Reviews

HUMAN CHROMOSOMAL ABNORMALITIES

Proceedings of the Conference on Human Chromosomal Abnormalities. Edited by Professor William M. Davidson, M.D., and D. Robertson Smith, M.A., M.D. (Pp. 148; illustrated. 21s.) London: Staples Press. 1961.

The speed and quality of the work done by those engaged in chromosome research in this country show what can be effected with a good idea and great determination. It is therefore a pity that a fraction of the energy and drive should not have been devoted to publishing these deliberations more quickly, for this book is an account of the Conference on Human Chromosomal Abnormalities held in September, 1959, and much has happened since then.

However, the papers are useful not only "for the record" but also because they show on what firm ground the original discoveries were based. They are also of interest in that they indicate which problems have and which have not been solved since then. For instance, we now know that the bimodality of maternal age in mongolism (Penrose) is due to the two types of mongol-those caused by reciprocal translocation and therefore inherited in a regular and predictable manner, and those caused by trisomy brought about by nondisjunction, not predictable but occurring more often in older mothers. On the other hand, we are still ignorant of the precise nature of the Barr body and its relationship to the drumstick appendages of the leucocytes (Davidson and Winn), and we still do not know whether most hydatidiform moles are XX (Harnden).

Mosaics, sexual and otherwise, have come to stay, and the use of uniocular colour-vision studies should be more widely known as a means of clinching a diagnosis of somatic mosaicism (Ford). There is also an interesting chapter by Polani on the problem of whether non-disjunction is paternal or maternal in the light of colour-vision studies. The same author has a fascinating description of "exceptional" females, in which the rules of sex-linked recessive inheritance appear to be contravened. One pedigree of these reported by Wilkinson contains two haemophiliac sisters (daughter of a carrier and a haemophiliac) who both produced haemophiliac daughters. Several explanations are put forward for this occurrence, and it would be most interesting to hear what has happened to these children and to know if their karyotype has been determined. In other cases Polani shows that the reason for the interference with the usual criss-cross inheritance is because some of the "females" are in fact XO-that is, Turner cases.

It is also useful to know that most congenital abnormalities have a formal chromosome complement, and that nothing very new has happened in cancer research except for the discovery of the Philadelphia chromosome in chronic myeloid leukaemia, mentioned as a footnote in this book. Trisomics have remained rare as anticipated because of their lethality, and the two additional examples which have been described since 1959 are probably excessively rare.

For those who find it difficult to remember what has gone wrong with people simply in genetic terms the chapter by Bernard Lennox on testicular feminization (all chromosomally normal males) is admirable. The clinical description is most vivid and brings us back to

what we are dealing with and trying to explain—human abnormalities.

The book can be recommended not only for the expert but also for the clinician who wishes to know to what extent the new information can be applied to actual patients.

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THE CHANGE IN PHARMACOLOGY

Pharmacodynamie Biochimique. Second edition. By Z. M. Bacq, J. Cheymol, M. J. Dallemagne, R. Hazard, J. La Barre, J. J. Reuse, M. Welsch. (Pp. 1,227+xvi; illustrated. NF. 140.) Paris: Masson et Cie. 1961.

Pharmacology as a subject is undergoing important changes at the present time, and it is possible that its great day is over. The change can be stated briefly as a change from the study of pharmacology as a branch of physiology to a study of pharmacology as a branch of biochemistry. The reason for this is curious. Such a change might be taken to mean that the harvest to be gained from the former study was exhausted. But this is not in the least true, for some of the most important advances recently made have belonged to it. The change is due to two causes: first, to the absence of any notable school where the methods of physiology are learnt by the pharmacologist; and, second, to the attraction of the precise methods of biochemistry. The change would matter less if the physiologists themselves would study the action of drugs in the system they investigate. But they rarely do so, and it is often sad to see how much they miss in the course of their investigations as a result.

The pharmacologists in many places are in process of losing their identity and are becoming indistinguishable from biochemists. This change is illustrated by the title of this book. It has become unfashionable to speak of pharmacology by itself, and pharmacology is believed to become respectable only in association with biochemistry.

Actually this book is in the main a normal textbook of pharmacology. It is extremely narrow in its outlook, and the large amount of work done in countries such as Britain, Sweden, and Germany in the last few years is almost completely ignored. The book does not in any way present a picture of pharmacology as it would be painted in any of these countries. Since the book will have a great influence in the French-speaking world for many years to come, it is sad it should have so limited a point of view.

J. H. Burn.

HEALTH SYSTEMS IN BRITAIN AND U.S.A.

Hospitals and Health Services in Britain and the United States of America. Some Reflections on Voluntary Effort for the Maintenance and Improvement of the Hospital and Health Services in Britain and on Financial Provisions for Medical Care in Hospitals in the United States of America. By John Dodd. (Pp. 148+v. 12s. 6d.) Bristol: British Hospitals Contributory Schemes Association. 1961.

Thirty-six years ago, before he became associated with the Hospital Contributory Schemes and the Western Provident Association which have been his life's work, Mr. John Dodd spent an undergraduate year in the School of Business of Columbia University. Invited to return there in the autumn of 1960, he gave a number of talks on the British National Health Service both in New York and in other centres along the Atlantic coast. But as so often happens in such circumstances he found himself involved in discussions on the future of medical care policy in the United States.