1. Record Nr. UNINA9910626114203321

Titolo	Antimicrobial drug discovery : emerging strategies / / edited by George Tegos and Eleftherios Mylonakis
Pubbl/distr/stampa	Wallingford, Oxfordshire, U.K., : CABI, 2012
ISBN	1-283-67084-4 1-78064-031-5
Descrizione fisica	1 online resource (369 p.)
Collana	Advances in molecular and cellular microbiology ; ; 22
Altri autori (Persone)	TegosGeorge MylonakisEleftherios
Disciplina	615.7/92
Soggetti	Anti-infective agents Drugs - Design Diseases - Animal models High throughput screening - Methodology Photosensitizing compounds Pharmacology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Emerging discovery strategies : an evolving necessity / Anthony R. Ball and George P. Tegos -- The antibiotic crisis / Arnold L. Demain and Jaroslav Spizek -- Structure, genetic regulation, physiology and function of the AcrAB-TolC efflux pump of escerichia coli and salmonella / Leonard Amaral ... [et al.] -- Small molecule efflux pump inhibitors from natural products as a potential source of antimicrobial agents / Sanjay M. Jachak ... [et al.] -- Fungal efflux-mediated resistance : from targets to inhibitors / Brian C. Monk ... [et al.] -- Vacuolar ATPase (V-ATPase) : a model proton pump for antifungal drug discovery -- Karlett J Parra -- Drug tolerance, persister cells and drug discovery / Kim Lewis -- Inhibition of quorum sensing as a novel antimicrobial strategy -- Gilles Brackman, Hans J. Nelis and Tom Coenye -- Filamentous temperature-sensitive mutant Z (FtsZ) protein as an antibacterial target / Jaroslaw M. Boberek ... [et al.] -- Lysostaphin : a silver bullet for staph / John F. Kokai-Kun -- Strategies to identify modified ribosomally synthesized antimicrobials -- Alan J.

Marsh ... [et al.] -- QSAR based discovery of antimicrobial peptides active against multidrug resistant bacteria / Christopher D. Fjell ... [et al.] -- Acetyl-CoA carboxylase as a target for antibacterial development / Grover L. Waldrop -- Underexploited targets in LPS biogenenesis for the design of antibacterials / Laura Cipolla ... [et al.] -- Predicting and dissecting biomolecular interactions by information-driven docking / Panagiotis Kastritsis & Alexandre M.J.J Bonvin -- Anti-fungals and anti-fungal drug discovery / Richard Calderone ... [et al.] -- Pathosystematic studies and the rational design of antifungal interventions / Elaine M Bignell and Darius Armstrong-James -- In vivo high-throughput antimicrobial discovery screens utilizing caenorhabditis elegans as an alternative host / Jeffrey J. Coleman and Eleftherios Mylonakis -- Drosophila melanogaster as a versatile model for discovery of drugs effective against human microbe-induced infection and pathology / Yiorgos Apidianakis and Dimitrios P. Kontoyiannis -- Antimicrobial photosensitizers - harnessing the power of light to treat infections / Sulbha K Sharma, Tianhong Dai and Michael R Hamblin -- Nanoparticle platforms for antimicrobial therapy / David Trofa, Joshua D. Nosanchuk -- Antimicrobial activity of carbon nanotubes / Shaobin Liu, Yuan Chen.

Sommario/riassunto

Resistance is on the rise among a variety of human pathogenic microorganisms associated with common and potentially life-threatening infections, including penicillin-resistant Streptococcus pneumonia and Methicillin-resistant Staphylococcus aureus (MRSA). There is increasing demand to approach the threat of multidrug resistance incorporating novel multidisciplinary methodologies and technological platforms. This book documents the latest research, covering current and promising activities in four key areas: computational chemistry and chemoinformatics, High Throughput Screening (HTS), non-vert