

Phagocytosis of Bacteria and Bacterial Pathogenicity

AMCM

This book provides up-to-date information on the crucial interaction of pathogenic bacteria and professional phagocytes, the host cells whose purpose is to ingest, kill, and digest bacteria in defense against infection. The introductory chapters focus on the receptors used by professional phagocytes to recognize and phagocytose bacteria, and the signal transduction events that are essential for phagocytosis of bacteria. Subsequent chapters discuss specific bacterial pathogens and the strategies they use in confronting professional phagocytes. Examples include *Helicobacter pylori*, *Streptococcus pneumoniae*, and *Yersinae*, each of which uses distinct mechanisms to avoid being phagocytosed and killed. Contrasting examples include *Listeria monocytogenes* and *Mycobacterium tuberculosis*, which survive and replicate intracellularly, and actually cooperate with phagocytes to promote their entry into these cells. Together, the contributions in this book provide an outstanding review of current knowledge regarding the mechanisms of phagocytosis and how specific pathogenic bacteria avoid or exploit these mechanisms.

Joel D. Ernst is Director of the Division of Infectious Diseases, and Professor of Medicine and Microbiology at the New York University School of Medicine.

Olle Stendahl is Professor of Medical Microbiology at Linköping University, Sweden.

Advances in Molecular and Cellular Microbiology is a series edited by researchers active in these exciting and rapidly expanding fields. Each volume focuses on a particular aspect of cellular or molecular microbiology, and provides an overview of the area, as well as examining current research. This series will enable graduate students and researchers to keep up with the rapidly diversifying literature in current microbiological research.

CAMBRIDGE
UNIVERSITY PRESS
www.cambridge.org

ISBN 0-521-84569-6



9 780521 845694