

Contents

Foreword	vii
Preface	ix
Contributors	xv
Section I Viruses	
Chapter 1 Herpes Viruses Sean P. Elliott	3
Chapter 2 Myxoviruses Jason G. Newland and José R. Romero	41
Chapter 3 Picornaviruses Motasem A. Abuelreish and Mobeen H. Rathore	69
Chapter 4 Arboviruses José R. Romero	83
Chapter 5 Togaviruses José R. Romero, Meera Varman, and Leslie L. Barton	105
Chapter 6 Rhabdoviruses Allan D. Friedman and Sean O. McKenna	121
Chapter 7 Adenoviruses Allan D. Friedman and Sean O. McKenna	127
Chapter 8 Arenaviruses Daniel J. Bonthius, Leslie L. Barton, Hannah Klein de Licon, Nancy E. Bonthius, and Bahri Karacay	135

Chapter 9	Orthopoxviruses	151
	José R. Romero	
Chapter 10	Retroviruses	157
	Lemuel Aigbivbalu, Ayesha Mirza, and Mobeen H. Rathore	
Chapter 11	Neurological Consequences of Antiretroviral Treatment	173
	Kimberley C. Brown, Lisa D. Inge, and Mobeen H. Rathore	
Chapter 12	Papovaviruses	185
	Diane C. Halstead and Mobeen H. Rathore	
Section II Bacteria		
Chapter 13	Bacterial Meningitis	193
	Barbara Stechenberg	
Chapter 14	Focal Bacterial Infections and Parameningeal Infections	199
	Barbara Stechenberg	
Chapter 15	<i>Streptococcus pyogenes</i>	209
	Barbara Stechenberg	
Chapter 16	<i>Bordetella pertussis</i>	215
	Barbara Stechenberg	
Chapter 17	<i>Shigella</i> Species	219
	Barbara Stechenberg	
Chapter 18	<i>Campylobacter</i> Species	223
	Barbara Stechenberg	
Chapter 19	<i>Brucella</i> Species	227
	Barbara Stechenberg	
Chapter 20	<i>Clostridium tetani</i>	231
	Barbara Stechenberg	
Chapter 21	<i>Clostridium botulinum</i>	235
	Barbara Stechenberg	

Chapter 22	<i>Corynebacterium diphtheriae</i>	239
	Barbara Stechenberg	
Chapter 23	<i>Bartonella</i> Species	243
	Andrew M. Margileth and Mobeen H. Rathore	
Chapter 24	<i>Mycobacterium tuberculosis</i>	251
	Barbara Stechenberg	
Chapter 25	<i>Mycobacterium leprae</i>	257
	Barbara Stechenberg	
Section III	Rickettsia and Spirochetes	
Chapter 26	<i>Rickettsia rickettsii</i>	263
	Abeer Khayat and Mobeen H. Rathore	
Chapter 27	<i>Ehrlichia</i> and <i>Anaplasma</i> Species	271
	Abeer Khayat and Mobeen H. Rathore	
Chapter 28	<i>Borrelia burgdorferi</i>	277
	Abeer Khayat and Mobeen H. Rathore	
Chapter 29	<i>Treponema pallidum</i>	287
	Abeer Khayat and Mobeen H. Rathore	
Section IV	Fungi	
Chapter 30	<i>Candida</i> Species	299
	Barbara Stechenberg	
Chapter 31	<i>Cryptococcus neoformans</i>	303
	Barbara Stechenberg	
Chapter 32	<i>Histoplasma capsulatum</i>	307
	Barbara Stechenberg	
Chapter 33	<i>Coccidioides</i> Species	311
	Barbara Stechenberg	
Chapter 34	Phaeohyphomycoses	315
	Barbara Stechenberg	

Section V Protozoa

Chapter 35 Protozoal Infections 319
Ana M. Alvarez and Mobeen H. Rathore

Chapter 36 *Babesia* Species 343
Abeer Khayat and Mobeen H. Rathore

Section VI Helminths

Chapter 37 Helminth Infections 349
Patrick J. Gavin

Section VII Primary Immunodeficiencies

Chapter 38 Neurological Disease and Primary Immunodeficiency 379
Megan Connick

Section VIII Basic Principles of Selective Neurological Treatments

Chapter 39 Basic Principles of Selective Neurological Treatments 401
Neil R. Friedman and Manikum Moodley

Index 411