This timely book reviews every aspect of cutting edge coronavirus research providing the first coherent picture of the viral molecular and cellular biology since the outbreak of SARS in 2003. The book is divided into two sections: Part I focuses on the molecular biology of the virus itself and includes topics such as coronavirus binding and entry, replicase gene function, cis-acting RNA elements, coronavirus discontinuous transcription, reverse genetics, genome packaging and molecular evolution. In Part II of the book, the focus is on molecular and cellular pathogenesis and infection control. This section includes reviews of the three prototype viruses, namely avian infectious bronchitis virus, feline coronavirus and mouse hepatitis virus. Other topics include SARS-CoV virus pathogenesis, SARS-CoV interaction with the host INF and antiviral cytokines, the newly recognized bat coronaviruses and human coronavirus NL63, and strategies for coronavirus vaccine development and the development of novel antiviral coronavirus agents.

Essential reading for all coronavirologists as well as scientists working on other viruses of the respiratory and/or gastrointestinal tract.

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