

Contents

Foreword	ix
Preface	xi
Editors	xiii
Contributors	xv

PART I General Aspects

Chapter 1 Viral Hemorrhagic Fevers: History and Definitions	3
<i>Jens H. Kuhn, Anna N. Clawson, Sheli R. Radoshitzky, Victoria Wahl-Jensen, Sina Bavari, and Peter B. Jahrling</i>	
Chapter 2 General Disease Pathology in Filoviral and Arenaviral Infections	15
<i>Louis M. Huzella, Jennifer A. Cann, Matthew Lackemeyer, Victoria Wahl-Jensen, Peter B. Jahrling, Jens H. Kuhn, and Donna L. Perry</i>	
Chapter 3 Interaction of the Host Immune System with Hemorrhagic Fever Viruses	31
<i>Gavin C. Bowick</i>	
Chapter 4 Vascular Endothelium and Hemorrhagic Fever Viruses	43
<i>Nadine A. Dalrymple, Elena Gorbunova, Irina Gavrilovskaya, and Erich R. Mackow</i>	
Chapter 5 Vascular Endothelial Dysfunctions: Viral Attack and Immunological Defense	63
<i>Jayashree Apurupa Lahoti, Ritu Mishra, and Sunit Kumar Singh</i>	
Chapter 6 Animal Models of Viral Hemorrhagic Fevers	81
<i>Amy C. Shurtleff, Travis K. Warren, Derek Morrow, Sheli R. Radoshitzky, Jens H. Kuhn, and Sina Bavari</i>	
Chapter 7 Role of Rodents and Bats in Human Viral Hemorrhagic Fevers	99
<i>Victoria Wahl-Jensen, Sheli R. Radoshitzky, Fabian de Kok-Mercado, Shannon L. Taylor, Sina Bavari, Peter B. Jahrling, and Jens H. Kuhn</i>	
Chapter 8 Biosafety Issues and Clinical Management of Hemorrhagic Fever Virus Infections	129
<i>George F. Risi and Thomas Arminio</i>	

Chapter 9	BSL4 Workforce Preparedness in Hemorrhagic Fever Outbreaks	149
	<i>Sean G. Kaufman</i>	
Chapter 10	Major Strategies for Prevention and Control of Viral Hemorrhagic Fevers	159
	<i>Matthew L. Boulton and Eden V. Wells</i>	
Chapter 11	Practical Considerations for Collection and Transportation of Hemorrhagic Fever Samples	177
	<i>Manfred Weidmann and Mandy Elschner</i>	
Chapter 12	Laboratory Diagnosis of Viral Hemorrhagic Fevers.....	183
	<i>Miroslav Fajfr and Daniel Růžek</i>	
Chapter 13	Vaccine Research Efforts for Hemorrhagic Fever Viruses	207
	<i>Shannon S. Martin and Mary Kate Hart</i>	

PART II Specific Infections

Chapter 14	Pathogenic Old World Arenaviruses	233
	<i>Jason Botten, Benjamin King, Joseph Klaus, and Christopher Ziegler</i>	
Chapter 15	Lassa Fever.....	261
	<i>Daniel G. Bausch, Lina M. Moses, Augustine Goba, Donald S. Grant, and Humarr Khan</i>	
Chapter 16	Lujo Virus Hemorrhagic Fever	287
	<i>Janusz T. Paweska, Petrus Jansen van Vuren, and Jacqueline Weyer</i>	
Chapter 17	Receptor Determinants of Zoonosis and Pathogenesis of New World Hemorrhagic Fever Arenaviruses.....	305
	<i>Stephanie Jemielity, Michael Farzan, and Hyeryun Choe</i>	
Chapter 18	Argentine Hemorrhagic Fever.....	317
	<i>Víctor Romanowski, Matías L. Pidre, M. Leticia Ferrelli, Cecilia Bender, and Ricardo M. Gómez</i>	
Chapter 19	Bolivian Hemorrhagic Fever	339
	<i>Sheli R. Radoshitzky, Fabian de Kok-Mercado, Peter B. Jahrling, Sina Bavari, and Jens H. Kuhn</i>	

Chapter 20	"Venezuelan" Hemorrhagic Fever	359
	<i>Sheli R. Radoshitzky, Fabian de Kok-Mercado, Peter B. Jahrling, Sina Bavari, and Jens H. Kuhn</i>	
Chapter 21	Rift Valley Fever Virus and Hemorrhagic Fever	379
	<i>Alexander N. Freiberg and Ramon Flick</i>	
Chapter 22	Crimean-Congo Hemorrhagic Fever Virus	405
	<i>Onder Ergonul</i>	
Chapter 23	Hemorrhagic Fever with Renal Syndrome	415
	<i>Paul Heyman, Tatjana Avšič-Županc, Christel Cochez, Ana Saksida, and Ake Lundkvist</i>	
Chapter 24	Ebola virus Infection	435
	<i>Anthony Griffiths, Andrew Hayhurst, Robert Davey, Olena Shtanko, Ricardo Carrion Jr., and Jean L. Patterson</i>	
Chapter 25	Marburg Virus Disease	457
	<i>Steven B. Bradfute, Sina Bavari, Peter B. Jahrling, and Jens H. Kuhn</i>	
Chapter 26	Dengue Hemorrhagic Fever	481
	<i>Chwan-Chuen King and Guey Chuen Perng</i>	
Chapter 27	Yellow Fever Virus Infection	499
	<i>Kate D. Ryman and William B. Klimstra</i>	
Chapter 28	Kyasanur Forest Disease	525
	<i>Gerhard Dobler and Frank Hufert</i>	
Chapter 29	Alkhurma Virus Hemorrhagic Fever	541
	<i>Ziad A. Memish, Shamsudeen Fagbo, and Ali Zaki</i>	
Chapter 30	Omsk Hemorrhagic Fever	553
	<i>Daniel Růžek, Valeriy V. Yakimenko, Lyudmila S. Karan, and Sergey E. Tkachev</i>	
Index		563