the efforts of experts writing on specialist topics and bringing together into a single chapter facets of information that are only briefly mentioned in the more formal textbooks.

Six topics are covered in this first volume, of what it is proposed will be a continuing series. These vary from hypothalamic endocrine disease, and cyclic nucleotides in clinical endocrinology to the mechanisms and management of postural hypotension. The chapters are well written, and by their format emphasise the relevance and application of recent scientific developments to diagnosis and therapy. This and further volumes should provide readily available reference material for workers in particular fields of research although because of their format they will be of limited interest to many workers in the endocrinological field.

GW PENNINGTON

Haemostasis and Thrombosis. Eds AL Bloom and DP Thomas. (Pp 868; illustrated; £35.) Churchill Livingstone. 1981.

All 64 contributors of this new and comprehensive text are internationally acknowledged experts in some aspect of the haemostasis and thrombosis field. Despite the multiple and elitist authorship this compilation is not over-repetitive or encyclopaedic. Most of the contributors have struck a sensible balance between the background information on biochemical structure, function, and pathophysiology on the one hand and their clinical and diagnostic relevance on the other. An obviously strong editorial influence has succeeded in integrating these authoritative contributions into a well balanced, up-to-date, (some chapters include 1981 references) and eminently readable text which nevertheless will also be found to be an extremely valuable source of reference.

This book is not only imperative reading for candidates studying for postgraduate degrees, particularly the final MRC Path examination in haematology, but also for their teachers and examiners. It has the ingredients to become one of the best thumbed volumes on the bookshelf of every practicing haematologist. The production is pleasing and it is considered excellent value at £35.

RJL DAVIDSON

Microenvironments in Haemopoietic and Lymphoid Differentiation. Ciba Foundation Symposium 84 in honour of Professor

John Humphrey, FRS. (Pp 348; illustrated £22.50.) Pitman Books Limited. 1981.

The control of differentiation is one of those vast biological topics, hitherto largely in the domain of the embryologist, where modern research techniques have brought us to the brink of a general understanding. Surprisingly perhaps it is in the complex systems of haemopoiesis and lymphocytic differentiation that recent advances have been made. Cell culture, the identification of surface markers (with or without monoclonal antibodies), and the discovery of growth and inhibitory factors combine to make this a subject of absorbing interest not only to the haematologist and immunologist but to many others.

To read the summaries and the discussions (one-third of the book) gives a clear insight into what is and what is not known. Those who wish to know more about, say the evidence for de-differentiation, the nature of T cell regulatory factors, or the function of Langerhans cells, veiled cells, and interdigitating cells will probe more deeply. They will be richly rewarded.

HEM KAY

Paediatric Pathology. Ed CL Berry. (Pp 697; illustrated; DM 170.00; £39.) Springer-Verlag. 1981.

"Paediatric Pathology" by Professor Berry and eleven others, mostly from the London Medical Schools, is welcome as a new British contribution to texts on paediatric pathology. It includes a short chapter on examination of the fetus with 20 pages of illustrations of the external appearance of the brain and of normal histology of various organs at different stages of development followed by a section on placental and abortion pathology. Apart from a useful general review of congenital malformations and contributions on embryonic tumours, sudden infant death syndrome, and non-accidental injury, the remaining chapters are devoted to system pathology. Only skin and ophthalmic pathology are omitted.

The book is aimed at individuals with a special interest rather than a special training in paediatric pathology and there is, as the preface indicates, a conscious weighting of the emphasis in different systems. The practical detail in the sections on muscle and on inborn errors of metabolism is most helpful. On occasion the balance might be questioned; for

example two pages devoted to primary malignant tumours of the lung as against half a page to the common autosomal trisomic conditions. Some paediatric entities, such as shunt nephritis, are mentioned rather than described and others, such as pseudorheumatoid nodule, are omitted. However these are minor criticisms. The layout of the text is pleasing and the illustrations are generally of a high quality. Although it is not intended to be a reference book this is a comprehensive text which will be welcomed by all whose work touches on the paediatric age group and it deserves a place in the departmental library alongside "Kissane" and "Dehner".

AAM GIBSON

Advances in Clinical Cytology. LG Ross and DV Coleman. (Pp 335; illustrated; £25.) The Butterworth Group. 1981.

The past 25 years have seen dramatic advances in cell biology. Clinical cytology, on the other hand, has remained rather static for much of this period. Ten years ago it would have been difficult to write a book called "Advances in Clinical Cytology" because there were so few. The scene has been changing however and all pathologists would do well to peruse this excellent book.

Apart from Weinstein and Pauli with their splendid chapter on cell junctions all the authors are concerned with clinical problems. The well-reproduced pictures include many transmission and scanning electron micrographs. Miller objectively discusses the value, and price, of cervical screening. Bartels *et al* describe the present state of automated cell analysis, but to pass normal cervical smears as "negative" still requires the fantastically versatile human eye and brain.

This book will be a landmark in integrating clinical cytology with the mainstream of biology applied to medicine.

AL SPRIGGS

Recent Advances in Prenatal Diagnosis. Eds C Orlandi, P Polani and L Bovicelli. (Pp 326; illustrated; £19.75.) John Wiley & Sons. 1981.

This text is the promptly produced proceedings of a symposium arranged to review prenatal diagnosis in the Italian context and particularly its provision in that country. Thus it is not surprising that almost half of the contributors are from Italy. External experts reviewed various

fields of study (amniocentesis, ultrasound, α feto-protein, diagnosis of metabolic disorders, etc.) and these are excellent when based on great experience; for example the 1000 amniocenteses per year performed by the Rotterdam group. However they are necessarily brief and some of the data have been published in more detail elsewhere.

The volume contains interesting information on Italian disease patterns—300 homozygotes for α -thalassaemia are born per year—and will be of greatest interest to readers in that country. Others may find the reviews of value since they are collected in one volume, but from this point of view the price makes it an expensive set of reprints.

CL BERRY

Perspectives in Virology. Vol XI. Proceedings of the XI Gustav Stern Symposium on Perspectives in Virology. Ed M Pollard. (Pp 294; illustrated; no price given.) Alan R Liss Inc. 1981.

The proceedings of the XI Gustav Stern Symposium held in New York in February 1980 in honour of George Hirst, one of the pioneers of influenza virus research are recorded in this book. It is valuable as a record of what virologists were talking about nearly two years ago but much of what is included has been updated at the recent 5th International Congress of Virology which will have been attended by many of the possible purchasers.

The contributions cover most of the currently interesting topics in virology, although neither monoclonal antibodies nor the use of bacteria to produce viral antigens get a mention. They vary considerably in content from the highly complex chapters on molecular biology of adenovirus late transcription, assembly of viral glycoproteins and herpes simplex mutants to more general thoughts on virus diagnosis and chemotherapy. The former will be hard going for those not familiar with the background, and those that are will not want the latter. As might be expected this is an uneven book and is neither text-book nor journal.

It is probably not a book for more than a few individuals but virology departments and university libraries will want a copy. For the few it will provide stimulating reading until even more of the new work is published.

CR MADELEY

Advances in Hemoglobin Analysis. Progress in Clinical and Biological Research. Vol 60. Eds SM Hanash and GJ Brewer. (Pp 222; illustrated; £15.) Alan R Liss Inc. 1981.

"Advances in Hemoglobin Analysis" is a compilation of papers presented at a workshop at Ann Arbor in September 1980. It reviews the modern methodology in the field of haemoglobin analysis. Almost half of the book (the first five chapters) is devoted to high pressure liquid chromatography (HPLC) of haemoglobin, including its use in identifying variants, separation of globin chains, its application to prenatal diagnosis, the factors that affect resolution of haemoglobin mixtures, and the technique of quantifying haemoglobins S, C, A, A₂ and F in cord and adult samples.

This is an interesting and useful book, but not suitable for a novice, either in haemoglobinopathies or in chromatography. As is often the case with books compiled from workshops and symposia, this is not an easy book to read, but many fascinating details emerge if the reader is sufficiently persistent.

M BROZOVIĆ

The Function of Red Blood Cells: Erythrocyte Pathobiology. Progress in Biological Research. Vol 51. Ed Donald FH Wallach. (Pp 404; illustrated; £25.90.) Alan R Liss Inc. 1981.

The proceedings and edited discussion of an International Symposium on Erythrocyte Pathobiology held in Boston in April 1980 form the contents of this book. It consists of 17 chapters in photo-ready format including references. Five chapters are concerned primarily with the erythrocyte membrane and deal with its protein structure, transport mechanisms, and its involvement in the sickling process. Four others are also concerned with sickle-cell haemoglobin including oxygen transport, gelation, effect on intra-erythrocyte calcium, and its clinical effects. Other chapters deal with superoxide dismutases, methaemoglobin formation, unstable haemoglobins, haemolysis by oxidants, haemoglobin glycosylation, carbon monoxide poisoning, and the effects of lead and mercurials on erythrocyte membranes. The book's appeal is likely to be limited to medical and science graduates with a research interest in the above areas of erythrocyte

metabolism, for whom it will be a useful reference point in a rapidly developing field.

J STUART

Automation in Hematology. What to Measure and Why? Eds DW Ross, G Brecher and M Bessis. (Pp 338; illustrated; DM 78; £46.10 paperback.) Springer-Verlag. 1981.

This is the record of a symposium held in July, 1979 at the Institute de Pathologie Cellulaire, Bicetre, with the objective so concisely expressed in its subtitle. The discussions bring out very clearly the circularity of the process sometimes involved: advances in technology in many cases make possible the measurement of properties of blood cells for which a clinical application (if any) has yet to be discovered, so providing the means to answer questions which haematologists might not otherwise have thought to ask. It is equally clear that a heavy investment has been made in the automation of traditional procedures, notably the differential leucocyte count, the general utility of which was disputed by several distinguished participants.

The contributions are wide-ranging and provide a fascinating glimpse of the technological explosion now taking place. The book fulfils in some aspects the organisers' hope of presenting "..... a tentative look at the haematology of the year 2000."

MK ALEXANDER

Radionuclide Tracer Techniques in Haematology. CS Bowring. (Pp 140; £8.50.) Butterworths. 1981.

This attractive, slim volume is an excellent introduction into the basic physics and instrumentation of radionuclide tracer investigations used by the haematologists. The accepted and often used techniques such as the measurement of red cell and plasma volume, cell survival studies, and ferrokinetics are clearly explained. The possible errors, common technical problems, and ways of presentation of results are simply and clearly discussed. The chapters on external counting and imaging are particularly useful and new techniques are well described. The book can be used as a laboratory manual even by those not familiar with radionuclide techniques.

It is a pity that such a neatly presented book makes no mention of safety rules and regulations that are of paramount im-