CAMBRIDGE

Cambridge University Press & Assessment
978-0-521-85244-9 — Bacterial-Epithelial Cell Cross-Talk
Edited by Beth A. McCormick
Table of Contents
More Information

Contents

List of contributors *page* ix

Part I Introduction to the host and bacterial pathogens

1 Overview of the epithelial cell 3
W. Vallen Graham and Jerrold R. Turner

2 Evolution of bacterial pathogens 30
Anthony T. Maurelli

Part II Bacterial cell biology and pathogenesis

3 Bacterial secretion systems 59
Helen J. Betts, Christopher M. Bailey, Mark J. Pallen, and Ian R. Henderson

4 Microbial molecular patterns and host defense 99
Matam Vijay-Kumar and Andrew T. Gewirtz

5 Roles of flagella in pathogenic bacteria and bacterial–host interactions 131
Glenn M. Young

6 The role of bacterial adhesion to epithelial cells in pathogenesis 158
Christof R. Hauck

7 Bacterial toxins that modify the epithelial cell barrier 184
Joseph T. Barbieri

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE

Cambridge University Press & Assessment
978-0-521-85244-9 — Bacterial-Epithelial Cell Cross-Talk
Edited by Beth A. McCormick
Table of Contents
More Information

Part III Host cell signaling by bacteria

8 Host-mediated invasion: the *Salmonella* Typhimurium trigger 213
Brit Winnen and Wolf-Dietrich Hardt

9 NF-κB-dependent responses activated by bacterial–epithelial interactions 244
Bobby J. Cherayil

10 NF-kB-independent responses activated by bacterial–epithelial interactions: the role of arachidonic acid metabolites 269
Beth A. McCormick and Randall J. Mrsny

Part IV Exploitation of host niches by pathogenic bacteria: mechanisms and consequences

11 Lung infections 301
Marisa I. Gómez and Alice S. Prince

12 Interaction of *Helicobacter pylori* with the gastric mucosa 327
D. Scott Merrell

13 Interactions of enteric bacteria with the intestinal mucosa 356
Samuel Tesfay, Donnie Edward Shifflett, and Gail A. Hecht

14 Uropathogenic bacteria 400
Luce Landraud, René Clément, and Patrice Boquet

Index 423

Color plates appear between pages 56 and 57.

© in this web service Cambridge University Press & Assessment www.cambridge.org