----- Book reviews --

Passarge, E. (ed.): Genetische Herkunft und Zukunft des Menschen. Weinheim, Deerfield, Basel: Verlag Chemie 1984. 193 pp., 52 figs., 11 tabs. Soft bound DM 42,-.

In this collection of papers based on lectures held in 1981/82 for students from all faculties of the University of Essen (Germany) the level of presentation varies very much. Some articles are very readable and informative, others too sophisticated and detailed as overviews for outsiders. Chapter (6) on Hemoglobin certainly belongs to the last category with its elaboration of oxygen affinity, the Bohr effect and 2–3 DPG. Some overlap between lectures, such as the mentioning of hemoglobin variants, is unavoidable in such a programme, but it is certainly boring when found in one and the same article (compare page 106 and 109). Nevertheless, the careful study of this book will indeed give the reader some insights on man's biological origin and future.

In chapter 1 an introduction is given to the evolution theory, but no mention is made of neo-darwinism nor of punctuation. On p. 99 the evolutionary importance of gene regulation is implicated and one whishes that punctuation was discussed in relation to the small differences in exons between hominids and man. In chapters 2 (Genetics and Evolution) and 3 (Mutations), on pages 21 and 41 respectively, the absence of the "pangen" and mutation concepts (1889 and 1901) from Hugo de Vries, as a support for Darwin's theories, is an omission. Chapter 4 (Chromosomal Evolution of Man) is interesting but many a layman will possibly think 'so what?". Sperling's Anatomy of the Gene (chapter 5) is the core of an introduction into molecular genetics and culminates in the already mentioned item of p. 99. Some information on the chemical aspects of mutagenicity is a rather special topic (chapter 7) for a general public. The anthropological discussion of social behaviour and social evolution (chapter 8) really is challenging for everybody. The emphasis in chapter 9

on genetic individuality in relation to social equality has to be connected with the conclusion in chapter 8, that the evolution in the vertebrate line, man inclusive, is a tendency for individualization in a context of social behaviour. Teachers and social workers are recommended to read this book.

S.J. Geerts, Nijmegen

Hamer, D.H.; Rosenberg, M.J. (eds.): Gene Expression. UCLA Symposia on Molecular and Cellular Biology, New Series, Vol. 8. New York: Alan R. Liss 1983. xxiii+588 pp., several figs. and tabs. Hard bound £ 58,-.

The volume consists of various papers on all aspects of gene expression which were presented at the 1983 Cetus-UCLA-Symposium held in Park City, Utah (USA). The papers deal with gene structure and function in prokaryotic, lower, and higher eukaryotic organisms and provide an opportunity of obtaining an overview of the actual research work done in this field.

In more than 50 papers a number of problems of gene expression are treated, most of them from the field of regulatory mechanisms controlling gene expression in different systems. The main topics are: promoters and enhancers, transcription, regulation during development, termination and post-transcriptional controls, structure of DNA and genes, gene transfer, DNA modifications and gene expression.

Although the papers are reproduced from the original manuscripts, the printing of both text and photos is of a good quality. The wide variety of organisms covered in this book makes it well suited to prevent the consequences of overspecialization of geneticists. If less expensive, it could also be used as a reader for classwork with advanced students.

R. Blaich, Siebeldingen