

CONTENTS

Contributors

vii

1. The Molecular Basis of pH Sensing, Signaling, and Homeostasis in Fungi	1
Elaine Bignell	
I. Fundamental and Applied Importance of Understanding Fungal pH Tolerance	2
II. Fungal pH Homeostasis	3
III. Fungal pH Sensing and Signaling	9
IV. pH Signaling and Fungal Virulence	13
V. Conclusions	15
References	16
2. Barriers to Horizontal Gene Transfer in <i>Campylobacter jejuni</i>	19
Susan P. Gardner and Jonathan W. Olson	
I. Introduction	20
II. Horizontal Gene Transmission	20
III. HGT in <i>C. jejuni</i>	24
IV. Barriers to HGT	28
V. Restriction Modification	32
VI. Conclusions	37
References	38
3. Innate Immunity to Intracellular Pathogens: Lessons Learned from <i>Legionella pneumophila</i>	43
Sunny Shin	
I. Introduction	44
II. Innate Immune Responses Triggered by the <i>L. pneumophila</i> Dot/Icm System	47
III. Conclusions and Future Prospects	63
Acknowledgment	63
References	63

4. Culture Collections**73**

David Smith

I. Introduction	74
II. Culture collection form and function	75
III. Collecting strains	84
IV. Authentication and characterization	92
V. Preservation	94
VI. Culture supply and services	102
VII. Networking	109
VIII. Information resources	112
IX. Conclusion and future prospects	114
Acknowledgments	115
References	115

Index

119

Contents of Previous Volumes

123