BACTERIAL SECRETED PROTEINS
Secretory Mechanisms and Role in Pathogenesis
Edited by: Karl Wooldridge (University of Nottingham, UK)
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Secreted proteins are particularly important in bacterial pathogenesis. These proteins have a range of biological functions ranging from host cell toxicity to more subtle alterations of the host cell for the benefit of the invader. The importance of protein secretion to bacterial pathogens is exemplified by the array of mechanisms that have evolved for this purpose.

This extensive publication on bacterial secreted proteins, the secretory systems of bacteria and the vital role of secreted proteins in bacterial pathogenesis will be of immense value to all microbiologists, molecular biologists, public health scientists and researchers engaged in the study of pathogenesis, drug design and vaccine development. A skillful selection of topics and a panel of acknowledged experts as authors have ensured that this volume will become an important reference source for many years to come.

The book is divided into two sections. The first section describes the various protein secretion systems including mechanisms for secretion across the cytoplasmic membrane of Gram-negative and Gram-positive bacteria, specialized mechanisms for secretion across the Gram-negative outer membrane, systems for transport across both membranes of Gram-negative bacteria, protein secretion systems in Gram-positive bacteria, the secretion of surface fimbrae/pili and a chapter on the less well defined pathways. Section 2 describes the protein secretion mechanisms and secreted proteins of a number of important human, veterinary and plant pathogens and their role in the pathogenicity of these organisms. The pathogens covered have been selected on the basis that there is active research on protein secretion by these pathogens and they employ a diverse array of secreted proteins and protein secretion systems. The book constitutes a broad and in-depth description of the current knowledge of bacterial protein secretion and its role in pathogenesis. A recommended reference volume for all microbiology libraries.

Table of Contents:
The Sec Protein Secretion System Koreaki Ito and Hiroyuki Mori • The Twin-Arginine Translocation Pathway Sascha Panahandeh, Eva Holzapfel and Matthias Müller • Type I Bacterial Secretion Systems Stefan Jenewein, I. Barry Holland and Lutz Schmitt • The Type II Secretory System (T2SS) in Gram-negative Bacteria: A Molecular Nanomachine for Secretion of Sec and Tat-Dependent Extracellular Proteins Gérard P.F. Michel and Romé Voulhoux • The Type III Secretion System Isabel Sorg and Guy R. Cornelis • Mechanistic and Structural Analysis of Type IV Secretion Systems Christian Baron • Type V Secretion Anthony Scott-Tucker and Ian R. Henderson • Assembly and Secretion of Surface Fibres in Gram-negative Bacteria David G. Thanassi, Matthew R. Chapman and Subhra Chakraborty • Secretome Mapping in Gram-Positive Pathogens Mark J.J.B. Sibbald and Jan Maarten van Dijl • Non-Classical Secretion Jannick D. Bendtsen and Karl G. Wooldridge • Section 2: Secreted Proteins of Bacterial Pathogens • Secreted Proteins and Virulence in Salmonella enterica Michael Hensel • Secreted and Exported Proteins Important to Mycobacterium tuberculosis Pathogenesis Jessica R. McCann, Sherry Kurtz, and Miriam Braunstein • Protein Secretion and Pathogenesis in Campylobacter jejuni Neil J. Oldfield and Karl G. Wooldridge • Listeria monocytogenes Mickaël Desvaux and Michel Hébraud • Protein Secretion and Pathogenesis in Neisseria meningitidis David P. Turner, Karl G. Wooldridge and Diawer A. A. Ala’Aldeen • Protein Secretion and Pathogenesis in Helicobacter pylori Robin M. Delahay and Darren P. Letley • Protein Secretion in Legionella pneumophila Emmy De Buck, Elke Lammertyn and Jozef Anné • Bordetella pertussis Zoé E. V. Worthington and Nicholas H. Carbonetti • Secreted Proteins of Vibrio cholerae Bethany Kay Boardman and Karla J. Fullner Satchell • The Secreted Proteins of Pseudomonas aeruginosa: Their Export Machineries, and How They Contribute to Pathogenesis Kim R Hardie, Stephanie Pommier and Susanne Wilhelm • Secretion Systems of the Enterobacterial Phytopathogen, Erwinia Terry J. Evans, Daniel Pérez-Mendoza, Rita E. Monson, Hannah G. Stickland, and George P.C. Salmond

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