

*Infectious Multiple Drug Resistance*

by S. Falkow

Pion Ltd, 207 Brondesbury Park, London, NW2 5JN, 1975

xii + 300 pages. £ 7.70

The study of bacterial plasmids has been one of the growth areas in microbial genetics over the last eight to ten years and this is the latest of a number of monographs which seeks to describe up-to-date knowledge in this field. As with its predecessors it is restricted in its coverage. The main thrust of this particular account is the structure and functional properties of R-plasmids, but a number of related topics — such as the fertility factor F, certain colicinogenic factors and phage lambda — are considered in some detail. In no sense, however, can this book be considered a general account of bacterial plasmids.

In one important way, this book is unusual, special and very valuable: it brings together both molecular and epidemiological information about these resistance plasmids. This is not surprising. Falkow is one of the pioneers in this field and his account is of great interest. As well as a detailed description of plasmid structure, expression and regulation, we have concise accounts of plasmids in relation to epidemic outbreaks of antibiotic resistance in clinical situations and a valuable section on the role of plasmids in influencing the colonisation properties and other aspects of the pathogenicity of clinically important bacteria. Perhaps these last two topics are not directly related to antibiotic resistance as such, but they do have very considerable implications for the emergence of resistance in a clinical context.

Perhaps the biggest shortcoming of the book is the fact that it is already very much out of date. In his preface the author says that he 'failed to meet even

a single dead-line' and in a sense it shows. More important, perhaps, is the fact that the publishers do not seem to have moved very rapidly with this text. Little of what has occurred post-1972 is included even though the author claims the book to be 'reasonably correct through June 1974'. This is particularly sad in view of the explosion of interest in gene transposition and in genetic engineering, both of which topics have taken enormous bounds forward in the last three years or so.

Throughout this book Falkow treats his subject in a rather discursive way and there is little attempt to be formally educational. Several students with whom I have discussed the book have found it hard to follow. Partly, this is because it tends rather to flow out, with immensely long paragraphs in places and with a continually shifting point of attack. Partly, as well, Falkow does assume some considerable understanding of the background biochemistry and molecular biology when discussing a particular topic. On the other hand, those who already know the field reasonably well have often commented on how stimulating a book it is to read and how helpfully it brings related aspects of the subject into context. For me this seems to be the first book on this topic which succeeds in relating the molecular work to the clinical situation and I feel this to be a major and important step forward.

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