

Book reviews

entific or medical, coming new to a clinical biochemistry laboratory.

New or rewritten sections include one on normal or reference values, on the handling of infected samples, and on protein measurements including "rocket electrophoresis". There are many new items amongst the other analytical methods described. Nevertheless it is a pity that the authors were unable to mention, if briefly alternative methods for measuring alkaline phosphatase, amylase, ethanol, and immunoglobulins. The complete absence of any reference to immunoassays is missed, particularly as methods using non-radioactive labels are becoming readily available.

The change to SI units has been made; a nice touch in Table 1.2 is the expression in mmol of the approximate 24 hour output of water in the urine.

MG RINSLER

Morphometry. WA Aherne and MS Durnill. (Pp 205; illustrated; £19.95.) Edward Arnold. 1982.

The aim of this book is to describe morphometric methods as they are applicable to light and electron microscopical examination of tissues, although one chapter in fact deals with the estimation of the volume of whole organs. The early chapters give a good introduction to measurement and the concepts of probability linked to geometry. They deal in fairly simple terms with the use of point counting methods for area measurements and linear intercept methods for lengths and surface areas. Such topics as preparation of tissues and care in sampling procedures are also well covered. Later chapters deal with aspects requiring a more mathematical approach in which it was possible to lose one's way. A chapter entitled "Historical Retrospect" traces the development of morphometry.

Specific questions are addressed with respect to morphometry of the nervous system, muscle, blood vessels, and testis. It is to be regretted, however, that a major area of morphometry in histopathological practice, namely, that of bone, is totally neglected. Only one reference from the bone histomorphometry literature is included in the whole book, and this is with respect to a general point about the effects of varying magnification on results obtained when surface area measurements are being made.

An appendix on statistical methods promised to be helpful on analysing such

aspects as the size of sample to be measured, but it was not easy for the non-mathematician. A further appendix dealt briefly with automated and semi-automated methods of measurement and one cannot help feel that these aspects should have been treated more fully in a book on morphometry written in the 1980s.

Overall, this book provides a good introduction to basic methods of measurement in its early sections and there are worked examples of methods which should prove of benefit to those who are not mathematically minded. Later parts deal with more specialist aspects, but do provide information on how to evaluate complex structures and use correction factors. The main thing in favour of the book is that it provides information on a large number of methods and formulae in one place, and in this respect it should provide a useful source of reference for those who wish to apply measurement to histology.

PA REVELL

Clinical Biochemistry. Contemporary Theories and Techniques. Vol 1. Ed Herbert E Spiegel. (Pp 232; illustrated; £19.60 \$29.50.) Academic Press Inc. (London) Ltd 1982.

This small book contains a number of chapters covering a wide variety of topics of contemporary interest to clinical biochemists including laboratory management, laboratory safety, kit selection and environmental monitoring as seen through North American eyes. There are also chapters on specific proteins and the measurement of blood pH and gasses. Much of the information will be familiar to readers but the presentation of the authors will give fresh insights particularly to those who are working for higher qualifications in this field. There is one topic which is more clinically orientated namely autoimmune disease as well as a section on Mathematics in Clinical Chemistry. Some of the topics in this last chapter are perhaps less suitable for a monograph of this kind since they are amply dealt with in standard textbooks. A future edition might pay more attention to the more complex mathematical treatment of spectrophotometric analyses, Bayesian analysis, and the use of discriminant functions.

Finally, is it really necessary for a book of this nature to cost nearly £20?

MG RINSLER

Proteins of the Brain and CSF in Health and Disease. Elizabeth R Einstein. (Pp 308; illustrated; \$37.50.) Charles C Thomas. 1982.

This volume presents the encyclopaedic view of perhaps the grandest Duchess of Neurochemistry. Her presence at international meetings was always felt and it is fortunate for us that she has distilled many years experience into a few hundred pages. The references are scholarly in that they include many cogent reports from Symposia not otherwise indexed. Much of the literature is European and all too often this is sadly lacking from certain writings emanating from North America. Her own personal research experience is amply sprinkled throughout the text. As was stated in the Introduction by Prof H Link, many otherwise excellent Departments of Neurology have serious deficiencies in their laboratory facilities for analysing CSF. Perhaps the local pathologist would improve the overall position by recommending this book to clinical colleagues for their combined edification.

EJ THOMPSON

Receptors, Antibodies and Disease. Ciba Foundation Symposium no 90. (Pp 312; illustrated; £22.50/\$35.) Pitman Books. 1982.

Ciba Foundation Symposia have a deservedly high reputation of bringing together, in a small intimate atmosphere, collections of scientists from often widely disparate disciplines, to review and discuss growing points in biology. Some symposia have become minor classics from which major new developments, sometimes leading to Nobel Prizes, have emerged.

The present symposium has conjoined clinicians and biologists with membrane-bound immunologists to discuss physiological and pathological conditions implicating receptor disorders. There are valuable contributions on insulin, thyrotrophin, acetyl choline, β adrenergic, prolactin, and growth hormone receptors. The presence of circulating β adrenergic receptor antibodies in atopic individuals, as expected, provoked considerable discussion. The contributions are a reasonably accurate statement of the present state of the art but the immunological contributions were rather muddled and the "... assertion that we will learn nothing new using monoclonal antibodies", may reflect the famous Ciba hospitality, a *cri de coeur* or a penetrating insight!