Biochemistry of Antimicrobial Action (second edition)

by T. J. Franklin and G. A. Snow
Chapman and Hall; London, 1975
xii + 224 pages. £ 3.95 (hardback £ 7.00)

This is the second edition of a book which was first published in 1971. The authors have taken the opportunity to revise the earlier text and to improve the presentation of the diagrams and in addition a new chapter has been added. The final result is a volume, available at a reasonable price (£ 3.95) by present day standards, which has been carefully compiled and beautifully presented. The authors, both of them experts in the field of pharmaceutical research, are to be complimented on producing a really comprehensive account of the biochemistry of antimicrobial action.

The text takes the reader from cinchona bark, as used by the Indians of Peru for the treatment of malaria, through the remarkable era of Paul Ehrlich, and up to the present day pharmaceutical industry with its incredible range of drug products. The authors emphasize where appropriate not only the chemotherapeutic value of the many compounds discussed but also show how certain drugs have aided greatly in the elucidation of complex biochemical processes. This is particularly relevant to the field of protein synthesis where the use of such drugs as tetracycline, streptomycin, erythromycin, fusidic acid and puromycin (too toxic for clinical use) has provided invaluable information concerning the details of ribosome structure and function. This dout approach is particularly refreshing since it indicates a awareness by the authors of the interdependence of scientific disciplines sometimes scorned by individual who have become totally engrossed in their own selec dreamland of specialization.

The book ends with a chapter concerning the prob of resistance to antimicrobial drugs and it is only righ that we should be left with the sobering thought that despite all the tremendous chemotherapeutic achieve ments made over the last fifty years we still have a fig on our hands to cope with the increasing problem of drug resistance.

If I have to make a constructive, though possibly trivial, criticism of this excellent book I would sugges that the new chapter on the penetration of antimicro bial agents into cells is not in the best position in the text. It would perhaps have been more suitable to ins this chapter earlier in the book and directly after the dealing with the bacterial cell wall.

Michael Cani