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Collana	Current Topics in Microbiology and Immunology, , 0070-217X ; ; 411
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Nota di contenuto	Filovirus Research: How it began -- Ecology of Filoviruses -- West Africa 2013 Ebola: From Virus Outbreak to Humanitarian Crisis -- Clinical Management of Ebola Virus Disease Patients in Low Resource Settings -- Clinical Management of Patients with Ebola Virus Disease in High Resource Settings -- Ebola Virus Disease in Humans: Pathophysiology and Immunity -- Nonhuman Primate Models of Ebola Virus Disease -- Small Animal Models for Studying Filovirus Pathogenesis -- Accelerating Vaccine Development during the West African Ebola Virus Disease Outbreak -- Therapeutics against Filovirus Infection -- Filovirus Strategies to Escape Antiviral Responses -- Mechanisms of Filovirus Entry -- Inside the Cell: Assembly of Filoviruses -- Filovirus Structural Biology: The Molecules in the Machine -- Reverse Genetics of Filoviruses -- Guide to the Correct Use of Filoviral Nomenclature.
Sommario/riassunto	This volume provides an overview of recent advances in our understanding of the biology of marburg- and ebolaviruses. It focuses on four essential areas: 1) ecology, outbreaks and clinical management, 2) disease, pathogenesis and protection, 3) virus replication inside the cell, and 4) molecular tools for virus study and taxonomy. For 50 years, these viruses have spilled over sporadically and without warning from

their wildlife reservoirs, often causing major outbreaks and high fatalities. The consequences can be devastating, with a clear potential for global reach, as demonstrated by the 2013 West African outbreak of Ebola virus, which led to over 28,000 reported cases across three continents and more than 11,000 deaths. Given the international threat posed by these viruses, the pace and scope of basic research have also greatly intensified, ranging from studies of virus emergence, epidemiology, antiviral countermeasures and human disease to detailed mechanistic studies of virus entry, replication, virion assembly and protein structure. Written by internationally respected experts, this book will appeal to a wide audience and be a valuable resource for basic researchers, clinicians and advanced students alike.