The Red Cell: Fifth Ann Arbor Conference

Progress in Clinical and Biological Research: Volume 55

Edited by G.J. Brewer

Alan R. Liss; New York, 1981
xxxiii + 803 pages. £53.20

This book is the proceedings of the Fifth Ann Arbor Conference, a regular triennial meeting on the red cell, held in 1980. The format of this volume follows that of the previous proceedings. There are 44 papers, many by authors who are leading research workers in this field. By the nature of this type of publication, they represent mainly recent research findings, most of which have been published more fully elsewhere, but the book does have the advantage of bringing these findings together, and allowing more speculation and discussion.

A variety of topics are covered, ranging from normal and abnormal haemoglobin function, sickle cell disease, membrane structure, erythrocyte metabolism, malaria and blood storage. Some of the papers on sickle cells take an interestingly different approach, and I particularly enjoyed reading the work of Hebbel et al. on the interaction between sickle erythrocytes and endothelial cells. Other interesting papers are the review by Hultquist et al. on the methaemoglobin reductase system, and the papers on the red cell cytoskeleton. One of the best sections is that on malaria, an area of red cell research that is often neglected in such publications.

The book is interesting reading for those working in the red cell field. Many will be aware of much of its contents from original publications, but for others it provides a good collation of many interesting findings.

Christine Winterbourn

Human Lymphokines. The Biological Immune Response Modifiers

Edited by A. Khan and N.O. Hill

Academic Press; New York, 1982
xxi + 733 pages. £36.00, $54.00

Lymphokines are soluble antigen nonspecific molecules produced by cells of the immune system, which mediate a bewildering variety of biological effects. This book represents the proceedings of the Third International Symposium on Human Lymphokines held in Dallas, Texas in October 1981, and as such exhibits all the strengths and weaknesses of this genre. Its interest lies in its being a barometer of the state of the art. Lymphokine research has burgeoned within recent years, in particular in the field of interleukins, one of which is a peptide growth factor for T cells and is widely used for growing T cell lines in vitro. Many other lymphokines are nowhere near as well-defined, however, as is apparent from this book. The holy grail is obviously the application of such
materials for the treatment of cancer or immunodeficiencies. There was a session devoted to phase 1 trials of various lymphokines — which do not appear very encouraging thus far. However, to be fair the preparations used were relatively crude. Now that increasing numbers of recombinant lymphokine preparations are becoming available, unravelling the interrelationships of the plethora of ‘factors’ currently in the literature, and establishing whether any of them have any medical usefulness should become greatly simplified.

G.G.B. Klaus

**Cytochemical Methods in Neuroanatomy: Neurology and Neurobiology: Volume 1**

Edited by V. Chan-Palay and S.L. Palay

*Alan R. Liss; New York, 1982*

568 pages. $96.00

This book is the report of a three day symposium held in 1981. The title is ambiguous, and the unwary may assume that the contents will elucidate the theory and practice of cytochemistry as applied to the nervous system. On the whole, such a reader will be disappointed, for what the book comprises is 28 contributions for most of which the common link is that the investigators adopted a cytochemical approach to the study of some neurological problems. This approach is powerful, topical, and has undoubtedly yielded much important information which otherwise would never have been gathered. The studies reported here range from examination of mammalian gut nerve plexuses on the one hand to insect nerve cord on the other, taking in studies of the brains of mammals (including man) and birds on the way. For the most part, the book suffers from the common affliction of symposia proceedings, viz. the whole is fragmented and unsatisfactory. Taken individually, however, these papers are of high standard and make fascinating reading. The book is well produced.

K.E. Webster

**Sister Chromatid Exchange**

Progress and Topics in Cytogenetics: Volume 2

Edited by Avery A. Sandberg

*Alan R. Liss; New York, 1982*

xv + 706 pages. £66.50

This second volume in a new series on specific aspects of cytogenetics gives a thorough review of the research and studies into sister chromatid exchange (SCE) which was first discovered in 1957. Chromosome preparations grown in 5-bromodeoxyuridine and then suitably stained make the chromatid exchanges easily visible after semiconservative replication has taken place.

Thirty-one well referenced papers are presented and they commence with the historical aspects of
Innate immune responses to noninfectious stressors can be best grasped by a few examples, in the light of consolidated research models: 

1. These data are fully in agreement with previous findings in humans after traumatic and burn injuries, which confirm a major downregulation of the TH1 response and an upregulation of the TH2 response. 

2. These findings should be offset against the current figures of high mortality rates of farm animals in hot summer periods, which are of concern in terms of.