group of psychiatrists and many members of other disciplines, who consider mental health a combination of various constructive qualities.

Jahoda is a proponent of the idea that mental health is not synonymous with the absence of mental illness and that it is not the equivalent of normality. Instead she views it as a positive quality, to be approached in any one person by considering attitudes of the individual toward himself, the degree to which he realizes his potentialities through action, unification of function in the individual's personality, the degree of independence of social influences which he has achieved, the manner in which he sees the world around him, and his ability to take life as it comes and master it. A person may be mentally healthy in some ways but not in others.

Walter Barton, in a dissent from the views expressed by Jahoda, looks upon mental health and mental illness as a continuum, with illness as the point of departure and health as the goal. He believes that efforts devoted to improvement of total mental health in the community should be concentrated on preventing or treating major and minor mental illness.

No single definition of mental health can be satisfactory to all workers, nor is such a definition necessary for effective action.

This book is required reading for all who are seriously interested in improving mental health. It sets a high standard—one which it is hoped the nine subsequent monographs of the commission can maintain.

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General Cytochemical Methods. vol. 1. J. F. Danielli, Ed. Academic Press, New York, 1958. xi + 471 pp. Illus. $12.80.

The first of a proposed biennial series, this volume deals with some of the methods applicable to *in situ* characterization of subcellular structures. The nine chapters give varied treatment to the editor's outline calling for presentation of theory, instrumentation and procedure, critique of the method, illustrative results, appendices, and references. The topics covered are as follows: "Weighing of cellular structures by ultrasoft x-rays," by A. Engström and B. Lindström; "Determination of mass and concentration by microscope interferometry," by H. G. Davies; "Ultraviolet microspectrophotometry," by P. M. B. Walker; "Quantitative determination of DNA in cells by Feulgen microspectrophotometry," by C. Leuchtenberger; "Autoradiography as a cytochemical method," by S. R. Pelc; "Cytochemical demonstration and measurement of sulfhydryl groups by azo-aryl mercaptide coupling," by H. S. Bennett and R. M. Watts; "Indigogenic staining methods for esterases," by S. J. Holt; "Fluorescent antibody methods," by A. H. Coons; and "Calcium phosphate precipitation method for alkaline phosphatase," by J. F. Danielli.

All of these topics have been reviewed elsewhere at fairly regular intervals. The present volume is well written throughout by outstanding contributors and aims at rounded presentations. Most of the text originated at King's College, London, and in it the emphasis is primarily on physical instrumentation. Prior reviews are carefully indicated. Unifying accounts supplementing the existing literature are given, and there are fresh approaches to theoretical aspects.

Davies' chapter on the interference microscope is the longest in the book (107 pages) and an important major reference. Walker, in his article on ultraviolet microspectrophotometry, describes newer objectives, testing procedures for equipment, and errors due to the biological specimen, and he comments on items of apparatus in 11 short appendices. Pelc's presentation ignores Fitzgerald's earlier review and deals primarily with C_{14} and S_{35}. Both Coons and Holt include convenient appendices on synthetic procedures for their reagents. Leuchtenberger gives operational details for her particular instruments. The principal expositions of theory pertain to the physical instruments described by Engström and Lindström, who emphasize procedures for dealing with systematic errors in relation to x-ray wavelength. All the authors give brief reviews of recent applications of the methods to biological material.

In a succinct review of that hardy perennial commonly known as the Gomori method, Danielli calls attention to the application of interferometry to the estimation of alkaline phosphatase. It is unfortunate that a definitive review of a technique which has been examined "more critically than any other cytochemical technique" should not have avoided the elementary interpretive pitfall contained in the statement, "The amount of phosphatase present in a cellular site varies with . . . [the] substrate used."

Cytochemical methodology furnishes a good field for examination of the popular thesis that the value of a scientific method is dependent on its ease of application and the generality of its adoption by investigators. Referring to the vast preponderance of literature in visual microphotometry over that in the ultraviolet, Walker states that it "may not be a disadvantage since those who have been prepared to surmount the greater technical difficulties might be expected to be well aware of the difficulties of interpretation and of the many other hazards of inaccuracy." On the chemical side Bennett notes that his "mercury orange cytochemical method has not enjoyed the popularity which has fallen to the Barrnett-Seligman method in spite of the lack of specificity which the latter method can display." It is evident throughout that the methods which require the greatest appreciation of theory of instrumentation have generated the least controversy and also have been least widely adopted. On the other hand the widely adopted tinctorial methods have generated some classic polemics, often in inverse proportion to the degree of mathematical formulation required for interpretation.

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Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, *but to the publisher or agency sponsoring the publication.)*

The North American Species of Hesperus Fauvel, with Descriptions of Two New Species (Coleoptera; Staphylinidae). Transactions, vol. XII, No. 18. Ian Moore. San Diego Society of Natural History, San Diego, Calif., 1958. 8 pp.

The Marine Molluscan Fauna of Guadalupe Island, Mexico. Transactions, vol. XII, No. 19. 12 pp. *A New Mollusk from San Felipe, Baja California.* Transactions, vol. XII, No. 20. 2 pp. E. P. Chace. San Diego Society of Natural History, San Diego, Calif., 1958.

The Customs and Religion of the Ch'iang. Misc. Coll., vol. 135, No. 1. David Crockett Graham. Smithsonian Institution, Washington, D.C., 1958. 110 pp.

Making the Most of Your Years. Pamphlet No. 276. Evelyn Hart. 28 pp. $0.25. *What's in the Air?* Pamphlet No. 275. Hazel Holly. 20 pp. $0.25. Public Affairs Committee, New York, 22 E. 38 St., New York, 1958.

International Medical Research. A compilation of background materials. Prepared for the Committee on Government Operations, U.S. Senate, and its Subcommittee on Reorganization and International Organizations. 85th Congress, 2nd Session. Superintendent of Documents, GPO, Washington, D.C., 117 pp. $0.45.

Science and History. An inaugural lecture delivered at University College, London, 22 May 1958. Douglas McKie. Lewis, London, 1958. 17 pp. 2s. 6d.

Aviation Medicine. An annotated bibliography. vol. 2. 1953 literature. Arnold J. Jacobius *et al.* Aero Medical Assoc. 2642 University Ave., St. Paul, Minn., 1959. 360 pp. $5.

Photochemical Secondary Reactions in Urban Air. Rept. 24. Philip A. Leighton and William A. Perkins. Air Pollution Foundation, San Marino, Calif., 1958. 214 pp. $6.