

1. Record Nr.	UNINA9910457266403321
Titolo	Respiratory syncytial virus [[electronic resource] /] / editor, Patricia Cane
Pubbl/distr/stampa	Amsterdam ; ; London, : Elsevier, 2006
ISBN	1-280-72919-8 9786610729197 0-08-046669-9
Descrizione fisica	1 online resource (349 p.)
Collana	Perspectives in medical virology, , 0168-7069 ; ; v. 14
Altri autori (Persone)	CanePatricia
Disciplina	616.20019
Soggetti	Respiratory organs - Diseases Respiratory syncytial virus Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Respiratory Syncytial Virus; Copyright Page; Contents; Preface; Molecular Biology of Human Respiratory Syncytial Virus; Introduction; The virion; The infectious cycle; Experimental systems to study the replicative cycle of HRSV; Virus entry; Transcription and replication of the viral genome; Virus assembly; Virus-host cell interactions; Acknowledgements; References; Immunology of RSV; The innate immune response; The adaptive immune response; Conclusions; References; Molecular Epidemiology and Evolution of RSV; Introduction; RSV groups and genotypes; Structure of epidemics Geographic distribution of RSV strainsThe G protein; Evolution of RSV; Emergence of new lineages; Disappearance of lineages; Mechanism of selection of new strains; Paradox; Reinfection with RSV; Conclusions; References; Genetic Susceptibility to RSV Disease; Epidemiological evidence of genetic susceptibility to RSV infection in infancy; Evidence that the host response rather than the virus is responsible for disease; Requirements for effective genetic association studies; Genetic association studies of RSV bronchiolitis; Other studies; General comments; The future; References Pathogenesis of RSV in ChildrenIntroduction; Viral infection and

cytotoxicity; The immune response to infection; Conclusion;
References; RSV Infection in Elderly Adults; Introduction; Epidemiology;
Clinical manifestations and complications of RSV infection in elderly
adults; Diagnosis of RSV infection; Treatment of RSV infection;
Prevention of RSV infection; Conclusions; References; Respiratory
Syncytial Virus Disease Burden in the Developing World; Introduction;
Methods, definitions, limitations; Denominator-based data on
incidence; Associated mortality
Disease-causing agent or benign co-infection Risk factors for RSV
infection; Additional burdens of disease; Temporal dynamics of RSV:
Where and how does it persist; Conclusions and future research needs;
Abbreviations; References; Vaccines against Human Respiratory
Syncytial Virus; Introduction: the burden of disease and the need for a
vaccine; Considerations in developing an RSV vaccine; Formalin-
inactivated RSV (FI-RSV); Subunit vaccines; Live-attenuated RSV strains;
Live-vectored RSV vaccines; DNA vaccines; Perspective;
Acknowledgment; References
Development of Antivirals against Respiratory Syncytial
Virus Introduction; Slow progress; Vaccines versus antivirals; Brief
history of RSV antiviral development; Modern approaches to antiviral
discovery; Models of RSV disease; Alternative model of human RSV in
tissue culture; Clinical trials of RSV agents; Drugs in development;
Miscellaneous (unknown) mechanisms; Inhibiting host cell functions;
Antisense compounds and siRNA; Future prospects;
Acknowledgements; References; Pneumonia Virus of Mice; The natural
history of PVM; Characteristics of the PVM virion; The molecular biology
of PVM
PVM proteins

Sommario/riassunto

Respiratory syncytial virus (RSV) was first identified half a century ago in 1956. Following its discovery, the virus soon became recognised as a major viral pathogen causing extensive outbreaks of respiratory tract infections in both the very young and in vulnerable adults. It is an unusual virus in that it can cause repeated reinfections throughout life. The topics covered within this volume are wide ranging in scope from the most basic molecular biology of the virus to the clinical picture of RSV in the developing world. The internationally recognised experts were invited not only to revi
