Record Nr. UNINA9910598009603321 Biofilm-based nosocomial infections / / Gianfranco Donelli (Ed.) Titolo [Basel, Switzerland]: ,: MDPI - Multidisciplinary Digital Publishing Pubbl/distr/stampa Institute, , 2015 **ISBN** 9783038421368 9783038421351 3038421359 1 online resource (ix, 226 pages): illustrations (black and white, and Descrizione fisica colour); digital file(s) 579.17 Disciplina Soggetti **Biofilms** Communicable diseases Infection - Treatment Anti-infective agents Medical instruments and apparatus - Disinfection Medical microbiology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "This book is a reprint of the special issue that appeared in the online Note generali open access journal Pathogens (ISSN 2076-0817) in 2014" -- title page verso. Nota di bibliografia Includes bibliographical references. Nota di contenuto Biomolecular mechanisms of Pseudomonas aeruginosa and Escherichia coli biofilm formation -- Iron and Acinetobacter baumannii biofilm formation -- Pseudomonas aeruginosa diversification during infection development in Cystic Fibrosis lungs—a review -- Antibiotic resistance related to biofilm formation in Klebsiella pneumonia -- Exploring dangerous connections between Klebsiella pneumoniae biofilms and healthcare-associated infections - Biofilms in infections of the eye --Role of Daptomycin in the induction and persistence of the viable but non-culturable state of Staphylococcus aureus biofilms -- Evolution of antimicrobial peptides to self-assembled peptides for biomaterial applications -- Antimicrobial activity of selected phytochemicals against Escherichia coli and Staphylococcus aureus and their biofilms

-- Antibiofilm effect of Octenidine Hydrochloride on Staphylococcus

Sommario/riassunto

aureus, MRSA and VRSA -- Antimicrobial and antibiofilm activity of Chitosan on the oral pathogen Candida albicans

"The well-known persistence in the nosocomial environment of multidrug resistant bacterial and fungal species, today responsible for a wide variety of healthcare-associated infections, is believed to be greatly promoted by the ability of most of them to adhere and to grow in sessile mode on mucosal and soft tissues of hospitalized patients, as well as on the inner and outer surfaces of indwelling medical devices, including intravenous catheters, orthopaedic, cardiac valves, intrauterine devices, and contact lenses... The aim of this Special Issue is to report on the state-of-art of the basic and applied research in the field of biofilm-based nosocomial infections that can be acquired by patients in both general hospitals and long-term care settings. Particularly, the involvement of microbial biofilms in medical device-related infections and other healthcare-associated infections, so far underestimated and/or scarcely investigated, has been considered, reviewed, and discussed." -- Preface.