Medical Genetics: Principles and Practice. By J. J. Nora and F. Clarke Fraser. (£9.50.) Kimpton, London; Lea and Febiger, Philadelphia. 1974.

This admirable textbook lies between the primers of human genetics and the larger textbooks. The strength of the book lies firstly in the fact that the authors are writing from extensive personal practical experience and secondly in the excellent illustrations. One example of the first strength is the section on the correction of biased ascertainment in establishing segregation ratios. Here the authors go directly to the proband method of counting the proportion affected of sibs in index patients, including each family once for each index patient, rather than discussing in detail the various *a priori* methods. A second example of the authors practical experience are the good chapters on multifactorial inheritance in relation to congenital malformations and the common constitutional disorders of adult life. A third is the chapter on disorders and syndromes of undetermined aetiology, including disorders such as the de Lange, Sturge-Weber, Prader-Willi, and Rubinstein-Taybi syndromes. In the second half of the book there are chapters on special topics including twin studies, teratology, dermatoglyphs, immunogenetics, somatic cell genetics, cancer, cardiovascular disorders, and a final chapter on genetic counselling.

This is a book which one would especially recommend to paediatricians whether established or in training. It is also a book which the experienced clinical geneticist will read with profit and pleasure.

C. O. CARTER

Haemoglobin, Isoenzymes and Tissue Differentiation. By C. F. Masters and R. S. Holmes. (Pp. 308 + figures and tables. \$32.95.) Amsterdam: North-Holland. 1975.

The authors aimed in this book to give an up-to-date account of the heterogeneity of molecular form of pro-

teins, as typified by haemoglobin and a variety of isoenzymic systems. The broader conceptual aim was to provide a commentary on the relevance of such multiplicity to the central themes of growth and development, evolutionary divergence, and tissue differentiation. As the traditional divisions of biology become more and more specialized, there is an increasing need for this kind of non-specialized view of fundamental concepts, and this need has been met, by the excellent series of monographs, *Frontiers of Biology*.

Dr Masters and Dr Holmes have succeeded in maintaining this high standard; both were well-equipped to do so, having made significant contributions to the study of isoenzymes. The book is thoroughly researched, packed (too much, perhaps) with information, and linked by thoughtful comment on the research approach to basic problems. The material is arranged in a sensible order, particularly with regard to an appreciation of the complementary findings for haemoglobin and multicomponent enzymes. An introductory chapter defines an approach to the understanding of tissue differentiation in terms of specific molecular forms of proteins. The next two chapters provide good summaries of data on the molecular diversity of haemoglobin and various isoenzymic systems. An account of the ontogeny and phylogenetic divergence of these proteins in higher organisms is presented, and final chapters deal with protein turnover during growth and development and with the subcellular distribution of isoenzymes.

On the whole, this is a well-balanced book, marred somewhat by a prolix style that often confuses rather than clarifies a valuable and interesting line of thought. However, the authors' enthusiasm for the subject is evident and is worth seeking, in spite of the long words and florid sentences. The book should interest many research workers in biochemical genetics, enzymology, cell biology and function, and growth and development.

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