different in their approach to this educational method as the
two continents from which they come.

Holton et al. use the traditional approach to problem cases.
Questions are asked relating to cases presented on one page;
answers are provided on another with appropriate references.
The cases are arranged by micro-organism aetiology and
there is a good balance between the most important
infections caused by bacteria, viruses and fungi with a
short section on parasitic infections. This book is well
written, clearly laid out and excellently illustrated.

The approach taken by Barrett is entirely different. The
philosophy, as stated, is to stimulate students to educate
themselves. Laboratory microbiology, infections and clinical
immunology are covered. Each case presentation is followed
by some basic questions. Useful information in tables, and
lists of broadly appropriate information sources are provided.
However, there are no answers or commentaries on the
cases; these are to be developed by the student. Barrett
suggests that the questions provided are merely a start for
student’s learning. For example, a case of viral pneumonia
might ultimately stimulate the student to consider what are
the mechanisms of antigenic drift and shift in the influenza
virus. The style of this book, and the nature of some cases
presented, reflect its American authorship. There are no
illustrations.

There are advantages and disadvantages in the different
approaches of these books. The availability of answers in
Problems in Medical Microbiology does not really encourage
students to learn from asking questions themselves in order
to solve problems, and in this respect it is not entirely
consistent with what educationalists consider ‘problem-based
learning’. However, this approach does make it easy for
students, at all levels, to test their knowledge in a quick,
informative and enjoyable way. I expect it will find most use
as a revision aid. In contrast, Microbiology and Immunology
Casebook is a starting place from which self-education
proceeds. To use it effectively, undergraduates need to be
highly motivated and carefully guided by an experienced
teacher. If used as suggested, learning through use of this
book will be very labour-intensive; a medical undergraduate
might be expected to complete only a few cases. This book
will probably be of more use to postgraduate students and
teachers.

M. GILL

Textbook of Diagnostic Microbiology
Edited by C.R. MAHON and G. MANUSELIA. 1995. ISBN 0-
1134. £29.95.

This textbook aims to provide a comprehensive introduction
to diagnostic microbiology for those entering the field. The
1134 pages are divided into three parts which cover basic
principles, the identification of significant isolates and the
diagnosis of infections. The principles of laboratory
safety and quality control are covered in early chapters together with
concepts and procedures in antimicrobial susceptibility
testing. How colonial morphology is used for the presumptive
identification of organisms is described thoroughly. In
addition to these (and other) traditional basic concepts, the
first part also covers ‘emergent technologies’. These include
commercially available rapid identification kits and auto-
mated systems, chromatography, DNA probes and the
polymerase chain reaction.

The laboratory identification of medically important bacter-
ia, parasites, fungi and viruses is described in part II. As in
part I, each of the 16 chapters in part II is laid out clearly
with objectives, tables, diagrams and excellent photographs.
Part III takes an organ system approach to diagnostic
microbiology with chapters covering infections of the
respiratory tract, skin, gastrointestinal tract, central nervous
system, bloodstream, urinary tract and eye. Chapters are
dedicated also to sexually transmitted diseases, infections in
special patient populations and zoonotic and rickettsial
infections. Brief case studies illustrate the course of various
infections.

This American book is surprisingly relevant to diagnostic
microbiology in the United Kingdom and is well illustrated
and easy to read. It covers comprehensively nearly all
aspects of diagnostic microbiology (with the possible
exception of outbreak investigations and hospital infection
control) in an accessible manner and is eminently suitable
for those new to the field, especially trainee medical
laboratory scientific officers.

J.Z. JORDEN

Bacteria in Biology, Biotechnology and Medicine,
3rd edition
Sons Ltd. Pp. 319. £15.95.

This is a new edition of the textbook published previously as
Introduction to Bacteria. The aim of this book is to provide
an introduction for university courses in applied biology,
microbiology, biotechnology and the health, environmental
and food sciences. In contrast to previous editions, a number
of areas have been expanded, with particular emphasis on
new developments in molecular biology. New to this edition
are sections on food hygiene and food poisoning, bioplastics,
the greenhouse effect, and the methodology of recombinant
DNA technology.

The book is medium-sized (297 pages including an
Appendix) and is complemented by many figures, most of
which are helpful, although some are a little plain. In
general, the text is well-referenced with the majority of
references being up-to-date and relevant. The contents
include an introduction to bacteria with chapters on the
cell, growth and reproduction, differentiation and metabo-
lism. These are followed by some basics of molecular
biology and bacteriophages. The next section covers
applications; e.g., bacteria in the living world, in medicine
and in food. Finally, there are sections on practical
bacteriology; e.g., man against bacteria, and the identifica-
tion and classification of bacteria. Overall, these chapters are
well written, although the order in which they are presented
is a little odd.

This book is interesting and provides a good introduction to
the subject. For its size it is very comprehensive and
because of this suffers in being a little sketchy in places.
There are very few typographical errors. I would have liked
to have seen a greater emphasis on enzyme immunoassays
rather than complement-fixation tests, and more on the
implications of the worrying increase in antibiotic resistance.
There is no mention of anaerobic cabinets or electronmicro-
scopy, and the description of the complement cascade would
have benefited from a diagram. Despite these minor
criticisms this is a book that achieves its aim and I would
highly recommend it to students for purchase, especially at
the current price of under £16.

A.R. ELEY