blood group serology, and clinical chemistry are covered in 276 further pages indicates the brevity with which each subject is dealt. Nevertheless the concise presentation of such a large amount of generally accurate information in one book must make it a very attractive volume to those working for the Ordinary National Certificate in medical laboratory sciences. The book is beautifully produced with excellent line drawings and clear photographs of apparatus.

PAMELA M. WATERWORTH

Rational Diagnosis and Treatment. By H. R. Wulff. (Pp. x + 182; illustrated; £3.75.) Oxford: Blackwell. 1976.

This book is written so that those who enjoy caring for patients may increase their enjoyment in exercising clinical skill and so become more effective. The text describes the foundation of clinical decisions, the recording of symptoms and signs, the quantitative handling of medical data, the concept of disease, the application of mathematics to diagnosis, the present therapeutic legacy, and controlled therapeutic trials; there is an appendix on statistics.

In a relatively short text the author covers a wide range of issues and presents his arguments clearly; a number of mathematical concepts, though presented in a relatively simple way, are likely to be heavy going for the general reader. The section on quality of data collection is interesting but does not cover in an exhaustive fashion all the literature on sources of error. The author seems rather keen on non-parametric statistical methods, he is disparaging about the application of 'computer diagnosis' and ignores some working applications, and is also rather critical of the value of clinico-pathological conferences.

The book is short and easily read and I would recommend it for an evening's relaxation (or stimulation) rather than for use as a regular source of reference.

M. R. ALDERSON

HBs Antigen Subtypes. Edited by A. M. Couroucé, P. V. Holland, J. Y. Muller, and J. P. Soulier. (Pp. viii + 158; illustrated; SFr/DM 75.) Basel: S. Karger. 1976.

The first half of this book consists of reviews of different aspects of antigenic

variation in HBsAg. Much of the material is difficult to find elsewhere and will be of great use to everyone interested in hepatitis. The remaining 70 pages give the results of comparative tests performed during the workshop with sera provided by the participants. Elaborate statistical techniques were needed to assign the antigen into 10 provisional groups, and there were many anomalous specimens. Unfortunately, there is no discussion of the fundamental question of the highest number of antigen subdeterminants which could be coded by a virus as small as hepatitis B. It is clear that the technical problems are far from solved, and the publication of these results should stimulate further international collaboration in this field.

YVONNE COSSART

Electronic Biology and Cancer: a New Theory of Cancer. By A. Szent-Györgyi. (Pp. 128; illustrated; SFr 48.) New York and Basel: Marcel Dekker. 1976.

Old Nobel prizewinners seldom fade away. Pauling, who previously worked on other chemicals, is now the champion of ascorbic acid, whereas Szent-Györgyi, who formerly did distinguished work on ascorbic acid, has now embraced cancer research.

The theory of cancer presented in this booklet is a slightly updated version of Warburg's theory. Early forms of life are thought to have developed under reducing conditions, what Szent-Györgyi terms the α -state. Later oxygen and oxidative metabolism was superimposed to give the β -state. The cancer cell is supposed to be stuck in the β -state or somewhere between the two basic states, α and β . This theory disregards much work showing that minimum deviation tumours have no demonstrable impairment of oxidative metabolism. The growth-promoting and growth-inhibiting tissue extracts, 'promine' and 'retine', are not taken seriously outside Szent-Györgyi's laboratory.

Szent-Györgyi reasserts his belief in charge-transfer as important in carcinogenesis, whereas the real advances in understanding have come from knowledge of the subsequent changes in high-energy bands that convert polybenzenoid hydrocarbons into agents able to react with important macromolecules.

The mass of work on regulatory systems carried out during the past decade is ignored by Szent-Györgyi. Although the

old master makes some thought-provoking statements, there is no escaping the conclusion that he has been sadly overtaken by events.

A. C. ALLISON

Pathology of the Fetus and the Infant, 3rd edition. By Edith L. Potter and John M. Craig. (Pp. xiv + 697; illustrated; £39.00.) London: Lloyd Luke (Medical Books). 1976.

For a quarter of a century Edith Potter's book on the *Pathology of the Fetus and Newborn* has been the most popular English book on the subject, largely due to its excellent photographs, its clear simple texts, and absence of jargon. It progressively became out of date and a new edition in 1961 was disappointing. It now reappears with the co-authorship of John Craig, of the Children's Hospital in Boston, and has regained its original vigour.

This was always the book for the clinician rather than the pathologist, and it remains so. It gives just that amount of knowledge that the paediatrician requires without the 'ifs' and 'buts' and deserves the wide use that it will achieve. It is an American book with a large bias towards American literature and appears to be directed towards the American paediatrician who is a primary care family practitioner.

In some ways the book is old-fashioned, being one of almost pure anatomical pathology, and has little of the more dynamic and clinically orientated approach that exists in paediatric pathology in this country.

This book is well written and beautifully illustrated. Such books are rare, and it rightly deserves to regain the popularity of the 1952 edition. I will hand it to students, housemen, and paediatricians to inform them and stimulate their interest in the pathology of the fetus and newborn but will not ask my registrars to use it as a 'textbook' in isolation.

J. L. EMERY

The Epidemiology of Human Mycotic Diseases. Edited by Yousef Al-Doory. (Pp. xv + 346; illustrated; \$26.50.) Springfield, Illinois: Charles C. Thomas. 1975.

During the last 30 years there has been an increasing interest in the mycological

disorders of man. This has been brought about, in part, by modern therapy which paves the way for opportunistic infections which are often fungal, and also by the description of new mycotic infections, such as subcutaneous phycromycosis.

Each chapter in this book considers the epidemiology of one group of mycotic infections, and there is information on their world distribution, ecological factors for fungal growth and spread, host-parasitic relationships, and some clinical and diagnostic features. The clinical features of *Candida* infections, a common complication of heart surgery and organ transplantation, are described in more detail. The bibliography is extensive and the book will be a valuable reference source for laboratory workers, physicians, and epidemiologists who encounter mycological problems.

M. S. R. HUTT

Studies of the Hypothalamus and the Pituitary Gland. With Special Reference to the Effects of Transection of the Pituitary Stalk. By Peter M. Daniel and Marjorie M. L. Pritchard. (Pp. 216; 104 figures; £3.00.) Oxford: Alden Press. 1975. (First published in 1975 as a Supplement to *Acta Endocrinologica (Copenhagen)*. Suppl 201, accompanying vol 80).

Against a background of their own research over a period of 25 years, and that of their associates, the authors spell out the progress that has been made in our knowledge of the relationship between the hypothalamus and the pituitary gland. The first chapter is wisely devoted to nomenclature.

This monograph should have wide appeal because of the well-conceived chapters on the anatomy of the hypothalamus and the pituitary gland in man and in some animals. For the specialized reader, there is a lucid summary of the more important contributions to literature concerned with lesions, naturally-occurring and experimental, which involve the pituitary stalk. Local and remote effects of its section are considered separately, and the far-reaching implications of the damage are considered from the point of view of potential therapeutic procedures. The authors draw attention to the importance of the hypophyseal portal vessels in specific segments of the neural component of the pituitary gland: two groups of these vessels are now recognized, which is of significance in regard to the secretion of hormones.

There is an extensive bibliography and a useful technical appendix. The varied and plentiful illustrations are of a high order, in keeping with the fine quality of the publication.

W. H. MCMENEMEY

Pathobiology Annual, Volume 5. 1975. Edited by Harry L. Joachim. (Pp. x + 426; illustrated; £18.50.) Hemel Hempstead: Prentice-Hall International. 1975.

This volume is a welcome indication of the catholic approach to pathology with significant blurring of the boundaries between individual disciplines. The articles, all of which are informative and most of which are clearly written and illustrated, range in subject matter from the Morphology of Coronary Artery Disease to an interesting discussion of the Sleep-Dream Cycle. W. M. Thurlbeck contributes a scholarly paper on Lung Growth and Alveolar Multiplication and brings new, if controversial, ideas to the field of disordered lung growth in human disease. There are informative articles, with much new data, on Cancer and Host Defence Mechanisms and on Mechanisms of Tissue Injury in Systemic Lupus Erythematosus. If these subjects seem rather obscure the practising clinical pathologist will find them intellectually stimulating and he can gain consolation and practical support from the sections on Haemopoietic Stem Cells by E. K. Cronkite, Cytomegalovirus Pulmonary Disease by J. E. Craighead, and The Pathology of the Liver in Haemochromatosis by L. W. Powell and J. F. R. Kerr. The chapter on the Mode of Action of Steroid Hormones and on Enzymes in Myocardial Infarction will prove of interest to all pathologists and not just to biochemists.

Dr Joachim is to be congratulated on bringing together a distinguished and varied collection of reviews, and one looks forward eagerly to the next Annual—even at this price.

M. S. DUNNILL

Biochemical Tests for Identification of Medical Bacteria. By Jean F. MacFaddin. (Pp. xii + 312; illustrated; \$12.75.) Baltimore: Williams and Wilkins. 1976.

This book contains the methods, media, and biochemical principles of 29 common biochemical tests used for medical bacteria together with illustrations of the un-

inoculated media and of positive and negative reactions. There is also a short account of multitest systems (particularly API and PathoTec), and identification schemes for the various groups of medically important bacteria are presented. This book will inevitably be compared with *Cowan and Steel's Identification of Medical Bacteria* (Cowan, S. T. (1974) 2nd ed. Cambridge University Press) with which it compares unfavourably in the range of tests covered. The present book is not sufficiently comprehensive for a bench manual as many commonly used tests are omitted, for example, starch hydrolysis and ammonium salt sugars, and a great deal of space is wasted by unnecessary descriptions of many varieties of the tests given. There are inaccuracies and omissions throughout the text; for example, taken at random it is stated on page 3 that all pseudomonads give an oxidative reaction in the O/F test, and on page 33 there is no mention of the use of 'chocolate' blood agar in tests for catalase for fastidious organisms.

The identification tables and sequential keys also compare unfavourably with the tables in Cowan and Steel, but the author is to be congratulated on the extremely useful explanations of the biochemical principles underlying each test, and the coloured illustrations may prove useful to those unfamiliar with the tests described.

S. P. LAPAGE

Notice

Platelets: a multidisciplinary approach

An international symposium on Platelets: a Multidisciplinary Approach will be held in Florence on 28-30 September 1977. The aim of this symposium is to focus attention on platelets both as a model in pharmacology, biochemistry, immunology, inflammation, and related fields and as a cell involved in physiopathological phenomena not directly connected with haemostasis and mechanisms of thrombosis.

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