Animal Viruses: Molecular Biology

Thomas C. Mettenleiter and Francisco Sobrino
ISBN: 978-1904455226
Pages: 531; Price: US $300.00

In this multi-author work, Mettenleiter and Sobrino have compiled 10 chapters that describe what is currently known about the molecular biology of some of the most interesting viruses of veterinary importance, from the tiny circovirus of pigs (1,800 nt of single-stranded DNA) to the highly complex African swine fever virus (≈200,000 nt pairs of double-stranded DNA). It is fitting that the first chapter describes foot-and-mouth disease virus, which was the first animal virus to be described by Loeffler and Frosch, who worked in Griefswald-Insel Riems, where Mettenleiter is currently the president of the Friedrich-Loeffler Institut. All 10 chapters are written by experts in their respective fields. Mettenleiter is a coauthor for a chapter about herpesviruses, whereas Sobrino is a coauthor for one on foot-and-mouth disease virus. Polly Roy wrote a chapter about bluetongue virus, one of the major threats to the livestock industry worldwide, which recently emerged in Europe, perhaps because global warming has allowed the Culicoides vector to survive and overwinter. Another chapter is about Hendra and Nipah viruses, which are newly emerging in Southeast Asia and Australia. There are also informative chapters on arteriviruses, coronavirus- es, and pestiviruses. Finally, in 1 chapter, Hans-Dieter Klenk and colleagues write about viruses of birds, including avian influenza. They discuss the molecular mechanism of pathogenesis and host range for the virus everyone fears may give rise to the next influenza pandemic.

The book would have been improved by including a chapter on paramyxoviruses, of which rinderpest virus of cattle and Newcastle disease virus of birds are 2 important examples. But, overall, this compilation is excellent and is rounded off by a scholarly and provocative epilogue about animal virology by Esteban Domingo and Marian C. Horzinek. It is almost worth buying the book for these 10 pages alone.

AIDS Therapy, 3rd Edition

Raphael Dolin, Henry Masur, and Michael S. Saag, editors
Churchill Livingstone, New York, New York, USA, 2007
ISBN-10: 044306752X
Pages: 1,204; Price US $189.00

Reviewing and summarizing the treatment of HIV disease and its complications is a daunting task. Writing a textbook incorporating the rapidly evolving treatments and management strategies is even more difficult. In this third edition of AIDS Therapy, the authors have combined the efforts of international experts to fulfill this goal. As with every textbook, references are a little outdated; few references are more recent than 2006. The addition of online access to updates will possibly alleviate this problem, although the online version still lists the Department of Health and Human Services guidelines for antiretroviral use from October 2006.

Excellent chapters cover the serologic diagnosis of HIV disease, primary care in industrialized and resource-limited countries, strategic use of antiretroviral agents, immune-based therapies, and special clinical settings. Although the management of pregnant HIV-positive patients is discussed, no individual coverage of pediatrics is provided.

The text provides comprehensive reviews of each antiretroviral agent, summarizing pharmacology, adverse reactions, and clinical uses, and extensively reviewing major trials for each agent. For some of these agents, this represents a historical review of monotherapy without practical application. For example, a full chapter is devoted to zalcitabine, an agent that was discontinued in June 2006. For antiretroviral agents, the best summary, referred to as “recommendations for use,” is included in the last section of each drug chapter.

Individual chapters describe opportunistic infections and malignancies, including their diagnosis, therapy, and prevention of these diseases. Variability in the length of these chapters does not always correlate with the importance of these processes. The inclusion of multiple charts and algorithms provides a useful approach to diagnosis and management. The last major section of the text provides approaches to specific syndromes including the major problems in patient...