Research on Genetics in Psychiatry. Report of a WHO Scientific Group. *Wld Hlth Org. techn. Rep. Ser.*, No. 346. (Pp. 20. 3s. 6d.) Geneva: World Health Organization. 1966.

The working party responsible for this report reviewed the present state of knowledge of the genetics of mental disorders, discussed present research trends, and adumbrated the problems of the future.

Under the first heading they took the reassuring view that research in many countries along genealogical statistical lines had produced results in fairly good agreement with one another. The difficulties arose mainly in interpretation which, apart from some particular syndromes, was usually undecided and debatable. Biochemical investigations, identifying the inborn error of metabolism, have had assured successes only in mental subnormality so far, though there are some very interesting leads both with regard to schizophrenia and the affective psychoses. Note was taken of the very striking advances that have been made by cytogenetical methods of investigation.

One of the great difficulties facing genetical research in the psychoses arises in attempting to define the class of individuals to be investigated. Psychiatric diagnosis is not always valid; it should as far as possible be based on a phenomenological approach. Clinical epidemiological investigations depend on agreed operational definitions being applied by workers in a variety of centres. WHO is currently supporting basic studies which should aid the standardization of psychiatric diagnosis. Emphasis is also given to the way in which work on twin pairs may provide information relevant to a variety of questions. The working party regarded it as a main task for the future to concentrate attention in isolating the effects of major genes, 'rather than to elaboration of non-disprovable hypotheses about the residual cases'.

On the cytogenetical side there is a strong recommendation for close co-operation between laboratories for the collection and comparison of very rare cases that are of great potential significance. This is already being attempted on a regional scale in France. The French organization has the three aims of pooling technical knowledge, the central collection and analysis of data on 'exceptional cases', and the preservation by refrigeration of stem cells from patients with a rare chromosome anomaly in a 'bank'.

A large number of schemes of investigation along biochemical lines are briefly mentioned. One of the more promising appears to be biochemical screening of high-risk groups combined with long-term follow-up.

Mention is also made of some tissue culture work which has already begun. Foetal neuroglial cells obtained at interruption of pregnancy have been studied, taking the material both from non-schizophrenic controls and from embryos where both parents were schizophrenic. In this case, as so often, one wonders what criteria were used for the diagnosis of 'schizophrenia' and how generally acceptable they would be.

Considering the huge area covered, one can hardly complain of the superficiality of a report which extends to only 20 pages. What does encourage one is the agreement of experts that so much that is fully practical can now be undertaken, and the fact that WHO will aid international collaboration in this basic subject.

ELIOT SLATER

Mongolism. Ciba Foundation Study Group No. 25. Edited by G. E. W. Wolstenholme and Ruth Porter. (Pp. ix + 99; illustrated + tables. 18s.) London: J. and A. Churchill. 1967.

This booklet represents the outcome of the Ciba Foundation Study Group on Mongolism, held in May 1966, and clearly indicates the value of these organized small conferences. There has been extensive literature published, particularly in recent years, on the subject of mongolism (Down's syndrome), excellently brought together in the publication by Penrose and Smith ('Down's Anomaly' 1966). This present publication is in no way an attempt to do the same but to present the individual papers read at the Study Group and also the spontaneous discussion which the papers aroused. It indicates the kind of research which is still very actively pursued in this field and is therefore of wide interest.

The preface by Lord Brain gives a most descriptive historical introduction, throwing light on the character and enthusiasm of John Langdon Haydon Down, whose classical description of the 'mongolian type of idiot' was published in 1866. The papers and discussions include a survey of the frequency of occurrence and related data on Down's syndrome in Japan (E. Matsunaga), an analysis of consanguineous marriages and mongolism in Sweden (H. Forssman and H. O. Åkesson), dermal patterns on finger-tips and toes (G. F. Smith), a suggested use of dermatoglyphic analysis (L. S. Penrose), DNA synthesis in mongol cells (U. Mittwoch), DNA patterns on 21/22 chromosomes in mosaic mongols (M. Fraccaro *et al.*), and abnormal granulocyte kinetics (W. J. Mellman, S. O. Raab, and F. A. Oski).

The data presented in Matsunaga's paper show