

Pseudomonas: Genomics and Molecular Biology

Edited by: **Pierre Cornelis** *Vrije Universiteit Brussel, Belgium*

x + 244 pp. (+ 8pp colour plate section), Jan. 2008
ISBN 978-1-904455-19-6, \$319 / £159

Reviews the most current and topical aspects of *Pseudomonas* molecular biology and genomics. Aimed at a readership of research scientists, graduate students and other specialists. Topics include: taxonomy, genome diversity, oligonucleotide usage, polysaccharides, pathogenesis, virulence, biofilms, antibiotic resistance, iron uptake, genetic tools. Essential reading for anyone involved in *Pseudomonas* research.

Chapter 1 The Road to the Taxonomy of *Pseudomonas* Norberto J. Palleroni • **Chapter 2** Genome Diversity of *Pseudomonas aeruginosa* Jens Klockgether, Dieco Würdemann, Lutz Wiehlmann, Tim T. Binnewies, David W. Ussery and Burkhard Tümmler • **Chapter 3** Oligonucleotide Usage Signatures of the *Pseudomonas putida* KT2440 Genome Oleg Reva and Burkhard Tümmler • **Chapter 4** Genetic Tools for *Pseudomonas* Young-Hee Choi, Lily A. Trunck, Ayush Kumar, Takehiko Mima, RoxAnn

R. Karkhoff-Schweizer and Herbert P. Schweizer • **Chapter 5** Molecular Biology of Cell-Surface Polysaccharides in *Pseudomonas aeruginosa*: From Gene to Protein Function Wayne L. Miller and Joseph S. Lam • **Chapter 6** *Pseudomonas aeruginosa* Virulence and Pathogenesis Issues Victoria E. Wagner, Melanie J. Filiatrault, Kristin F. Picardo and Barbara H. Iglewski • **Chapter 7** *Pseudomonas aeruginosa* Biofilms: Impact of Small Colony Variants on Chronic Persistent Infections Susanne Häußler • **Chapter 8** Antibiotic Resistance in *Pseudomonas* Alicia Fajardo and José L. Martínez • **Chapter 9** Iron uptake in *Pseudomonas* Pierre Cornelis, Christine Baysse and Sandra Matthijs • **Index**



"... well-written, extensively referenced and up-to-date ... a valuable resource for anyone studying these microbes" from ACM News (2008) 1: 13.

Acinetobacter Molecular Biology

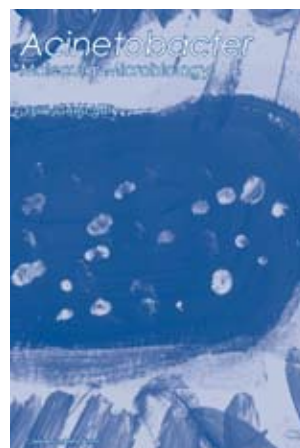
Edited by: **Ulrike Gerischer** *University of Ulm, Germany*

x + 348 pp., Jan. 2008, ISBN 978-1-904455-20-2, \$319 / £159

Reviews the most current and topical aspects of *Acinetobacter* genetics and molecular biology. Includes: taxonomy, lipopolysaccharides, catabolism of aromatic compounds, transformation systems, transcriptional regulation, applications in biotechnology, the molecular basis for virulence and pathogenicity, molecular epidemiology, and antibiotic resistance.

Chapter 1 The Diversity of the Genus *Acinetobacter* Lenie Dijkshoorn and Alexandr Nemeč • **Chapter 2** Taxonomy of the Genus *Acinetobacter* Based on 16S Ribosomal RNA Gene Sequences Mario Vanechoutte and Thierry De Baere • **Chapter 3** Lipopolysaccharides of *Acinetobacter* Ralph A. Pantophlet • **Chapter 4** The Catabolism of Aromatic Compounds by *Acinetobacter* Peter A. Williams and Catherine M. Kay • **Chapter 5** The Natural Transformation System of *Acinetobacter baylyi* ADP1: A Unique DNA Transport Machinery Beate Averhoff and Iris Graf • **Chapter 6** *Acinetobacter baylyi* Genetics L. Nicholas Ornston, Susan Schlimpert, Alison Buchan and Donna Parke • **Chapter 7** Lysr

Homologs in *Acinetobacter*: Insights into a Diverse and Prevalent Family of Transcriptional Regulators Sarah H. Craven, Obidimma C. Ezezika, Cory Momany and Ellen L. Neidle • **Chapter 8** Spotlight on the *Acinetobacter baylyi* Beta-Ketoadipate Pathway: Multiple Levels of Regulation Ulrike Gerischer, Bettina Jerg and Rita Fischer • **Chapter 9** Potential Application of *Acinetobacter* in Biotechnology David L. Gutnick and Horacio Bach • **Chapter 10** Molecular Basis of *Acinetobacter* Virulence and Pathogenicity Andrew P. Tomaras, Caleb W. Dorsey, Christin McQueary and Luis A. Actis • **Chapter 11** Molecular Epidemiology of *Acinetobacter* species Harald Seifert and Hilmar Wisplinghoff • **Chapter 12** Molecular Basis of Antibiotic Resistance in *Acinetobacter* spp. Kevin J. Towner • **Index**



"a wide-ranging series of reviews ... this book is a must for anyone working on molecular aspects of *Acinetobacter*" from Microbiology Today (2008)

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