**Helicobacter pylori**  
Molecular Genetics and Cellular Biology  

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*Helicobacter pylori* is an important human pathogen that infects up to 50% of the human population. As the leading cause of peptic ulcers, gastritis and gastric cancer worldwide, the organism has been the subject of intensive research to unravel the mysteries of its genetics and cellular biology. In fact the number of publications in this field has risen dramatically in recent years making it extremely difficult for even the most diligent reader to stay abreast of progress. This book distills the most important cutting-edge findings in the field to produce a timely and comprehensive review. With contributions from leading international helicobacter researchers, topics include: lipopolysaccharides, outer membrane proteins, motility and chemotaxis, type IV secretions systems, metal metabolism, molecular mechanisms of host adaptation, genomotyping, and proteonomics.

A useful introduction to the subject for new researchers and an invaluable reference for the experienced researcher, this book is essential reading for all researchers working with *Helicobacter* and related organisms.

**Chapter 1.** Overview. Yoshio Yamaoka  
**Chapter 2.** *Helicobacter pylori* Lipopolysaccharides and Lewis Antigens. Anthony P. Moran and M. Stephen Trent  
**Chapter 3.** *Helicobacter pylori* Outer Membrane Proteins. Yoshio Yamaoka and Richard A. Alm  
**Chapter 4.** *Helicobacter* Flagella, Motility and Chemotaxis. Melanie Rust, Tobias Schweinitzer, and Christine Josenhans  
**Chapter 5.** *Helicobacter pylori* Vacuolating Toxin. Steven R. Blanke and Timothy L. Cover  
**Chapter 6.** Type IV Secretion Systems in *Helicobacter pylori*. Wolfgang Fischer, Arno Karnholz, Luisa F. Jimenez-Soto and Rainer Haas  
**Chapter 7.** Gastric Biology of *Helicobacter pylori*. George Sachs, Yi Wen and David R. Scott  
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**Chapter 11.** Genomotyping of *Helicobacter pylori* and its Host: Microarray Based Insights on Gene Variation, Expression and Function. Olivier Humbert, Delia M. Pinto-Santini and Nina R. Salama  
**Chapter 12.** The Application of Proteomics Technology to *Helicobacter pylori*-associated Gastroduodenal Disease: State-of-the-Art and Future Clinical Potentials. Ming-Shiang Wu, Lu-Ping Chow, Jaw-Town Lin and Shyh-Hong Chiu

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