

## Book reviews

**Paediatric Research: a Genetic Approach**, Festschrift for Paul Polani. Edited by M. Adinolfi. Pp 245: £15.00 hardback. London: Spastics International Medical Publications with Heinemann Medical, 1982.

This is a collection of 12 papers and reviews from present and past members of the Paediatric Research Unit, Guy's Hospital Medical School. The different subjects (it should not really be called a monograph) reflect Paul Polani's wide range of scientific and medical interests, and also his particular viewpoint, namely that of the geneticist.

Many who know Paul Polani and his contribution to paediatric research will be delighted, as I was, to read the account by Philip Evans of how he came to Guy's and built up the Paediatric Research Unit, and to dip into some of the first class reviews that follow. But what about the reader who does not have this personal interest in the book? The combination of papers as diverse as 'Is the Outcome of Very Low Birthweight Improving?' and 'The Immunosuppressive Role of Alphafetoprotein and the Transfer of Lymphocytes Across the Placenta: Two Controversial Issues in the Materno-fetal Relationship', makes it difficult to judge the likely readership. The interest might be reduced still further by the lack of any attempt in some specialised papers to accommodate the general clinician who may be intimidated by an introduction that starts 'The cytology of human meiosis conforms to the classical description of nuclear chromatin changes seen by light microscopy, with an appropriate separation of the two divisions into meiosis I and II'. The great advantage of such a collection of papers, however, is that without the usual constraints, the authors stick to what they know well, and as a consequence the general standard of the book is very high. Eva Alberman has made a masterly attempt to bring together available epidemiological data on congenital defects, so as to construct a table on the 'Outcome of Hereditary or Partly Hereditary Hazards During Early Pregnancy'. Such a synthesis gives the primary cause (chromosomal, monogenic, or multifactorially caused disorders) along

one axis and the outcome (spontaneous abortion, perinatal deaths, handicapped survivors, mild or severe) along the other. This contribution and Mary Sellar's paper on 'Neural Tube Defects: Cause and Prevention' are outstanding. With first class reviews on 'Inheritable Variation in the Response to Drugs and Other Environmental Chemicals' (R G Spector); 'The Repair of Genetic Damage and its Relevance to Human Health' (F Giannelli); 'Meiosis and the Aetiology of Chromosomal Aberrations in Man' (Georgiana Jagiello); 'Population Cytogenetics: A Perspective' (John L Hamerton); to name the ones of particular interest to this reviewer, it is clear that this book compares very well with any 'Recent Advances—Current Trends' type of volume.

It adds another useful Spastics International Medical Publication to the collection maintained by many libraries; and there will be some paediatricians who will read it because it is a festschrift for Paul Polani. They will be the wiser for doing so.

MARCUS PEMBREY

**Human Genetics**, second edition. By F Vogel and A G Motulsky. Pp 700: \$45.70 hardback. New York: Springer-Verlag, 1982.

The first edition of this splendid, well written book was welcomed by clinical geneticists but paediatricians are less likely to be familiar with it. There is now a second edition which has been brought up to date with references as recent as 1979. Although it cannot be recommended for casual reading, it does contain chapters which describe and explore the developments that have taken place in the last 20 years. The interested clinician is led on a well guided and illustrated tour of chromosomal nomenclature, the effect of chromosome imbalance on body and psyche and the interpretation of results, the complexities of the HLA system and the major histocompatibility locus, the mysteries of linkage and the nature of the chromosome map, as well as the intricacies of genetic polymorphisms and the nuclear basis of genetic disease. It does not aim to

catalogue chromosomal and genetic disorders but uses specific examples to illustrate genetic effect and ingenuity. Nevertheless much useful information about disease is there to be gleaned. It is a major reference book for the paediatrician and should be in the postgraduate library—but only paediatricians with a special interest in clinical genetics are likely to want it for themselves.

There are 9 major chapters covering history, human chromosomes, formal genetics of man, gene action, mutation, population genetics, human evolution, genetics and human behaviour and the practical application of human genetics and the biological future of mankind. The introduction is preceded by an exhaustive table of contents taken chapter by chapter and signposted by section numbers and page. The chapters themselves are followed by 9 appendices that cover the mathematics and calculations of genetics, a bibliography of 1760 references and author and subject indices. The book is impeccably printed and presented: the tables are magnificent and the illustrations are relevant and easy to follow.

JACK INSLEY

## Shorter notice

**The effects of maternal alcohol and drug abuse on the newborn**. By B Stimmel. Pp 157: \$32.00 hardback. New York: Haworth Press, 1982.

This issue of a hardback journal (*Advances in Alcohol and Substance Abuse*) is devoted to the fetal and neonatal consequences of drug abuse in pregnancy. Paediatricians will appreciate particularly the excellent review of fetal alcohol effects by Little, Graham, and Samson. The papers on opiate and narcotic addiction are of more pressing relevance to New York than to old York, but are nevertheless worth reading. The links between opiate abuse, defective DNA repair, immunodeficiency, and cancer risks are likely to have more general implications.