

1. Record Nr.	UNINA9910830315803321
Titolo	Microbial proteomics [[electronic resource]] : functional biology of whole organisms // [edited by] Ian Humphery-Smith, Michael Hecker
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Liss, c2006
ISBN	1-280-55030-9 9786610550302 0-471-97316-5 0-471-97315-7
Descrizione fisica	1 online resource (540 p.)
Collana	Methods of biochemical analysis ; ; v. 49
Altri autori (Persone)	Humphery-Smith Ian Hecker M (Michael)
Disciplina	571.29 660.6/2 660.62
Soggetti	Microbial biotechnology Proteomics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	MICROBIAL PROTEOMICS; CONTENTS; PREFACE; ACKNOWLEDGMENTS; CONTRIBUTORS; PART I GENERAL PROTEOMICS OF MICROORGANISMS/MODEL ORGANISMS; 1. Holistic Biology of Microorganisms: Genomics, Transcriptomics, and Proteomics; 2. Strategies for Measuring Dynamics: The Temporal Component of Proteomics; 3. Quest for Complete Proteome Coverage; 4. Proteome of Mycoplasma pneumoniae; 5. Proteomics of Archaea; PART II PROTEOMICS AND CELL PHYSIOLOGY; 6. Elucidation of Mechanisms of Acid Stress in Listeria monocytogenes by Proteomic Analysis; 7. Oxidation of Bacterial Proteome in Response to Starvation 8. Tale of Two Metal Reducers: Comparative Proteome Analysis of Geobacter sulfurreducens PCA and Shewanella oneidensis MR-19. AMT Tag Approach to Proteomic Characterization of Deinococcus radiodurans and Shewanella oneidensis; PART III PHYSIOLOGICAL PROTEOMICS OF INDUSTRIAL BACTERIA; 10. Proteomics of Corynebacterium glutamicum: Essential Industrial Bacterium; 11.

Proteomics of *Lactococcus lactis*: Phenotypes for a Domestic Bacterium;
12. Proteomic Survey through Secretome of *Bacillus subtilis*; PART IV
PROTEOMICS OF PATHOGENIC MICROORGANISMS
13. Analyzing Bacterial Pathogenesis at Level of Proteome
14. Unraveling *Edwardsiella tarda* Pathogenesis Using the Proteomics
Approach; 15. Structural Proteomics and Computational Analysis of a
Deadly Pathogen: Combating *Mycobacterium tuberculosis* from Multiple
Fronts; 16. Proteomic Studies of Plant-Pathogenic Oomycetes and
Fungi; 17. *Candida albicans* Biology and Pathogenicity: Insights from
Proteomics; 18. Contributions of Proteomics to Diagnosis, Treatment,
and Prevention of Candidiasis; 19. Identification of Protein Candidates
for Developing Bacterial Ghost Vaccines against *Brucella*
20. Genomics and Proteomics in Reverse Vaccines
PART V PROTEOME
DATABASES, BIOINFORMATICS, AND BIOCHEMICAL MODELING; 21.
Databases and Resources for *in silico* Proteome Analysis; 22.
Interspecies and Intraspecies Comparison of Microbial Proteins:
Learning about Gene Ancestry, Protein Function, and Species Life Style;
23. Cellular Kinetic Modeling of the Microbial Metabolism; INDEX

Sommario/riassunto

Discover important lessons learned about whole organism biology via microbial proteomics This text provides an exhaustive analysis and presentation of current research in the field of microbial proteomics, with an emphasis on new developments and applications and future directions in research. The editors and authors show how and why the relative simplicity of microbes has made them attractive targets for extensive experimental manipulation in a quest for both improved disease prevention and treatment and an improved understanding of whole organism functional biology. In particular, t
