Book reviews

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Practical Genetic Counselling

2nd ed. By Peter S Harper. 1984 (Pp xi+326; figures + tables. £15.00.) Bristol: Wright. 1984.

In his first edition Peter Harper asked whether a single book could cover the amount of detailed information that is relevant to genetic counselling without danger of being superficial and inaccurate. The last three years have not made his task any easier. The growth of dysmorphology, antenatal diagnosis, gene probes, immunogenetics, and new data on genetic and chromosomal disorders frequently leaves even clinical geneticists out of their depth in a mass of detail involving disease of all body systems and all ages. By grappling with genetic heterogeneity, major advances are being made into the aetiology of common diseases like cancer and coronary thrombosis but rarely do other specialists have sufficient knowledge of genetics to apply to the diagnosis, pathogenesis, prognosis, and treatment of 'their' diseases. Recombinant DNA technology has demonstrated beyond all doubt that direct access to the gene is possible and will alter fundamentally our ability to manage genetic disease.

The need is clearly greater than ever for a summary of the genetic aspects of clinical problems with a key to the relevant publications which, if used with common sense, allows one to decide whether one can deal with the problem oneself or seek further specialist assistance. The value of Harper's book is that there is an entry, however brief, for virtually every relevant problem and the references, including 'further reading', are skilfully chosen and up to date. There is, for example, a brief and very clear introduction to the DNA approach to genetic disorders which accounts for eight of the extra 41 pages in the new edition. The other new pages are devoted to updating, particularly of the second half of the book concerned with genetic aspects of specific organ systems. Some chapters deserve special mention because they illuminate areas which many, including geneticists, find particularly difficult. The chapter on genetic counselling includes a useful and comprehensible section on Bayes' theorem while 'Special Problems in Genetic Counselling' allows the uninitiated the satisfaction of understanding both the reasoning and the sums involved in the assessment of the effects of consanguinity. It is difficult to identify any major lacunae but perhaps the next edition will bring together into

a separate chapter some of the basic principles behind the diagnosis of multiple malformation syndromes ('Dysmorphology'). Some of the HLA material (including nomenclature) could do with a little revision and the appendix of 'Useful Information' could now include a reference to the listing of UK Regional Genetic Services available from the Clinical Genetics Society.

This book is full of common sense, accurate facts, and enlightenment. It is remarkably enjoyable to read considering how tightly packed with information it is. The general sections on genetic counselling provide an excellent summary of how high technology genetics can be humanised for the manifest benefit of the patients and their families. The need for clinical geneticists is explicitly stated but Harper leaves one in no doubt that genetics is too important to be the exclusive preserve of any one group of specialists. This book remains an essential companion for clinical geneticists and indeed for all doctors, senior medical students, and others concerned with the welfare of patients.

RODNEY HARRIS

Genetic Analysis of the Cell Surface

Edited by P Goodfellow. (Pp x+193; figures + tables. £27.50.) London, New York: Chapman and Hall. 1984.

This current volume is the latest in a series of monographs concerned with cell surface receptors and recognition, essential factors in virtually all important biological functions including fertilisation, embryonic development, neural activity, growth and metabolic regulation, and immune responses to foreign antigens. In most of the preceding volumes the emphasis has been on biochemistry or physiology, but here the approach is genetic. There are seven chapters, five of which are concerned with man, and these will be of most interest to Medical Geneticists.

There is an excellent and succinct review of the human red cell surface by Tippet in which the antigenic properties and biochemical features are well summarised. It seems that Duffy is still the only blood group which shows any clear evidence of natural selection; in this case Fy(a-b-) conferring resistance to *Plasmodium vivax*. The analysis of cell