monograph, or series of short volumes, who needs a colossus of this type?

Surprisingly, the text achieves a significantly fresh approach to the subject. This is not a reference textbook concerned with minutiae, and there is no attempt to describe all conceivable clinical presentations or laboratory abnormalities in haematology. Instead, the emphasis is on the physiology, biochemistry, and cell biology of haematological disease. This approach is used to provide biological explanations for the clinical features and laboratory abnormalities of day-to-day haematology. The result is a modern presentation which is both logical and readable.

The editors have brought together an impressive group of 33 specialist contributors. The outstanding chapters are those in which the laboratory and clinical aspects of a disease are presented together and by the same author. Where this is not done the unique approach of the book is lost, and there can be irritating overlap between contributors when linked chapters are read in sequence. There is a detailed bibliography up to 1973 only and, owing to a presumed delay in publication, there are now conspicuous deficiencies in areas such as low-dose heparin therapy (one reference) and neutrophil function.

The general theme of the book is an excellent one, however, and will not date prematurely. The editors and contributors have aimed at the postgraduate trainee, and with few exceptions the chapters are ideal for this purpose; there is also considerable uniformity of approach and style for a multi-authored text. The book should be recommended reading for the trainee in haematology, before turning to specialist monographs, and will provide a

lasting understanding of the biological basis of blood disorders. The book should be added to medical undergraduate reading lists for elective studies and is also a very useful source of material for lecture preparation.

The publishers, regrettably, appear to have aimed at a different target. The book has been issued as a prestigious, high-cost edition, and there is inefficient utilization of the printed page owing to over-generous spacing. As a consequence the excessive price, weight, and bulk detract significantly from the readability of this valuable book; the binding is also very fragile. A paperback edition in two volumes should be considered for trainees.

JOHN STUART

Drug Resistance in Antimicrobial Therapy.

By E. J. L. Lowbury and G. A. J. Ayliffe. Publication no. 923, American Lecture Series. A monograph in the Banerstone Division of American Lectures in Living Chemistry. (Pp. xi + 211; illustrated. \$16.75.) Springfield, Illinois: Charles C. Thomas. 1974.

This book deals first with mechanisms and modes of origin of drug resistance, bacterial drug sensitivity tests and their clinical interpretation, and then individual infections, the longest chapters in the book being on those due to staphylococci and Gram-negative bacilli. Tuberculosis has a chapter, followed by one dealing with streptococci, *Neisseria* spp., fungi, and malaria. A thoughtful final chapter defines the principles according to which the emergence of antibiotic resistance can be discouraged. There is much information on the frequency of various

drug resistances in different species, and emphasis on their greater prevalence in hospital environments. Good accounts are naturally given of work in Birmingham on the development of resistance in bacteria infecting burns, including studies of *in vivo* resistance transfer from enterobacteria to *Pseudomonas aeruginosa*. Although the dominant part played by enzymes in transferable resistance to β -lactam antibiotics is fully recognized, there is no mention of the fact that such resistance to aminoglycosides is also enzymic, the antibiotic being either acetylated or otherwise modified with loss of activity; several such enzymes acting on one or more of these antibiotics are known to exist. A less important omission concerns minocycline. It may not be of much therapeutic significance, but is of theoretical interest, that tetracycline-resistant strains of certain species but not of others are sensitive to minocycline, and so far no explanation of these differences has been forthcoming.

The book is published in an American series described in a Foreword by the general editor as 'charged with the stimulus of chemical wisdom' and aimed at applying advances in chemical knowledge to clinical medicine. Certainly chemistry comes into this subject, but the principles with whose application to medicine it deals are biological rather than chemical. Both laboratory and ward can learn much from its pages, and there are generous reference lists. How does a classical scholar who prefaces the first chapter with an apt quotation from Tertullian react to the (doubtless editorially altered) spelling 'hydrolyze'?

L. P. GARROD