

only preparations. No epidemiological data are yet available with modern low oestrogen/gestagen combinations. The risk assessment of HRT now centres on post-menopausal breast cancer risk. There is a balanced chapter assessing this and pointing out the inconclusive and variable nature of much of the epidemiological data. As with the CVS benefits, so the breast cancer risks of modern HRT preparations are not known. This area will surely be covered in later series when more data become available.

Overall, I found this a useful book with many chapters relevant to my own clinical endocrine practice. I think the book will be useful to gynaecologists and physicians with an interest in HRT and cardiovascular disease and osteoporosis though for the general physician it has little of relevance. But at £28.00 it is cheap by present day standards and should be affordable for most postgraduate centre libraries to whom I commend it as value for money.

R N CLAYTON

*Consultant Physician/Endocrinologist,
North Staffordshire Royal Infirmary*

Annual review of immunology. Edited by William E Paul, C Garrison Fatham, Henry Metzger. Annual Reviews Inc, Palo Alto, 1993. 843pp. \$50.00.

It is unlikely that any self respecting immunologist is without this latest addition to the series. These modestly priced volumes have established themselves as the *nonpareils* for keeping up with current thought and advances in the immunological field. The list of authors reads like a section of Who's Who in Immunology (and elsewhere). It is thus to the non-immunologist that this review is addressed to encourage them to investigate the contents, as they are very likely to find something of interest and relevance to their clinical work in these 24 chapters. The close interplay between microorganisms and the immune system means that this is particularly pertinent to those with an interest in infections, and it is clearly required reading for haematologists. Many other clinicians will also benefit from chapters such as the forward looking 'Gene therapy of the immune system' by Cournoyer and Caskey—world authorities—with its review of immunodeficiency and explanations of gene therapy methodology. This chapter also includes an excellent update on current gene therapy trials for immunodeficiency and cancer.

The Annual Reviews traditionally start with a personal contribution from a distinguished researcher in the field. The Dutch HLA expert J J van Rood is featured in volume 11. This is a wonderful and entertaining read from a scientist/clinician who has been concerned with HLA and transplants from the earliest days. Apart from its historical interest, the case for a

career in which both laboratory and bedside medicine play a complementary role has rarely been better made. Perhaps we should learn from this and allow physicians to switch from one to the other, and back, more easily. Lymphocyte lineages feature in chapters on T cell subsets (Fitch *et al*) and B cells (Kantor and Herzenberg). Both describe murine cells but the findings are translatable to humans. Those readers who grew up with T 'helpers' and 'suppressors' should be warned that the latter are (as a colleague recently said) 'in a bit of trouble'. Fitch lays out the distinction between T helper 1 (T_H1) and 2 (T_H2) subsets in terms of cytokine profiles and functional differences. Kantor and Herzenberg show that B-1 (B-1a and B-1b) cells are separable from conventional B lymphocytes and may represent a more primitive layer of broad specificity antibody producing cells. B-1 cells may incidentally be the origin of the B chronic lymphocytic leukaemia (B-CLL) cell in man.

The clinician who wants to know more about autoantibodies will find the chapter by Naparstek and Plotz of great value in not only explaining what cellular components the antibodies recognise but also objectively assessing their significance and the likelihood of their being responsible for the diseases in which they are found.

Some chapters are clearly not for casual reading: that on IL-10, whilst its comprehensiveness is not in doubt, is mostly useful as a reference source for all but true aficionados. The three chapters on the antimicrobial peptides 'defensins'; immunity to intracellular bacteria; and malaria vaccines merit recommendation for ID clinicians and microbiologists.

Jan Klein, writing on the subject of molecular evolution of the major histocompatibility complex, begins by comparing it to 'bel canto' opera which some may feel is going a little far. However, to be fair, one can read this chapter ignoring the complex formulae, and still come away with a good grasp of how and why our immunological repertoire has been formed.

There are contributions on antigen processing and presentation, leukocyte adhesion molecules, and a masterpiece on the IL-2 receptor written by a group headed by Tonegawa. The molecule is described functionally and structurally in the context of other cell surface receptors and the authors finish with a challenging list of questions illustrating how much more there is to know about how this receptor transmits its signal into the cell.

The Annual Review editors are to be congratulated: their scientific stature and commitment have maintained the high standards of the series. The facility with which they attract good contributors reflects the fact that an invitation to contribute is in itself a mark of recognition.

A M L LEVER

Lecturer in Medicine, University of Cambridge