An Epidemiological Survey of Skin Diseases, Tattooing, and Rheumatic Diseases as Exemplified Initially by the Prevalence of Psoriasis and Tattooing. By Lars Hellgren. (Pp. 108; 1 figure + tables. Sw. kr. 32.) Stockholm: Almqvist and Wiksells. 1967.

Psoriasis. The Prevalence in Sex, Age and Occupational Groups in Total Populations in Sweden. Morphology, Inheritance and Association with Other Skin and Rheumatic Diseases. By Lars Hellgren. (Pp. 106; 23 tables. Sw. kr. 32.) Stockholm: Almqvist and Wiksells. 1967.

Tattooing. The Prevalence of Tattooed Persons in Total Populations. Association with Skin and Rheumatic Diseases. By Lars Hellgren. (Pp. 72; 2 figures + tables. Sw. kr. 24.) Stockholm: Almqvist and Wiksells. 1967.

The author undertook a large statistical, epidemiological, and clinical survey of a population of about 40,000 in Sweden between January 1961 and May 1963. This investigation was made possible by virtue of his connexion with the Swedish Mass *X*-ray Service. The geographical area involved measured about 1500 kilometres from north to south and about 150 to 650 kilometers from east to west. He gives details of his statistical methods and full details of punching, storing, calculation, and sorting for use on the Datasaab D.21 Computer. In the first monograph he illustrates very clearly how much a programme can be used, giving as an example xanthelasma palpebrarum. His main object was to carry out an epidemiological study on skin and rheumatic disease in total populations in Sweden in subjects over the age of 7 years. In addition to diseases of the skin he included tattooing. His particular interests were: (1) geographical studies to determine the incidence of these diseases in different areas; (2) analyses of climatic, professional, social, economic, and other factors in relation to the origin and development of the diseases; and (3) family and genetic studies. Incidences of many skin diseases are given, for he has a long and comprehensive list. For the commoner disorders this is a valuable contribution in itself as a work of reference.

The prevalence of tattooing in this population and its association with skin and rheumatic diseases are discussed in the second monograph. There are two interesting chapters on the history and geographical distribution of tattooing, and the material methods used, and the information is clearly set out. Tattooing was more commonly seen in the more densely crowded urban areas than in rural districts. It was generally carried out between the ages of 15 and 24 years, and the incidence in males varied from 4 to 10%, and in females it was negligible. Occupations such as docker, chimney-sweep, fisherman, hairdresser, woodworker, and 'forgeworker' were the commonest.

The possibility of a mathematical association of tattooing with diseases of the skin and rheumatic disorders was investigated. Of the various diseases recorded in the survey, there was no significant difference in frequency between the tattooed and the non-tattooed groups, and this certainly covered all the more common skin disorders. Only in the case of psoriasis was the disease significantly more frequent among tattooed persons. For rheumatic diseases there was no statistical difference between the tattooed and the non-tattooed groups.

Prevalence of psoriasis in the dense populations was about 2·3% for males and 1·5% for females. Much statistical information is provided, but unfortunately none that is really helpful in deciding prognosis. These monographs are useful for reference, as are the details on the setting up of a computer trial in such circumstances.

O. L. S. Scott

Translocation in Human Chromosomes with Special Reference to Mental Retardation and Congenital Malformations. Norwegian Monographs on Medical Science. By Anton Brøgger. (Pp. 136; illustrated + tables. Norw. kr. 52.50.) Norway: Universitetsforlaget. 1967.

This monograph describes the results of chromosome studies on a relatively small series of patients with Down's syndrome, some of their relatives, and an even smaller group of patients who were selected because of multiple congenital malformations associated with mental retardation. No information is given, however, of the way in which the congenitally malformed group of subjects was selected, and this would have been invaluable in assessing the significance of the chromosome findings. The findings on Down's syndrome subjects basically confirm those of other authors.

There is a brief section on the general subject of chromosome aberrations and included in this is a section on nomenclature which introduces an entirely new system using terms 'simplex', 'duplex', and 'triplex' to indicate the presence of chromosome material in single, double, and triple doses. This is confusing and unnecessary, besides departing from normal cytogenetic usage. The complexities of this system are illustrated by the following example taken from the first paragraph of page 67 which reads: 'The children are then triplex-D/17, or more precisely triplex short arm D + triplex maximally 33·3 per cent long arm D + triplex maximally 50 per cent long arm 17.' The author also finds it necessary to introduce a new numerical system to describe gametes produced by translocation heterozygotes. This is indicated in Fig. 3 and 32 only, and thereafter in the text the gametic types are referred to by number, so that on each occasion a particular gamete is referred to, the figure has to be checked to see which chromosome constitution is meant. This is both irritating and confusing. The book is full of statements, of which the following are but a selection:

Page 86: 'Cases of subtriplex-G_2 + subduplex-G_1 have not been found. This leads to the assumption that the centromere of the translocation chromosome is derived from a G_2 chromosome since the alternate and adjacent-1 configurations presumably are most frequent.'

Page 89: 'In case 11 535 the mother had several abortions before the birth of the patient. This may indicate that she has mosaicism in her gonadal tissue involving cells with a G_1/G_1 or G_1/G_2 translocation.'

Page 91: 'The patient 812 is sex chromatin positive and her sexual development is normal. The C chromosome involved in the translocation is therefore presumably an autosome and not an X chromosome.'

Page 98: 'It appears that acrocentric chromosomes with enlarged short arms are not always associated with disease, though most cases have been ascertained through patients with congenital disorders. Most evidence favours the conception that acrocentric chromosomes with enlarged short arm are not normal variants occurring sporadically in the human population, but represent chromosomal aberrrations, which may lead to pathological conditions.'

Each of these statements is basically incorrect and indicates that the author has very little idea concerning the theoretical background of his subject, or alternatively has chosen to ignore much of the cytogenetic literature of the past six years.

In Table 16, the author lists types of translocation found in man according to the chromosome or chromosome groups involved. It is, however, confusing that the author has felt it necessary to list each translocation twice, so that for instance a 1/C translocation appears both under chromosome No. 1 and under the C group entry.

As a book reporting some additional data on chromosome studies in Down's syndrome and congenital malformation it has some value; as a theoretical dissertation on chromosome translocation in man it has little. One always hesitates before writing a review of this nature on a monograph which is presumably published to conform to the Scandinavian doctoral regulations. In the present case there is little to commend this volume and it is a pity that these regulations do not allow such theses to be decently buried in the archives of a University library rather than thrown to the wolves on the open market. To conclude, the price is high, standards low, the publication as a book unwarranted.

JOHN HAMERTON

Biochemical Genetics, Vol. 1, No. 1. June 1967. (Pp. 71; illustrated + tables. Annual subscription $18.00.) Plenum Press. New York. 1967.

Biochemical Genetics is a new journal. Published by Plenum Press, New York, and printed in England. The Editor is Charles R. Shaw of Northville, Michigan, and his Associated Editors are one each from Canada, the United States, and Scotland.

The first number consists of 71 pages and contains 6 articles and 2 reports on methods. One of the latter deals with a tetrazolium technique for distinguishing between cultured human fibroblasts with normal levels of glucose-6-phosphate dehydrogenase and those which are enzyme deficient. The other technical article describes a method for estimating the number of amino-acid coding positions in a gene and using cytochrome c as a model.

The articles reflect the wide interests of biochemical genetics. One is concerned with the genetic control of alcohol dehydrogenase isoenzymes in maize, another with an amino acid difference between the human transferrins C and D_{Chi}. D_{Chi} is a transferrin which was discovered in mongoloid races and has only so far been described in such people. Other articles describe studies to examine the quantitative expression of erythrocyte glucose-6-phosphate dehydrogenase deficiency in the Negro, of an enzyme variability in species of the genus drosophila, and genetic and population studies of quantitative levels of adenosine triphosphate in human erythrocytes. There is also an article on the uridylyl-phosphate glucose and the α-D-Galactose-1-phosphate uridylyltransferase activity in cultured human fibroblasts using as a method of assay the incorporation of ^{14}C from $^{14}C_1$-galactose.

The Advisory Board of the new Journal carries famous international names and there should be every hope for this journal to make a significant contribution to genetics in general and to biochemical genetics in particular.

H. LEHMANN