

Alphaviruses

Current Biology

Edited by: Suresh Mahalingam¹, Lara Herrero¹ and Belinda Herring²

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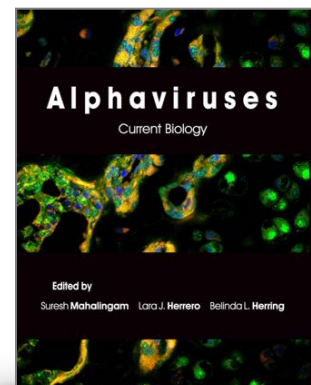
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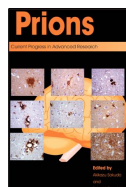
This timely book provides a comprehensive overview of the latest developments in alphavirus research. Written by a team of prominent scientists the main focus is on the pathogenesis and host interactions.

Topics covered include: genome structure and replication; viral evolution; laboratory diagnosis and detection; interaction with the interferon system; antiviral responses in mosquitoes; animal models of alphavirus-induced inflammatory disease; clinical manifestations of arthritogenic alphaviruses; encephalitic alphaviruses; the application of alphavirus vectors for gene therapy; and chikungunya virus pathogenesis and the development of control strategies. As the first to focus exclusively on alphaviruses, this book serves as an invaluable resource for researchers and clinicians working with alphaviruses and related viruses. Essential reading.



Topics

• Chapter 1: Alphavirus Genome Structure and Replication. *Belinda L. Herring, Lara J. Herrero, Weiqiang Chen, Kuo-Ching Sheng, Nestor E. Rulli and Suresh Mahalingam* • Chapter 2: Alphavirus Evolution. *Lark L. Coffey, Scott C. Weaver and Naomi Forrester* • Chapter 3: Laboratory Diagnosis and Detection of Alphaviruses. *Linda Hueston* • Chapter 4: The Interaction of Alphaviruses with the Interferon System. *William B. Klimstra and Kate D. Ryman* • Chapter 5: Alphaviruses and their Role in Elucidating Antiviral Responses in Mosquitoes. *Melanie McFarlane and Alain Kohl* • Chapter 6: Animal Models of Alphavirus-induced Inflammatory Disease. *Lara J. Herrero, Adam Taylor, Pierre Roques, Brett A. Lidbury and Suresh Mahalingam* • Chapter 7: Clinical Manifestations of Arthritogenic Alphaviruses. *Lara J. Herrero, Adam Taylor, Suan Sin Foo, Lynden Roberts, Natkunam Ketheesan and Suresh Mahalingam* • Chapter 8: Encephalitic Alphaviruses. *Clive S. McKimmie and John K. Fazakerley* • Chapter 9: Application of Alphavirus Vectors for Gene Therapy. *Kenneth Lundstrom* • Chapter 10: Case Study: Chikungunya Virus. *Lisa F.P. Ng*



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