

tion for anaerobes, but surely the criteria by which one judges the significance of a bacterium isolated are the same whether it be an aerobe or an anaerobe.

It is useful to have all this information in one volume and medical libraries should possess a copy. For all but the anaerobe enthusiasts the price will be prohibitive. The weight, about 3 lb, is not conducive to armchair or bedside reading.

E. JOAN STOKES

**The Distribution and Identification of Non-fermenting Bacteria** By J. J. S. Snell. Public Health Laboratory Service Monograph Series No. 4. (Pp. vii + 45; 1 figure; 9 tables. 50p.) London: HMSO. 1974.

The 'non-fermenting bacteria' referred to in the title are Gram-negative bacteria, some of which are well recognized pathogens but many of which have in recent years come to be looked on as 'opportunistic invaders'.

Distribution is mentioned only briefly in the text and is dealt with mainly in table I which is essentially a list of references dealing principally but not entirely with isolations from pathological processes in man and animals.

The remainder of the booklet is a report of a study of these bacteria by the methods of numerical taxonomy. A wide range of tests was used and the results were analysed by computer. It was possible to recognize 16 groups. Some of these groups corresponded to recognized species, ie, group 6 = *Bordetella parapertussis*, but, on the other hand, some groups were heterogeneous, ie, group 7 = *Moraxella*, *Neisseria*, *Acinetobacter wolffi*. The heterogeneous groups were divided into subgroups 'as a division of convenience rather than as a strictly unbiased interpretation of the relationships between strains'. All this gives rise to a certain unevenness in presentation.

The results of the numerical taxonomy study were used to construct a practical key for identification of groups and subgroups, using a limited number of simple tests. Mathematical methods were used in selecting tests most useful for construction of the key. In a small field trial conducted by the author this key proved 92% successful in identification of freshly isolated strains. If this success rate is upheld the key should be useful to bacteriologists confronted with bacteria of this kind.

W. J. RYAN

**The Detection of Hemoglobinopathies.** Edited by R. M. Schmidt, T. H. J. Huisman and H. Lehmann. (Pp. 101; illustrated. £6.00.) Oxford: Blackwell Scientific Publications (Cleveland: CRC Press). 1974.

This book consists of papers presented by 22 experts in the field of abnormal haemoglobins and thalassaemia presented at the 1973 International Conference on Standardization of Laboratory Methods and Reagents. The papers are short, ranging from one to six pages, with a longer section on peptide mapping, and provide comments on current methods for specimen handling, electrophoresis, chromatography, peptide chain separation and mapping, sickling tests, staining for inclusion bodies, detection of unstable haemoglobins, determination of foetal haemoglobin and HbA<sub>2</sub>, and diagnosis of thalassaemia.

There is a need for an authoritative textbook on methodology, standardization, and quality control in this field. Several of these conference papers reach this standard and will be of considerable value to laboratories which provide a haemoglobinopathy diagnostic service. Other papers, however, are extremely brief or state only personal preferences and recommendations without providing either a substantial review or significant new data. This considerably reduces the impact of the book.

Despite this imbalance, haematologists with a laboratory interest should consider this book as a working manual to supplement existing textbooks on haemoglobinopathies. The text is not sufficiently detailed for the trainee or for laboratory staff without experience in the field, but many of the practical hints given will be of value to the more experienced haematologist or biochemist.

JOHN STUART

**Enzymology and Medicine.** By D. W. Moss and P. J. Butterworth. (Pp. 175; 69 figures; 9 tables. £4.00) London: Pitman Medical Publishing Co. 1974.

This book discusses both the biochemistry of enzymes and the clinical application of enzyme assays. The first eight chapters cover almost every aspect of enzyme biochemistry, including principles of methodology and intracellular localization. The last two chapters outline some of the clinical uses of the subject. Both sections are well written and informative.

The aim of the authors is to integrate the preclinical and clinical aspects of enzymology for the benefit of medical students, and to persuade them that the preclinical study is not just 'an obstacle to be surmounted . . . which, once it is overcome, can be dismissed from the mind'. The reviewer's experience of medical students suggests that only the most dedicated of these would sustain their interest through the first 80% of the book, dealing with pure biochemistry of the kind they feel has 'to be surmounted', to reach the last 20% or less of clinical application. The impression is that the clinical and the biochemistry sections were written in isolation. Much more could have been done to integrate theory and practice within the same chapter, and to show the clinical application of preclinical learning. From the point of view of the proposed audience, the biochemistry section is probably too ambitious, including as it does quite long sections on, for instance, methodology and protein synthesis. This, together with the rather unattractive layout, printing, and large blocks of unbroken text, will be unlikely to attract the unconverted reader.

This being said, the book is one which the reviewer read with pleasure, and which many graduates in clinical chemistry will find useful. It is a book for the already converted rather than for the audience at which it is aimed.

JOAN F. ZILVA

**Macromolecular Changes in Atherosclerosis** (Handbuch der Histochemie), Edited by W. Graumann and K. Neumann, Vol. VIII [Suppl.], Part 2. By C Velican. (Pp. x + 694; 142 figures; 28 tables. DM. 320.- Subscription price: DM. 288.-) Stuttgart: Gustav Fischer Verlag. 1974.

This is a truly monumental effort by a single author who has spent many years of research in the field of atherosclerosis.

It begins with a survey of the evolution of knowledge on the subject of the natural disorder in man, of its experimental counterpart in animals, and of the macromolecular construction blocks of which the arterial wall is composed. The chapter which follows describes the involvement of the two most important structural components of the vessel (smooth muscle and endothelium) and suggests mechanisms by which intimal thickening may occur. The third chapter on structural macromolecules (elastin)

collagen, glycoproteins), which is an exhaustive survey of the subject and which ends with a summary of their role in atherogenesis, is followed by one on macromolecules accumulating in the lesion (lipoproteins and fibrinogen). It contains sub-chapters on the mechanisms of cholesterol deposition, of the role of injury, and on thrombus formation. Both author and subject indices are provided.

The book is very well produced, and well illustrated with black-and-white and colour figures, and by a wealth of clear diagrams with chemical and physical formulations.

It contains, necessarily, a large amount of theory but the balance of facts, physiological, histochemical, and especially pathological, keeps the work strictly on an objective plane.

I consider that this book will constitute the most authoritative standard reference text on the subject of atherosclerosis for some time to come. Certainly no other in the field takes in so great a compass with so full a measure of understanding.

A. G. EVERSON PEARSE

## Notices

### Ninth International Congress of Chemotherapy

The Ninth International Congress of Chemotherapy will be held in London from 13 to 18 July 1975 under the patronage of Her Majesty the Queen and the Presidency of Professor W. Brumfit. The scientific sessions will be held at the Imperial College of Science and Technology. The special symposia will explore current research in the management of infections and cancer-chemotherapy of tuberculosis, life-threatening infections, tropical diseases, antiviral and antifungal chemotherapy, venereal diseases, leukaemia, potentiators of radiotherapy, new anticancer regimes, and immunological aspects of anticancer drugs.

In addition to international symposia and invited special speakers, there are also sessions for free communications for which participants are invited to make 10-minute presentations.

Full details are obtainable from the Conference Centre, 43 Charles Street, London, W1 (telephone 01-499-1101).

### Symposium on Laboratory Hazards

The Institute of Medical Laboratory Technology and The Royal College of Pathologists have jointly organized this meeting to be held on Friday 10 October 1975 at the West Centre Hotel, Lillie Road, London SW6.

#### MORNING PROGRAMME

(CHAIRMAN: MR F. J. BAKER, FIMLT)

0945 Registration and coffee

1030 Legislation and Responsibility

Dr W. Lees, CBE, TD, MB, FRCOG,

- 1050 DPH, MFCM, Department of Health and Social Security. London WC2E 7EL  
Electrical Hazards  
Mr M. S. Pocock, CENG, MIEE, Division of Bioengineering, Northwick Park Hospital, Middlesex
- 1110 Mechanical Hazards  
Mr R. F. Latchford, FIMM, Department of Health and Social Security, London WC1
- 1130 Chemical Accidents and Hazards  
Dr S. S. Brown, PhD, FRIC, MRCPath, Division of Clinical Chemistry, Medical Research Council, Northwick Park Hospital, Middlesex
- 1150 Questions and discussion  
1230 Lunch
- AFTERNOON PROGRAMME  
(CHAIRMAN: DR R. BLOWERS MD, DipB, FRCP, MRCS, FRCPath)
- 1415 Laboratory Design  
Dr D. Hughes, PhD, CENG, FINS, MIEE, University of Leeds
- 1435 Infectious Hazards  
Mr C. H. Collins, MBE, FIMM, MIBiol, Public Health Laboratory, Dulwich
- 1455 Ionizing Radiation  
Dr S. B. Osborn, PhD, FINS, Director, Department of Medical Physics, King's College Hospital, London SE5
- 1515 Disposal of Laboratory Waste  
Dr P. J. J. Warren, PhD, FINS, Safety Officer and Senior Lecturer in Biochemistry, London Hospital Medical School, London E1
- 1535 Questions and discussion  
1615 Summary  
Dr W. H. P. Lewis, PhD, FIMM, MRCPath, Regional Scientific Officer, South East Thames Regional Health Authority
- 1635 Tea