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0521832489 - Molecular Pathogenesis of Virus Infections

Edited by P. Digard, A. A. Nash and R. E. Randall

Frontmatter

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Molecular pathogenesis of virus infections

Virus and prion diseases remain a major public health threat, in both developed and developing countries. The worldwide HIV pandemic is but one example of a newly emerged virus disease; other potential threats come from exotic viruses such as SARS, Ebola and Hantaan viruses. Older human viruses such as influenza, papilloma, herpes and the hepatitis viruses still cause major health problems. Furthermore, as well as causing acute infections, some viruses may also establish persistent infections which can lead to the development of chronic diseases, including cancer. This symposium book covers central factors that influence the pathogenicity of virus and prion infections. Topics range from innate and adaptive immune responses and virus evasion of host defences to details of selected virus–host interactions, including those involving dengue virus, HIV, influenza viruses, coronaviruses, hepatitis C virus, herpesviruses, papillomaviruses, African swine fever virus and poxviruses.

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Front cover illustration: Coloured scanning electron micrograph of a cluster of
coronavirus particles. Eye of Science / Science Photo Library.

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Because their pathogenesis and patho-physiology are better understood than in many virus infections, and because very striking rashes are produced, rickettsial diseases will also be considered. Some aspects of the pathogenesis of virus-induced skin lesions have already been discussed in Platt's excellent short review (108). Virus route to skin--primary. Lesion. Dengue virus infection: Pathogenesis. Formulary drug information for this topic. No drug references linked in this topic. Substantial gaps remain in the comprehensive understanding of the pathogenesis of dengue virus infections. In large part, this limitation is related to the lack of a suitable animal model of disease [1]. Rhesus monkeys develop viremia similar in pattern to humans after dengue virus challenge but do not develop clinical disease. Careful epidemiologic and experimental challenge studies in humans have provided valuable information on dengue virus infection, but detailed data on virus distribution in vivo are available only from small numbers of patients with more severe disease, unusual manifesta