In human biology, one cannot dissociate the scientific findings from ethical and humanitarian considerations. The question must be asked: ‘What does all this mean to the Indian?’ It would be a dubious benefit to lower the infantile mortality without parallel economic measures to ensure extra food; and in this context, we must be sure that an impaired intellectual performance, on which a prejudice flourishes, is not evidence of early nutritional deficiency; if it is, the scientist has the special moral obligation to translate his findings into action. The human biologist realizes only too well that when the eco-system is disrupted we know little about the long range results of this disruption. Thus studies in depth within or without the International Biological Programme will contribute to man’s well-being, and also to our scientific perspective, alerting us to necessary adjustments from time to time.

The publication has a valuable bibliography of 271 references, and also a tabulation of phenotype and genotype frequencies for 11 different genetic systems that have been studied. The American Indian presents an unusual challenge to those interested in genetic taxonomy, but racial admixture may vitiate attempts to apply the knowledge, and for this reason each sample has been classified, as far as permits, to take into account these degrees of admixture.

H. E. LEWIS


The speed and extent of progress in human genetics in the past two decades has made it increasingly difficult to keep track of new developments. A regular scrutiny of the relevant journals (and who can still do that?) can at best supply only unconnected parcels of information, and even an undertaking like the ‘Handbuch der Humangenetik’ soon becomes out of date. Under these circumstances, a new series of short monographs has been started under the general editorship of P. E. Becker, W. Lenz, F. Vogel, and G. G. Wendt, and the book under review on radiation genetics is the first to be published. It is brief and authoritative and includes an extensive bibliography. Unfortunately, considering its size, it is rather expensive. All the same, if this series continues the way it has started, some of our colleagues may find it worth their while to brush up their German.

H. GRÜNEBERG


A small informal symposium on Molecular Genetics was organized on behalf of the Society of German Naturalists and Doctors, in Berlin, in October 1967. There were about 40 participants from Europe and the United States. This volume contains an account, still up to date in 1969, of specially important aspects such as the structure and function of ribosomes and complementation, the codons in protein synthesis, the reactivation, modification, and mutation of DNA. There are contributions on the regulation of biosynthesis, the inducer-repressor interactions, and the regulation and transcription in amino acid starved bacteria, etc. There is also a section on viruses, in which there are contributions on the primary structure of a certain coat protein, on the control mechanism of infection, and on the gene functions of the influenza virus, to give only some examples.

This book appeals in the first place to specialists who can look up points of particular interest to them; for example, there is a contribution on genetic control of nonsense triplets, another on the peptides arising from cyanogen bromide cleavage in ribosomal proteins, and one on the haemoglobins of different chironomid larvae: these midges possess well-developed giant chromosomes in the cells of the salivary glands, and the question may be answered whether the haemoglobin genes are randomly distributed over the chromosomes or are localized in the same region. It is noted that all of the species specific haemoglobins were found to be correlated with the left arm of the III chromosome in the chromosomal region 1–11C.

This must have been a most stimulating conference, and it is noted in the introduction that even this report is not all comprehensive; because of the informal nature of the discussions, only a part of them could be included in the book.

H. LEHMANN

Shorter Notice

Genetics for O Level. By J. J. Head and N. R. Dennis. (Pp. x + 137; 80 figures. 10s.) Edinburgh: Oliver and Boyd. 1968.

Two of the six chapters of this little book deal with histological details, mainly concerning chromosomes. These lend themselves readily to practical exercises, but the authors also introduce laboratory work very successfully in the remaining chapters which are devoted to theoretical discussions: variation, mendelian laws, mutation, and population genetics. The illustrations are well chosen and the text clear and concise. Altogether this is an excellent introduction to present-day genetics as a laboratory subject in schools.