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| 1. Record Nr. | UNINA9910144558703321 |
| Titolo | Pathogenomics [[electronic resource]] : genome analysis of pathogenic microbes // edited by Jorg Hacker and Ulrich Dobrindt |
| Pubbl/distr/stampa | Weinheim, : Wiley-VCH [Chichester], : Wiley-VCH, c2006 |
| ISBN | 1-280-72279-7 9786610722792 3-527-60801-X 3-527-60751-X |
| Descrizione fisica | 1 online resource (618 p.) |
| Altri autori (Persone) | HackerJorg (Jorg Hinrich) DobrindtUlrich |
| Disciplina | 579.2 |
| Soggetti | Pathogenic microorganisms Microbiology |
| 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 | Pathogenomics; Foreword; Contents; Preface; List of Contributors; Color Plates; I Methods; 1 Bioinformatics: Data Mining Among Genome Sequences; 1.1 Systematic Genome Analysis of Pathogens as a Basis for Pharmacogenomic Strategies; 1.2 Direct Sequence Annotation Tools for Functional Genomics; 1.3 Identification of Protein Function; 1.4 Obtaining Protein Information from a Domain Server; 1.5 Pathway Analysis; 1.6 Network Analysis; 1.7 Adaptation in Time and to Stimuli; 1.7.1 Experimental Design for Microarray Analysis; 1.7.2 Data Analysis; 1.8 Pathogen-Specific Challenges 1.9 Pathogen Adaptation Potential 1.10 The Fight Against Resistance; 1.11 Drug Design and Antibiotics; 1.12 Annotation Platforms Suitable for Pathogenomics; 1.13 Conclusions; 2 Transcriptome Analysis: Towards a Comprehensive Understanding of Global Transcription Activity; 2.1 Introduction; 2.2 Development of Transcriptomics; 2.2.1 From Genomics to Functional Genomics; 2.2.2 From Gene to Whole Genome; 2.3 Introducing the Microarray; 2.3.1 What Is a Microarray?; 2.3.2 The Affymetrix Gene Chip; 2.3.3 The Spotted Microarray; 2.4 |

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2.4.1.1 Type of Experiment 2.4.1.2 Replicates; 2.4.2 RNA Extraction;
2.4.3 Labeling/Reverse Transcription; 2.4.4 Hybridization; 2.4.5
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2.5.7 Microarray Follow-Up; 2.5.8 Data Storage and Reanalysis; 2.6
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4.3.3.3 *Staphylococcus aureus*

Sommario/riassunto

The first book on this young, highly dynamic, and expanding field. This comprehensive, interdisciplinary text focuses on those pathogenic bacteria that are of high scientific and public health interest, yet which also display great potential for the development of new diagnostic, prophylactic and therapeutic procedures. The authors cover all aspects of pathogenomics, including methods, genomics and applications. In addition, the ongoing development of genome, transcriptome, proteome and bioinformatic analyses of pathogenic microorganisms and their host interactions makes for a comprehens
