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Titolo	Drugs and a Methodological Compendium : From bench to bedside // edited by Vikrant Singh Rajput, Ashish Runthala
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Descrizione fisica	1 online resource (433 pages)
Disciplina	615.1
Soggetti	Biotechnology Drug delivery systems Biology Pharmaceutical chemistry Medicine - Research Biology - Research Drug Delivery Biological Sciences Pharmaceutics Biomedical Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1.Computational and informatics methodologies in Drug Discovery, with focus on Natural Products -- Chapter 2.Structural biology an essential tool for Drug discovery and Development -- Chapter 3.Bioactivity guided fractionation and identification of bioactive molecules: A basic method in drug discovery -- Chapter 4.In-vitro methodologies for the safety assessment of drugs -- Chapter 5.In-vivo models for evaluation of Drug efficacy: Demand and Challenges -- Chapter 6.Preclinical In vivo Drug Development Studies: Limitations, Model Organisms and Techniques -- Chapter 7.Peptide Based Therapeutics and Drug Delivery Systems -- Chapter 8.Basics of Clinical Drug Development: Clinical Trial and Drug Development -- Chapter 9. Trailblazing contemporary frameworks for drug repurposing: A saga on drugs' expedition to disinter the veiled destiny -- Chapter 10.Small

molecules as promising tool for targeted cancer therapies: an overview of 21st century -- Chapter 11.Nanoparticles for Targeted DrugDelivery Systems with Cancer Therapy in Perspective -- Chapter 12.Biomimetic approach for the controlled drug delivery through 3D bioactive scaffolds: A novel strategy for tissue engineering applications -- Chapter 13.Perspectives on anti-tuberculosis drug discovery -- Chapter 14.Cofactor-Receptor interactions based pharmacophore design for development of novel inhibitors: A case study against Tuberculosis -- Chapter 15.Insilico identification of potential antivirals against SARS-CoV2 main protease and RBD of spike protein – A Drug Repurposing Approach -- Chapter16.Anti-malarial drug discovery and development: from bench to bedside.

Sommario/riassunto

This book provides a meticulous view on methodological drug discovery and development insights from bench to bedside. The current book threads almost each step encompassing drug the discovery and development of a molecule. The chapters focus on computational modus operandi, pharmacological optimization approaches, modern high-throughput screening methods and in-vitro procedures, role of structural biologists in drug discovery and development, medicinal chemistry approaches for drug design, formulation and drug delivery, in-vivo evaluations of candidate molecules, clinical trial procedures and others. The book also covers specific case studies, regulatory approval proceedings, and industrial view point alongside the aforementioned conceptual layout. And at the same time, the volume integrates medical, biological, medicinal, pharmacological and computational streams, and it is suggested as an ideal guideline to a wide audience including molecular biologists, biochemist, pharmacologists, medicinal chemist, toxicologists, drug discovery and development researchers, and all other students interested in these disciplines. .