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Epstein-Barr Virus

Edited by: Erle S. Robertson

Department of Microbiology and the Abramson Comprehensive Cancer Center, University of Pennsylvania Medical School, Philadelphia, Pennsylvania 19104, USA

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Epstein-Barr virus (EBV) is a human gamma herpes virus that remains one of the most successful viral parasites known to man. It is the etiological agent of infectious mononucleosis and is the major biological cofactor contributing to a number of human cancers including B-cell neoplasms (e.g. Burkitt's lymphoma, Hodgkin's disease and immunoblastic lymphomas), certain forms of T-cell lymphoma, and some epithelial tumours (e.g. nasopharyngeal carcinomas and gastric carcinomas). The virus has the unique ability to persist in the infected, apparently healthy host for life. Understanding the molecular interaction between EBV and its human host, the ability of the virus to modulate the host immune system, its ability to 'hide' in B-memory cells and factors that trigger viral reactivation are fundamental to understanding the cellular and molecular pathogenesis of the virus. This is critical for the development of strategies for the prevention and control of infection and disease.

In this book, world renowned EBV experts provide a critical and comprehensive review of every aspect of this important virus. By integrating genetic, immunologic, and cell biologic approaches to elucidate pathogenesis, penetrating new insights into the molecular and cellular interaction between EBV and its human host have emerged. Topics covered include: Discovery, history and seroepidemiology, EBV and the immune response, EBV genetics, EBV infection and persistence, latency, lytic proteins and reactivation control, vaccine approaches, animal models, and the future of EBV studies. This is essential reading for all EBV virologists as well as clinical and research scientists working on oncogenic viruses.

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