

# Neisseria

## Molecular Mechanisms of Pathogenesis

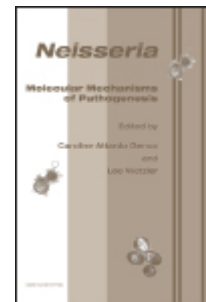
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*Neisseria gonorrhoeae* and *Neisseria meningitidis* are Gram-negative diplococci. *N. gonorrhoeae* is the causative agent of gonorrhoea and is transmitted via sexual contact. *N. meningitidis* is transmitted via respiratory droplets leading to colonization of the nasopharynx and can cause meningitis and septicemia.

This important reference volume provides research scientists, advanced students, clinicians, and other professionals with a comprehensive update on the current understanding of the molecular mechanisms of pathogenesis in *Neisseria*. The editors have assembled a team of highly regarded scientists, over 40 contributors, to describe the latest, up-to-date research, theory and clinical significance of molecular mechanisms in meningococcal disease. Leading authorities have contributed chapters on topics such as gene expression, genomics, biofilms, denitrification, adhesion strategies and mechanisms of cellular invasion. A section on the host response to neisserial infection covers innate immunity, complement, apoptosis, and acquired immunity while a section devoted to clinical correlation deals with vaccine development, epidemiology and antibiotic resistance.

The volume is highly recommended for microbiologists, epidemiologists and clinicians involved with *Neisseria* research or meningococcal disease and is a recommended text for all microbiology libraries.

**Chapter 1.** Gene Expression Strategies of the Pathogenic *Neisseria*. *J.R. Mellin and Stuart Hill*

**Chapter 2.** Regulation and Function of the Neisserial Denitrification Pathway: Life with Limited Oxygen. *Virginia L. Clark, Vincent M. Isabella, Kenneth Barth and Tim W. Overton*

**Chapter 3.** Genomics and Recombination. *John K. Davies*

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