

Population and Biological Aspects of Human Mutation

Edited by Ernest B Hook and Ian H Porter. (Pp xvii + 435; figures + tables.) New York, London: Academic Press. 1981.

This represents the edited proceedings of the 11th Annual Symposium of the Birth Defects Institute of New York State. However, unlike many similar publications, the result is a thoroughly comprehensive text, which has been very well edited, and there is little repetition or irrelevant material. In fact it could well be recommended as the basis for a series of postgraduate lectures on mutation, as well as providing much useful information for the practising clinical geneticist.

The book is divided into six main sections. The first is concerned with mutation, selection, and human evolution and naturally includes much on the neutralist-selectionist controversy. Recent findings in recombinant DNA technology are also detailed in regard to evolution. The second section is concerned with mutations at specific autosomal and X linked loci and includes discussions of the controversy as to whether the mutation rates for certain X linked loci are equal in males and females. On balance this now seems so for Duchenne muscular dystrophy but perhaps not for the Lesch-Nyhan syndrome. The third section is concerned with cytogenetic mutations, their frequency, their distribution in the genome, and the possibility of 'hot spots' for which there does seem to be some suggestive evidence. The fourth section is concerned with somatic cell mutation as studied in fibroblasts in vitro and in peripheral blood lymphocytes in vivo. The latter approach involves the identification in normal persons of rare erythrocytes that contain abnormal haemoglobins, an interesting but very laborious and tedious technology. The fifth

section is concerned with radiation and mutation and includes a further assessment of the effects of the atomic explosions in Hiroshima and Nagasaki. The conclusion is that though radiation is certainly known to cause mutation "... there has yet to emerge compelling evidence of genetic change in the offspring of exposed parents". Current estimates of the 'doubling dose' in man may be somewhat higher than previously suggested, perhaps nearer 200 rem. The sixth section is concerned with fundamental problems of mutation at the molecular level. Finally, there is an appendix, which includes details of the New York State Chromosome Registry, and there is an index.

This book can be highly recommended to anyone who seeks a comprehensive and up-to-date summary of our present knowledge of mutation in man.

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Atlas des Maladies Chromosomiques

2nd ed. By Jean de Grouchy and Catherine Turleau. (Pp 492; 580 figures. Fr 390.) Paris: Expansion Scientific Française. 1982.

A new edition of the now well established 'de Grouchy' atlas has appeared. The book retains its previous format but has been considerably enlarged. There are not only more pictures of the old syndromes but there are many new additions; even Prader-Willi syndrome now has a place.

On the basis that syndromologists cannot see sufficient patients or, alternatively, pictures of patients, this volume should be on the shelf of all clinical geneticists. As an atlas of chromosomal syndromes the book has no rival.

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