

## Topley and Wilson's Microbiology and Microbial Infections: Bacteriology, Vol 1 and 2

S. P. Boriello, P. R. Murray, G. Funke eds. London: Hodder Arnold, 2007: 10th edn.  
ISBN 0340885661 (two-volume set). \$1596. 2228 pp.

Having already reviewed the Medical Mycology and Virology volumes, I left the Bacteriology volumes until last. It is hard to know what to say in addition to my previous complimentary comments: the accompanying CD is invaluable; the introductory parts are excellent, outlining basic characteristics, ecosystems, epidemiology, organs and systems, and diagnosis. Perhaps I would have liked to see a more overt reference to emerging and re-emerging infections, and accompanying changes in epidemiology. Similarly, biofilms are addressed only in passing, even though their importance in infection is of increasing significance.

Nevertheless, for the individual who wishes to find out more about a particular bacterium, Volume 2 provides well

over 100 pages of information. There are fewer illustrations than in the other volumes, presumably because mycology relies significantly on the visibility of symptoms and pathology, and viruses are, well, not visible, while bacteriology has well-established and recognised approaches to diagnosis and identification.

As this is a well-known and highly regarded reference book, I am sure that a ready customer base already exists. Libraries will presumably purchase a set of volumes, while individuals/laboratories might focus on a particular area of interest. I am delighted to have had the opportunity to spend some quality time with this important publication.

**J. Verran**

## Clinical Biochemistry

R. Luxton. Bloxham: Scion, 2008: 2nd edn  
ISBN 9781904842415. \$40. 300 pp

When I left school in 1968, I was awarded a prize for 'Service to the School'. This award was a consolation for all those who had failed to distinguish themselves, either academically or in the sporting arena, but who had nevertheless carried out the role of school prefect diligently. The prize was always a book of the winner's choice, and, knowing I had secured a job in the biochemistry department at Dudley Road Hospital in Birmingham, I chose a copy of *Techniques in Chemical Pathology* by G. A. Cheyne. I have it still. It is full of arcane wisdom about long-forgotten procedures such as the thymol turbidity test and Lange's colloidal gold. Such books, while still available today, are pretty much redundant in modern pathology laboratories where the preparation of materials has largely passed from the laboratory to the private commercial manufacturer. The world of the clinical biochemist has changed immeasurably in the years since 1968, but should someone be about to take up their first post today then they could do much worse than to invest in a copy of *Clinical Biochemistry*.

The book is ambitious in scope, aiming to cover the considerable breadth of the topic by splitting the chapters into six main 'systems': *Input*; covering nutrition, digestion and drugs, *Control*; covering genetics and endocrinology, *Processing*; covering enzymes and inborn errors of metabolism, *Transport and storage*; which covers plasma proteins, lipids and acid-base balance, *Defence*; covering the immune system, and *Output*; which deals with kidney and liver function. There is a useful introductory chapter, which looks to define clinical biochemistry, and covers analytical variables, reference ranges and clinical utility, etc. Each of these chapters is structured similarly to include the biochemical background to the subject, the relationship to pathology and the methods available for the investigation of diseases. While the precise content of these systems will be the source of argument, they do have the benefit of providing a structural logic to the book.

There are many explanatory diagrams and tables to be found in the text and while one might take issue with some of them, and some errors and omissions are to be found, they are mainly useful for the novice practitioner. Nevertheless, there is some sense in which the book does not entirely prepare the student for the reality of work in the clinical biochemistry laboratory. For example, while the section on specificity, sensitivity, ROC curves, etc, is welcome, it is hard to see why this would be at the expense of a greater insight into quality assurance and accreditation schemes, which dominate work in laboratories and which are covered only lightly in the book.

Each chapter begins with a set of learning objectives for the reader and ends with some self-assessment questions to enable readers to check their understanding and progress. The scope of the book is such that loss of detail is inevitable, and this is especially apparent in the methodological sections where one questions the usefulness of some of the information provided: for example, the necessity for an overview of enzyme kinetics, when the reality of the highly automated and computer-managed nature of the laboratory is not really emphasised, and, in any event, most practitioners will never be called upon to use this knowledge. However, these deficiencies are ameliorated by the provision of useful further reading lists for those who wish to study individual topics in more depth.

Thus, when one compares this volume to the earlier one by Cheyne, one is struck by how far the study of clinical biochemistry has come in 40 years. This thought leads one to speculate about the developments someone joining the profession today, and perhaps purchasing this volume, will be privileged to see during the course of their career, and which of today's techniques will have gone the way of the thymol turbidity test and Lange's colloidal gold.

**R. F. Smith**