Paramyxoviruses are a diverse family of non-segmented negative strand RNA viruses that include many important human, animal, and zoonotic pathogens. Despite their enormous importance, the nature of the viral genome had proved an obstacle to research, with the result that paramyxoviral research had lagged behind that of other viruses. The advent of reverse genetics in recent years has changed this, enabling great strides to be made in our understanding of the genomics, molecular biology and viral pathogenesis.

This book provides a timely and comprehensive review of current knowledge of all paramyxoviruses and is written by renowned scientists who have made seminal contributions in their respective paramyxovirus fields of expertise. Topics include: mumps virus, simian virus 5, parainfluenza viruses, Newcastle disease and related avian paramyxoviruses, Sendai virus, Hendra virus, Nipah virus, measles virus, canine distemper virus, rinderpest virus, peste des petits ruminants virus, human respiratory syncytial virus, metapneumoviruses, and new and emerging paramyxoviruses. Each chapter covers our current knowledge on history, genome organization, viral proteins, reverse genetics, epidemiology, pathogenesis, immunity, diagnosis, prevention and control and future challenges.

This book is an invaluable reference source of timely information for virologists, microbiologists, immunologists, physicians, veterinarians and scientists working on paramyxoviruses. It is also strongly recommended for all medical and veterinary school libraries.

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