mental cholesterosis in animals produces histologic changes in arteries similar to that found in arteries of patients with familial hypercholesteremic xanthomatosis. However, it seems more than doubtful to consider the accumulation of foam cells in the intima and in the subintimal layer, i.e., atheroma formation in familial hypercholesteremia as well as in experimental cholesterosis in rabbits as the usual and common pathway for the development of arteriosclerosis in humans. Altschul, himself, rightly stresses in section III that human arteriosclerosis is not an etiologic, a clinical, nor a pathologic entity. Indeed, heterogenous conditions such as changes in the colloidal solution of cholesterol in the plasma (different sizes and configurations of protein molecules and their agglomeration with cholesterol and phospholipids), as well as changes of the colloidal structure of the altered vascular wall, mutually influence the deposition of amorphous masses of cholesterol in a primarily damaged vascular wall.

At the beginning of each section, the pertinent fundamental questions regarding the pathogenesis of arteriosclerosis are raised. The answers, however, are not forthcoming but are substituted by the detailed description of experimental histologic findings. The reproductions of the histologic slides in the book are excellent.—*S. J. Thannhauser*

CELL PHYSIOLOGY AND PHARMACOLOGY, *J. F. Danielli*. New York, Elsevier Publishing Company, Inc., 1950, pp. 156.

Based upon lectures given by Danielli at University College, London, this monograph indicates some of the more important factors which should be considered by students of drug action (pharmacologists, chemists, biologists and clinicians). Problems encountered in the search for new drugs are dealt with from the viewpoint of organic chemistry, physical chemistry and biology. The cell is first discussed as it constitutes a physico-chemical unit including consideration of the units of its structure, the control of its enzyme systems, its dielectric and membrane properties and the dynamic condition of its cell constituents. The action of drugs on surfaces are defined as ionic and dipole interactions, as well as those of the formation of complexes and micelles. Membrane permeability and drug action are considered chiefly from the direction of drug structure and the access of drugs to organs.

An interesting chapter on the important field of enzymes and drug action concerns not only the action of drugs on respiration and glycolysis in muscle but also the action of various enzyme poisons on different physiologic processes. The possible modes of drug activity on enzyme systems are their action as carriers, activators, chemical and physical inhibitors, prosthetic groups, coenzymes, cosubstrates and as substrate removers. The difficulties of interpreting the effects of drugs on enzyme action from the viewpoint of the biologist are pointed out. The action of narcotics is discussed with regard to the familiar concepts of surface-action and oil-water partition effects. In the last chapter, Danielli deals with responses of cells on the biologic level including artificial parthenogenesis, mitotic poisons, reproduction of bacteria and viruses, nuclear and cytoplasmic drug action, possible modes of drug action upon genes and the relationship between hormones and evocators. The author has written a thought-stimulating treatise which the reader will want to read more than once in order to fix in his mind the highly original and clearly stated ideas of Danielli.—*W. H. Fishman*

ERRATA

YOUNG, LAWRENCE E., CHRISTIAN, RICHARD M., ERVIN, DONALD M., DAVIS, R. WENDELL, O'BRIEN, WILLIAM A., SWISHER, SCOTT N. AND YUILE, CHARLES L.: Hemolytic disease in newborn dogs. Blood *6:* 291–313 (April) 1951.

Page 293, fourth line from bottom should read: "72 parts of M/15 Na_2HPO_4" instead of "72 parts of M/12 Na_2HPO_4."

Page 297, table 1, under observations of pups in litter H, should read: "Two pups suckling mother of litter G during first day" instead of "mother of litter F."