

geneticist must have them. The wider market to which the publishers are looking—general physicians, students, and others with only occasional interest in human cytogenetics—will however probably be content to have access to the books in a nearby library and will hold their money until a revised version becomes available, incorporating the important information of the early 1970s.

MARTIN BOBROW

Textbook of Human Genetics. By Max Levitan and Ashley Montague. (Pp. xiv+922; figures and tables. £5.00.) London: Oxford University Press. 1970.

This book was aimed at providing for the varied background of students reading human genetics and has ended up by being itself heterogeneous. This is a pity because the book has many useful points, is well produced and, in general, well written. But its balance is uneven and also for this reason, while it can usefully be read by the discerning student who knows some human genetics and uses it as a complementary text, it cannot be universally recommended to the majority of the students for whom it was intended.

Many parts of the book rely fairly heavily on a mathematical treatment of the subject and to some extent this is desirable but many students, for example medical and dental, may find the going rather heavy because such subjects as linkage, aspects of population genetics, and the use of special methods to make genetic inferences from pooled data are treated at a fairly advanced level. This part, to the reviewer's mind, is out of keeping with the rest of the book. In other chapters the authors draw heavily on clinical material, and on problems of a medical genetic nature, and one derives a general impression of lack of familiarity with these subjects. In contrast, genetics of normal diversity and variation, so important to man, is inadequately considered.

There are also a number of obvious errors and inaccuracies. For example the words 'euploid' and 'aneuploid' are used (Figs. 3-25 and 3-39) when balanced and unbalanced are meant; telocentric really does mean with the centromere at the end (Figs. 1-7 and 1-9); Figs. 1-10 and 2-16 seem to be from the same cell and do not seem likely to have been supplied by two different workers; on the subject of translocation Down's syndrome in Fig. 3-29, two normal gametes are wrongly numbered, female carriers of the translocation do not produce 30% of Down's syndrome offspring, and some of the references quoted clearly say so. Also translocation Down's syndrome cases do not appear to be phenotypically different from those who are primary trisomic; Lesch-Nyhan's disease is neither a convulsive nor a compulsive disorder though the affected children cannot refrain from self mutilation; the basic defects of *Xeroderma pigmentosum*, mostly spelled correctly and repeatedly mentioned, might have been discussed in view of its importance in principle; deletion mapping could have been discussed in relation to linkage and gene assignment, and the assignment of Duffy (and a special cataract locus) to chromo-

some No. 1, and of the haptoglobin gene to No. 16, should have been mentioned although perhaps one would not have expected more than the brief sentence which is devoted to cell hybridization as a means of assigning human genes to their linkage group. The section on counselling starts well and is sensitive, but some of the factual information is in error. For example, the overall prevalence of anencephaly (and/or spina bifida rather than 'with spina bifida') is too high, the risk of recurrence after one affected is well less than the one quoted and the risk after two could not be smaller than the risk after one affected child; also, fibrocystic disease of the pancreas after the birth of one affected child has a higher recurrence risk than 1% and a woman who has produced a child with Down's syndrome has not, overall, a 4% risk of recurrence of the condition. Less importantly 45,X abortuses are about 22% of the chromosomally abnormal (30 to 50%) spontaneous abortions, not 22% of all miscarriages.

There are other corrigenda which the authors have listed and recently circulated privately. They have also circulated a useful collection of answers to the exercises.

The bibliography is extensive and seems accurate; the subject index is excellent.

In spite of faults and errors the book could be useful but needs extensive and careful revising and re-editing.

P. E. POLANI

Clinical Genetics, 2nd ed. Edited by Arnold Sorsby. (Pp. xi + 646; figures + tables. £17.00.) London: Butterworth. 1973.

The first edition of 'Sorsby', which appeared in 1953, before this Journal was founded, was an important landmark in the development of medical genetics combining lucid chapters on 'Theoretical considerations' and a clinical section mainly concerned with systematic descriptions of inherited traits and diseases, as they were then known. It was an admirable textbook which provided in a more leisurely age and in a single volume all the genetics most physicians would need. However, in the two decades since the first edition there have been many advances including the development of new techniques which have greatly increased the practical importance of clinical genetics in most branches of medicine. Any textbook which attempted to be genuinely comprehensive today would be impossibly long or simply an annotated bibliography. Although the latter is of inestimable value to the specialist the majority require the more selective approach of Sorsby. However, a number of compromises have been inevitable. Multiple authorship, in this edition, has led to overlap between chapters—for example in the descriptions of immune deficiencies and inborn errors. The coverage of autosomal chromosomal abnormalities, prenatal diagnosis and genetic counselling might with advantage have been more extensive and in view of the deletion of the section on 'Theoretical considerations' the non-specialist would be well advised, as the editor suggests, to have at hand a

more basic textbook of human genetics. Unless the clinician understands something of the problems of penetrance and expression, the detection of carriers and the evidence for inheritance of disease he will be baffled by the confusion of diagnostic heterogeneity and be poorly equipped to distinguish conditions with a Mendelian basis, with a high recurrence risk, and multi-

factorial or environmentally induced diseases usually with little risk of recurrence in a family.

In spite of some limitations largely the result of commendable brevity, the second edition of 'Sorsby' provides a most useful survey of clinical genetics with many excellent chapters by masters in the field.

R. HARRIS

Announcements

Birth Defects

The National Foundation-March of Dimes will entertain a limited number of research proposals for the support of basic and clinical research in birth defects. The National Foundation defines a birth defect as an abnormality of structure, function, or metabolism, whether genetically determined or a result of environmental interference during embryonic or fetal life. Requests dealing with the structure and function of chromosomes, their sub-units, genes, supporting structures, repressor substances and the like, will be encouraged. For further information contact: Vice President for Research, The National Foundation-March of Dimes, 1275 Mamaronek Avenue, White Plains, New York 10605, USA.

Colour Vision Deficiencies

The International Research Group on Colour Vision Deficiencies will hold its third Symposium in Amsterdam on 25-27 June, 1975. The main subjects will be: basic mechanisms of defective colour vision; peripheral colour vision; genetics of colour vision. Free papers will be accepted. Information can be obtained from R. A. Crone, Department of Ophthalmology, Wilhelmina Gasthuis, 1e Helmersstraat 104, Amsterdam-West, The Netherlands. The deadline for the submission of papers is 31 December 1974; forms are available from: G. Verriest, Dienst Oogheelkunde, Akademisch Ziekenhuis, De Pintelaan 135, B-9000 Ghent, Belgium.