BOOKS RECEIVED

Principles of biochemical tests in diagnostic microbiology

By DONNA J. BLAZEVIC and GRACE M. EDERER. 1974. New York: John Wiley. Pp. xiv and 136. £6.65.

Despite changing trends in diagnostic microbiology, such as the introduction of rapid diagnostic aids, the careful performance of well-tried biochemical tests continues to be of central importance in the identification of medically important bacteria. The professional microbiologist is well provided with laboratory manuals and reference texts. However, as the authors point out, teachers and students of microbiology often find difficulty in obtaining, from a single source, information on the historical background and biochemical principles of diagnostic tests. This little book is intended to provide such a source of information. Although a few chapters are less complete than they might have been, the authors have in the main succeeded in compiling informative and easily readable summaries of 26 commonly used biochemical tests. The chemical mechanisms of some tests are still not fully understood, and we must remember that the bacteriologist is often faced with the problem of having to determine a particular biochemical activity in relatively complex growth media using simple indicator systems. The book will be of value not only to teachers of science students and medical-laboratory technologists but also to medical microbiologists who are daily concerned with maintaining a high degree of reproducibility and sensitivity of the tests that form the basis of diagnostic microbiology.

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Lymphocytes and their interactions: recent observations

Edited by R. C. WILLIAMS jr. 1975. Kroc Foundation Symposia Series, vol. 4. New York: Raven Press. Pp. xi and 228. US\$ 12.50.

Formal review articles are difficult to write and are usually difficult to read. There is, nevertheless, a need to provide a general view of different areas in immunology, and this is being met to an increasing extent by convening special symposia and publishing the papers presented. These publications usually take one of two forms. In the commoner form, a series of papers is presented that in due course are published in scientific journals; the main advantage of this is to make information available earlier and to group articles dealing with related topics together. In the rarer form, the articles are a "Cook's tour" through the literature or a synopsis of a particular group's approach to research.

Both sorts of articles appear in this book. There is an excellent exposition on the work of Feldmann's group at University College, London, on the interaction between T cells, B cells and macrophages. They describe their evidence from in-vitro systems that T cells make a distinctive factor which, combined with antigen, adheres to macrophages, and that complexes of the factor with antigen on the surface of the macrophage are the stimulus to B cells to make antibody. There is also a clear description of T suppressor cells and a summary of the evidence that the specific factor made by T cells in their system is an IgM antibody.

A shorter article by Hadden and Johnson summarises the evidence that cyclic GMP and cations determine lymphocyte activation and division, while cyclic AMP has the opposite effect. Other articles deal with a miscellany of topics, many of them clinical, in a briefer fashion. There is a summary of the immunological defects in NZB mice, which are a model for the human disease systemic lupus erythematosus. There are several articles drawing attention to the heterogeneity of T cells and B cells in man, as assessed by markers, and tantalising data about the raised incidence of antibodies to lymphocytes in the relatives and spouses of patients with systemic lupus erythematosus and inflammatory bowel disease.