

Stuart C. Clarke

Modern Medical Microbiology

THE FUNDAMENTALS



Contents

<i>Author biography</i>	<i>ix</i>
<i>Preface</i>	<i>xi</i>
<i>Acknowledgements</i>	<i>xiii</i>
<i>List of abbreviations</i>	<i>xv</i>
PART I INTRODUCTION	1
1 Health and safety in the laboratory	3
2 Emerging and re-emerging diseases	5
3 Disease in the developing world	8
4 Food poisoning	12
5 Evasion of the immune response by bacteria	15
6 DNA vaccination	17
7 Antibiotics	20
8 Microbiology of catheters	23
9 Monoclonal antibodies in medicine	26
10 Lactic acid bacteria and human health	28
11 Clinical applications of leeches and maggots	31
12 Applications of molecular biology	34
13 Bioterrorism	37
PART II BACTERIOLOGY	41
14 Plague and other <i>Yersinia</i> infections	43
15 Anthrax infection	47
16 Botulism	50
17 Tetanus	52
18 Other anaerobic infections	55
19 Tuberculosis	58
20 Leprosy	61
21 Travellers' diarrhoea	64
22 <i>Salmonella</i>	67
23 Diarrhoeagenic <i>Escherichia coli</i>	70
24 <i>Campylobacter</i> enteritis	77
25 Shigellosis	80
26 Cholera	83
27 <i>Helicobacter pylori</i>	86
28 Listeriosis	89

29	Syphilis	92
30	<i>Chlamydia</i>	95
31	Gonorrhoea	98
32	Whooping cough	101
33	Acute bacterial meningitis	104
34	Meningococcal disease	107
35	Pneumococcal disease	111
36	<i>Haemophilus influenzae</i>	115
37	Lyme disease	117
38	Q fever	120
39	Leptospirosis (Weil's disease)	123
40	Brucellosis	126
41	<i>Mycoplasma</i> infection	129
42	Bacterial urinary tract infections	132
43	Cyanobacteria	134
	 PART III VIROLOGY	 137
44	Viral hepatitis	139
45	The common cold	143
46	Respiratory syncytial virus	145
47	Rubella	148
48	Filoviruses	151
49	Smallpox	154
50	Influenza	157
51	Epstein-Barr virus	160
52	Rabies	163
53	HIV and AIDS	165
54	Herpes simplex viruses I and II	170
55	Dengue fever	173
56	Human papillomavirus infection	176
57	Polio	178
58	Parvovirus infection	182
59	Chickenpox and shingles	185
	 PART IV PARASITOLOGY	 189
60	<i>Toxoplasma</i>	191
61	Malaria	194
62	Cyclosporiasis	197
63	Cryptosporidiosis	200
64	Microsporidiosis	203
65	Schistosomiasis	206
66	Onchocerciasis	209
67	<i>Acanthamoeba</i> infection	211
68	Parasitic cestodes	214

	PART V MYCOLOGY	219
69	Candidiasis	221
70	Ringworm	224
71	Aspergillosis	226
72	Histoplasmosis	229
	<i>Appendix: useful websites</i>	231
	<i>Index</i>	233