<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of contributors</td>
</tr>
<tr>
<td>Preface</td>
</tr>
<tr>
<td><strong>Part I Introduction: definition and classification of the human herpesviruses</strong></td>
</tr>
<tr>
<td>Bernard Roizman</td>
</tr>
<tr>
<td>1 Overview of classification</td>
</tr>
<tr>
<td>Andrew Davison</td>
</tr>
<tr>
<td>2 Comparative analysis of the genomes</td>
</tr>
<tr>
<td>Andrew Davison</td>
</tr>
<tr>
<td>3 Comparative virion structures of human herpesviruses</td>
</tr>
<tr>
<td>Fenyong Liu and Z. Hong Zhou</td>
</tr>
<tr>
<td>4 Comparative analysis of herpesvirus–common proteins</td>
</tr>
<tr>
<td>Edward Mocarski, Jr.</td>
</tr>
<tr>
<td><strong>Part II Basic virology and viral gene effects on host cell functions: alphaherpesviruses</strong></td>
</tr>
<tr>
<td>Gabriella Campadelli-Fiume and Bernard Roizman</td>
</tr>
<tr>
<td>5 Genetic comparison of human alphaherpesvirus genomes</td>
</tr>
<tr>
<td>Joel Baines and Philip Pellett</td>
</tr>
<tr>
<td>6 Alphaherpes viral genes and their functions</td>
</tr>
<tr>
<td>Bernard Roizman and Gabriella Campadelli-Fiume</td>
</tr>
<tr>
<td>7 Entry of alphaherpesviruses into the cell</td>
</tr>
<tr>
<td>Gabriella Campadelli-Fiume and Laura Menotti</td>
</tr>
</tbody>
</table>
8 Early events pre-initiation of alphaherpes viral gene expression
  Thomas Kristie

9 Initiation of transcription and RNA synthesis, processing, and transport in HSV and VZV infected cells
  Rozanne Sandri-Goldin

10 Alphaherpesvirus DNA replication
  John Hay and William Ruyechan

11 Envelopment of HSV nucleocapsids at the inner nuclear membrane
  Joel Baines

12 The egress of alphaherpesviruses from the cell
  Gabriella Campadelli-Fiume

13 The strategy of herpes simplex virus replication and takeover of the host cell
  Bernard Roizman and Brunella Taddeo

Part II Basic virology and viral gene effects on host cell functions: betaherpesviruses
Edward Mocarski

14 Comparative betaherpes viral genome and virion structure
  Andrew Davison and David Bhella

15 Betaherpes viral genes and their functions
  Edward Mocarski

16 Early events in human cytomegalovirus infection
  Teresa Compton and Adam Feire

17 Immediate–early CMV gene regulation and function
  Mark Stinski and Jeffrey Meier

18 Early CMV gene expression and function
  Elizabeth White and Deborah Spector

19 CMV DNA synthesis and late viral gene expression
  David Anders, Julie Kerry and Gregory Pari

20 CMV maturation and egress
  William Britt

21 CMV modulation of the host response to infection
  A. Louise McCormick and Edward Mocarski, Jr.

Part II Basic virology and viral gene effects on host cell functions: gammaherpesviruses
Patrick S. Moore

22 Introduction to the human γ-herpesviruses
  Richard Longnecker and Frank Neipel

23 Gammaherpesviruses entry and early events during infection
  Bala Chandran and Lindsey Hutt-Fletcher

24 Gammaherpesvirus maintenance and replication during latency
  Paul Lieberman, Jianhang Hu, and Rolf Renne

25 Reactivation and lytic replication of EBV
  Shannon Kenney

26 Reactivation and lytic replication of KSHV
  David Lukac and Yan Yuan

27 EBV gene expression and regulation
  Lawrence S. Young, John R. Arrand, and Paul G. Murray

28 KSHV gene expression and regulation
  Thomas Schultz and Yuan Chang

29 Effects on apoptosis, cell cycle and transformation, and comparative aspects of EBV with other DNA tumor viruses
  George Klein and Ingemar Emberg

30 KSHV manipulation of the cell cycle and programmed cell death pathways
  Patrick Moore

31 Human gammaherpesvirus immune evasion strategies
  Robert Means, Sabine Lang, and Jae Jung

Part III Pathogenesis, clinical disease, host response, and epidemiology:
HSV-1 and HSV-2
Ann Arvin and Richard Whitley

32 HSV-1 AND 2: pathogenesis and disease
  Richard Whitley, David Kimberlin, and Charles Prober

33 HSV-1 and 2: molecular basis of HSV latency and reactivation
  Christopher Preston and Stacey Efstathiou
Part IV Non-human primate herpesviruses
Ann Arvin, Patrick Moore, and Richard Whitley

57 Monkey B virus
Julia Hilliard

58 Simian varicella virus
Ravi Mahalingam and Donald Gilden

59 Primate beta herpesviruses
Peter Barry and William Chang

60 Gammaherpesviruses of New World primates
Armin Ensser and Bernhard Fleckenstein

61 EBV and KSHV-related herpesviruses in non-human primates
Blossom Damania

Part V Subversion of adaptive immunity
Richard Whitley and Ann Arvin

62 Herpesvirus evasion of T-cell immunity
Jatin Vyas, Benjamin Gewurz, and Hidde Ploegh

63 Subversion of innate and adaptive immunity:
immune evasion from antibody and complement
Lauren Hook and Harvey Friedman

Part VI Antiviral therapy
Richard Whitley

64 Antiviral therapy of HSV-1 and -2
David Kimberlin and Richard Whitley

65 Antiviral therapy of varicella-zoster virus infections
John Gnann, Jr.

66 Antiviral therapy for human cytomegalovirus
Paul Griffiths and Michael Boeckh

67 New approaches to antiviral drug discovery
(genomics/proteomics)
Mark Prichard

68 Candidate anti-herpesviral drugs; mechanisms of action and resistance
Karen Biron

Part VII Vaccines and immunotherapy
Ann Arvin and Koichi Yamanishi

69 Herpes simplex vaccines
George Kemble and Richard Spaete

70 Varicella-zoster vaccine
Anne Gershon

71 Human cytomegalovirus vaccines
Thomas Heineman

72 Epstein-Barr virus vaccines
Andrew Morgan and Rajiv Khanna

73 DNA vaccines for human herpesviruses
Thomas Evans and Mary Wloch

74 Adoptive immunotherapy for herpesviruses
Ann M. Leen, Uluhan Sili, Catherine Bollard, and Cliona Rooney

75 Immunotherapy of HSV infections – antibody delivery
David Kimberlin

Part VIII Herpes as therapeutic agents
Richard Whitley and Bernard Roizman

76 Herpesviruses as therapeutic agents
Frank Tufaro and James Markert

Index