Record Nr. UNINA9910555051503321 Bacillus subtilis and Other Gram-Positive Bacteria: Biochemistry, **Titolo** Physiology, and Molecular Genetics / / Abraham L. Sonenshein, James A. Hoch, Richard Losick, editors Washington, D.C.:,: ASM Press,, 1993 Pubbl/distr/stampa **ISBN** 1-68367-277-1 Descrizione fisica 1 online resource (xiii, 987 pages): illustrations Disciplina 579.362 Soggetti Bacillus subtilis Gram-positive bacteria Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Gram-positive bacteria -- Metabolism and its regulation -- Cell envelope -- Chromosome structure -- Chromosome replication, modification, and repair -- Genetic exchange and genetic engineering -- Transcription and translation machinery -- Postexponential-phase phenomena -- Bacteriophages -- Production of commercial products. Sommario/riassunto "Bacillus subtilis has become the principle paradigm for analysis of the physiology of gram-positive bacteria, bacterial differentiation, and useful applications of bacterial products. Sequencing of whole bacterial genomes and the experimental approaches made possible by accessibility to the sequences have brought a new perspective to microbiology. Focussing on issues of gene organization, regulation, and evolution in the context of the whole life of the cell, this volume complements the editors' classic 1993 volume Bacillus subtilis and Other Gram-Positive Bacteria. Building upon the previous edition, Bacillus subtilis and Its Closest Relatives contains an updated annotation of the complete B. subtilis genome and includes a unique compilation of major pathways of metabolism and macromolecular

synthesis, correlating genes and proteins and assigning new functions

to many genes. It also provides clear explanations of the major regulatory mechanisms that are unique to gram-positive bacteria as well as an overview of their special properties. This essential reference offers detailed information and is valuable reading for microbiologists.