BOOKS RECEIVED

The book thus continues to be a useful transitional aid for students who know the elements of microbiology—it still has little or nothing on microbial anatomy, physiology or genetics, for example—but who are not ready for a full systematic study of microbial disease.

I. PHILLIPS

Haemophilus influenzae

It is 15 years since the publication of Turk and May's authoritative work "Haemophilus influenzae: its clinical importance". In the last decade there has been increasing interest in this organism, mainly because of the growing problem of antibiotic resistance. Dr Turk has distilled his encyclopaedic knowledge of the literature to bring the subject of Haemophilus influenzae up to date. As stated in the preface he has concentrated on those areas that he considers to be most relevant to clinical bacteriologists.

The book is divided into two parts. The first section deals with clinical aspects of infections caused by Haemophilus influenzae. The role of capsulated and non-capsulated strains, antibacterial therapy, chemoprophylaxis and immunisation are all discussed. The second half of the book covers the laboratory handling of haemophilus. Topics covered include specimen taking, microscopy, detection of capsular polysaccharide, cultural methods, typing, antibacterial susceptibility testing, storage and diagnostic serology. The style is concise and lucid throughout and the descriptions of laboratory techniques are admirably clear. This inexpensive manual is an excellent addition to the Public Health Laboratory Service Monograph series and will be read with pleasure by many bacteriologists.

MARY P. E. SLACK

Genital infection by Chlamydia trachomatis

Chlamydia trachomatis is a cause of various genital-tract and associated diseases that constitute an important public-health problem. The authors are a respected clinician-microbiologist combination in this field and, therefore, are admirably suited to write a book on the subject. The topics discussed include the microbiology of C. trachomatis, laboratory diagnosis, infections of the eye and of the neonate, genital infections of men and women, miscellaneous diseases, lymphogranuloma venereum and treatment. In addition, there is an appendix of laboratory procedures. The introduction is useful and in conjunction with the tables it does, in some respects, just about say it all. Thereafter, the presentation of the various aspects is logical and straightforward and many of the value judgements made by the authors are ones with which most who are informed in this field would agree. As an example, the comments throughout the book regarding the inability of the serological approach, as it stands at present, to be used as a diagnostic tool in place of cultural methods seem to be logically based. Having said all that, in a subject in which there are several contentious areas, it would be too much, perhaps, to expect the book not to contain aspects with which one is inclined to disagree or which are not clearly written. It does, and the following are a few examples: the authors have considerable experience in antibiotic sensitivity testing so that it would have been appropriate if the time at which antibiotics should be introduced into infected cultures, an important and controversial aspect, had been considered more fully; the bald statement that immunofluorescence of clinical material from the genital tract is, in some hands, as good as culture is a real surprise which begs for some comment; while it is hard to disagree with the advice that one should use an isolation technique that has reasonable sensitivity and that works reproducibly, it is a pity that the authors hedge around the issue and do not point out that cycloheximide treatment of cells provides the most sensitive procedure; there's plenty of evidence that C. trachomatis is a cause of non-gonococcal urethritis (NGU) without putting forward the illogical argument that the greater prevalence of chlamydial infection of the cervix in contacts of men with chlamydia-positive NGU than in
contacts of men with chlamydia-negative NGU is evidence; it is wrong to equate chlamydial infection of Bartholin’s ducts with disease of the ducts (first table); although the mechanism of pathogenicity is not understood there is considerable evidence that \textit{C. trachomatis} is involved as a triggering factor in some cases of Reiter’s disease. A pity, therefore, that the authors seem to be so lukewarm about it; as the arguments for and against the need for a chlamydial diagnostic service were discussed, I felt like a cork tossed about in a rough sea. For a moment it seemed that the authors were attempting to give every venereologist a guilt complex for treating NGU without a microbiological diagnosis. Mercifully, in the end, for the most part this is what they advise and practise and are in favour of a limited diagnostic service with which I suppose nobody would disagree.

Despite what the authors say to the contrary, there are useful susceptible non-primate animal models of \textit{C. trachomatis} genital infection, and rosaramicin has been evaluated clinically. The information is recent and illustrates that although the book is unlikely to have taken long to write and publish, it is already becoming out of date. This is to be expected in a rapidly advancing field but it raises the question of whether the book is worth buying. Despite any criticism put forward, as a concise and thoughtful overview of chlamydial infections and disease, I believe it is. Furthermore, it’s not disastrous on the pocket, for when all is said and done, it is only the cost of a good meal out.

D. TAYLOR-ROBINSON

\textit{Interferon 3}


This is the third volume in a series on the interferon field which began in 1979. As do its predecessors, it contains a collection of reviews on different aspects of the synthesis, actions and potential applications of interferons, each chapter being written by well known contributors. The seven topics are presented from the personal viewpoint of the authors, a style that makes a refreshing change in professional science writing these days. The subjects covered, which range from descriptions of interferon gene-cloning experiments to a survey of clinical trials with human interferons, are thus easily digestible for non-expert readers, without losing any of their scientific quality.

The first contribution is by Jean Lindenmann, one of the co-discoverers (with Isaacs) of interferon in 1957. His article, “The role of interferon in natural resistance”, is mainly concerned with the genetics of sensitivity to interferon and of resistance to viral infections in mice. This is followed by Lois Epstein’s chapter on interferon-gamma, a form that differs from the other interferon classes in being induced in lymphocytes by mitogenic and antigenic stimuli rather than by viral infections. The title poses the question “Is it really different from the other interferons?”, and the article goes on to conclude that the answer must be both yes and no. Such is the pace of the progress in the analysis of the interferons by recombinant DNA technology that parts of this chapter are now out of date; for example, the primary structure of human IFN-\(\gamma\) is now completely known and it is clearly different from the other interferons. Nevertheless, at least some of its biological effects are similar and Dr Epstein’s review is a valuable survey of the present state of knowledge concerning these properties of IFN-\(\gamma\).

In recent years there has been growing interest in the anti-tumour properties of the interferons and the mechanisms by which tumour growth is restricted \textit{in vivo}. One component of the anti-cellular actions of interferons is the activation of natural killer (NK) cells and this is reviewed in a chapter by Eero Saksela. A number of thought-provoking issues are raised here, such as the possibility that the NK-cell system and interferons themselves have evolved from very early cellular protective mechanisms. These may well predate, in evolutionary terms, the development of immune systems and other complex cellular interactions which now characterise higher organisms. Whatever cell biological mechanisms underlie the actions of the interferons, quite different problems confront the clinician who wishes to use these agents as antiviral or anticancer therapies in man. The present state and future prospects of clinical studies with interferon are surveyed by Thomas Merigan, who concludes that “given the breadth of its effects, it seems impossible that interferon will not find some place in human medicine”.