neglected. The book thus nicely complements other manuals that tend to dwell more on the purely descriptive aspects of antimicrobial drugs and their use.

The scope of the book encompasses antibacterial, antifungal, antiprotozoal, anthelmintic and antiviral agents; the temptation to include anticancer chemotherapy has wisely been avoided. This unusually broad approach is very refreshing and has the added virtue of highlighting the striking versatility of some groups of compounds: the wide-ranging talents of metronidazole are now being appreciated and this book further reminds us that the antifungal drugs clotrimazole and miconazole and the singularly broad-spectrum anthelmintics thiabendazole and mebendazole are related imidazole derivatives. What emerges as even more remarkable, if the present rather speculative state of knowledge is borne out by future work, is that several of these imidazoles appear to have distinct modes of action.

The majority of antimicrobial drugs in common use come under Dr Pratt's scrutiny, but the book reflects current American usage, so that, for example, fusidic acid, novobiocin, flucloxacillin and the ampicillin esters such as pivampicillin and talampicillin, fail to get a mention. Some relatively new drugs, such as the antitrypanosomal agent, nifurtimox, are cited, but in general the author has adopted a conservative attitude to new compounds: the aminopenicillin, mecillinam, which has helped to throw new light on the mode of action of β -lactam antibiotics, is not referred to, and amikacin, squeezed into a short paragraph in the aminoglycoside chapter, is about the most up-to-date antibacterial to be included.

There is some inequality of treatment: penicillins get a good deal of the limelight at the expense of their cephalosporin cousins; isoniazid is accorded as much space as the rest of the antituberculous drugs put together (although streptomycin appears separately with the aminoglycosides); among antiparasitic drugs, antimalarial agents get the lion's share with a long chapter.

It is pleasantly difficult to point to serious omissions from this book. The most notable deficiency is perhaps that mechanisms of drug resistance are not dealt with as extensively as one would like. The text contains some bizarre spelling, not all of which is attributable to the book's American provenance ("stearic hinderance" for "steric hindrance" is my favourite), but most of the misprints are of the irritating rather than the misleading variety. These blemishes apart, the text is highly recommended to all those who wish to acquire a more thorough understanding of the scientific principles underlying antimicrobial drug therapy.

DAVID GREENWOOD

Bacterial reaction to radiation

By B. A. BRIDGES. 1976. Patterns of progress series. Shildon, Co. Durham: Meadowfield Press Ltd. Pp. 72. £2.80.

This monograph, intended for advanced students and research workers, describes the current views about the effects of ionising and UV irradiation on bacterial cells, with passing mention of higher cells. The recognition of repair mechanisms has tended to displace older ideas, such as the target theory, but there would still seem to be difficulties in proving any hypothesis.

The author points out that the study of the mechanisms of the effects depends on the isolation of appropriate mutants, and that a number of genetic loci are involved; this makes the allocation of a given effect to a genetic locus relatively complicated. He has tried manfully to present a complete picture, but, because of the very restricted length of the monograph, has had to adopt a style that does not make for easy reading. It would have improved matters if the author had distinguished more clearly between the effects of UV radiation and of ionising radiation. He does so in chapters 5 and 6 when discussing the all-important repair systems, but in the other chapters care is often needed to decide which type of radiation was responsible for an effect, or whether the effect was produced by both types of radiation. However, the monograph provides a very useful summary of current ideas on the subject, by a leading worker in the field.

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