
 Book reviews

Birge, E. A.: Bacterial and Bacteriophage Genetics. An Introduction, 2nd edn. Berlin, Heidelberg, New York: Springer 1983. 359 pp., 111 figs. Hard bound \$ 25.50.

To "develop the basic aspects of bacterial and bacteriophage genetics in a volume of reasonable size", which would serve as an introductory text, is an interesting project, and the author should be commended for this effort. Such a book is desirable in spite of the availability of many other excellent textbooks covering the field. To write such a book requires that the author has a substantial and critical understanding of the essentials of the field. Furthermore, these essentials must be presented in a comprehensible way. Neither of these criteria are met in this book. In fact, this book is distinguished by a remarkable absence in the description of concept building experiments (e.g. Hershey/Chase; Meselson/Stahl; Crick/Brenner/Orgel; three factor crosses) in favour of marginal observations (e.g. role of phenotypic mixing in phage crosses) or in favour of information which must be totally incomprehensible to both the beginner (and the advanced geneticist) in the way they are presented (e.g. differential equations of Visconti-Delbrück theory). Furthermore, the book, being the "corrected" printing of the 1981 version, is outdated in many aspects, which cannot alone be attributed to the rapid progress of research (e.g. Table 1-1; recognition sequence in *Haemophilus* transformation; role of the terminal protein in $\Phi 29$). It also contains an intolerable number of mistakes: e.g. pg. 72: A multiplicity of less than one is definitely not a prerequisite for a successful single burst experiment; page 78/79: The definition of recombination frequency is wrong; Legend to Figure 8-3: In second order kinetics a 100-fold increase in phage equivalents of DNA would result in a 10,000-fold (and not, as written, 10-fold) increase in infectious centers. To realize that a research area which has contributed so very much to our understanding of biology in general can be misrepresented in such a way as in this book, must be a frustrating experience to any researcher in the field. Clearly the book with its deficiencies is totally inadequate as an introductory text.

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Rattazzi, M. C.; Scandalios, J. G.; Whitt, G. S. (eds): Isozymes, Current Topics in Biological and Medical Research, Vol. 6. New York: Alan R. Liss 1982. XI+297 pp., several figs., several tabs.

The several new books discussing isoenzymes which have been published in the last few years demonstrate the great interest of the scientific world in this topic. These books have often varied from the traditional approaches to this topic, and such changes can not be attributed only to the large number of enzymes.

In the book under review eight authors describe their specialities: gel electrophoresis and cryptic protein variation, plant nucleases, the evolutionary change of duplicate genes, isoenzymes in forensic science, broadly defined as the application of science to questions of legal concern.

Each author provides the reader with the most contemporary concepts and technology of the particular field as well as the results of the author's latest research. That does not mean that "Isoenzymes" is just a book for specialists.

The reader will find an introduction in every chapter which brings his lack of knowledge to the level at which an understanding of technics, theory and tricks is very well possible. The conclusions and the recent references, of each chapter will be a real support for further research, though not every part is to read so easily.

Volume 6 in this series of "Isoenzymes" Current Topics in Biological and Medical Research fits well in the aim of the editors to serve readers with diverse backgrounds and interests. However, would it not be better to write down in one volume subjects which are more comparable because the fields of the scientist who works plant nucleases and forensic sciences are quite different.

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