
It is now clear that genes encoding the α and β-chains of the T-cell receptor account for the specificity of the cells expressing them; and many of the functions of cells expressing these receptors have been documented. In addition, the properties of T-cells expressing receptor γ and δ-chains is in some way linked to non-MHC-restricted lysis, or to MHC class II restricted signals: such cells may be important in inflammatory diseases such as rheumatoid arthritis. In this context the present publication in the molecular and cellular biology series is of particular importance. It contains a unique collection of articles which describe the important molecular events related to T-cell receptor expression, and the potential importance of the various T-cell receptor molecules in T-cell activation and maturation. T-cells interact with foreign antigens through their membrane bound T-cell receptors, which are composed of heterodimers of α and β-chains each of which contain variable and constant regions. The mapping and generation of diversity and polymorphism is therefore important to an understanding of T-cell antigen interactions; articles included in this publication refer to the gene maps of α and β-chains of human and murine origin. The T-cell receptor is associated with CD-3 polypeptides on the surface of mature peripheral blood T-lymphocytes mediating specific recognition of antigen in the context of MHC products; a further T-cell receptor (TCR-γ) has been reported; the association of accessory molecules such as CD-4 and CD-8 not covalently bound to the T-cell receptor is under investigation: these findings and problems are all comprehensively addressed in this book. Furthermore, other chapters cover the molecular aspects of recognition molecules, such as LFA-1 and CD-2, and ICAM-1 and LFA-3, which are important in the process of cell-cell contact. The book will prove an excellent reference for those researchers and clinicians who wish to gain a precise understanding of the molecular basis of antigen recognition, and is an example of how molecular biology has been applied to further our understanding of an important subject of biology and immunology.

CW POTTER


Conventional pathologists commonly either refer neuropathological problems to remote and tardy experts, or take a limited approach and may not make the best diagnostic and educational use of their cases. As an attack on such unnecessary weaknesses, Professor Berry has edited interesting chapters by four experts. Two are excellent and should be used by everyone who performs necropsies—Professor Adams on non-missile head injuries and Weller on how to examine the nervous system (the latter should have come first). Both are full of skilled, practical advice, and clear illustrations, ranging from use of a fish slice to diffuse axonal degeneration. The other two are more mixed. Dr Anderson has taken a brief but encyclopaedic view of acute viral encephalitis that mingles common and fashionable disorders in a way that will help trainees more than practitioners. Dr Scholz has covered most spontaneous causes of dementia in the adult in a similar manner. Both of these authors have an irritating wealth of spelling errors, and Dr Anderson has also suffered unexpectedly poor black and white microphotographs accompanying excellent coloured plates. On balance, the real value of the expertise of Adams and Weller dominates and makes this a book worth having in every laboratory, because no one can fail to gain from studying the brain.

AD DAYAN


Writing for undergraduate veterinary students Dr Thomson and his colleagues have also produced a book that will enthral postgraduate clinical pathologists, albeit on a “fancy that” basis. It is beautifully produced, lavishly illustrated, and constructed on a system by system basis rather than a species by species one—so there is a chapter on the endocrine system, one on the haemopoietic system, and so on.

Gems abound. Immune haemolytic anaemias are particularly troublesome in dogs, piglets commonly become iron deficient, bracken poisoning causes aplastic anaemia in cows, horses get haemophilia, and chickens get gout. The pictures are unforgettable—acromegalic beagles and pseudomorphid pigs jostle with a mind boggling gallery of zoonoses.

What a shame few readers of the Journal of Clinical Pathology will ever see it. They would probably learn far more than veterinary pathologists browsing through one of the worthier undergraduate texts on human pathology—and be better entertained.

JS LILLEYMAN


This monograph is the proceedings of a workshop involving scientists and clinicians interested in hyperoxaluria and urolithiasis, edited to blend the contributions into an easily readable, well illustrated, and nicely balanced treatise where the strong links between basic science and clinical medicine are emphasised. It is a subject which usually receives only passing reference in standard textbooks of chemical pathology but this book reviews new developments in diagnosis and management.

An accurate measurement of urinary