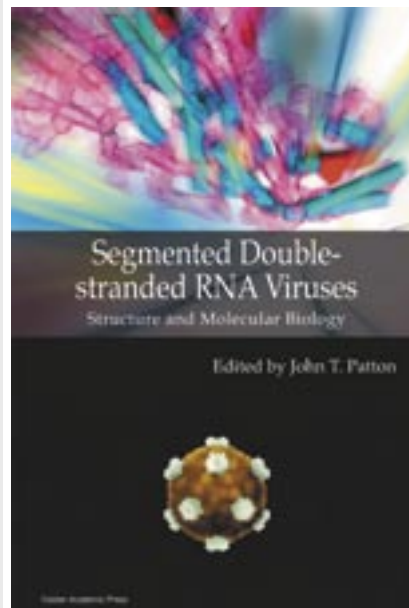


# Segmented Double-Stranded RNA Viruses Structure and Molecular Biology

Edited by: John T. Patton, *NIAID, NIH, Bethesda, USA*

x + 374 (plus a 22pp colour plate section), Jan. 2008  
ISBN 978-1-904455-21-9 \$300/£150

In recent years, remarkable progress has been made in determining, at atomic and subnanometer levels, the capsid structures of several of dsRNA viruses, as well as the structures of a number of individual viral proteins. This information has not only provided a unique insight into the events in the viral life cycle (including attachment and entry, genome replication, gene expression, and capsid morphogenesis), but also highlights the significant parallels in the structure and replicative processes of many of these fascinating viruses. In this timely volume, respected and experienced virologists review all of the current key recent research, providing for the first time a single resource reviewing structure and molecular biology of segmented dsRNA viruses. Topics include: the structures of orthoreoviruses, rotavirus, phytoreoviruses, and bluetongue virus, entry into the bacterial cell, crystal structure of reovirus polymerase  $\lambda 3$ , assembly of the reovirus genome, genomic RNA packaging and replication in the *Cystoviridae*, and much more. Essential reading for all dsRNA virologists and all other virologists with an interest in molecular and structural biology.



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## Coronaviruses

### Molecular and Cellular Biology

Edited by: **Volker Thiel**

x + 350pp, Aug. 2007

ISBN 978-1-904455-16-5 \$300/ £150



Provides the first coherent picture of the molecular and cellular biology since the outbreak of SARS in 2003. Topics include binding and entry, replicase gene function, cis-acting RNA elements, transcription, reverse genetics, genome packaging, molecular

evolution, avian infectious bronchitis virus, feline coronavirus and mouse hepatitis virus, SARS-CoV virus pathogenesis, SARS-CoV interaction with the host INF and antiviral cytokines, bat coronaviruses, NL63, and strategies for coronavirus vaccine development.

## Animal Viruses

### Molecular Biology

Edited by: **Thomas C. Mettenleiter and Francisco Sobrino**

xii + 532, Jan. 2008

ISBN 978-1-904455-22-6 \$300/£150



In this book an international panel of leading virologists provide a state-of-the-art overview of the field, comprehensively detailing the current understanding of viruses, their replication, evolution and interaction with the host. The authors

emphasize strategic and methodological aspects of current research, and provide key related references. Topics include foot-and-mouth disease virus, Pestivirus, *Arteriviridae*, Coronaviruses (including SARS), *Herpesviridae*, *Paramyxoviridae*, influenza viruses, *Reoviridae*, porcine circoviruses, *Asfarviridae* and much more. An essential text for every virology laboratory.

## Alpha Herpesviruses

### Molecular and Cellular Biology

Edited by: **R.M. Sandri-Goldin**

x + 402 pp., Aug. 2006

ISBN 978-1-904455-09-7, \$280 / £140

In recent years, the study of the molecular biology and cellular biology of the alpha herpesviruses has made great strides. The chapters in this volume summarize and highlight some of the more provocative and exciting findings, each with a view to probing or defining the mechanisms of viral infection. For this reason, not all aspects of the biology of herpesvirus infection will be covered here. But instead, the emphasis is on recent advances.

## Bacteriophage

### Genetics and Molecular Biology

Edited by: **Stephen Mc Grath and Douwe van Sinderen**

viii + 344 pp., July 2007

ISBN 978-1-904455-14-1 \$300 / £150



Focuses on the current rapid developments in this exciting field. The book opens with an excellent chapter that provides a broad overview of the topics and also highlights the multifaceted nature of bacteriophage research. This is followed by a series of reviews that focus on

the current most cutting-edge topics including bioinformatics and genomics, phage in the environment, bacteriophage in medicine, transfer of phage DNA to the host, contribution to host phenotype and much more.

## AIDS Vaccine

### Development

Challenges and Opportunities

Edited by: **Wayne Koff, Patricia Kahn and Ian D. Gust**

280mm x 210mm, Paperback  
xiv + 151pp, Feb. 2007

ISBN 978-1-904455-11-0, \$99 / £49

This book reviews the scientific challenges that have impeded the search for an effective AIDS vaccine and discusses current novel research that is accelerating progress. In a series of mini-reviews by the world's leading experts in AIDS vaccine research the book is essential reading for everyone interested in the current progress and future direction of AIDS vaccine development.

## Real-Time PCR in Microbiology

### From Diagnosis to Characterization

Edited by: **Ian M. Mackay**

x + 454 pp., Sept. 2007

ISBN 978-1-904455-18-9 \$300 / £150



A background for the novice, a theoretical reference for the experienced user, and useful discussions of future developments. Includes: oligonucleotide design, target preparation, standardisation, quantification, various applications, and future challenges. The final chapter is a roundtable

discussion providing an insightful, topical and interesting discourse with contributions from over 30 experts.

## Influenza Virology

### Current Topics

Edited by: **Yoshihiro Kawaoka**

viii + 372 pp., March 2006

ISBN 978-1-904455-06-6, \$260 / £130

In this timely book world renowned scientists (including the 1996 Nobel Prize Winner, Peter Doherty) critically review the most important issues in this rapidly expanding field. Topics covered include analysis of influenza RNP, viral entry and intracellular transport, epidemiology, host range and pathogenicity, antivirals, vaccines, H5 viruses, and much more. Essential reading for all influenza virologists, molecular biologists, public health scientists and research scientists in pharmaceutical companies.

## Other Books of Interest

- RNA and the Regulation of Gene Expression: A Hidden Layer of Complexity
- Papillomavirus Research: From Natural History To Vaccines and Beyond
- Cytomegaloviruses: Molecular Biology and Immunology
- HIV Chemotherapy: A Critical Review
- Epigenetics
- Microbial Subversion of Immunity: Current Topics
- Foodborne Pathogens: Microbiology and Molecular Biology
- *Leishmania*: After The Genome
- *Archaea*: New Models for Prokaryotic Biology
- *Legionella*: Molecular Microbiology
- Molecular Oral Microbiology
- *Acinetobacter* Molecular Biology
- *Pseudomonas*: Genomics and Molecular Biology
- Microbial Biodegradation: Genomics and Molecular Biology
- The Cyanobacteria: Molecular Biology, Genomics and Evolution
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