

flagella" by Don Fawcett; "Mitochondria" and "Lysosomes" by Alex Novikoff; "Chloroplasts" by S. Granick; "Golgi apparatus" by A. J. Dalton; "The ground substance" by Keith Porter; "The interphase nucleus" by Alfred Mirsky and Syozo Osawa; and "Nucleocytoplasmic interactions in unicellular organisms" by J. Brachet.

The articles are complemented by numerous photographs that, for the most part, are excellent, and the literature reviewed appears to be more or less complete through 1960. The greatest service rendered by this book is that it gathers together and integrates existing data; hence it provides the teacher with a résumé of the present status, however transitory it may be, of the biology of the cell. In this regard, I scarcely need remark that the present rate of growth of literature in cellular biology is awesome. One wonders, therefore, whether any work of this sort can possibly have the lasting value which Wilson's book enjoyed in its day. Indeed, certain portions of this series, which were published a year or two ago, are already dated.

Although *The Cell* will undoubtedly be used chiefly by teachers and students, the pretentiousness of the published product has dictated an alarmingly high price tag for volume 2 and for the entire series. Because of the largely ephemeral nature of this volume, which, as I have indicated, is inevitable in such an active field, it is my opinion that a greater service to the scientific community would have been provided by markedly reducing its cost, thereby making it readily available to those who will actually use it.

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Ecological Signpost

Growth and Regulation of Animal Populations. Lawrence B. Slobodkin. Holt, Rinehart and Winston, New York, 1961. viii + 184 pp. Illus. \$5.

During its development, ecology has profited from a number of short books, characteristically written from a highly personal point of view. Among these, works by Pearl, Lotka, Gause, Elton, and Bodenheimer have had major directing influence. This volume, a member of the spate of "series" that pub-

lishers currently cherish, goes beyond its ostensible summarizing function and may well lay claim to a place in this company. Slobodkin attempts "to indicate the present state of theory relating to the number and kinds of animals and plants that are found in nature." Starting broadly, he quickly changes focus to the elements of population and then shifts logically from birth and death rates in simple organisms to progressively more complex models of population growth and interaction. Population mathematics are well presented, although the author's statement that "anything stated in mathematical form will also be said verbally," while reassuring to the student, is not (and should not be) realized. With a critical and original discussion of energy relations and community structure, the final chapters come full circle.

The personal approach is the source of the book's main strengths and weaknesses. The somewhat irreverent style is appealing, and the first chapter—on man in the ecological world—is an unsurpassed, concise presentation of this overwritten and underemployed subject. The choice of subjects to discuss and to omit has been made well. The book as a whole is marvelously cohesive. However, the neglect of much pertinent literature is regrettable, and the virtual absence of basic data is worse. A seeming plea for pedantry may be in order at a time when short, specialized books are becoming so popular. Where details of methodology become part of substance, as, in my opinion, they do here, they must not be sacrificed for lack either of space or of personal interest. Besides the usual errors that plague a first printing, there are a number of ambiguities and heterodoxies. At least some of these may be intentional, since they are provocative rather than provoking. In its function of reflecting the present state of theory, the book gives ample indication that some of the invidious divisions within ecology are beginning to be bridged. It does less well by some of the current controversies. Finally, by failing to consider them, it reveals areas of current neglect. For example, parasitism, commensalism, and mutualism do not even receive short shrift. More significant than the fidelity of the book as a mirror, however, is the fact that it manages, despite its brevity, to serve as a signpost.

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Biology and Medicine

Medizinische Grundlagenforschung, vol. 3. K. Fr. Bauer, Ed. Thieme, Stuttgart, Germany, 1960 (order from Intercontinental Medical Book, New York). 762 pp. Illus. DM. 178.

In volume 3, as in the previous volumes of this series, actual problems of medicine and its allied fields are presented by internationally known experts; their goal is to give information about the progress in certain selected disciplines and to find a synthesis of the different, apparently diverging, tendencies in modern medical-biological research.

The individual chapters (15) deal with such problems as radiation protection, exposure of human beings to radioactivity, protein research, fat metabolism and arteriosclerosis, blood coagulation, structure and function of different tissues and systems, and the present state of information and knowledge in the field of evolution, to mention a few.

The presentation in general is quite dynamic, makes interesting reading, and stimulates the development of one's own ideas. The book's format is excellent, and the volume is a valuable contribution to medicine and biology.

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A Scholar's Approach

A History of Medicine, vol. 2, *Early Greek, Hindu, and Persian Medicine*. Henry E. Sigerist. Oxford University Press, New York, 1961. 352 pp. Illus. \$11.

In the foreword to volume 1 of his proposed eight-volume *History of Medicine*, the late Henry E. Sigerist provided an insight into his undertaking. He "had resolved to write a history of medicine that would approach the subject from a somewhat different angle." The methodological introduction which followed gave clear indication of the "new angles" to be explored. Medicine was viewed as having a scope much broader than the actions of the physician. Thus the historian of medicine must concern himself with the "promotion of health, the prevention of illness, the restoration of health and rehabilitation of the patient."

Many factors must be examined for