

REVIEWS

HORMONE CHEMISTRY. W. R. Butt. John Wiley and Sons, Inc., 1977. 2nd Edition. Pp. 272. Price: £16.00.

If you need to find out something about vertebrate hormones this is the book with which to start. It contains the basic facts about the structure, metabolism and functions of oestrogens, androgens, progestagens, corticosteroids, thyroid hormones, catecholamines and prostaglandins. The book discusses the best ways of identifying and measuring these hormones in a variety of biological fluids. Each section includes an account of the synthetic analogues of the natural hormones, and describes their uses and assay.

The book is well produced and is illustrated with many clear diagrams. Finding further information about any hormone or assay method is made very easy by the carefully selected bibliographies given at the end of each section. These include references to over 1400 original papers and reviews. I hope that my copy will not be worn to shreds through constant use before the third edition is published.

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GENETIC ENGINEERING: THREAT OR PROMISE? Laurence Karp. Nelson-Hall Inc., Chicago, 1976. Pp. 235. Price: \$15.00.

The most unfortunate thing about this book is its title, which has recently (no doubt since the book's conception) become associated with techniques of *in vitro* genetic recombination. Dr Karp's one reference to the latter is untypically confused, since he leads the reader to suppose that the manifesto organised by Paul Berg had to do with the *in vivo* phenomena of transformation and transduction. But the book is primarily about the more controversial medical applications of genetics and reproductive biology (often referring to the latter class as "reproductive engineering"); it is addressed to the non-geneticist and lay public, and it does a good job.

The author first outlines the basic principles of genetics, starting with the gene as a length of DNA (but avoiding mention of bases) and a protein as its usual product, and continuing to describe chromosomes, mitosis and meiosis (without mentioning crossing-over); then come genetic diseases, under chromosomal abnormalities, single gene defects, and multifactorial conditions. There follow chapters on genetic counselling, eugenics, screening for carriers or affected individuals, therapy (*e.g.* dietary manipulation in phenylketonuria), and prenatal diagnosis. The second half of the book is devoted to "reproductive engineering": artificial insemination, sex determination, ectogenesis (defined as "techniques which permit an egg or an embryo to complete some or all of its parental development outside, rather than within, the female reproductive tract"), parthenogenesis, cloning, and the synthesis of life from unliving matter. The last three headings may suggest that Dr Karp is willing to indulge science fiction; but his concern is to distinguish what can reasonably be said in these