
General Physiology. *Bradley T. Scheer.* John Wiley and Sons, Inc., New York. 1953. x+613 pp. \$7.00.

General Physiology is an excellent example of a text written for a specific purpose by a teacher with a comprehension of his subject. This book is an integration of the fields of biochemistry and general physiology interwoven to interpret one in terms of the other. Many of the 1453 complete bibliographic references are current reviews of specific physiological problems.

Certainly this text was not written for students of physiology who lack chemistry training through physical chemistry if the students are to fully realize the derivations of equations, such as are given for free energy and entropy.

This book is written in a unique and logical manner. Instead of the usual initial attack of the subject with a consideration of the chemical breakdown of protoplasm, the author discusses physicochemical aspects of life in a natural succession of topics beginning with energy, including nuclear energy and isotopic techniques, and ranging through the chemistry of cell constituents and physicochemical structure of cells.

The second part of the text is devoted to the sequence of chemical processes and interrelationships of enzyme systems, vitamins, and hormones. The catabolic and anabolic processes of fats, proteins, and carbohydrates are well diagrammed. In the last chapter of this section, the concepts of the first two parts of the book are developed to give a clear concept of the dynamic state of body constituents. Part III deals with energy manifestations and transformations in cells, organs, and organisms.

Lastly, the author considers the physiology of cellular fertilization, growth, and differentiation and of the integration of the organism by nervous and humoral intermediation. This volume is easy to read, well organized, and should prove to be of considerable value as a text for general physiology courses.

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