

### Book Reviews

*New Antibacterial Strategies*. H. C. NEU. Pp. 328 + 170 illustrations. Edinburgh: Churchill Livingstone, 1991. £27.50

How many proceedings of meetings have we read with such titles as *New Antibacterial Strategies*, promoted, as was this one, by a pharmaceutical company, only to find it the vehicle for yet another clutch of inadequate clinical trials on the latest antibacterial aspirant to a share in the market? How refreshing to find that this is not the case with this book. It really is about the frontiers of infectious diseases!

After Professor Neu's inimitable overview of problems in infectious diseases and the need for more and better vaccines, antibacterials and immunomodulators, there follows a series of sections, connected by their molecular approach, each with two or three truly authoritative reviews. First come three papers on what is 'probably the leading vector-borne bacterial disease in the world'. Would you have known that this is Lyme disease? Together these papers provide an excellent review of the epidemiology, the potential for vaccines, the current optimum therapy – all complicated by the protean manifestations of the disease and the difficulty of definitive diagnosis.

Next come two excellent papers on vaccines. Lindberg is most persuasive on the subject of polysaccharides, 'ideal carriers of individuality' since three hexoses can form no less than 1056 different oligosaccharides. Let us hope that conversion to T dependence and other manoeuvres will convert the virulence factors of *H. influenzae* type b, *N. meningitidis* (including type B, which has to be disguised), *S. typhi* and the like into highly effective, safe vaccines for all ages. Levine and his colleagues move the review on to live attenuated salmonella vaccines.

Section III has three papers on infections of mucosal surfaces – an account by Schoolnik of the role of adherence and potential for vaccines and receptor blockade in *E. coli* pyelonephritis: a guide to the proliferation of pathogenic mechanisms in *E. coli* gastroenteritis ('a great complexity of surface appendages' is an understatement); and an intriguing review of an organism that infects (but does not necessarily affect) about 50% of those over 60 years of age – again would one have guessed *Helicobacter pylori*?

The three papers in Section IV on resistance review the molecular mechanisms of  $\beta$ -lactamase induction (the latest Normark hypothesis), quinolone action and resistance and the role of general transport systems in drug resistance.

A review of leprosy 'as a paradigm for host-microbe interactions' is the next contribution in which McAdam draws attention to the good and the bad – perhaps mainly the latter – of the immune response.

In Section V Tulkens discusses intracellular pharmacokinetics of antibiotics, drawing attention to means of overcoming methodological problems, and predicting the development of drugs tailored to specific intracellular compartments. This is followed by an interesting paper by Cohen on antigenic similarity among the heat-shock proteins resulting in autoimmune arthritis and diabetes.

Finally comes Section VI on immunomodulators. I found this as helpful a review as any, of the increasing complexities of interleukins and colony-stimulating factors.

The volume could have been a little more user-friendly at times – some, but by no means all, contributors overestimate the knowledge of the 'basic scientists, clinicians and health-care professionals' for whom the book is intended, and the editors could have insisted on fewer abbreviations. Otherwise I have no criticisms of this feast.

IAN PHILLIPS  
UMDS, St Thomas's Campus,  
St Thomas's Hospital,  
London SE1 7EH