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Book Review

M. S. Gottlieb, D. J. Jeffries, D. Mildvan, A. J. Pinching, T. C. Quinn, R. A. Weiss  
**Current Topics in AIDS (Vol. 2)**  
 291 pages, numerous figures  
 John Wiley & Sons, Chichester, 1989  
 Price: £ 29.95

This book consists of 13 chapters describing actual topics of HIV infection like epidemiology, molecular biology of HIV-1 and HIV-2, covering vaccine development and ending with treatment. The individual chapters are written by highly qualified authors. As happened with the first volume as well, from the completion of the contributions (end 1988, sometimes beginning of 1989) until publication of the book a long time elapsed in this quickly developing field of HIV research.

The history of AIDS and the present pandemic is described, giving suggestions for the future prevention of the spread of HIV worldwide through information and educational programmes. Heterosexual spread of HIV is discussed considering different risk groups and different geographic regions and comments are given on the various strategies of prevention. Cofactors and aspects of HIV transmission are put together in mathematical models, leading to short-term and long-term (40 years) predictions of the HIV prevalence and incidence in different populations.

Virological and clinical features of HIV-2, its biology, pathogenicity and epidemiology are briefly summarized. The replication and genomic organization, as well as the special aspect of the regulatory elements of HIV-1, and other factors such as lymphokines and other viruses are thoroughly discussed. The current knowledge of animal models for AIDS is reviewed according to data on chimpanzees infected with HIV-1 and macaques infected with SIV. Information on the prevention of HIV infection by different kinds of vaccines, like envelope subunit, peptide based,

or anti-idio-type based material or inactivated HIV is put together, covering the difficulties of antigenic variation of HIV, preclinical testing of some vaccine candidates and animal models. The immuno-pathogenesis of HIV-1 covers the replication cycle, cytopathic effect on T4 lymphocytes and monocyte/macrophages and finally brain cells. The humoral immune response to HIV-1 deals with the time course of antibodies to HIV, especially the *nef* compound, which is still ambiguously discussed, neutralizing antibodies and the validity of the p24 antigen determination.

The clinically orientated chapters describe the ophthalmic manifestations of HIV, such as microvascular changes, infectious complications and neuroophthalmic disorders. This chapter is illustrated with several colour photographs. The management of opportunistic infections focuses on the treatment of pneumocystis pneumonia, toxoplasma encephalitis, some fungal diseases and generally on cytomegalovirus infection. Mycobacteria and treponema are briefly covered. Strategies of treatment of HIV infection by virus binding, inhibition of posttranscription of viral RNA, of translation of viral proteins, of posttranslational modifications of virion budding is described in 15 pages.

The last chapter deals with the legal and ethical issues in AIDS, covering discrimination, confidentiality and reporting. The limits of coercion are basically discussed.

This book can be recommended for everyone unable to keep up with the huge number of original publications in this field. The subject index at the end of the book and the conclusions at the end of each chapter facilitate a general survey. The number of cited references is encouraging. Thus, this book is of value not only to scientists, but also health care workers and politicians engaged in HIV management.

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