Human Genetics and Medicine

The third edition of this short book continues, as expected from its author, to be stimulating and thought provoking. It has been considerably updated, notably by a section on molecular genetics, though there are still some older parts of the book that could well now be shortened or omitted.

With the abundance of introductory books on human genetics that now exists, one might ask whether it still fills a gap. I think that it does, provided that one bears in mind the original intended readership, which is for sixth form school students intending to do medicine or allied topics at university. It also provides a good introduction for first year university students doing a biology course where genetics is not emphasised. However, it is not really appropriate as a first year genetics course book; the publishers should take care not to try to convert it into such a book, or its readers will be disappointed. For its right readership it remains most enjoyable and valuable.

Peter S Harper

Primer of Genetic Analysis

This is a book of self-assessment. The first 15 chapters cover separate topics and follow a set format: study hints, important terms, problems and answers. The study hints consist of brief explanations of key principles which are then tested in the problem section. They serve as an aide-memoire rather than a detailed discussion of the topic. The important terms are presented as a short list but without explanation, although there is a glossary at the end of the book. It is implied that if the terms are either new or poorly understood by a student then further reading is required. The authors have helpfully cross referenced their chapters with corresponding relevant chapters in 13 standard text books. The main emphasis of each chapter is on the problem and answer sections. Some questions require a brief discussion while others can be answered by a mathematical calculation. Detailed explanations of the problems are provided in the answers section. In addition, there is a practice exam based on the whole book in chapter 16 and the answers to this are provided in chapter 17.

A wide range of topics are dealt with in the book including mitosis and meiosis, statistics, genetic linkage and mapping, population genetics, mutation, and evolution. I was disappointed that there was only one chapter on human genetics, the remainder dealing mainly with plant, animal, and bacterial genetics. In view of this, I agree with the authors that the book will appeal to undergraduates taking a genetics course. It will have limited use to medical students and their teachers. The book will, however, be extremely useful to anyone coming to medical genetics, who has not previously studied this subject in depth, and who wishes to identify areas of weakness which require further study.

On the whole, I think this is a well written book and the authors have succeeded in the difficult task of testing understanding rather than factual recall.

Oliver Quarrell


The book comprises papers presented in 1985 at a symposium in honour of Joseph J Bonner and also published as a supplement to the Journal of Craniofacial Genetics and Developmental Biology. Research work on normal and abnormal morphogenesis is included in man, mice, and other animals as diverse as Burmese cats with mid-facial malformations.

The first, rather brief, section concerns normal morphogenesis, and here the mesenchymal origins of orofacial tissues are well described and illustrated. There are two papers on the components of the facial processes and their fusion sites and a complex paper on a complex mouse, where a single gene modifying the shape of the mandible has been mapped.

The second section, dealing with the genetics of abnormal morphogenesis, includes two studies of major genes causing cleft lip in mice; an interesting