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cells References Chapter 7: Zika virus (ZIKV) strains and lineages 7.1 East and West African lineage 7.2 Africa vs. Asian/American lineage References Chapter 8: ZIKV-host interactions 8.1 Systematic studies to identify ZIKV affected functions and pathways 8.2 Induction and dysregulation of innate immune responses during ZIKV infection 8.3 Induction of cell death and apoptosis by ZIKV 8.4 Induction of autophagy by ZIKV 8.5 Dysregulation of cell cycle and induction of abnormal mitosis by ZIKV References Chapter 9: Inhibitors of ZIKV replication and infection 9.1 Drugs that lead to the destruction of ZIKV virions 9.2 Drugs that inhibit ZIKV entry and endocytosis 9.3 Drugs that target ZIKV NS2B-NS3 protease activity 9.4 Drugs that target ZIKV NS5 RNA-dependent RNA polymerase activity 9.5 Neutralizing antibodies that target ZIKV structural protein 9.6 Drugs that inhibit ZIKV infection by targeting host machinery 9.7 Drugs that show neuroprotective activity but do not suppress ZIKV replication 9.8 Other drugs that inhibit ZIKV infection identified from a screening of FDA-approved drugs References Chapter 10: Long-term care and Perspectives 10.1 Prenatal care and diagnosis of abnormal fetus development 10.2 Long-term care for patients affected by ZIKV 10.3 Assistance to families with children affected by ZIKV 10.4 Perspectives References Index.

Sommario/riassunto

"Compiles the most current information on the Zika virus and its associated diseases. This comprehensive book provides the most up-to-date information for students, medical students, and scientists on Zika virus and its associated diseases. It includes all the information related to the Zika virus since its discovery in 1947; its epidemic outbreak in 2007-2014; how the epidemiology changed in America in 2015-2016; its mode of transmission; how to prevent and treat it; and associated diseases. Zika Virus and Diseases: From Molecular Biology to Epidemiology offers complete and up-to-date coverage in 10 chapters. It presents information from papers that attempted to associate the virus with diseases in Africa until the first animal experiment; discusses its association with Guillain-Barre syndrome and microcephaly; describes the basic mechanisms for Zika (ZIKV) replication, including important differences between Dengue (DENV), West-Nile virus (WNV), and ZIKV; explains the difference between the strains and discusses the pathogenesis of them; covers the papers that showed all the interferences that Zika can cause, and the pathways which can be modified; and more. The first book since 1947 to put together all the scientific information Compiles all the information received in the last year about Zika virus Clearly demonstrates the origin and discovery of the virus Zika Virus and Diseases: From Molecular Biology to Epidemiology will appeal to graduate students, medical students, basic researchers, clinicians in infectious disease, microbiology, and virology, as well as people in related disciplines interested in learning more about this topic"--
