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Nota di contenuto	Handbook of Meningococcal Disease; Contents; Preface; Foreword; List of Contributors; Color Plates; 1 Historical Aspects; 1.1 The Origins of Meningococcal Disease; 1.2 The 19th Century; 1.3 From 1900 to 1920; 1.4 From 1921 to 1939; 1.5 From World War II to 1960 - Epidemiology; 1.6 From 1961 to 2005; 1.7 Conclusion; References; Part I Epidemiology of Meningococcal Disease; 2 The Population Biology of Neisseria meningitidis: Implications for Meningococcal Disease, Epidemiology and Control; 2.1 Introduction: The Meningococcus, an Enigmatic Pathogen 2.1.1 The Global Burden of Meningococcal Disease 2.1.2 Paradoxes Arising from Meningococcal Natural History; 2.2 Meningococcal Diversity and its Consequences; 2.2.1 Genetic and Antigenic Diversity; 2.2.2 Structure Within Meningococcal Populations - The Clonal Complex; 2.3 Mechanisms of Diversification and Structuring in Meningococcal Populations; 2.3.1 Mutation and Recombination in

Bacterial Evolution; 2.3.2 Evidence for Recombination in Meningococcal Populations; 2.4 Meningococcal Genotypes in Carriage and Disease; 2.4.1 The Hyperinvasive Lineages
2.5 Global Epidemiology of Meningococcal Disease
2.5.1 The Group A Pandemics; 2.5.2 The ST-11 (ET-37) Complex Epidemics; 2.5.3 The ST-32 (ET-5) Pandemic; 2.5.4 The ST-41/44 Complex (Lineage 3); 2.5.5 Other Complexes; 2.6 Conclusions: Implications of Meningococcal Population Biology for Disease Control; References; 3 Methods for Typing of Meningococci; 3.1 Introduction; 3.2 Phenotypic Typing Methods; 3.3 Serological Typing Methods; 3.3.1 Serogrouping of Meningococci; 3.3.2 Serotyping and Serosubtyping; 3.4 Immunotyping; 3.5 Multilocus Enzyme Electrophoresis; 3.6 Genetic Characterization
3.6.1 Antigen Gene PCR and Sequencing for Meningococcal Typing
3.6.2 Genogrouping (PCR-based Designation of Group); 3.6.3 Genotyping and Genosubtyping - porB and porA Sequencing; 3.6.4 FetA; 3.6.5 Multilocus Sequence Typing; 3.6.6 Variable-number Tandem Repeats; 3.6.7 Pulsed Field Gel Electrophoresis; 3.6.8 Databases; 3.7 Conclusion; References; 4 Antibiotic Resistance; 4.1 Introduction; 4.2 Testing Antibiotics Against *N. meningitidis*; 4.2.1 Methodological Issues in *N. meningitidis* Susceptibility Testing; 4.2.1.1 The "Invasion" of the Etest; 4.2.1.2 The Breakpoint Issue
4.3 Clinical Impact and Spread of Antibiotic Resistance in Meningococcal Disease
4.3.1 Antibiotic Resistance in the Chemoprophylaxis of Meningococcal Disease; 4.3.2 Antibiotic Resistance in the Treatment of Meningococcal Disease; 4.3.2.1 Penicillin; 4.3.2.2 Chloramphenicol; 4.3.2.3 Quinolones; 4.4 Are There New Drugs or New Strategies on the Horizon?; 4.5 Molecular Tools for Definition of Antimicrobial Susceptibility in *N. meningitidis*; References; Part II Genetics and Genomics of the Meningococcus; 5 *Neisseria meningitidis* Genome Sequencing Projects; 5.1 Introduction
5.2 The Genomes of *Neisseria meningitidis*

Sommario/riassunto

A comprehensive overview of recent advances, from current basic research and epidemiology, to novel therapeutic strategies and clinical management. Here, the leading scientists who have made major advances in the field provide up-to-date reviews and describe their current knowledge and concepts. As such, this is the first volume to summarize the implications of the meningococcus genome-sequencing project, emphasizing the novel strategies in vaccine development. Following a look at the history, the authors go on to treat the epidemiology of meningococcal disease, as well as the genetics, str
