Book reviews

Medical Microbiology and Infectious Diseases, 2nd edn
Peter H. Gilligan, M. Lynn Smiley and Daniel S. Shapiro
ASM Press, Washington, DC, 1998
ISBN 1-55581-106X
£28.00

There may be a myriad reasons why we choose to become doctors, but surely we all share the same love of puzzles. It follows that a textbook which mimics the puzzle-solving reality of medicine is preferable to the turgid rote learning that most of us have had to endure. This book involves the student by presenting real-life cases as unknown infections followed by a series of questions designed to test knowledge of an organism’s characteristics and laboratory diagnosis, pathogenesis and clinical features of the disease, epidemiology, prevention and some aspects of drug treatment and resistance. Overleaf from each of the case presentations and questions, there are a couple of pages of discussion and a short reference list for further reading. Since the first edition, the book has been rearranged by organ system rather than organism. This fits in well with the growing trend of integrated medical education. There are 70 cases in all, and they cover the majority of important infections.

There are many colour illustrations but these are of variable quality and, I suspect, of limited use to the student (especially the photographs of culture and other laboratory paraphernalia). One or two photographs of commercial kits unfortunately reveal the answers to the problems by having the name of the test organism on them. Some of the Gram’s stains are difficult to see. However, this emphasis on technical illustrations is an attempt by the authors to redress the imbalance caused by fewer practical teaching sessions—a trend they regard as lamentable.

There is a glossary written by a medical student. This is a noble idea but it does not work. Hence, ‘auscultation’ (a word we hope no student would need to look up) is followed by ‘autochthonous’ (answers on a postcard please).

The final section (seven cases) is devoted to emerging and re-emerging infectious diseases. This includes new variant Creutzfeldt–Jakob disease which leads to the UK’s only mention in the book, as a repository of mad cows and Englishmen. Indeed, the book is heavily Americocentric, detracting somewhat from its user-friendliness for non-Americans. It will not be possible for students in the UK to discriminate between infections that are important in the USA and those that are important in the UK. Nor will they be able to recognize the trans-Atlantic differences in investigations, drug treatments and vaccination programmes. I believe that this book would be best employed by microbiologists as a tutorial crib. They would then be able to pick and choose or even adapt cases to suit their needs. Discussion of actual cases within a tutorial setting is one of the more interesting and effective ways of teaching and brings the best out of both tutee and tutor.

This is a readable book which has much to commend it. Despite the drawbacks of its A merico-centricity, I am sure it will also deserve a place on this side of the A tlantic.

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Essential Procedures for Clinical Microbiology
H. D. Isenberg
ASM Press, Washington, DC, 1998

When faced with the prospect of reviewing a technical manual which extends to over 800 pages, the usual feeling is one of dread. However, reviewing this book was pure pleasure. The book is intended as a laboratory bench workbook and is arranged to give clear advice on practical aspects of the processing of specimens. The first section deals with aerobic bacteriology and it was with great delight that I realized it contained the sort of flow charts that I wish were available when I was struggling to understand how to identify organisms on the bench. The layout is clear and concise, and the book gives details on materials needed as well as the appropriate procedures. It also contains useful information on quality control and helpful warnings on interpretation of culture results.

The breadth of material covered in this book is nothing short of astonishing. A s well as the usual coverage of aerobic and anaerobic bacteriology (including mycobacteriology and antimicrobial susceptibility testing), there are also comprehensive sections on mycology, parasitology and virology. A ll these sections are written with a clarity that would be required should a technically competent individual wish to develop new tests. A particularly useful
section covers molecular biology and deals with a wide variety of commercial and in-house tests for analysis of specimens. Primer sequences are given for in-house methods as well as detailed descriptions of specimen preparation and cycle times. It was particularly gratifying to note that in the section on amplification-based molecular methods there was a large amount of information on the limitations of these techniques. The book concludes with sections on quality assurance and safety in the microbiology laboratory.

An American Society for Microbiology publication, written by North American authors, inevitably has a distinctly transatlantic flavour. In particular the section on antimicrobial susceptibility testing demonstrates the North American preference for Muller–Hinton media and thus could grate with some European readers. Nevertheless, I found much of the methodology appropriate for laboratories on both sides of the Atlantic. Referencing is less thorough than in other ASM texts but the concentration on key references supplemented by suggested further reading allowed the book to be concise while allowing further delving into the various methodologies.

At just over £50 this book represents excellent value and should find its place on the shelves of every diagnostic laboratory as well as those of medical microbiologists and MLSOs of all levels.

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Molecular Virology, 2nd edn
D. R. Harper
Bios Scientific Publishers, 1998
ISBN 1-85996-2567
£19.95

This is the second edition of a book aiming to describe the fundamental molecular features of viruses. It provides an excellent and comprehensive introduction to molecular virology for undergraduates or for those new to the field. The material is well laid out and highly readable, with many easily understood diagrams. The chapter on emerging viruses is a welcome addition. The relevance of molecular virology to issues in modern clinical virology is well documented, and the book should inspire readers to investigate the further reading lists.

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Antiviral Therapy
E. Blair, G. Darby, G. Gough, E. Litllter, D. Rowlands and M. Tisdale
Bios Scientific Publishers, 1998
ISBN 1-85996-0707
£18.95

This small book aims to introduce undergraduates and postgraduates in medicine and science to the field of antiviral therapy. The authors are all actively involved in the development of antiviral drugs at Glaxo Wellcome. As is to be expected, there is a slight bias in the content of the book towards those drugs with which the authors work; nevertheless the principles of antiviral therapy and the strategies for suppressing viral infections are extremely well described and pitched just about right. Specific chapters cover the herpes viruses, HIV, respiratory viral infections (influenza, RSV and rhinoviruses), hepatitis viruses and papilloma viruses. In all cases, the relevant models used for assessing antiviral activity are discussed, as is the mechanism of action of drugs and drug resistance. There is also a useful concluding chapter on future potential targets for antiviral therapies. In addition to some minor typographical errors, the book suffers from inadequate referencing, and some chapters point readers to a couple of reference texts only. Nevertheless, this book will be well received by those unfamiliar with issues of antiviral therapy.

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