

Scientific Knowledge" (1959), depending on one's personal positions solidified earlier through exposure to Lorenz's other writings.

In short, this is a book by, for, and about Lorenz the behaviorist, the biologist, the evolutionist, the scientist—but more the man, the thinker, the philosopher. It deserves a place on the library shelf, but I pity the librarian who has to decide where.

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Cell Biology

BIOLOGY OF THE CELL, by Stephen L. Wolfe. 1971. Wadsworth Publishing Co., Belmont Calif. 553 p. Hardback; price not given.

This book is organized around the structure of the cell. Morphologic variations and changes during the cell cycle are beautifully illustrated and fully explained. The electron micrographs, in themselves, make this a very valuable reference. Bioenergetics, cell metabolism, biosynthesis, and photosynthesis are all explained adequately and are closely tied to cell structure. Inheritance is treated only in its molecular and cellular aspects; this may be a drawback to the student who has no background in classic genetics.

Among the textbooks for cell-biology courses, this is a refreshing change from books that are merely extensions of physical biochemistry. Its focus on biologic organization puts biology back into the teaching of cell biology.


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CYTOGENETICS: AN INTRODUCTION, by E. D. Garber. 1972. McGraw-Hill Book Co., New York. 271 p. \$5.50 softback, \$7.95 hardback.


All of the major topics of cytogenetics are covered, some in considerable detail, despite the relatively small size of this volume. Explanations and descriptions are necessarily brief but can serve as a point of departure for the instructor. Two introductory chapters cover the basic problems of chromosome structure in relation to genetics, mitosis, meiosis, and meiotic products in plants and animals. Consideration of unusual types of chromosomes and structural aberrations occupy the next three chapters. Aneuploidy and euploidy are the subjects of chapters 6 and 7. The last two chapters treat of mammalian cytogenetics and the cytogenetic techniques used in the study of speciation. The book has a glossary and an author-subject index.

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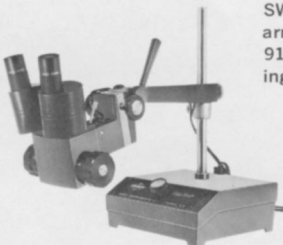
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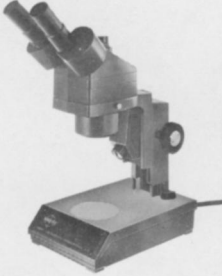
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Comparison of this book with other current textbooks of cytogenetics (or books including cytogenetics) shows only the following subjects either absent or marginally treated by Garber: polyteny; apomixis; and the cytogenetics of the prokaryotes.

The author's inclusion of cellular division as a part of mitosis is a departure from conventional practice, for mitosis has generally been seen as restricted to nuclear events. Most of his explanations, though terse, are clear and accurate; but I found the one concerning fertilization (p. 23) confusing. Figures and charts have been carefully selected and faithfully repro-

duced, with the exception of two misspelled place names in fig. 4-11. The statement on p. 142 that specific epithets have been abandoned by taxonomists dealing with *Oenothera* is not correct, nor is the author's numbering system the one now in use for *Oenothera* chromosomes.

This generally excellent volume has unfortunately been marred by poor reproduction of the cover picture, which also serves as the frontispiece; much clearer views of the synaptonemal complex have been published elsewhere.

Garber's book is a concise and highly competent introduction to cytogenet-