Record Nr. UNINA9910298318703321 Molecular Mechanisms in Legionella Pathogenesis [[electronic resource] **Titolo** /] / edited by Hubert Hilbi Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2014 **ISBN** 3-642-40591-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (297 p.) Collana Current Topics in Microbiology and Immunology, , 0070-217X;; 376 Disciplina 616.2 616.2/4101 616.241 616.24101 Soggetti Medical microbiology Infectious diseases Molecular biology **Immunology** Bacteriology Medical Microbiology Infectious Diseases Molecular Medicine Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. From amoeba to macrophages: exploring the molecular mechanisms of Nota di contenuto Legionella infection in both hosts -- The Legionella pneumophila twocomponent regulatory systems that participate in the regulation of Icm/Dot effectors -- Facets of small RNA-mediated regulation in Legionella pneumophila -- Type II secretion and Legionella virulence --Effector translocation by the Legionella Icm/Dot type IV secretion system -- Modulation of small GTPases by Legionella -- Host lipidation: A mechanism for spatial regulation of Legionella effectors --

Phosphoinositides and the Legionella pathogen vacuole -- Legionella

glucosyltransferases of Legionella pneumophila -- Modulation of the ubiquitination machinery by Legionella -- Host signal transduction and

phospholipases implicated in virulence -- Cytotoxic

## Sommario/riassunto

protein kinases implicated in Legionella infection -- Mouse models of Legionnaires' disease.

Legionnaires' disease, a potentially fatal type of pneumonia primarily affecting elderly and immuno-compromised persons, is caused by the ubiquitous environmental bacterium Legionella pneumophila. This book offers authoritative reviews of different facets of its virulence, focusing on comparative phagocyte infection, virulence gene regulation, biochemical functions of effector proteins and cellular pathogen-host interactions, as well as host responses and immunity to L. pneumophila. Taken together, the contributions in this compilation provide a state-of-the-art overview of current insights into the molecular pathogenesis of the opportunistic and potentially fatal pathogen L. pneumophila.