

Book reviews

Biochemistry and the Central Nervous System 4th ed. By Henry McIlwain and H. S. Bachelard. (Pp. vii + 616; illustrated. £6.00.) Edinburgh and London: Churchill Livingstone. 1966. Longman Group Ltd. 1971.

This splendid volume written by two British experts is a mine of the most up-to-date knowledge concerning neurochemistry. Many of the chapters relate to the basic normal metabolism of the brain or of its component chemical substances—sugars, nucleic acids, proteins, amino acids, lipids—to name a few; only to a very small extent do pathological changes concern the authors. Each paragraph is packed with information, making it a little difficult to read with ease, yet it can be said that if the reader persists he will find everything of value to have been presented. There are many thousands of references, which unlike so many recent books, include those from the writings of workers in countries other than that of the authors. This volume can be most confidently recommended.

J. N. CUMINGS

Comparative Virology Edited by Karl Maramorosch and Edouard Kurstak. (Pp. xv + 584; illustrated. \$27.50.) New York: Academic Press Inc. 1971.

Microbes were simple in Edwardian days. Men 'saw them clearly and they saw them whole'. Filterable agents were cropping up in plant pathology, veterinary practice, and medical epidemiology. Then other streams began to converge—bacterial genetics, macromolecular chemistry, and molecular biology. Nowadays there is a re-synthesis going on and this book springs from the first International Conference on Comparative Virology held in September 1969, when a genuine attempt was made to relate viruses of all kinds to each other into an integrated whole. The editors are to be congratulated on having brought together some excellent reviews, but they might have borrowed Rudyard Kipling's title 'Debits and credits'. The individual reviews are all good. They range over adenoviruses, bacteriophages, 'bullet-shaped viruses', and oncogenic viruses, to mention only a few. Some, eg, the one on the proteinless, or almost protein-

less, potato spindle tuber virus, by Diener, are fascinating, and of potential interest to similar agents which may exist in man. On the debit side, there is the inevitable criticism that this is not a treatise and not a comprehensive and integrated handling of the subject. This does not detract greatly from its value, but it does invite the question, 'Quis comparabit ipsos comparatores'.

A. P. WATERSON

Biological Tissue in Heart Valve Replacement By M. I. Ionescu, D. N. Ross, and G. H. Wooler. (Pp. xxix + 925; illustrated. £22.00.) London: The Butterworth Group. 1972.

As Dr Kirklin, who writes the foreword to this volume, states: 'This monumental collection of material concerned with biological tissue in heart valve replacement serves the important purpose of summarizing the present status of this endeavour.' Monumental the volume certainly is: monumental in its 925 pages and in the thoroughness with which the subject is covered, but perhaps most monumental of all in its price (for it is not a large volume) which is no less than £22.00.

The chapters, by an international array of authors, deal with all the clinical, surgical, experimental, immunological, and pathological aspects of valve replacement. The sections which will interest pathologists most are those by R. E. B. Hudson on the pathology of heart valve grafting and by T. W. Sutherland on microscopic changes in aortic valve heterografts.

Some 60 authors in all contribute results of their personal studies and it is not surprising that some duplication of coverage develops. Nevertheless the volume is a mine of information and will prove invaluable to those whose work brings them into this field.

THEO. CRAWFORD

Human Anti-Human Gamma-Globulins: Their Specificity and Function Edited by R. Grubb and G. Samuelsson. (Pp. xii + 227; illustrated. £6.00.) Oxford: Pergamon Press. 1971.

I cannot see any scientific reason why this book should have seen the light of day. It has appeared over two years after the symposium at which the 27 papers were given, and I am aware that the 'meat' of 26 of these papers has appeared elsewhere in the scientific literature. Its only virtue could be that it has collected these papers

in one volume, but this surely could have been done with one page of bibliography for a much cheaper sum than the price of £6.

The editing is bad for allowing such delay in publication; it also permits several misconceptions to appear, eg (page 3) L-chains are used to mean all kinds of light chains; (page 79) rheumatoid factor is described as a reagin, etc, and allows mistitling in that five of the papers are confined to animal work and animal reagents are used in many of the others.

What was perhaps new at the time of the symposium was the use of insolubilized aggregated IgG (Roitt and Torrigiani) to unmask IgG and IgA rheumatoid factors in otherwise seronegative patients; the beautiful demonstration of immune complexes in rheumatoid joints (Bonomo, Tursi, Trizio) together with the conversion of C3 to C3_i (Hedberg, Lundh, Laurell) antisera against allotypes of IgA (Fudenberg, Vyas; Kunkel, Smith, Natvig) and careful studies of the composition of mixed cryoglobulins (Wager, Rasanen, Sihvonen).

Unfortunately the elegant use by Waaler of IgG-coated red cells to localize rheumatoid factors in tissues does not allow for the fact that receptors for activated Fc occur also on phagocytes and lymphocytes.

The style of writing is for experts in the field who will mostly have already read the relevant scientific literature. I therefore do not think many of us would want to buy the book, especially at this price of £6.00, which compares unfavourably with the price of other published symposia.

J. R. HOBBS