Record Nr. UNINA9910437848803321 Mucosal Immunology of Acute Bacterial Pneumonia [[electronic **Titolo** resource] /] / edited by Alice Prince Pubbl/distr/stampa New York, NY:,: Springer New York:,: Imprint: Springer,, 2013 **ISBN** 1-283-93403-5 1-4614-5326-7 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (285 p.) Disciplina 616.2 616.241 Soggetti **Immunology** Medical microbiology Infectious diseases Medical Microbiology Infectious Diseases 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. Alveolar macrophages - key coordinators of host defense -- Lung Nota di contenuto dendritic cells and pulmonary defense mechanisms against bacteria --CD4 T cell immunity in the lung -- Neutrophil mediated defenses in bacterial pneumonia -- Toll-like receptors in the epithelium -- Type I IFN signaling in bacterial pneumonia -- Transcriptional signaling hubs in epithelial cells during pneumonia.- Innate immune responses in Ventilator Associated Pneumonia -- Streptococcus pneumoniae: The prototype of lung responses in pneumonia -- Staphylococcus aureus infection of the respiratory tract -- Pseudomonas aeruginosa: the consummate opportunistic pathogen of the lung. Sommario/riassunto In contrast to the substantial literature that focuses upon innate immune signaling in the gut, there is remarkably less known about the response of the airway to bacterial pathogens. The purpose of this book will be to review the current status of theunderstanding of the pathogenesis of acute bacterial pneumonia, slanted toward the mucosal immunology of these infections. It will describe, in general, the

signaling cascades that control the proinflammatory response to

bacterial infection in the lung. How innate immune signaling is orchestrated in response to specific common airway pathogens is addressed, targeting Staphylococus aureus (including MRSA), Streptococcus pneumoniae and Klebsiella pneumoniae. By describing the general immunological responses to conserved bacterial components and then detailing how specific organisms cause infection, this book provides a targeted but comprehensive review of this important topic.