Book Reviews

Embryology. Rev. ed. Lester George Barth. New York: Dryden Press, 1953. 516 pp. Illus. $6.00.

The preparation of a textbook which for the first time attempts to combine descriptive and experimental studies must, as the author himself has commented, be regarded as an experiment; and, like most "first" experiments, it is to be expected that revisions and refinements will be needed as time goes on. The present, second, edition represents these revisions and refinements to the extent of nearly doubling the original number of pages

The great increase in the number of pages is due primarily to the addition of figures and figure legends. Ninety-seven of these constitute a new chapter, the 21st and last, dealing with the comparative embryology of vertebrates. This can actually be used in the laboratory as a manual. Well-executed and well-labelled drawings of typical cross sections and dissections of embryos of the frog, chick, pig, and man, at several developmental periods, have been quite ingeniously arranged so that a specific organ can be studied either chronologically through its development in one embryo, or comparatively in several different embryos at the same time.

Throughout the text (chs. 1 to 20) approximately 75 new illustrations, mostly half-tone reproductions, taken from original papers of outstanding authorship, have been added as companion illustrations to supplement the excellent, schematic teaching diagrams typical of the first edition. These numerous photographs and drawings from the original papers are a welcome addition. They provide the student with the complete reference to much additional experimental material, thus encouraging collateral reading, and at the same time give him an accurate idea of the details and the real object under study. With such an abundance of illustrative material—photographs for realism, diagrams for easy comprehension of principles—the teaching value of this refreshingly unique book has been greatly enhanced.

The general subject outline has not been much changed. New material has been added here and there, but primarily to the sections on the nervous system and the mesodermal derivatives. A fuller account of the early development of the chick has also been given, including the origin of the layers of the blastoderm, the movement of cells in the formation of the primitive streak, and the relationship of the primitive streak to the later embryo. A slight change in organization, affecting the order of presentation of material, has been made. In the present edition the description of the development of the frog and chick precedes the analytical experimental treatment. This was done with the hope of its being of greater help to the student in his visualization and comprehension of the principles of development.

In general, the revisions and improvements which the author has made are quite praiseworthy and undoubtedly will increase the usefulness of the text. The present edition can be highly recommended as a teaching guide for college students beginning their study of embryology.

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Five-Membered Heterocyclic Compounds Containing Nitrogen and Sulfur or Nitrogen, Sulfur, and Oxygen (Except Thiazole). L. L. Bambas. New York: Interscience, 1952. 403 pp. $14.00.

This is the fourth volume to be published in a series of monographs whose purpose is to cover the large and complex classes of heterocyclic compounds in a detailed and comprehensive fashion. The contents are divided into three parts. The chemistry of the thiadiazoles takes up the first 211 pages. It is followed by a short chapter (8 pp.) on five-membered rings containing nitrogen, sulfur, selenium, or oxygen atoms in addition to one sulfur and one nitrogen atom. Finally, the third part presents in 148 pages the isothiazoles and their derivatives.

The contents of the various chapters are well organized and the historical development is chosen to describe uncritically the chemistry of the vast number of compounds. The presentation of many structural formulas and equations are very helpful to the reader in following the sometimes complex reactions. Tables at the end of each subdivision summarize methods of preparation of individual compounds and give their structural formulas and physical data, e.g., solubilities and melting points. The large number of references cited, cover the literature through 1950.

This reviewer feels that the short discussions and critical evaluations of the literature at the conclusion of most of the chapters are very desirable. They show the reader some of the contradictions which occur in the literature and point to the direction in which further research is needed.

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Adrenal Cortex: Transactions of the Fourth Conference, November 12–14, 1952, New York. Elaine P. Ralli, Ed. New York: Josiah Macy, Jr. Fdn., 1953. 165 pp. Illus. $3.50.

This book records the transactions of the fourth of five scheduled Macy Foundation conferences on the adrenal cortex. As is usual with these conferences, attendance was limited to 25 invited members. Discussion topics comprised four broad subjects, three of which were introduced by formal presentation of conference members. Most of the volume is filled, however, with the three-day informal discussion, well-edited by Dr. Ralli.