Pasteurellaceae

Biology, Genomics and Molecular Aspects

Edited by: **Peter Kuhnert and Henrik Christensen**
Institute of Veterinary Bacteriology, Vetsuisse Faculty University of Bern, Länggass-Str. 122, 3001 Bern, Switzerland and Department of Veterinary Pathobiology, Faculty of Life Science, Copenhagen University, Dyrlaegevej 88, 1870 Frederiksberg, Denmark

Published: Aug 2008. **Pages:** viii + 267
Hardback: ISBN 978-1-904455-34-9 £159, $319
Published by: Caister Academic Press www.caister.com

Pasteurellaceae comprise a large and diverse family of Gram-negative bacteria with members ranging from important pathogens such as *Haemophilus influenzae* to commensals of the animal and human mucosa. Information on the biology of these organisms has mushroomed in recent years, driven by the development of novel genetic and molecular methodologies. Since 1995, the family has been expanded from three genera to the current thirteen through the use of new genetic-based classification and identification technologies. Many members of the *Pasteurellaceae* family make excellent natural models for the study of bacterial pathogenesis and host-pathogen-interactions thus giving valuable insights into related human diseases. Research in this area is at a very exciting stage. In this timely book, leading international *Pasteurellaceae* scientists critically review the most important current research providing an up-to-date review of the molecular biology, genomics and virulence of these fascinating organisms. Topics covered include taxonomy and biodiversity, phylogeny, comparative genomics, competence, DNA uptake and transformation, proteomics and protein secretion, RTX toxins, lipopolysaccharides, biofilms, quorum sensing, antimicrobial resistance, diagnosis, and OMP and iron uptake. Each chapter is independent and can be read in isolation and as a whole the book provides an important resource summarising our current knowledge of *Pasteurellaceae* genomics and molecular biology. Essential reading for everyone working on *Pasteurellaceae* and related organisms.

CURRENT BOOKS OF INTEREST www.caister.com

☞ **MALDI-TOF Mass Spectrometry in Microbiology**
Edited by: Markus Kostrzewa and Sören Schubert (Published: 2016)

☞ ***Aspergillus* and *Penicillium* in the Post-genomic Era**
Edited by: Ronald P. de Vries, Isabelle Benoit Gelber and Mikael Rørdam Andersen (Published: 2016)

☞ **The Bacteriocins: Current Knowledge and Future Prospects**
Edited by: Robert L. Dorit, Sandra M. Roy and Margaret A. Riley (Published: 2016)

☞ **Omics in Plant Disease Resistance**
Edited by: Vijai Bhadauria (Published: 2016)

☞ **Acidophiles: Life in Extremely Acidic Environments**
Edited by: Raquel Quatrini and D. Barrie Johnson (Published: 2016)

☞ **Climate Change and Microbial Ecology: Current Research and Future Trends**
Edited by: Jürgen Marxsen (Published: 2016)

☞ **Biofilms in Bioremediation: Current Research and Emerging Technologies**
Edited by: Gavin Lear (Published: 2016)

☞ **Microalgae: Current Research and Applications**
Edited by: Maria-Nefeli Tsaloglou (Published: 2016)

☞ **Gas Plasma Sterilization in Microbiology: Theory, Applications, Pitfalls and New Perspectives**
Edited by: Hideharu Shintani and Akikazu Sakudo (Published: 2016)

☞ **Virus Evolution: Current Research and Future Directions**
Edited by: Scott C. Weaver, Mark Denison, Marilyn Roossinck and Marco Vignuzzi (Published: 2016)

☞ **Arboviruses: Molecular Biology, Evolution and Control**
Edited by: Nikos Vasilakis and Duane J. Gubler (Published: 2016)

☞ ***Shigella*: Molecular and Cellular Biology**
Edited by: William D. Picking and Wendy L. Picking (Published: 2016)

☞ **Aquatic Biofilms: Ecology, Water Quality and Wastewater Treatment**
Edited by: Anna M. Romaní, Helena Guasch and M. Dolors Balaguer (Published: 2016)

☞ **Alphaviruses: Current Biology**
Edited by: Suresh Mahalingam, Lara Herrero and Belinda Herring (Published: 2016)

☞ **Thermophilic Microorganisms**
Edited by: Fu-Li Li (Published: 2015)

☞ **Flow Cytometry in Microbiology: Technology and Applications**
Edited by: Martin G. Wilkinson (Published: 2015)
"an impressive group of experts" (ProtoView)

☞ **Probiotics and Prebiotics: Current Research and Future Trends**
Edited by: Koen Venema and Ana Paula do Carmo (Published: 2015)

☞ **Epigenetics: Current Research and Emerging Trends**
Edited by: Brian P. Chadwick (Published: 2015)
"this is one text you don't want to miss" (Epigenie); "up-to-date information" (ChemMedChem)

☞ ***Corynebacterium glutamicum*: From Systems Biology to Biotechnological Applications**
Edited by: Andreas Burkovski (Published: 2015)
"Without question a valuable book" (BIOSpektrum)

☞ **Advanced Vaccine Research Methods for the Decade of Vaccines**
Edited by: Fabio Bagnoli and Rino Rappuoli (Published: 2015)