Record Nr. UNINA9910253869903321 Host Defense Peptides and Their Potential as Therapeutic Agents // **Titolo** edited by Richard M. Epand Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-32949-9 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (323 p.) 570 Disciplina Soggetti **Proteins Immunology** Microbiology Medical biochemistry Protein Science Applied Microbiology Medical Biochemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters. Nota di bibliografia Nota di contenuto Diversity in Host Defense Antimicrobial Peptides -- Antifungal Host Defense Peptides -- Antiviral Host Defense Peptides -- Anticancer peptides: prospective innovation in cancer therapy -- Plant Antimicrobial Peptides -- Host Defense Peptides and the Eicosanoid Cascade -- Bacterial resistance to host defence peptides -- Engineered OAKs Against Antibiotic Resistance and for Bacterial Detection --Structural Analysis of Amphibian, Insect and Plant Host Defense Peptides Inspires the Design of Novel Therapeutic Molecules -- How to teach old antibiotics new tricks -- Antimicrobial peptides and Preterm Birth -- Host defense peptides and their advancements in translational Staphylococcus aureus research.<. This book offers an overview of our current understanding of host Sommario/riassunto defense peptides and their potential for clinical applications as well as some of the obstacles to this. The chapters, written by leading experts

in the field, detail the number and diversity of host defense peptides, and discuss the therapeutic potential not only of antibacterial, but also

of antifungal, antiviral, plant antimicrobial and anticancer host defense peptides. The authors provide new insights into their mechanisms of action and their immunomodulatory properties, and review recent advances in the design of novel therapeutic molecules. Lastly, their potential to prevent preterm births and Staphylococcus aureus infections is highlighted. The book is of interest to researchers, industry and clinicians alike.