Book Reviews

Genetics Today. Proceedings of the XI International Congress of Genetics, The Hague, The Netherlands, September 1963. Volume 2: Reports, Records and Plenary Sessions. Symposia 1–13. Volume 3: Symposia 14–25. List of Members. List of Authors. Edited by S. J. Geerts. (Volume 2: Pp. lxxix + 494; illustrated. 100s.; Volume 3: Pp. vii + 1069; illustrated. 100s.) Oxford: Symposium Publications Division, Pergamon Press. 1965.

These excellently edited volumes of Proceedings of the XIth International Congress of Genetics inevitably contain much material devoted to specialized aspects of animal and plant genetics, but the bulk of the papers are of general genetic interest and a surprisingly large amount of space has been given to human and medical genetics. Of the five papers at the second of the two plenary sessions, the contributions by C. H. Waddington on genes and organization, by T. Dobzhansky on evolutionary and population genetics, and that by J. B. S. Haldane on the implication of genetics for human society, deal with fundamental problems of interest to the physician, and each is masterly. The 25 symposia organized at the congress covered an immense field: gene structure, gene action, coding, developmental genetics, radiation genetics, chemical mutagenesis, chromosome structure and function, and ecological genetics were all surveyed in a series of symposia of exceptional breadth and competence. Amongst symposia devoted to purely human problems, J. Lejeune dealt with the origin and significance of autosomal abnormalities, F. Vogel with mutations, and M. Siniscalco with the localization of genes; biochemical diversity was considered in papers on pharmacogenetics, protein variations, and inborn errors of metabolism, contributed respectively by A. G. Motulsky, O. Smithies, and J. Frezal; different aspects of dermatoglyphics were considered by L. S. Penrose, by Norman F. Walker, and Margarete Weiniger and the last symposium dealt with population problems. The 200 or so pages devoted to human genetics constitute in themselves a valuable survey of current problems.

Human Diversity. The nature and significance of differences among men. By Kenneth Mather. (Pp. viii + 126; 16 figures. 21s.) Edinburgh and London: Oliver and Boyd. 1964.

Based on lectures delivered to a professional and general audience (the Ballard-Mathews Lectures of 1960 at the University College of North Wales), this essay on human diversity attempts a popular exposition of a fundamental problem. The considered views of an eminent geneticist on a matter that permeates all social activity would in any case be welcome; this text is all the more acceptable for its clarity of exposition and its broad and balanced approach: it is no eugenic tract.

Drawing on the techniques of biometry, the findings of genetics, and the principle of natural selection, Mather discusses environmental, genetic, and social causes in the production and maintenance of human diversity. As examples of the first and the third of these causes, he discusses the effect of nutrition and of transmitted traditions, but the fullest assessment is given of genetic factors. Successive chapters are devoted to the significance of chromosome anomalies, gene mutations, and polygenic inheritance. An account of sickle-cell anaemia and the protective effect of the heterozygous state against malaria leads to a lucid exposition of polymorphism in man. A discussion on the interplay between genetic differences and social development concludes a text that can be warmly recommended as an introduction to the role of genetics in society.

Humangenetik. Ein Kurzes Handbuch in fünf Bänden. Vol. 3, No. 1. Edited by P. E. Becker. Pp. xviii + 719; 219 figures + tables. DM.216; (subscription price DM.172.) Stuttgart: Georg Thieme. 1964.

This first half of volume III of this encyclopaedic survey of medical genetics is the work of six contributors who deal with eight subjects. The text as a whole—535 pages of the total of 692—is, however, devoted to four surveys of monograph dimension and character. These are all valuable: the one on metabolic disorders contributed by Pfändler is a full and up-to-date account of a rapidly developing subject, while the contribution by Lenz of Hamburg on the urogenital system carries a particularly full discussion of some 70 pages on the anomalies of the sex chromosome, gonadal dysgenesis, and intersexuality. The monographs on the endocrines by Lehrmann of Kiel and on the myopathies by the editor are equally illuminating and exceptional in their comprehensiveness. The concluding 140 pages of this outstanding volume are contributed by Schade and von Verschuer, both of Münster. The first deals with the difficult subjects of allergic diseases and the rheumatic affections; both these sections cover adequately the scattered and rather conflicting literature. The even more indefinite subjects of the infectious diseases and neoplasms are discussed by von Verschuer, who draws rather heavily on twin researches. Altogether this is a most welcome volume.