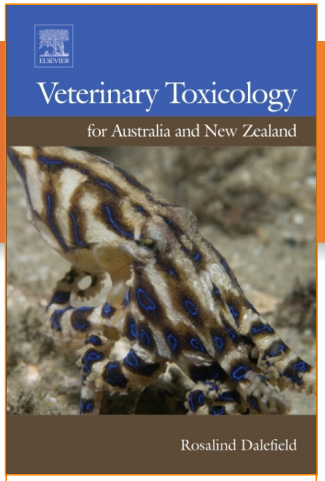

Veterinary Toxicology for Australia and New Zealand

Rosalind Dalefield

ELSEVIER

A streamlined reference for toxicology and coverage of poisons and treatments in veterinary practice for Australia and New Zealand

KEY FEATURES

- Highlights toxins of specific concern in Australia and New Zealand
- Structures information in a logical way so that it can be located quickly
- Offers up-to-date information on current and emerging risks

DESCRIPTION

Veterinary Toxicology for Australia and New Zealand is a reference suited to the unique challenges of veterinary practice in Australia and New Zealand. Both streamlined and thorough in its coverage of poisons and treatments for those locations, this focused approach allows readers to quickly find relevant information that is presented in a concise and logical manner that is useful to clinicians. The authors draw upon a wealth of knowledge of the particularities of toxicology in Australia and New Zealand to present readers with the up-to-date information required to efficiently and effectively diagnose and treat their patients.

ISBN: 978-0-12-420227-6

PUB DATE: June 2017

FORMAT: Hardback

PAGES: c. 500

TRIM: 6w x 9h

AUDIENCE

Veterinary practitioners, students and nurses; poison advisory services; animal welfare personnel, toxicologists, farm advisors

LIFE SCIENCES
TOXICOLOGY
Please contact your Elsevier Sales or Customer Service Representative

Toxicology: What Everyone Should Know

A Book for Researchers, Consumers, Journalists and Politicians

Aalt Bast Professor of Human Toxicology at the Maastricht University in The Netherlands and Dean of the Venlo Campus of the University.
Jaap C Hanekamp, Dr. Associate professor at the University College Roosevelt in Middelburg in The Netherlands and Adjunct Faculty Member at the University of Massachusetts, Environmental Health Sciences, Amherst, USA.

An introductory reference describing toxicological concepts from the historical to the cutting-edge perspective

ISBN: 978-0-12-805348-5
PUB DATE: June 2017
FORMAT: Paperback
PAGES: c. 212
TRIM: 6w x 9h

AUDIENCE

Professional researchers and risk assessors, and graduate and postgraduate students, new to the field of toxicology.

KEY FEATURES

- Presents a seminal toxicological discovery in each chapter, describing its evolution towards today's cutting-edge techniques.
- Shows how the study of toxicology directly impacts legislature, and discusses the need for a new look at risk evaluations.
- Includes introductions to a variety of toxicological concerns, such as risk perception, pesticides contamination, carcinogenic compounds, drug toxicities, and toxicological modelling.

DESCRIPTION

Toxicology: What Everyone Should Know is an essential reference for anyone looking for an entry into this fascinating field of study. This innovative book describes important discoveries in Toxicology through the ages, explores their historical and sociological impacts, and shows how they still influence recent, state-of-the-art developments. Finally, *Toxicology: What Everyone Should Know* shows how these developments are extrapolated into public and political perceptions on risks, and the regulatory consequences. Emphasis will be on environmental issues (such as man-made and natural chemicals, their interaction and impact), nutrition and drugs.

Toxicology: What Everyone Should Know presents cutting-edge approaches to nutritional and combinatorial toxicology, risk evaluation modelling and benefits of chemicals exposure (nutrition versus man-made chemicals), environmental health, and legislative frameworks to control the public's chemical exposure. This is an essential reference for those looking for an introduction to Toxicology, its past, and its exciting future.

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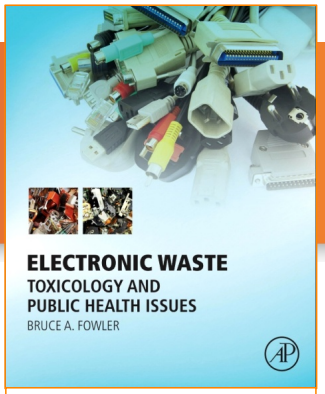


Electronic Waste

Toxicology and Public Health Issues

Bruce A. Fowler Ph.D., A.T.S., Private Consulting Toxicologist, Adjunct Professor, Emory University, Rollins School of Public Health, and Presidents Professor of Biomedical Research, University of Alaska - Fairbanks

Describes the current recycling practices of electronic waste, the toxicology of common chemicals and the human populations most commonly exposed to these agents while emphasizing risk assessment methods that will inform and lead to necessary public health policy changes

ISBN: 978-0-12-803083-7

PUB DATE: June 2017

FORMAT: Hardback

PAGES: c. 264

TRIM: 7.5w x 9.25h

AUDIENCE

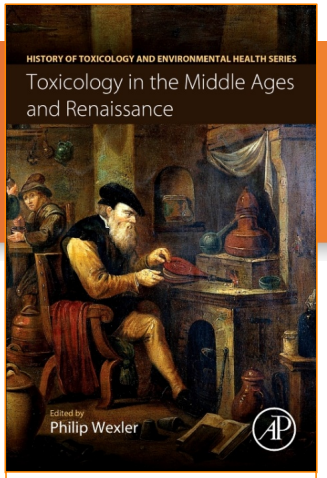
Toxicologists, risk assessors, public policy professionals, professors and researchers in schools of public health and environmental health, staff of government agencies, NGOs and public health agencies, including WHO, IARC, UNEP, OECD, European Environment Agency and US EPA

KEY FEATURES

- Offers a well-researched single authored book and draws attention to the need for better and more informed risk assessment and policy making in this area
- Emphasizes the transference of electronic waste (e-waste) to developing countries where populations of concern include children working in recycling activities and impoverished groups with poor nutritional status and limited access to medical resources
- Reviews in detail the issue of exposure to chemical mixtures as a central feature of e-waste due to the presence of a number of organic and inorganic chemicals in modern electronic devices

DESCRIPTION

Electronic Waste: Toxicology and Public Health Issues discusses the major public health concerns due to the presence of toxic chemicals generated from improper recycling and disposal practices of electronic waste (e-waste). This book highlights hazardous inorganic chemicals found in e-waste, including arsenic, cadmium, lead, mercury, gallium, iridium and nanomaterials. It also focuses on health issues related to the presence of BPA, styrene and other plastic components and combustion products while identifying populations at special risk. To provide readers with potential solutions to this global problem, Dr. Fowler presents risk assessment approaches using chemicals, mixtures, biomarkers, susceptibility factors and computational toxicology. He discusses how to translate the information gathered through risk assessment into safe and effective international policies. The final chapter is devoted to future research directions. This is a timely and useful resource for all those concerned with the health issues surrounding e-waste management and proper disposal, including toxicologists, public health and policy officials, environmental scientists and risk assessors.



Toxicology in the Middle Ages and Renaissance

Edited by: ***Philip Wexler*** National Library of Medicine's (NLM) Toxicology and Environmental Health Information Program

An exploration of toxins and poisons through famous incidents, scholars, and people of the Middle Ages and Renaissance

A Volume in the History of Toxicology and Environmental Health Series.

KEY FEATURES

- Provides the historical background for understanding modern toxicology
- Illustrates the ways previous civilizations learned to distinguish safe from hazardous substances, how to avoid the hazardous substances and how to use them against enemies
- Explores the way famous historical figures used toxins

DESCRIPTION

Toxicology in the Middle Ages and Renaissance provides an authoritative and fascinating exploration into the use of toxins and poisons in the Middle Ages and Renaissance. Part of the *History of Toxicology and Environmental Health* series, this volume is a follow-up, chronologically, to the first two volumes which explored toxicology in Antiquity. It covers approximately the 1100s through the 1600s and delves into different aspects of toxicology such as the contributions of scientific scholars of the time, sensational poisoners and poisoning cases, as well as myths. Historical figures such as the Borgias and Catherine de Medici are discussed. Toxicologists, students, medical researchers, and those interested in the history of science will find insightful and relevant material in this volume.

ISBN: 978-0-12-809554-6

PUB DATE: March 2017

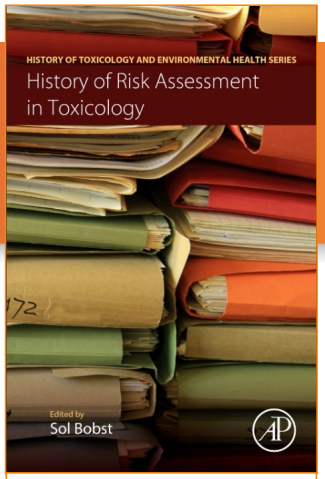
FORMAT: Paperback

PAGES: c. 115

TRIM: 6w x 9h

AUDIENCE

Toxicologists, environmental health professionals, science historians, general audience



History of Risk Assessment in Toxicology

Edited by: ***Sol Bobst*** MBA PhD DABT ToxSci Advisors

This cutting edge book is the first to present the history and context of developments in risk assessment within toxicology

A Volume in the History of Toxicology and Environmental Health Series.

KEY FEATURES

- Presents the first dedicated history on the evolution of risk assessment in toxicology
- Reviews the development of major US and EU regulatory bodies
- Provides a context to current debates surrounding the future of risk assessment
- Reviews examples from early scientific and health studies to showcase the foundations of risk assessment

DESCRIPTION

History of Risk Assessment in Toxicology guides the reader through the historical narrative of the evolution of risk assessment thinking in human and environmental practices. Risk assessment concepts are used in many different professional practice areas. In the health and environmental practices of risk assessment, the critical issue is often what chemical concentration in air, water, food, or a solid substance is acceptable, or considered not to result in any adverse effect.

The book reviews examples from early scientific and health studies to showcase the foundations of risk assessment. The book also explores the development of risk assessment as practiced by major regulatory bodies such as the US Food and Drug Administration (FDA), the Occupational Safety & Health Administration (OSHA), and the US Environmental Protection Agency (EPA) to reveal how risk assessment has evolved in the 20th and 21st centuries.

Modern technology has created opportunities in silicon in vitro, computational modeling, omics, and big data techniques to assess the toxicity of chemicals, while traditional approaches to risk assessment are being challenged with new and innovative approaches. Finally, current issues being debated and tested in risk assessment are outlined with possible future avenues suggested.

ISBN: 978-0-12-809532-4

PUB DATE: May 2017

FORMAT: Paperback

PAGES: c. 115

TRIM: 6w x 9h

AUDIENCE

Toxicologists, epidemiologists, risk assessors, and regulators and societal decision makers. Secondary markets include environmental health researchers and practitioners and the risk science community

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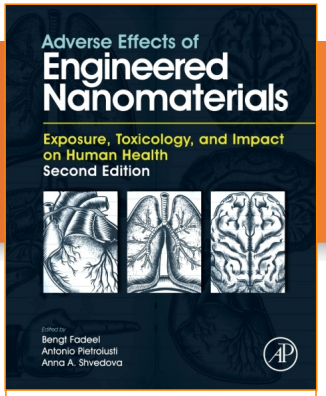


Adverse Effects of Engineered Nanomaterials, 2e

Exposure, Toxicology, and Impact on Human Health

Edited by: ***Bengt Fadeel*** Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden
Antonio Pietroiusti Department of Biomedicine and Prevention, Tor Vergata University, Rome, Italy
Anna A. Shvedova Exposure Assessment Branch, Health Effects Laboratory Division, National Institute for Occupational Safety and Health, Morgantown, WV, USA

Completely updated reference that explores the human health impacts of nanomaterials, including contributions from scientists, industry, regulatory agencies, and more

ISBN: 978-0-12-809199-9

PREVIOUS EDITION ISBN: 9780123869401

PUB DATE: March 2017

FORMAT: Hardback

PAGES: c. 442

TRIM: 7.5w x 9.25h

AUDIENCE

This book is intended for those directly involved in the field of nanosafety, namely professionals in toxicology, pharmacology, occupational medicine, clinical medicine and nanomedicine. Workers concerned with safety in the pharmaceutics, cosmetics and public health industries, as well as policy makers developing regulatory frameworks and nanotechnology industries/enterprises

KEY FEATURES

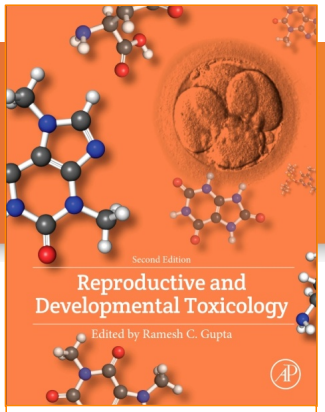
- Uses a schematic, non-exhaustive approach to summarizes the most important research data in this field
- Discusses the health implications of experimental data in nanotoxicology
- Presents a completely revised edition that focuses on the human health impacts of engineered nanomaterials, including many organ-specific chapters

DESCRIPTION

Adverse Effects of Engineered Nanomaterials: Exposure, Toxicology, and Impact on Human Health, Second Edition, provides a systematic evaluation of representative engineered nanomaterials (ENM) of high volume production and their high economic importance. Each class of nanomaterials discussed includes information on what scientists, industry, regulatory agencies, and the general public need to know about nanosafety.

Written by leading international experts in nanotoxicology and nanomedicine, this book gives a comprehensive view of the health impact of ENM, focusing on their potential adverse effects in exposed workers, consumers, and patients. All chapters have been updated with new sections on the endocrine system and other organ systems. In addition, other newly added sections include introductory chapters on the physio-chemical characterization of nanomaterials and interactions between nanomaterials and biological systems, as well as a new chapter that explores risk assessment and management of nanomaterials.

This book fills an important need in terms of bridging the gap between experimental findings and human exposure to ENM, also detailing the clinical and pathological consequences of such exposure in the human population.



Reproductive and Developmental Toxicology, 2e

Edited by: ***Ramesh C. Gupta*** DVM, MVSc, PhD, DABT, FACT, FACN, FATS, Professor and Head, Toxicology Department, Breathitt Veterinary Center, Murray State University, Hopkinsville, KY, USA

ISBN: 978-0-12-804239-7

PREVIOUS EDITION ISBN: 9780123820327

PUB DATE: February 2017

FORMAT: Hardback

PAGES: c. 38

TRIM: 276 x 216 (8 1/2 x 10 7/8)

AUDIENCE

Researchers and advanced students in Toxicology. Also, biologists, pharmacologists, and teratologists from academia, industry, and governmental agencies; domestic, wildlife, and aquatic specialists; environmentalists; regulatory agencies

Updated edition examines the toxicological risks to parent, placenta, and fetus, providing information for improving health during key stages of reproduction and development

KEY FEATURES

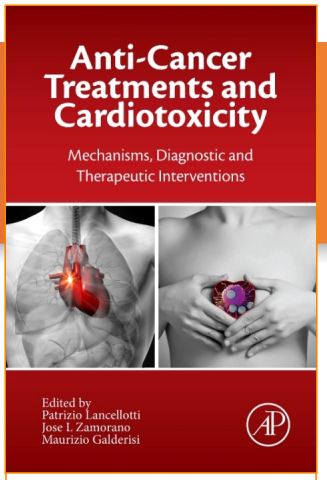
- Provides a complete, up-to-date, integrated source of information on the key risk stages during reproduction and development
- Includes new chapters covering significant developments, such as dose-response assessment for developmental toxicity, juvenile toxicity, and neural tube defects, as well as emerging science, such as stem cell application, toxicoproteomics, metabolomics, endocrine disruption, surveillance and regulatory considerations, and risk assessment
- Offers diverse and unique in vitro and in vivo toxicity models for reproductive and developmental toxicity testing in a user-friendly format that assists in comparative analysis

DESCRIPTION

Reproductive and Developmental Toxicology, Second Edition, is a comprehensive and authoritative resource that provides the latest literature on this complex subject with a primary focus on three core components—parent, placenta, and fetus—and the continuous changes that occur in each. Enriched with relevant references describing every aspect of reproductive toxicology, this revised and updated resource addresses the totality of the subject, discussing a broad range of topics, including nanoparticles and radiation, gases and solvents, smoking, alcohol and drug abuse, and metals, amongst others.

With a special focus on placental toxicity, this book is the only available reference to connect the three key risk stages, also including discussions on reproductive and developmental toxicity in domestic animals, fish, and wildlife.

Completely revised and updated to include the most recent developments in the field, the book is an essential resource for advanced students and researchers in toxicology, as well as biologists, pharmacologists, and teratologists from academia, industry, and regulatory agencies.



Anticancer Treatments and Cardiotoxicity

Mechanisms, Diagnostic and Therapeutic Interventions

Edited by: ***Patrizio Lancellotti*** Professor of Cardiology, University of Liège, Liège, Belgium
Jose L Zamorano Professor and Head of Cardiology, University Hospital Ramón y Cajal, Madrid, Spain
Maurizio Galderisi Associate Professor of Cardiology, Clinical Director, Federico II University Hospital, Italy

A comprehensive examination of the latest research on the adverse cardiac effects of anti-cancer treatments such as radiotherapy and chemotherapy, this book highlights the most effective diagnostic and imaging tools for evaluating and predicting the development of cardiac dysfunction in patients undergoing cancer treatment

ISBN: 978-0-12-802509-3
PUB DATE: December 2016
FORMAT: Hardback
PAGES: c. 434
TRIM: 6w x 9h

AUDIENCE

Professionals and graduate students in the fields of toxicology and cardiology research; Oncologists; Cardiologists; Clinicians

KEY FEATURES

- Provides algorithms essential for the use of imaging, and biomarkers for the screening and monitoring of patients
- Written by world-leading experts in the field of cardiotoxicity
- Includes high-quality images, case studies, and test questions
- Describes the most effective diagnostic and imaging tools to evaluate and predict the development of cardiac dysfunction for those patients undergoing cancer treatment

DESCRIPTION

Anticancer Treatments and Cardiotoxicity: Mechanisms, Diagnostic and Therapeutic Interventions presents cutting edge research on the adverse cardiac effects of both radiotherapy and chemotherapy, brought together by leaders in the field. Cancer treatment-related cardiotoxicity is the leading cause of treatment-associated mortality in cancer survivors and is one of the most common post-treatment issues among survivors of adult cancer. Early detection of the patients prone to developing cardiotoxicity, taking in to account the type of treatment, history and other risk factors, is essential in the fight to decrease cardiotoxic mortality.

This illustrated reference describes the most effective diagnostic and imaging tools to evaluate and predict the development of cardiac dysfunction for those patients undergoing cancer treatment. In addition, new guidelines on imaging for the screening and monitoring of these patients are also presented. *Anticancer Treatments and Cardiotoxicity* is an essential reference for those involved in the research and treatment of cardiovascular toxicity.

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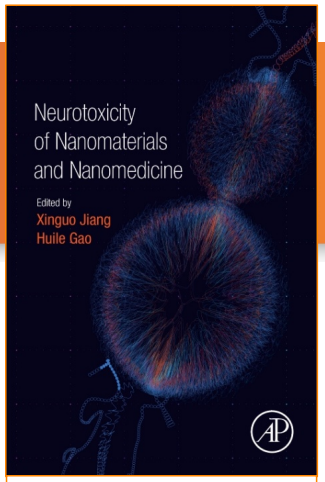

Neurotoxicity of Nanomaterials and Nanomedicine

Edited by: ***Xinguo Jiang*** Key Laboratory of Smart Drug Delivery (Ministry of Education), School of Pharmacy, Fudan University, Shanghai, China
Huile Gao Key Laboratory of Drug Targeting and Drug Delivery Systems, West China School of Pharmacy, Sichuan University, Chengdu, Sichuan, China

Presents exciting research in neurotoxicity and nanomaterials, including their use in medicine, including diagnosis probes, drug carriers, and embedded materials

KEY FEATURES

- Presents a thorough discussion of the most common nanoparticles in the brain and their neurotoxicology
- Includes the most common nanoparticles, their applications, and mechanisms
- Provides one of the first books to focus on nanomedicine and neurotoxicity

DESCRIPTION

Neurotoxicity of Nanomaterials and Nanomedicine presents an overview of the exciting research in neurotoxicity and nanomaterials. Nanomaterials have been extensively used in medicine, including diagnosis probes, drug carriers, and embedded materials. While some have been approved for clinical use, most nanomaterials are waiting to be transferred from lab to clinic. However, the toxicity is a main barrier that restricts the translation.

This comprehensive book includes chapters on the most commonly used individual nanoparticles, with information on the applications, neurotoxicity, and related mechanisms of each, providing the most in-depth and current information available. The book examines the pathways that nanomaterials enter into, and eliminate, from the brain, along with the strategies that could reduce the neurotoxicity of nanomaterials.

Providing a background to the subject, detailed information, and ideas for future directions in research, the book is essential for students and researchers in toxicology, and for those in medicine, neurology, pharmacology, pharmaceutical science, and materials science who are researching nanomaterials.

ISBN: 978-0-12-804598-5
PUB DATE: September 2016
FORMAT: Hardback
PAGES: c. 336
TRIM: 6w x 9h

AUDIENCE

Postgraduate students and researchers in toxicology as well as pharmaceutical science, pharmacology, medicine and material science. Researchers in neurotoxicology, nanotoxicology, nanomedicine, neuroscience, and nanotechnology: will also be of use in industrial settings such as the medical, pharmaceutical, cosmetics, and coating industries

Fundamentals of Toxicology

Essential Concepts and Applications

PK Gupta Director of Toxicology Consultant Group, Patron and Founder President of the Society of Toxicology of India and President of the Academy of Sciences for Animal Welfare, Rajendra Nagar, Bareilly (UP), India

A concise, approachable overview of the basic concepts of toxicology, this foundational text covers commonly used definitions, historical perspectives, regulatory requirements, good laboratory practices, types of toxicology testing and evaluation, toxic agents and their adverse effects on health, and analytical, forensic, and diagnostic toxicology

ISBN: 978-0-12-805426-0

PUB DATE: August 2016

FORMAT: Paperback

PAGES: c. 398

TRIM: 7.5w x 9.25h

AUDIENCE

Graduate-level students and professors in the field of toxicology, researchers in interdisciplinary fields bordering toxicology that need to know basic toxicology concepts, such as pharmacy and pharmaceutical science, medicine, forensics, veterinary science and chemistry.

KEY FEATURES

- Explains the essential concepts of toxicology in a clear fashion
- Provides in-depth coverage of testing protocols, common drugs, chemicals, and laboratory-based diagnostic and analytical toxicology
- Explores the history, foundations, and most recent concepts of toxicology
- Serves as an essential reference for advanced students in toxicology and across the biomedical, life, and environmental sciences who want to learn the concepts of toxicology

DESCRIPTION

Fundamentals of Toxicology: Essential Concepts and Applications provides a crisp, easy-to-understand overview of the most important concepts, applications, and ideas needed to learn the basics of toxicology. Written by a pre-eminent toxicologist with over five decades of teaching experience, this comprehensive resource offers the hands-on knowledge needed for a strong foundation in the wide field of toxicology. *Fundamentals of Toxicology* includes a clear structure divided into five units to assist learning and understanding.

The first unit provides extensive coverage on the background of toxicology including commonly used definitions and historical perspective, while following units cover: basic concepts; regulatory requirements and good laboratory practices, including types of toxicology testing and evaluation; toxic agents and adverse effects on health; and analytical, forensic, and diagnostic toxicology. This is an essential book for advanced students in toxicology and across the biomedical sciences, life sciences, and environmental sciences who want to learn the concepts of toxicology, as well as early researchers needing to refresh outside of their specialty.

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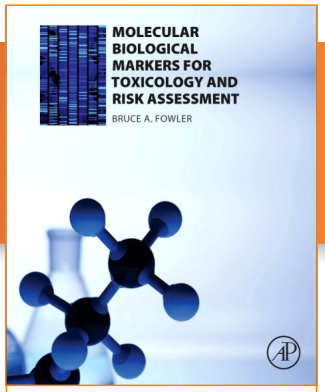


Molecular Biological Markers for Toxicology and Risk Assessment

Bruce A. Fowler Ph.D., A.T.S., Private Consulting Toxicologist, Adjunct Professor, Emory University, Rollins School of Public Health, and Presidents Professor of Biomedical Research, University of Alaska - Fairbanks

This professional reference provides an introduction to the exciting field of biomarkers and their use in toxicology and risk assessment. Covers a broad range of molecular biological markers, including the "omic" biomarkers, and provides an examination of the various elements in the evolution of these modern tools.

ISBN: 978-0-12-809589-8

PUB DATE: June 2016

FORMAT: Hardback

PAGES: c. 154

TRIM: 7.5w x 9.25h

AUDIENCE

Professional toxicologists, risk assessors, and regulators

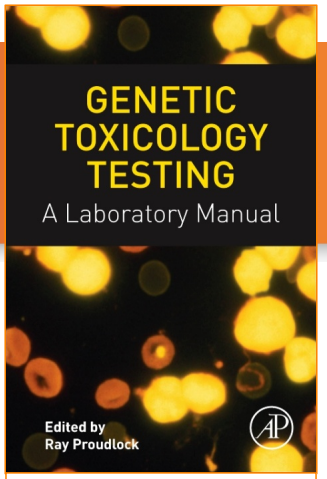
KEY FEATURES

- Introduces the use of molecular biomarkers to detect toxic effects of chemicals as early as possible
- Provides an accessible overview of this emerging, interdisciplinary field, to best inform decision making in chemical and pharmaceutical safety
- Includes a section on risk communication of these complex concepts, essential for effective risk assessment
- Provides new insights into the initial mechanisms of chemical-induced toxicity and carcinogenicity

DESCRIPTION

Molecular Biological Markers for Toxicology and Risk Assessment provides an introduction to the exciting field of biomarkers and their use in toxicology and risk assessment. In recent years, new classes of molecular biomarkers capable of detecting early manifestations of ongoing chemical-induced cell injury and cell death have been developed as a result of advances in analytical chemistry, molecular biology, and computational modeling. The interplay between these emergent tools of science has resulted in new insights into initial mechanisms of chemical-induced toxicity and carcinogenicity.

Molecular Biological Markers for Toxicology and Risk Assessment guides the reader through a broad range of molecular biological markers, including the "omic" biomarkers, and provides an examination of the various elements in the evolution of these modern tools. It then explores possible ways in which these markers may be applied to advance the field of chemical risk assessment. Since molecular biomarkers and related technologies are inherently complex, the book concludes with a section on risk communication in order that readers may appreciate both the strengths and limitations of molecular biological marker approaches to risk assessment practice.



Genetic Toxicology Testing

A Laboratory Manual

Edited by: ***Ray Proudlock*** Boone, North Carolina, USA

Reviewing genetic toxicology testing of chemicals in a Good Laboratory Practice (GLP) environment, this practical guide covers the most commonly used assays—from laboratory ad test design to results analysis—as well as individual test methods, equipment, suggested suppliers, recipes for reagents, and evaluation criteria

ISBN: 978-0-12-800764-8

PUB DATE: May 2016

FORMAT: Paperback

PAGES: c. 444

TRIM: 7.5w x 9.25h

AUDIENCE

Graduate students and professional researchers in toxicology and pharmaceutical science

KEY FEATURES

- Offers practical and consistent guidance on the most commonly-performed tests and procedures in a genetic toxicology lab
- Describes standard genetic toxicology assays, their methodology, reagents, suppliers, and analysis of their results
- Includes guidance on general approaches: formulation for in vitro assays, study monitoring, and Good Laboratory Practice (GLP)
- Serves as an essential reference for those new to the genetic toxicology laboratory, or anyone involved in setting up their own lab

DESCRIPTION

Genetic Toxicology Testing: A Laboratory Manual presents a practical guide to genetic toxicology testing of chemicals in a GLP environment. The most commonly used assays are described, from laboratory and test design to results analysis. In a methodical manner, individual test methods are described step-by-step, along with equipment, suggested suppliers, recipes for reagents, and evaluation criteria.

An invaluable resource in the lab, this book will help to troubleshoot any assay problems you may encounter to optimise quality and efficiency in your genetic toxicology tests. *Genetic Toxicology Testing: A Laboratory Manual* is an essential reference for those new to the genetic toxicology laboratory, or anyone involved in setting up their own.

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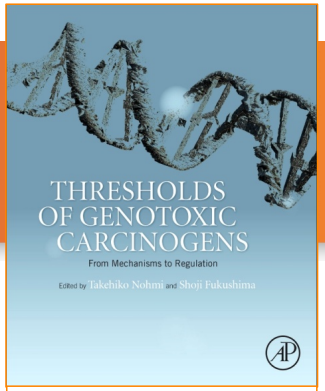

Thresholds of Genotoxic Carcinogens

From Mechanisms to Regulation

Edited by: ***Takehiko Nohmi*** Visiting Scientist, Scientist Emeritus, Biological Safety Research Center, National Institute of Health Sciences, Japan; Science Coordinator, Japan Agency for Medical Research and Development, Japan
Shoji Fukushima Japan Bioassay Research Center, Japan

A balanced overview of the current international research and opinions on the thresholds of genotoxic carcinogens, this professional reference describes potential cancer risks of daily low-level exposure, the mechanisms involved, chemical and statistical methods of analysis, and the ways in which these may be utilized to inform policy

ISBN: 978-0-12-801663-3
PUB DATE: May 2016
FORMAT: Hardback
PAGES: c. 210
TRIM: 7.5w x 9.25h

AUDIENCE

Researchers in genetic toxicology, genetic toxicologists working in pharmaceuticals, foods, agricultural pesticides and cosmetics, regulatory toxicologists, risk assessors

KEY FEATURES

- Unites an international team of experts to provide a balanced overview of the current opinion on thresholds of genotoxic carcinogens
- Provides all the information readers need to determine a safe threshold for potential genotoxic carcinogens
- Includes information on the mechanisms of genotoxic carcinogens and how these can inform regulation
- Serves as an essential reference for any professional researchers in genetic toxicology and those involved in toxicological regulation

DESCRIPTION

Thresholds of Genotoxic Carcinogens: From Mechanisms to Regulation brings together current opinion and research activities from Japan, the US, and Europe on the subject of genotoxic thresholds. In regulation, it is an adage that genotoxic carcinogens have no thresholds for action, and that they impose cancer risk on humans even at very low levels. This policy is frequently called into question as humans possess a number of defense mechanisms including detoxication, DNA repair, and apoptosis, meaning there is a threshold at which these genotoxic carcinogens take action.

The book examines these potential thresholds, describing the potential cancer risks of daily low-level exposure, the mechanisms involved (such as DNA repair, detoxication, translesion DNA synthesis), chemical and statistical methods of analysis, and the ways in which these may be utilized to inform policy. *Thresholds of Genotoxic Carcinogens: From Mechanisms to Regulation* is an essential reference for any professional researchers in genetic toxicology and those involved in toxicological regulation.

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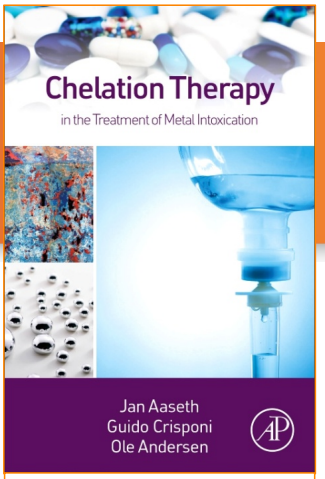


Chelation Therapy in the Treatment of Metal Intoxication

Jan Aaseth Professor, Deptatment of Public Health, Hedmark University College, Elverum, Hedmark, Norway; Kongsvinger Hospital, Innlandet, Hedmark, Norway
Guido Crisponi Professor, Department of Chemical and Geological Sciences, University of Cagliari, Monserrato - Cagliari, Italy
Ole Anderson Professor, Department of Science, Systems and Models, Roskilde University, Roskilde, Denmark

This practical guide explores the use of chelation therapy—from its basic chemistry to available chelating antidotes and the application of chelating agents—in response to human exposure to a range of toxic metal compounds

ISBN: 978-0-12-803072-1
PUB DATE: April 2016
FORMAT: Hardback
PAGES: c. 380
TRIM: 6w x 9h

AUDIENCE

Professional toxicologists, pharmacologists, medical chemists, chemists and clinicians

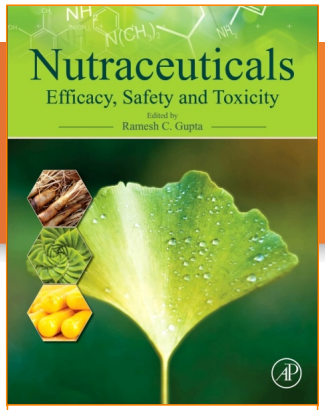
KEY FEATURES

- Presents all the current findings on the potential for chelation as a therapy for metal intoxication
- Presents practical guidelines for selecting the most appropriate chelating agent
- Includes coverage on radionuclide exposure and metal storage diseases
- Describes the chemical and biological principles of chelation in the treatment of toxic metal compounds

DESCRIPTION

Chelation Therapy in the Treatment of Metal Intoxication presents a practical guide to the use of chelation therapy, from its basic chemistry, to available chelating antidotes, and the application of chelating agents. Several metals have long been known to be toxic to humans, and continue to pose great difficulty to treat. These challenges pose particular problems in industrial settings, with lead smelting known to be associated with hemopoietic alterations and paralyses, and the inhalation of mercury vapor in mercury mining being extremely detrimental to the central nervous system.

Clinical experience has demonstrated that acute and chronic human intoxications with a range of metals can be treated efficiently by administration of chelating agents. *Chelation Therapy in the Treatment of Metal Intoxication* describes the chemical and biological principles of chelation in the treatment of these toxic metal compounds, including new chelators such as meso-2,3-dimercaptosuccinic acid (DMSA) and D,L-2,3-dimercapto-1-propanesulfonic acid (DMPS).



Nutraceuticals

Efficacy, Safety and Toxicity

Edited by: ***Ramesh C. Gupta*** DVM, MVSc, PhD, DABT, FACT, FACN, FATS, Professor and Head, Toxicology Department, Breathitt Veterinary Center, Murray State University, Hopkinsville, KY, USA

As the first-of-its-kind reference detailing the use and potential toxic effects of nutraceuticals and dietary supplements, this book brings together all current knowledge regarding nutraceuticals and their potential toxic effects, providing an introduction to nutraceuticals, herbal medicines, ayurvedic medicines, prebiotics, probiotics, and adaptogens, along with their use and specific applications

ISBN: 978-0-12-802147-7

PUB DATE: January 2016

FORMAT: Hardback

PAGES: c. 1022

TRIM: 8.5w x 10.875h

AUDIENCE

Toxicologists, pharmacologists, pharmaceutical scientists, pharmacists, nutritionists, medicinal and natural product chemists

"This is the first comprehensive book on nutraceuticals involving timely topics such as fenugreek. The book covers various aspects of nutraceuticals, including efficacy, safety and regulatory status. It will be an immense resource for researchers, toxicologists, clinicians and regulators engaged in the area of nutraceuticals." **-- Dr. Ramesh C. Garg, Abbvie**

"This book is a great contribution to our understanding of naturally derived nutraceuticals and how they relate to human health. In the era of legal cannabis, this book highlights many of its beneficial properties, which have been overlooked for nearly a century." **-- Dr. Joshua Hartsel, Delta-9 Technologies, San Diego, CA, USA**

KEY FEATURES

- Grants an overview of the current state-of-the-science of nutraceuticals, their use and applications, and known adverse effects
- Provides effective tools to evaluate the potential toxicity of any nutraceutical
- Includes details of regulatory issues as written by international experts

DESCRIPTION

Nutraceuticals: Efficacy, Safety and Toxicity brings together all current knowledge regarding nutraceuticals and their potential toxic effects as written by the scientists at the forefront of their study. Users will find an introduction to nutraceuticals, herbal medicines, ayurvedic medicines, prebiotics, probiotics, and adaptogens, along with their use and specific applications.

This essential reference then discusses the mechanism of action for the judicious use of these nutraceuticals and the best tools for their evaluation before detailing the safety and toxicity of nutraceuticals and their interactions with other therapeutic drugs.

Finally, and crucially, regulatory aspects from around the world are covered, providing a comprehensive overview of the most effective tools for the evaluation, safety, and toxicity of nutraceuticals, prebiotics, probiotics, and alternative medicines.

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Progress in Medicinal Chemistry, Vol 56

Progress in Medicinal Chemistry

Edited by: ***David R. Witty*** Convergence Pharmaceuticals Ltd, Cambridge, UK
Brian Cox University of Sussex, Brighton, UK

ELSEVIER

A review of eclectic developments in medicinal chemistry, with authoritative extended reviews of targets and technologies addressing new therapeutics

ISBN: 978-0-444-63939-4

PUB DATE: June 2017

FORMAT: Hardback

PAGES: c. 250

TRIM: 6w x 9h

AUDIENCE

Everyone interested in the strategy and practice of the preclinical phases of the creation of new medicines. Those wishing to understand the drivers of drug design or expand their knowledge of therapeutic target classes

KEY FEATURES

- Extended timely reviews of topics in medicinal chemistry
- Targets and technologies relevant to the discovery of tomorrow's drugs
- Analyses of successful drug discovery programmes

DESCRIPTION

Progress in Medicinal Chemistry provides a review of eclectic developments in medicinal chemistry. This volume includes chapters covering recent advances in cancer therapeutics, *f*luorine in medicinal chemistry, a perspective on the next generation of antibacterial agents derived by manipulation of natural products, a new era for Chagas Disease drug discovery? and imaging in drug development.

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Advances in Molecular Toxicology, Vol 10

Advances in Molecular Toxicology

Edited by: ***James C. Fishbein*** Department of Chemistry and Biochemistry, University of Maryland, Baltimore, MD, USA
Jacqueline M. Heilman Exponent, Inc., Washington, DC, USA

Reviews the evolving field of molecular toxicology, featuring the latest advances in related subspecialties and detailing the molecular basis of toxins

KEY FEATURES

- Provides cutting-edge reviews by leading workers in the discipline
- Includes in-depth dissection of the molecular aspects that are of interest to a broad range of scientists, physicians, and any student in the allied disciplines
- Presents leading-edge applications of technological innovations in chemistry, biochemistry, and molecular medicine

DESCRIPTION

Advances in Molecular Toxicology features the latest advances in the subspecialties of the broad area of molecular toxicology. This series details the study of the molecular basis of toxicology by which a vast array of agents encountered in the human environment, and produced by the human body, manifest themselves as toxins.

The book is not strictly limited to documenting these examples, but also covers the complex web of chemical and biological events that give rise to toxin-induced symptoms and disease. The new technologies that are being harnessed to analyze and understand these events are also reviewed by leading experts in the field.

ISBN: 978-0-12-804700-2
PUB DATE: November 2016
FORMAT: Hardback
PAGES: c. 402
TRIM: 6w x 9h

AUDIENCE

For academics in the field of chemistry, biochemistry, toxicology, pharmacology and medicine; for Government agencies and those in industry; pharmaceutical and chemical manufacturers

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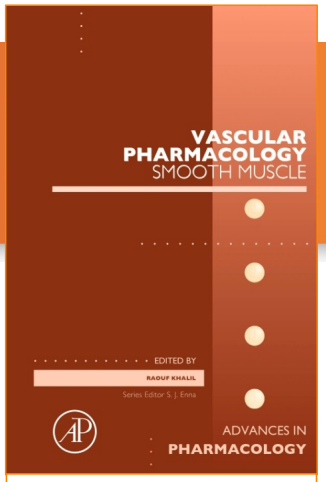

Advances in Pharmacology, Vol 78

Vascular Pharmacology

Edited by: ***Raouf A Khalil*** Division of Vascular Surgery, Brigham and Women's Hospital, Boston, MA, USA

Contains concise information on vascular smooth muscle, with helpful illustrations and supporting references by prominent scientists experts in the field

ISBN: 978-0-12-811485-8

PUB DATE: March 2017

FORMAT: Hardback

PAGES: c. 300

TRIM: 6w x 9h

AUDIENCE

Undergraduate and graduate students and postgraduate trainees as well as established scientists, physicians and medical professionals with interest in the vascular field

KEY FEATURES

- Presents a must read reference on vascular smooth muscle physiology and pharmacology
- Contains up-to-date information on the structure, function, signaling, and development of vascular smooth muscle
- Includes contributors from prominent scientists and highly-recognized experts with major accomplishments in the field of vascular smooth muscle research

DESCRIPTION

Vascular Pharmacology: Smooth Muscle provides up-to-date information on the structure, function, signaling, and development of vascular smooth muscle. Contributors include prominent scientists and highly-recognized experts with major accomplishments in the field of vascular smooth muscle research.

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Profiles of Drug Substances, Excipients and Related Methodology, Vol 42

Profiles of Drug Substances, Excipients, and Related Methodology

Edited by: ***Harry G. Brittain*** Center for Pharmaceutical Physics, Milford, NJ, USA

This widely revered series presents comprehensive reviews of drug substances, excipients, and additional materials as written by experts in the field

ISBN: 978-0-12-812226-6

PUB DATE: March 2017

FORMAT: Hardback

PAGES: c. 446

TRIM: 6w x 9h

AUDIENCE

Medicinal, pharmaceutical, and analytical chemists; pharmacologists

KEY FEATURES

- Contains contributions from leading authorities
- Informs and updates on all the latest developments in the field

DESCRIPTION

Profiles of Drug Substances, Excipients, and Related Methodology presents comprehensive reviews of drug substances and additional materials, with critical review chapters that summarize information related to the characterization of drug substances and excipients, thus meeting the needs of the pharmaceutical community and allowing for the development of a timely vehicle for publishing review materials on the topic.

The scope of the *Profiles* series encompasses review articles and database compilations that fall within one of the following six broad categories, Physical profiles of drug substances and excipients, Analytical profiles of drug substances and excipients, Drug metabolism and pharmacokinetic profiles of drug substances and excipients, Methodology related to the characterization of drug substances and excipients, Methods of chemical synthesis, and Reviews of the uses and applications for individual drug substances, classes of drug substances, or excipients.

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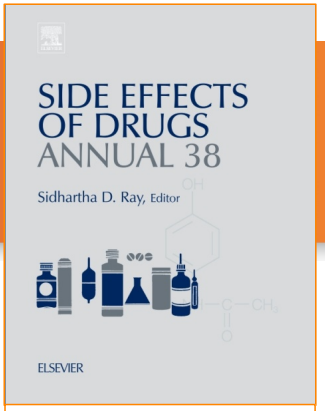

Side Effects of Drugs Annual, Vol 38

Side Effects of Drugs Annual

Edited by: ***Sidhartha D. Ray*** Department of Pharmaceutical Sciences, Manchester University, College of Pharmacy, Fort Wayne, IN, USA

ELSEVIER

This book provides readers with a reliable and critical survey on the side effects of drugs and new trends in the area of adverse drug reactions

ISBN: 978-0-444-63718-5

PUB DATE: November 2016

FORMAT: Hardback

PAGES: c. 562

TRIM: 8.5w x 10.875h

AUDIENCE

Pharmacologists, clinicians, pharmaceutical companies, clinical toxicologists, clinical pharmacologists and medical libraries

KEY FEATURES

- Provides a critical yearly survey of the new data and trends regarding the side effects of drugs
- Authored and reviewed by worldwide pioneers in the clinical and practice sciences
- Presents an essential clinical on the side effects of drugs for practitioners and healthcare professionals alike

DESCRIPTION

Side Effects of Drugs Annual: A Worldwide Yearly Survey of New Data in Adverse Drug Reactions was first published in 1977, and has been continually published as a yearly update to the voluminous encyclopedia *Meyler's Side Effects of Drugs*. Each annual provides clinicians and medical investigators with a reliable and critical survey of new data and trends in the area of adverse drug reactions and interactions, with an international team of specialists contributing their expertise each year.

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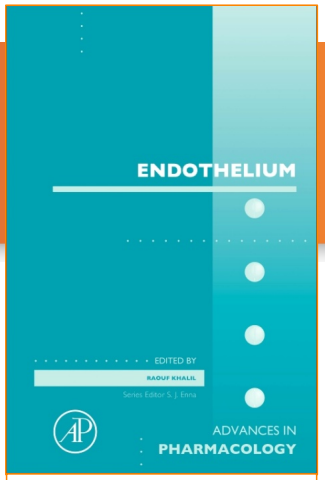

Advances in Pharmacology, Vol 77

Endothelium

Edited by: ***Raouf A Khalil*** Division of Vascular Surgery, Brigham and Women's Hospital, Boston, MA, USA

This new volume of the *Advances in Pharmacology* series presents endothelium-derived mediators and their changes with gender and during vascular development, senescence, and hypertensive disorders

Praise for the Series:
"...recommended not only to pharmacologists but also to all those in related disciplines" **--Nature**

ISBN: 978-0-12-804396-7
PUB DATE: July 2016
FORMAT: Hardback
PAGES: c. 448
TRIM: 6w x 9h

AUDIENCE
Pharmacologists, immunologists, and biochemists

KEY FEATURES

- Contains contributions from the best authors in the field
- Provides an essential resource for pharmacologists, immunologists, and biochemists
- Covers endothelium-derived mediators and their changes

DESCRIPTION

Endothelium, the new volume in the *Advances in Pharmacology* series, presents readers with a variety of chapters that cover various endothelium-derived mediators and their changes with gender, and during vascular development, senescence, and hypertensive disorders.

Topics include endothelium, nitric oxide, gap junctions, potassium channels, endothelin, vascular development, vascular permeability, gender, aging, and preeclampsia. With contributions from the best authors in the field, the volume is an essential resource for pharmacologists, immunologists, and biochemists alike.

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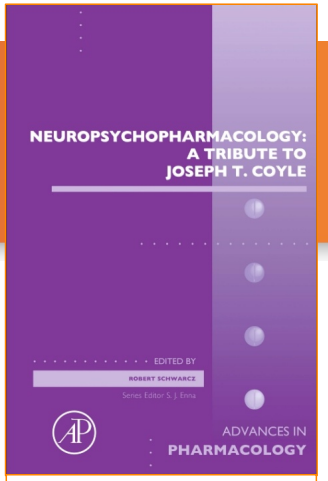

Advances in Pharmacology, Vol 76

Neuropsychopharmacology: A Tribute to Joseph T. Coyle

Edited by: ***Robert Schwarcz*** Maryland Psychiatric Research Center, University of Maryland School of Medicine, Baltimore, MD, USA

This new volume from *Advances in Pharmacology* presents reviews of recent breakthroughs in glutamate pharmacology and a tribute to one of the most influential neuroscientists of our times. Features chapters from the best authors in the field. An essential resource for pharmacologists, immunologists, and biochemists alike.

Praise for the Series:
"...recommended not only to pharmacologists but also to all those in related disciplines" **--Nature**

ISBN: 978-0-12-809745-8
PUB DATE: June 2016
FORMAT: Hardback
PAGES: c. 398
TRIM: 6w x 9h

AUDIENCE
Pharmacologists, immunologists, and biochemists

KEY FEATURES

- Features contributions from the best authors in the field
- Provides an essential resource for pharmacologists, immunologists, and biochemists
- Includes new approaches for diagnosing and treating major neurological and psychiatric diseases
- Features a tribute to one of the most influential neuroscientists of our times

DESCRIPTION

Neuropsychopharmacology: A Tribute to Joseph T. Coyle is a new volume from *Advances in Pharmacology* presenting reviews of recent breakthroughs in glutamate pharmacology and a tribute to one of the most influential neuroscientists of our times. With a variety of chapters and the best authors in the field, the volume is an essential resource for pharmacologists, immunologists, and biochemists alike.

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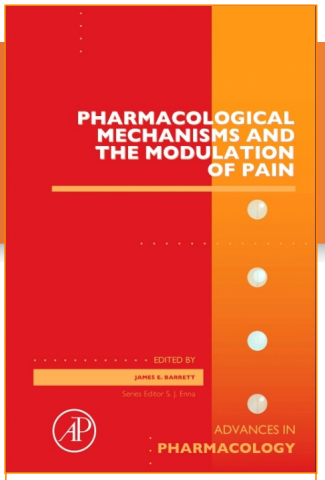

Advances in Pharmacology, Vol 75

Pharmacological Mechanisms and the Modulation of Pain

Edited by: ***James E Barrett*** Department of Pharmacology & Physiology, Drexel University College of Medicine, USA

This new volume in the *Advances in Pharmacology* series focuses on the pharmacological mechanisms and the modulation of pain, and is an essential resource for pharmacologists, immunologists, and biochemists alike

Praise for the Series:
"...recommended not only to pharmacologists but also to all those in related disciplines" **--Nature**

ISBN: 978-0-12-803883-3
PUB DATE: February 2016
FORMAT: Hardback
PAGES: c. 372
TRIM: 6w x 9h

AUDIENCE
Pharmacologists, immunologists, and biochemists

KEY FEATURES

- Contains contributions from the best authors in the field of pharmacology that focus on the pharmacological mechanisms and modulation of pain
- Provides an essential resource for pharmacologists, immunologists, and biochemists

DESCRIPTION

Pharmacological Mechanisms and the Modulation of Pain, the newest volume in the *Advances in Pharmacology* series, presents the pharmacological mechanisms and the modulation of pain. With a variety of chapters and the best authors in the field, this volume is an essential resource for pharmacologists, immunologists, and biochemists alike.

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Profiles of
Drug Substances, Excipients, and Related Methodology Volume 41

Profiles of Drug Substances, Excipients and Related Methodology, Vol 41

Profiles of Drug Substances, Excipients and Related Methodology

Edited by: ***Harry G. Brittain*** Center for Pharmaceutical Physics, Milford, NJ, USA

This widely revered series presents comprehensive reviews of drug substances, excipients and additional materials, written by experts in the field

Praise for the Series:
"This series was first published in 1972 and represents a very important contribution to the practice of pharmaceutical analysis." **--The Analyst**

KEY FEATURES

- Contributions from leading authorities
- Informs and updates on all the latest developments in the field

DESCRIPTION

Volumes in this widely revered series present comprehensive reviews of drug substances and additional materials, with critical review chapters that summarize information related to the characterization of drug substances and excipients. This organizational structure meets the needs of the pharmaceutical community and allows for the development of a timely vehicle for publishing review materials on this topic.

The scope of the Profiles series encompasses review articles and database compilations that fall within one of the following six broad categories: Physical profiles of drug substances and excipients; Analytical profiles of drug substances and excipients; Drug metabolism and pharmacokinetic profiles of drug substances and excipients; Methodology related to the characterization of drug substances and excipients; Methods of chemical synthesis; and Reviews of the uses and applications for individual drug substances, classes of drug substances, or excipients.

ISBN: 978-0-12-804784-2
PUB DATE: February 2016
FORMAT: Hardback
PAGES: c. 446
TRIM: 6w x 9h

AUDIENCE

Medicinal, pharmaceutical, and analytical chemists; pharmacologists

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