Genetic Concepts and Neoplasia. (A collection of papers presented at the 23rd Annual Symposium on Fundamental Cancer Research, Texas, 1969.) (Pp. xiii + 620; figures + tables. $17.00.) Published by The University of Texas, M. D. Anderson Hospital, and Tumor Institute at Houston, Houston, Texas—Baltimore: Williams and Wilkins. 1970.

This book was published about a year after the symposium on which it is based. Little of the work cited was published later than 1968 but some contributors have managed to include significant discussion of material published by themselves and by others as late as 1970. Unfortunately, this does not include the more recent demonstration of RNA-dependent DNA polymerase activity in leukaeic cells of human cases of acute lymphocytic leukaemia.

The 4 main parts of the volume deal with the 'Role of genetic change in neoplasia', 'Interactions between the genetic apparatus and exogenous agents', 'Genetics of somatic cells', and 'Repair of genetic defects'. It is interesting to contrast its contents with those of 'Genetic concept for the origin of cancer' (Annals of the New York Academy of Sciences, 71, 807-1241, 1958), based on a symposium held in October 1957. The more recent symposium deals less with mice than with man; much more time is devoted to chromosome abnormalities and, of course, both somatic hybridization and transformation are new topics.

The general level of the contributions is high. Most are critical reviews of work already published. There is less variation in the standard of the contributions than is commonly found in such volumes and both the papers and the 11 sections of discussion have been well edited. Amongst the outstanding reviewers are those of B. Ephrussi on the potential of somatic hybridization, N. B. Atkin on cytogenetic studies, P. J. Fialkow on genetic marker studies in neoplasia, and P. S. Moorhead on viral effects on chromosomes. The difficult field of electron microscopy of chromosomes is dealt with by R. R. Brinkley and Margery W. Shaw, and by A. Cole and his coworkers. Some of the most interesting and controversial topics developed at varying lengths include R. W. Miller's statement that the high promise of studies of transformation in vitro by viruses has not been realized. Similarly, K. Hirschhorn and N. Bloch-Schtacher question the method of measurement of transformation in vitro. Enzymatic excision and repair of chromosome damage are discussed by M. Gellert and his coworkers and by R. M. Humphrey and his colleagues.

The book will retain its value to those interested in the field for much longer than is commonly the case with such publications. It is very well produced, remarkably free from errors, and has a good index which is so unusual in published symposia.

A. G. BAIKIE


This is an excellent book and better than its predecessor. The changes for this second edition include more on molecular and immunogenetics, and transplantation genetics. Some pictures of chromosome disorders have been widely omitted, leaving space for further discussion on mechanisms, and for the results of some population studies. There is an improved description of genetic versus environmental aetiology. In the final and important chapter on genetic problems and the physician, the empiric risk of recurrence for non-specific mental retardation has fortunately been changed from 15 per cent to 3–5 per cent. There are two minor criticisms in relation to genetic counselling: it would have been useful to have been told the proportion of new mutations among patients with dominant disorders or X-linked disorders. The absolute mutation rates are without significance to the practising physician. Secondly, the calculations for genetic counselling in Huntington's chorea are rather laboursome, and above the level for undergraduates. On the whole, however, the book is written at the correct level for the undergraduates for whom it is designed. It is extremely interesting and informative, and is likely to be read by many from cover to cover. Moreover, the printing and layout is now much better and adds to the pleasure of handling and reading the book.

SARAH BUNDEY


This book is the report of a conference held at the Johns Hopkins Hospital, Baltimore, in 1968. The skeletal dysplasias in man form a group of disorders most of which are extremely rare; for the first time