

chapter 4 dealing with physical growth, its measurement, and factors affecting it, chapter 5 examines neurological development, how it affects learning, and the development of language and behaviour; the author here is by no means as self-disciplined in presentation as those of the crisp chapters preceding it. A short chapter on puberty is followed by the final chapter on ageing and its mechanisms, again expansively presented by comparison with most of its predecessors.

The book itself is well produced and the diagrams clear. It is interesting to have a text, summarising the changes that occur from the beginning to the end of individual life, that includes behavioural as well as more strictly biological considerations. But there are far too few references to support the conciseness and level of the biological chapters. There is much that is omitted, for example there is no mention of the intriguing problems of control of tissue specificity in differentiation, but the choice of what is or is not included in a book is essentially the author's. The terminology takes a lot on trust, for few terms are defined and the book is better fitted for those who already have some background knowledge. But it is the minor errors and inconsistencies that distract attention and deserve criticism. Are stature and eye colour really 'physical structure', or was not 'physical appearance' meant (page 9)? There are several techniques for chromosome banding besides the use of quinacrine mustard (page 12). Klinefelter's syndrome is misspelt (page 14). Table 13 (page 20) suggests that the proportion of aberrant karyotypes in a series of abortuses is constant, whereas it depends on the gestational age of the series. A polymorphic variant is not an allele (page 21). Four pairs of genetic factors appear to be responsible for the difference in skin colour between African and Western European, *not* for all variations in skin pigmentation (page 26). A printing error in the middle of figure 21 has added to the English language an intriguing new word, evocative perhaps of South Sea maidens. Section 4·1 relates to the measurement of size, not of growth (page 63). The formulae for estimating the adult height of a child magnify the sex difference by a factor of 2 (page 70). The legend to figure 7·1 provides no help in interpreting what is said in the text on page 127. "Non sequitur" (page 117) is inappropriately used.

These niggling criticisms and the lack of balance between the more biological and the more behavioural chapters are a great pity, for in concept the book promised so much. It is to be hoped that these and other criticisms will be dealt with in a second edition.

D F ROBERTS

Human Gene Mapping 5

Edinburgh Conference 1979. Fifth International Workshop on Human Gene Mapping. Edited by H J Evans, J L Hamerton, H P Klinger, and V A McKusick. (Pp vi + 227; 23 figures + 44 tables. SFr 65, DM 78, US\$39.) Basel: Karger. 1979.

The reports of the 5th International Workshop on Human Gene Mapping held in Edinburgh in July 1979 were published with commendable speed in the spring of 1980. One third of the book contains committee reports which can be used to answer the questions "What genes are on chromosome 13?" or "Where exactly on chromosome 7 is the GUSB locus?". For those who do not know what GUSB means there is a 'catalog' which lists the 260 loci which had been assigned to chromosomes or linked to other markers by 1979. The book includes brief abstracts of 180 posters presented at the meeting and some recommendations for human gene nomenclature.

It is a pity that there is no banded diagram of the human karyotype in the book and there are inevitably a few mistakes. On page 87 the GDH locus should be on human chromosome 1p and mouse chromosome 4. On page 9 the leukaemia region suggested by Gahrton *et al* (1978) was excluded by the committee, who then omitted the reference to *Hereditas* volume 88.

The lack of space for details of the poster presentations has some compensations. Human Gene Mapping 5 is one third of the weight of Human Gene Mapping 4 and the price could be kept down to US\$39. The book which was reprinted as volume 25 of *Cytogenetics and Cell Genetics* is referred to several times each week in our laboratory and is an essential reference book for all gene mappers. It may be of interest to A level biology teachers, clinical geneticists, and cytogeneticists.

P J L COOK

Genes and the Mind. Inheritance of Mental Illness

By Ming T Tsuang and Randall Vandermey. (Pp x + 143; figures + tables. £5·95.) Oxford, New York, Toronto: Oxford University Press. 1980.

The combined authorship of a psychiatrist and a lecturer in rhetoric bodes well for a book on the inheritance of mental illness. That they have not included a full-time geneticist is possibly an advantage as the quarter of the book devoted to an explanation of simple inheritance is not muddled by too much expertise. In the section on the principles

of counselling, the authors discuss not only the concept of risk but also the burden of disease, the needs of the client, the formation of a plan of action, and the follow-up.

In a short book that is meant for health care professionals (nurses, social workers, and counselors) and also for practising physicians, the best chapters are on schizophrenia and mood disorders. All will benefit from the clear explanation of those complex studies in which adopted children of a schizophrenic parent are compared with adopted children whose biological mothers were normal, or those possibly confusing situations in which adopted persons who had become schizophrenic were

identified to see whether their biological parents could be distinguished from their adoptive parents by a higher rate of schizophrenia! There is a useful table which gives risks of schizophrenia in first and second degree relatives but less serious consideration should be given to the table showing the probability that grandchildren of patients with Huntington's chorea, whose parents are unaffected at a given age, could still develop the disease. The risks as given are too optimistic.

This is a worthwhile book (the price includes a marvellous Dubuffet print on the cover) and is well worth the £5.95 that the publishers are asking for it.

M BARAITSER