Book Reviews

The Hereditary Dystrophies of the Posterior Pole of the Eye

(Le Distrofie Ereditarie del Polo Posteriore dell'Occhio)

Di A. F. Deutman. Royal Van Gorcum Ltd. - Assen 1971. Volume rilegato, con sovracoperta, di 17×25 cm; VIII+484 pagine; 263 illustrazioni in bianco e nero e a colori (13 tavole). Indice analitico e degli autori. Prezzo non indicato.

In questo bel libro arricchito di numerose fotografie in bianco e nero e a colori l'autore considera una serie di 14 malattie o gruppi di malattie che interessano il fondo dell'occhio: le distrofie ereditarie della regione centrale della retina e della coroide, la retinoschisi giovanile legata al sesso, la malattia di Stargardt, la distrofia progressiva della fovea, la distrofia progressiva del cono, la retinopatia pigmentosa centrale e pericentrale, la distrofia vitelliforme della fovea, il « fundus flavimaculatus », la malattia di Sjögren, la distrofia pigmentaria e altre pigmentazioni anomale della fovea, le *drusen* della membrana di Bruch, la malattia di Sorsby e la distrofia centroareolare della coroide.

I capitoli sono seguiti dalla casistica personale, spesso corredata da alberi genealogici, dove si notano anche delle coppie gemellari interessate variamente dai processi morbosi, come alle pagine 84 (non 34! cf. indice analitico), 372, 375, 393, 394. L'interpretazione genetistica è riferita alla genetica mendeliana e non alla genetica molecolare. La bibliografia è abbondante e tiene in giusto conto le scuole oftalmologiche italiane.

L. G.

Genetic Concepts and Neoplasia

A collection of papers presented at the Twenty-Third Annual Symposium on Fundamental Cancer Research, 1969, at the University of Texas M. D. Anderson Hospital and Tumor Institute at Houston. The William and Wilkins Co. — Baltimore 1970. Bound volume with cover; 16×23 cm; XIII+620 pages including numerous tables and black-and-white illustrations. Subject and author index. Price: US $ 17.00.

The familial occurrence of cancer has been observed many years ago, and the existence of some relationship between heredity and neoplasia had been postulated long before the term *genetics* was adopted.

A pooling of efforts by geneticists and cancerologists is obviously desirable, and this book represents both a valid example of such pooling and, we hope, the stimulus towards a much wider cooperation.

Perhaps too many geneticists consider cancer the area of the exception rather than the rule in genetic research, and the quest for the rule leads them to disregard the exception. A similar, reverse outlook seems to lead many cancerologists to consider the comparatively " normal " laws of genetics as something opposed to the unpredictability of most cancers.

It is heartening to see in this book the enthousiasm and ingenuity with which the enormous mass of modern genetic information and techniques is applied to the solution of many unanswered problems of cancerogenesis. Cell hybridization, chromosome cultures, twin studies, transformation of cultured cells, X-inactivation, derepression, degeneracy of the genetic code, tRNA variation, allophenic mice, differential growth rates in normal tissue, DNA repair and

many other more or less specialized areas of genetic research are currently being exploited in the study of neoplasia, and it is to be hoped that the example of the researchers who contributed to the 1969 Houston Symposium may lead many other geneticists to apply their knowledge and effort in this direction.

M. M. C.

The Future of Human Heredity

An Introduction to Eugenics in Modern Society

By Frederick Osborn, with a Foreword by Th. Dobzhansky. Weybright and Talley - New York 1968. Bound volume with cover; 14×21 cm; X+133 pages, including five tables and one graph, references, and index. Price: US $ 5.95.

" The real problem which mankind will not be able to evade indefinitely is where the evolutionary process is taking man, and where man himself wishes to go ", Professor Dobzhansky stresses in his foreword. An answer to such a basic problem is attempted by Frederick Osborn, Chairman of the Executive Committee of the Population Council, and for several decades the leader of the eugenic movement in America.

A review of man's genetic past introduces the analysis of present situation: selection and survival are examined in their possible action among primitive hunters and food gatherers up to the Neolithic, around 8,000 b. C., and then among agricultural peoples up to the nineteenth century.

Recent changes in the way of life of modern industrialized societies, the spread of birth control and its effect on survival, and group and individual differentials in births, are then examined on the basis of the recent social history and development of the United States (1865-1965).

The genetic significance of such group and individual birth differentials, the frequency of defects and abnormalities, are then taken into account. Eugenic policies are reviewed and proposals put forth.

On account of increased expectation of life (as a result of the largely decreased early mortality) and birth control, a " relaxation " of selection is forecasted, due to " an increase throughout the population in the frequency of mutated genes responsible for serious hereditary defects and abnormalities, and this will be followed in due time by an increase in actual defects ". Such an apparently justified statement would, not necessarily be shared by any population geneticist. Nor would anyone easily agree on the author's speculations about the possibility of building up " superior races ", consisting in " those who breed most from their own superior stocks and least from their poorest stocks ".

P. P.

Gene Activity in Early Development

By Eric H. Davidson (New York). Academic Press - New York and London 1968. Second printing, 1969. Bound volume: 15×23 cm; XI+375 pages including 15 tables and 102 illustrations. Bibliography of 600 items; author and subject index. Price not indicated.

This book provides a review of the current state of knowledge on the gene function in the programming and operation of early development. It is divided into four parts.

Part 1, " Gene Activity in Early Embryogenesis ", deals with the theory of variable gene activity on cell differentiation, onset of genome control in embryogenesis, early molecular indices of differentiation, RNA synthesis in the early embryo, early informational RNA, and maternal template RNA.

Part 2, " Cytoplasmic Localization and the Onset of Differentiation ", is essentially concerned with the phenomenon of localization, its experimental evidence, its demonstrations in regulative embryos, and its interpretations.

Part 3, " Gene Function in Oogenesis ", reviews such topics as the origin and differentiation of the female germ line, oocyte