Corynebacteria
Genomics and Molecular Biology
Edited by: Andreas Burkovski
Friedrich-Alexander Universität Erlangen-Nuernberg, 91058 Erlangen, Germany
viii + 340 pp, June 2008
978-1-904455-30-1 $319/£159

This volume brings together the expertise and enthusiasm of today's leading Corynebacteria experts providing a timely review of the molecular biology toolbox available for Corynebacterium research. Topics include the global analyses techniques, such as comparative genomics, transcriptome, proteome and metabolome analysis, as well as the most recent knowledge on Corynebacterium promoter structures and vector systems. Furthermore, topics such as regulatory networks controlling carbon, nitrogen, phosphorus, sulphur and iron metabolism, cell wall structure, proteolysis and environmental stress response are covered. The fascinating advances made in the last few years unequivocally demonstrate that C. glutamicum has become one of the best investigated and understood microorganisms known today. Clearly, the high G+C Gram positive corynebacteria are significantly different from low G+C Gram positive bacteria such as Bacillus subtilis, and the application of modern molecular biology analysis techniques has made C. glutamicum not only an excellent model organism for Corynebacterinae, but also a model organism for systems biology. Essential reading for everyone with an interest in Corynebacterium and related organisms.

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