

INTERPRETIVE ENZYMOLOGY By J. G. Batsakis and J. G. Briere. (Pp. xv + 291; 96 figures. \$12.50.) Springfield, Illinois: Charles C. Thomas. 1967. There are already a number of good books and reviews available on this popular subject. I had hoped that this book would be good, but was disappointed.

The authors have made a thorough survey of the use of enzyme assays in diagnosis to which they have added their own experiences. After a short general introduction, and a sensible chapter on the significance of isoenzyme assay, the rest of the book is arranged by organs. Thus the book is more easily helpful to the clinician who wishes to find what alterations of enzyme values are found in a given condition, than to the biochemist who is more likely to be interested in the factors altering the distribution of a given enzyme. As well as the usual systems, diseases of erythrocytes are included but not diseases of leucocytes or platelets; nor is the growing field of enzyme assay in biopsy samples considered. There are no major omissions on the changes of enzyme X in disease Y, few errors, and reasonable differences of opinion. There is a great deal of information which is well laid out, though the index could be improved. The reference list is comprehensive, though last page numbers would help readers who are concerned whether a reference might be a short description or a long review. I found this book useful but it fails at the highest standards on several grounds. It reads too much like a compilation, without sufficient basic considerations concerning the relation between cellular chemical pathology and the derivation of the compiled information by measuring changes in the extracellular fluid. It is too long, both due to much repetition and to the inclusion of irrelevant matter such as muscle biopsy photomicrographs. Yet although the book is on interpretive enzymology it stills needs (and there is inconsistent omission) additional important background biochemistry, such as the nature of the transaminase reaction and its relation to methodology and therefore to results. The I.U.B. nomenclature *does* exist and has been accepted, and the authors should use at least its trivial nomenclature (such as creatine kinase and *not* creatine phosphokinase). Their abbreviations are inconsistent: *eg* LDH but ICD; SGOT but never SOCT).

The book is well produced but expensive, and the foreword is non-contributory.

D. N. BARON

PROGRESS IN ALLERGY Volume XI. Edited by P. Kallos and B. H. Waksman. (Pp. xx + 184; 40 figures; 21 tables. sFr./DM. 41.00.) Basel and New York: S. Karger AG. 1967.

The annual volumes of 'Progress in Allergy' provide valuable summaries of both clinically orientated and fundamental work in immunology. This year is no exception. In the preface Kallos gives a brief and interesting survey of recent advances in immunology and emphasizes the extent to which immunological phenomena can now be explained in molecular terms.

The first article is by Charles Cochrane of the Scripps Clinic and Research Foundation, La Jolla, California. It describes the mechanism whereby the combination of

antigen with complement-fixing antibody leads to the production of factors chemotactic for polymorphs. The polymorphs then cause local tissue damage especially to blood vessel. This work is relevant to nephritis and the nephrotic syndrome caused by circulation antigen antibody complexes and probably to certain forms of arteritis in humans.

The second article is by Epstein and deals with granulomatous hypersensitivity. He maintains that two sorts of reactions may be seen to particulate material which can be distinguished histologically. One form exemplified by silicosis is due to a non-immunological reaction, while the other form, exemplified by zirconium and beryllium granuloma and sarcoidosis, is due to an immune response. The immunological mechanism involved is still unclear.

Mackaness discussed the mechanism of cellular immunity, including delayed hypersensitivity skin reactions, graft rejection, and the killing of microorganisms. He suggests that these reactions are due to antibody carried by cells and suggests that these cells (*eg*, lymphocytes) may have made the antibody themselves or may, like macrophages, have acquired the antibody from lymphocytes. He also suggests that the antibody responsible may be a macroglobulin.

The last article by Kelus and Gell, from the Department of Experimental Pathology, Birmingham, describes the genetically determined allotypic differences between immunoglobulins. It is particularly interesting that antibody against an allotype can be abolished by giving antisera during the neonatal period.

This book is well produced. All the articles are of interest to workers studying the cause of human disease and to immunologists. The first two articles deserve a wider audience.

G. L. ASHERSON

QUANTITIES AND UNITS IN CLINICAL CHEMISTRY By R. Dybkaer and K. Jørgensen. Pp. x + 102. D.Kr. 60.00. Copenhagen: Munksgaard. 1967.

The slow replacement of Imperial units by metric units in British medicine and industry has one compensation, namely, that these metric units will derive from the SI (Système International) range of basic unit. The SI units for length, mass, and time are the metre, kilogram, and second; others concern temperature (degree Kelvin), electric current (ampere) and luminous intensity (candela). Often scientific workers have used the centimetre, gram, second (c.g.s.) system and are now recommended to change to the new system. The SI units are now the only legally accepted system in many countries and are recommended by all the international bodies concerned with the physical sciences. To the six basic units, those bodies concerned with chemistry have added the unit for the amount of a substance (mole). A variety of supplementary units are defined in terms of these basic units and deal with such concepts as energy, volume, density, pressure etc. It is recommended that multiples or fractions of the basic units shall be indicated by a series of prefixes, of which adjacent members of the series indicate changes of 1000 fold. Thus, mm,  $\mu\text{m}$ , nm, designate  $10^{-3}$ ,  $10^{-6}$  and  $10^{-9}$  metres, but cm is not recommended