graphs of various types of virus particles are included. The author is to be congratulated for her excellent treatment of a timely subject.

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Cell Biology

THE CELL: CHEMISTRY AND FUNCTION, Robert H. Trumbore, 412 pp., $12.00, C. V. Mosby Co., St. Louis, 1966.

The author has produced an intelligible and integrated approach to the subject of cell physiology. One of the author's basic premises is that courses in cell physiology are often taught prior to the time when students take biochemistry, and it is difficult really to understand cell physiology since so much cell physiology is biochemistry. To partially remedy this situation the author summarizes a great deal of information on biochemistry in the second section and then builds the concepts of cell physiology around this information. Using this format the author is able to discuss the physio-chemical environment, bioenergetics, intermediary metabolism, electron transport and oxidative phosphorylation, cytology, and specialized cell processes without each topic appearing as mutually exclusive subjects but rather processes that are integrated and result in a functioning cell.

This book would not satisfy the biochemist, many cell physiologists, or cytologists but would satisfy the person attempting to teach a course which attempts to give the student an appreciation and understanding of the cell.

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CELL BIOLOGY, Lester Goldstein, Ed., 212 pp., $3.95, Wm. C. Brown Co. Publishers, Dubuque, Iowa, 1966.

Cell biology has become a distinct specialty of biology during the past decade. Being basic to many other areas of biology, it unavoidably overlaps much of genetics, molecular biology, and developmental biology. In this book twenty-one papers are assembled as a collection of readings. They have been grouped into six sections covering the topics of: Cell structure, chromosome structure, chromosome replication, genetic mechanisms, gene action, and mitosis and cell division. Each of these sections is preceded by a few brief remarks of the editor which gives the separate papers a certain cohesiveness.

The selection of papers, I believe, is exceptionally fine and certainly brings out the diversity of methods which have led to our present understanding of the structure and function of the cell. In some way each of the papers already has contributed significantly and stood the test of time as to its importance in the field. I am sure that one of the editor's hopes will be fulfilled, i.e., that the student reading these papers will have a better understanding of the subject and how investigators carry out their studies.

A further service rendered by the editor is that only the pertinent portions of the papers are included. By leaving out the summaries, for example, the student will be required to read through the paper in order to understand it. This leads to another virtue of this book; more papers can be included.

I am certain this book will be useful in acquainting students with the primary sources of cell biology. Introducing him to original literature should help to convey both attitudes and theories as well as methods used in this science. It also will certainly stimulate many students to pursue other readings in this field.

This book should be readily available for all students in biology to consult. The editor should be congratulated for his thoughtful labors.

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