Book reviews

Journal of Medical Genetics 1989, **26,** 668–671

Issues and Reviews in Teratology
Volume 4. Edited by H Kalter. (Pp 360.) New York, London: Plenum Press. 1988.

There is a great deal in this volume for those interested in the history of embryology, both concerning the way the science has evolved and its major contributors. Half of the book is taken up by three long chapters. The first is a fascinating autobiography by Josef Warkany, which underlines how recent is the study of malformations and syndromes in humans; Warkany modestly describes his contribution to the science as "sowing a few seeds". The second chapter is a review of 100 years of human embryology and the third describes the past and present contribution of the Central Laboratory for Human Embryology in Seattle to the work of research projects in many disciplines.

The remainder of the book is taken up with chapters on specific topics, including the liability to cleft lip and palate, the teratogenic effects of alcohol in human pregnancy and experimentally, diabetic embryopathy, and a lengthy review of the developmental toxicology of caffeine, which concludes with the opinion that there is no proven risk to pregnant women and their embryos.

This is a volume which is likely to be borrowed from a large university library rather than purchased for individual or departmental use.

DIAN DONNAI

The Foundations of Human Genetics
By Krishna R Dronamraju. (Pp 211; $40·75.) Springfield, Illinois: Charles C Thomas. 1989.

Dronamraju's history of human genetics covers developments in the main areas of the subject which have occurred since the early 1900s: natural selection, mutation, biochemical genetics, medical genetics, cytogenetics, and human gene mapping. Predictably, since the author was once a student of Haldane, the section on natural selection is the most rewarding. It is well referenced with an extensive bibliography and includes photographs of many illustrious geneticists. However, the approach to historical events is somewhat idiosyncratic, for the author chooses to view developments largely through Kuhn's philosophical ideas. Kuhn has argued that what he calls 'extraordinary' (or revolutionary) science, which is the driving force behind scientific advancement, eventually gives way to 'normal' or routine science, which often becomes repetitive and dull. Thus, the extraordinary cytogenetic discoveries of the late 1950s and early 1960s gradually gave way to routine laboratory studies. The author also devotes almost a third of the text to an involved discussion of the idea of what he refers to as paradigms. The term is never very clearly defined but is used either for a body of knowledge and ideas held at any one time, or for the members of a group who share such knowledge. But neither the distinction between 'extraordinary' science and 'normal' science, nor the concept of paradigms seems to be particularly enlightening. Furthermore, though the author is clearly versed in his subject, he all too often avoids in depth analysis of developments and fails to relate them to social and political events occurring at the time. This is a missed opportunity in a book which deals with the history of one of the most exciting areas of modern science.

ALAN E H EMERY

Choices, Not Chances—An Essential Guide to your Heredity and Health
By Aubrey Milunsky. (Pp 488; $22·50.) New York: Little, Brown and Co. 1989.

This book is an enlargement and update of the author's *Know Your Genes* published in 1977. This new book provides a comprehensive (nearly 500 pages) guide to basic genetic principles, genetically determined disorders (both single gene and multifactorial), teratology, recombinant DNA technology and its applications, and the new techniques for 'assisted reproduction'.

There are sections on the ethical and legal aspects of the new developments and one on the treatment of genetic disorders, which ranges from insulin dependent diabetes to galactosaemia.

The emphasis throughout is to encourage couples to seek advice about their family tree and racial origins and to ascertain before a pregnancy what risks they run and what tests they need. The constant refrain is "not knowing removes your choices not your chances" (of abnormality in a child). With this we would all concur.