BOOK REVIEWS


Volume 2 of the very successful AIDS Research Reviews provides updates on the molecular biology of HIV, host responses, animal models of HIV infections, drug development and research in candidate vaccine development. E. F. Terwilliger reviews the state of research on functional (non-structural) gene products of HIV-1, of which now seven have been described but not all yet been assigned functions and mechanisms of action. The article provides the current state of systemic cellular gene products with transactivation interactions in their activity with HIV during its replication. A long chapter (by G. Pavlik et al) is devoted to gene expression, functionality to neutralization of HIV-1, a process characterised by multiply-spliced mRNAs, and various interactions of the gene products with proviral DNA, mRNA and viral RNA. T. Kieber-Emmons and D. B. Weingarten review on HIV-1 CD4* interaction at the molecular level, and S. M. Schnittman and A. S. Fauci discuss the viral load in different CD4*-expressing cells of the peripheral blood. Fusion of viruses with cell membranes is an important step in the replication of many enveloped viruses, and T. Taylor and P. Kanda discuss the relevant recent research relating to HIV, and, closely related to this (and with some overlap) J. S. Chu describes receptor-mediated endocytosis facilitating the entry of HIV and SIV into cells. An interesting chapter is the description of experiments suggesting neurotoxic activity of proteins secreted from HIV-1-infected macrophages and monocytes (G. Giulian and C. A. Noonan). The molecular studies comprise almost half the volume which indicates the intensity of research in this field.

M. B. Gardner, one of the most experienced workers with animal models to study retrovirus infections, gives a concise and precise update of the research in the monkey-SIV model, and N. L. Letvin et al provide a detailed, biochemical analysis of the SIV-specific CTL response in monkeys. The use of rabbits for infection with human retroviruses (HIV-1, HTLV-1) which leads to no overt disease in these cells (D. Giulian and C. A. Noonan). The molecular studies comprise almost half the volume which indicates the intensity of research in this field.

The section on drug developments contains chapters on HIV drug resistance (D. R. Richman) and on HIV-1 resistance by soluble CD4 (E. S. Daar and D. D. Ho) and the description of HIV-specific ribozymes and their potential and difficulties in their application as anticidas (N. Sarver, J. A. Zaia and J. J. Ross). The chapter on ribozymes has exciting parallels in many other viral systems (for example influenza-viruses, arenaviruses, viroids and delta agents) which are currently under intensive research.

A widely applicable HIV vaccine is still far away but a lot of research goes into this branch of HIV research. J. R. McGhee and J. Mestecky describe aspects of mucosal immunity to HIV and its importance for vaccine development. The use of HIV-gene preparations as potential subunit vaccines is reviewed extensively by K. S. Steiner and N. L. Haidwood. There are differences between epitopes exposed on the subunit vaccine and epitopes exposed on native viruses, and the immune responses differ and complete protection is difficult to achieve. B. D. Walker describes research on the HIV-1 specific CTL response which recognises various epitopes expressed on gag and env gene products. The response differs depending on HLA type of the infected individual and is therefore not uniform. It is not clear at present to what extent CTL responses contribute to development of disease and/or to protection. The section closes with a chapter by A. M. Schultz discussing the entire information on HIV vaccine studies in chimpanzees. Unfortunately, so far, the exact correlates of protection remain elusive.

When comparing this volume with volume 1 of the AIDS Research Reviews which was overseen by the same editors and published in 1991, one gets an impression of the intensity and speed of research in this field. This is a highly informative and very up-to-date book which can be recommended to a wide readership (molecular biologists, virologists, pathologists, pharmacologists, clinicians). It properly reflects how much basic science has been at the beginning and is continually being dovored to the attempts to improve treatment and to find a vaccine towards a pandemic disease.

U. DESSELBERGER


This timely publication deserves to be highly influential. Sexual health has been placed firmly on the political agenda thanks to the (UK) Government White Paper, The Health of the Nation. Objectives include control of HIV and other STDs and reducing the number of unwanted pregnancies. Thus, genitourinary medicine clinics will play a key role in helping to achieve the targets set by government. Many in genitourinary medicine are already involved in health education and promotion. This activity seems set to increase, with greater liaison between allied agencies and the possible development of “Sexual Health” services. Already, one former genitourinary medicine clinic (Ipswich) in the UK has adopted the title “Department of Sexual Health”.

The book is a collection of very stimulating papers from the Second International Workshop on Prevention of Sexual Transmission of HIV and other Sexually Transmitted Diseases, Cambridge, 24-27 March 1991. The Editor apologises unnecessarily for the format: many who read the book will be familiar with the style; the enthusiasm of the participants, their thoroughness and liberal approach create a framework for changes which can negate the observation that political action during the last 15 years has seen “the UK driving backwards into the future”. (p 169).

There is analysis of the broad brushstrokes of WHO statements and policies, sexual health is cemented in a wider health promotion context; many specific topics in sexual health promotion receive thorough attention. As those working in genitourinary medicine confront the challenges of developing their sexual health promotion knowledge and activity, this text will be a valuable reference.

The need for legislative change presents a similar challenge to politicians. The liberal attitudes which pervade the book include calls to decriminalise homosexual activity, prostitution and drug use. The accent is on the positive, the accepting, the affirmative.

The government has set targets, aimed at improving sexual health, by the year 2000. These should not be accepted in isolation of other sexual health promotion. This book should not be seen as a Utopian dream but as a framework for collaboration, co-ordination and promotion of sexual health. I hope that it achieves a very wide readership because, in years to come, if it still comes across as merely a path forwards, an opportunity will have been missed.

MARTIN JONES

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VIDEO REVIEW


This is the second of a series of three guides. The first was reviewed in Genitourinary Medicine, 1992;48:67. Dr Stanway’s aim is “making sex even better”. In an age of sexual freedom, high divorce rates and more hazardous sexual practices, he declares there is an urgent need to improve all forms of monogamous relationships. Recreational sex within such relationships he sees as worthy of elevation to an art form.

The guidance offered by Dr Stanway’s second video is presented in his inimitable relaxed and attention-fixing style. Indeed the verbal presentation demands so much attention that the tasteful photography cannot but be acceptable even to the reticent or prudish viewer.

Every facet of the sexual relationship is presented from “interpersonal relationship skills” to consideration of the most anatomically satisfying positions for intercourse. As regards the first it is clear that sharing the viewing of a video offers a unique opportunity for the initiation of communication (verbal and tactile), that books or magazines cannot hope to achieve. As regards the second, the film presents the dynamics of intercourse in a way that potential intimates can hardly fail to grasp.

How to develop and master, or to be mistress of, these basic skills is given encourage-