

comparison, which might have strengthened the reader's confidence in her generalizations from the BCG debates.

Moreover, the title and subtitle (perhaps the work of an ambitious editor?) promise more than the book actually delivers on the subject of class, poverty, and disease. This is a sophisticated case study of the BCG controversy, not a comprehensive account of "disease and class" in 20th-century North American society. Still, it is a remarkable first book and a lively, welcome addition to the growing literature on both the history of tuberculosis and the evolution of modern biomedicine.

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## Transposons

**Mobile Genetic Elements.** DAVID J. SHERATT, Ed. IRL (Oxford University Press), New York, 1995. xiv, 179 pp., illus. \$105 or £60; paper, \$52 or £29.50. *Frontiers of Molecular Biology*, 8.

By its title this volume invites comparison with *Mobile DNA* edited by Berg and Howe and published by the American Society for Microbiology in 1989. In contrast to the earlier and much larger volume, which remains surprisingly useful, this book is organized according to topic rather than type of element or organism. It attempts to highlight some common themes rather than catalog the myriad subtle differences between transposable elements found in different organisms.

The book is generally clearly written and well illustrated, although the chapter on retrons in bacteria is poorly put together, with both conflicting and repeated sections. There is considerable variation in style among chapters and a small amount of duplicated material that might have been better placed in an introductory chapter to define basic terms and conventions. I especially enjoyed, and recommend to all those interested in the history of modern biology, the opening chapter, by James Shapiro. Shapiro presents a personal account of the discovery and significance of transposable elements, concluding with some observations on Barbara McClintock, her work and her role in the development of the field. He points out that the parallels between genetic rearrangements associated with controlling elements in maize and episomes in bacteria were not originally appreciated. As re-

search and researchers become ever narrower and more tightly focused, this can be read as a plea for a more open and broad approach to current problems.

Perhaps the chapters of most general appeal will be those that describe the applications of mobile elements as genetic tools. Claire and Douglas Berg describe their use in prokaryotes and demonstrate the elegance of rearranging bacterial genomes in vivo rather than by in vitro recombinant DNA techniques. They also discuss using mobile elements in bacteria to assist mapping and sequencing cloned eukaryotic DNA. As this is precisely the sort of area that is of interest to many nonspecialists and is one that is rapidly evolving, a separate chapter might have been more useful. The chapter by Kim Kaiser, John SENTRY, and David Finnegan on using mobile elements in eukaryotes is inevitably mostly about *Drosophila*, and mostly about P elements. This is the best-exploited eukaryotic transposable element, and many P element tricks seem to be applicable in other systems such as Tc1 in the nematode worm, so focusing on P elements is appropriate. However, there is no discussion of the uses of mobile elements to study the genome of organisms, such as humans, where genetic experimentation is not possible. The application of L1 elements in fingerprinting yeast artificial chromosomes, and the uses of Alu-polymerase chain reaction are surprisingly omitted.

This book is aimed at those who do not currently work with transposable elements but have an academic interest in them or are thinking about using them. Such readers will find much of interest, although the specialist will find few new insights.

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## Also Noteworthy

**Methods in Nitric Oxide Research.** MARTIN FEELISCH and JONATHAN S. STAMLER, Eds. Wiley, New York, 1996. xx, 712 pp., illus. \$130 or £80.

Noting that the recent growth of research concerned with nitric oxide "has resulted in a lack of methodological uniformity which has limited the interpretation of data," the editors of this volume have undertaken to provide a "comprehensive text" that would alleviate this problem. Further, "In recognition of the confusion

that surrounds the state of the art," they enlisted the collaboration of two authors for each chapter "in order to generate a consensus statement." In all, the book contains 46 chapters grouped under nine headings. An opening group of five chapters on the chemistry, biochemistry, kinetics, and metabolism of nitrogen oxides is followed by a pair on the preparation and handling of NO and related compounds. The remaining groups are devoted to enzymatic formation and targets of nitrogen oxides (seven chapters), detection and distribution of NO synthase activity (three), metabolism of substrates and cofactors (two), detection of nitrogen oxides (thirteen), detection of adducts and reaction products of NO (five), bioassay techniques (six), and clinical assessment (three). In general, the chapters follow a format of beginning with a review of the subject at hand, then presenting the methodology "in a cookbook-like fashion with ready-to-use recipes," and concluding with a reference list. In producing the work the editors report having exercised a firm editorial hand but having given preference to quality over matters of style. The book includes a 42-page subject index.

**Katherine Livingston**

## Books Received

**Analysis of Biological Development.** Klaus Kalthoff. McGraw-Hill, New York, 1995. xviii, 814 pp., illus. \$66.34.

**Behavioral Archaeology.** First Principles. Michael Brian Schiffer. University of Utah Press, Salt Lake City, 1995. x, 289 pp., illus. Paper, \$24.95. *Frontiers of Archaeological Inquiry*. Reprinted papers, 1972-1987, with an autobiographical introduction.

**The Collected Papers of Albert Einstein.** Vol. 4, The Swiss Years: Writings, 1912-1914. Martin J. Klein et al., Eds. Princeton University Press, Princeton, NJ, 1995. xxii, 715 pp., illus. \$85 or £66.50.

**DNA-Protein.** Structural Interactions. David M. J. Lilley, Ed. IRL (Oxford University Press), New York, 1995. xii, 202 pp., illus. \$105. *Frontiers in Molecular Biology*, 7.

**Feral Pigeons.** Richard F. Johnston and Marián Janiga. Oxford University Press, New York, 1995. xvi, 320 pp., illus. \$95.

**Guide Archeologiche. Preistoria e Protostoria in Italia.** Vol. 1, Il Paleolitico dell'Italia Centro-Meridionale. Paolo Gambassini et al. A.B.A.C.O. Edizioni, Forlì, Italy, 1995. 176 pp., illus. Paper, £20.

**High Frequency Processes in Magnetic Materials.** G. Srinivasan and A. N. Slavin, Eds. World Scientific, River Edge, NJ, 1995. x, 468 pp., illus. \$90.

**The Interpretation of Quantum Mechanics.** Dublin Seminars (1949-1955) and Other Unpublished Essays. Erwin Schrödinger. Edited and with introduction by Michel Bitbol. Ox Bow, Woodbridge, CT, 1995. vi, 151 pp., illus. \$55; paper, \$30.

**Journeys in Microspace.** The Art of the Scanning Electron Microscope. Dee Berger. Columbia University Press, New York, 1995. viii, 203 pp., illus. \$39.50.

**Kangaroos.** Biology of the Largest Marsupials. Terence J. Dawson. Comstock (Cornell University Press), Ithaca, NY, 1995. vi, 162 pp., illus., + plates. Paper, \$25 or £19.50.

**Luck.** The Brilliant Randomness of Everyday Life. Nicholas Rescher. Farrar, Straus and Giroux, New York, 1995. xii, 237 pp. \$19.