

List of Contributors ix

Preface xvii

Acknowledgments xix

About the Editor xxi

1 Pathogenesis of the OldWorld Arenaviruses in Humans 1

Igor S. Lukashevich

2 Pathogenesis of New World Arenaviruses in Humans 29

Verónica Martín, Stefan Kunz, Esteban Domingo and Noemí Sevilla

3 Pathogenesis of Emerging and Novel Bunyaviruses in Humans 43

Cong Jin and Dexin Li

4 Pathogenesis of Rift Valley Fever in Humans 73

Inaia Phoenix and Tetsuro Ikegami

5 Pathogenesis of Hantavirus Infections 95

Tarja Sironen Olli Vapalahti and Alexander Plyusnin

6 Molecular Pathogenesis of Japanese Encephalitis Virus Infection 113

Sunit Kumar Singh

7 Dengue Virus Infection in Humans: Epidemiology Biology Pathogenesis and Clinical Aspects 125

Fatih Anfasa, Leonard Nainggolan and Byron E. E. Martina

8 Pathogenesis of West Nile Virus in Humans 145

Rianna Vandergaast, Katherine L. Hussmann and Brenda L. Fredericksen

9 Overview on Chikungunya Virus Pathogenesis 177

Sunit Kumar Singh

10 Nipah Virus Infections in Humans 189

Kaw Bing Chua, Chong Tin Tan and Kum Thong Wong

11 Pathogenesis of Hendra Virus in Humans 207

Chad E. Mire, Benjamin A. Satterfield and Thomas W. Geisbert

12 Pathogenesis of Rotavirus in Humans 227

Carlos Fernando Narváez, Martha C. Mesa, Alfonso Barreto, Luz-Stella Rodríguez and Juana Angel

13 Pathogenesis of Papillomaviruses in Humans 243

John Doorbar

14 Kaposi's Sarcoma–Associated Herpesvirus Pathogenesis 265

Lia R. Walker, Anshul V. Subramanya, Zeal T. Akula and Shaw M. Akula

15 Microsporidiosis in Humans 281

Henry Shikani, Elizabeth S. Didier and Louis M. Weiss

16 Pathogenesis of *Toxoplasma gondii* in Humans 303

Hong-Juan Peng, Feng Tan and David S. Lindsay

17 Pathogenesis of Human African Trypanosomiasis 319

Jennifer Cnops and Stefan Magez

18 Pathogenesis of Leishmaniasis in Humans 337

Steve Oghumu, Gayathri Natarajan and Abhay R. Satoskar

19 Pathogenesis of Chagas Disease in Humans 349

María-Jesús Pinazo, Faustino Torrico and Joaquim Gascón

20 Pathogenesis of *Cryptosporidium* in Humans 371

Gabriela Certad, Marwan Osman, and Sadia Benamrouz

21 Pathogenesis of Malarial Parasites in Humans 393

Caroline Lin Lin Chua, Ricardo Ataíde, Alexandra J. Umbers and Phillipe Boeuf

22 Pathogenesis of *Trichomonas vaginalis* in Humans 423

Marlene Benchimol, Antonio Pereira-Neves and Wanderley de Souza

23 *Loa loa* Pathogenesis in Humans 441

Akue Jean Paul

24 Nematode LarvaMigrans 453

Kumara Singaravelu, Christina M. Coyle, Yuri C. Martins, Louis M. Weiss, Fabiana S. Machado, Herbert B. Tanowitz and Kevin R. Kazacos

25 Pathogenesis of Human Schistosomiasis 481

Thien-Linh Le, Susanne H. Sokolow, Olfat Hammam, Chi-Ling Fu and Michael Hsieh

26 Vector-Borne Parasitic Zoonotic Infections in Humans 505

Domenico Otranto and Filipe Dantas-Torres

Index i1