Book reviews

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Advances in Human Genetics

Volume 10. Edited by H Harris and K Hirschhorn. (Pp xvii + 394; figures + tables. \$35.) New York, London: Plenum Press. 1980.

Advances in Human Genetics is primarily aimed at keeping those working in related branches of biology and medical research, including clinicians, informed about basic research in genetics.

When one considers the nine previous volumes, there have been a number of review articles of considerable interest to the clinical geneticist, but volume 10 might emphasise methodology and technical detail too strongly for it to be frequently referred to by the clinician. This applies particularly to the long first chapter on the biochemistry of blood group systems, but also to the chapters on sister chromatid exchange and linkage analysis. All are excellent reviews for the human geneticist. Nevertheless the chapters on disorders of male sexual differentiation and HLA in disease are enough reason for the book to be acquired by a medical library. Both chapters fulfil all the criteria of authoritative critical reviews.

This volume in the series *Recent Advances in Human Genetics* maintains the high standard set previously and as it is not specifically meant for clinicians, they should receive the pearls, when they come their way, with gratitude. We look forward to a bigger bounty in volume 11.

M BARAITSER

Genetics

By Charlotte J Avers. (Pp xi + 659; figures + tables. £16.45.) New York: Van Nostrand Reinhold. 1980.

This is a general textbook of genetics, aimed at American college students. The approach to the topics covered includes much historical perspective which adds interest. There were only 88 years between the discoveries of Mendel and Watson and Crick, which illustrates the rapid advances made in genetic research in this century. The book is up to date and includes many 1979 references in its ample bibliography. There is a lucid discussion of recombinant DNA technology and more basic sections cover quantitative and population genetics. Clinical geneticists might like to assess their know-

ledge of bacterial and molecular genetics by answering the problems at the end of each chapter.

Clinical topics are not covered in depth but are used to illustrate basic problems. There are, unfortunately, a few inaccurate statements in relation to this. The author considers Creutzfeld-Jakob disease to be transmitted by infected food, and that hare lip is transmitted as a dominant in males but recessively inherited in females. The mother of a haemophiliac boy "must be a carrier".

This is not a book that the majority of clinicians will want to purchase personally but it provides a useful introduction to the non-medical aspects of genetics.

A E HARDING

Development, Growth and Ageing

Edited by Nicholas Carter. (Pp 169; figures + tables. £10.95.) London: Croom Helm. 1980.

This is a book produced by committee; all the authors hold teaching or research posts at St George's Hospital Medical School, but none of them takes individual responsibility for any one chapter. This is a pity, for perhaps with individual responsibility would have come the little extra care which would have turned a text that is promising but with many weaknesses into one that was first class.

There are seven chapters. The first is devoted to genetic influences on fetal and neonatal development, outlining in sequence the influence of the chromosomes (mainly concerned with aberrations), the gene, and the environment (mostly concerned with drug effects). The second chapter presents the biochemical mechanisms of differentiation, with especial reference to the red blood cells, in which the control processes are well illustrated at the transcriptional and translational levels, and to the muscle cell, with discussions of differentiation of fibre type and development of specific enzyme activities. A final section on metabolic changes in liver and pancreas, preparing for and accompanying the attainment of independent life, leads naturally to chapter 3 on changes in physiological maturation in the newborn period and childhood, which gives a particularly clear picture of the range and magnitude of the challenges faced by the neonate. After