respective fields. For example, A. Tiselius writes on "Electrophoresis," F. H. C. Crick on "X-ray diffraction of protein crystals," F. S. Sjöstrand on "Electron microscopy of cellular constituents," K. Bloch on "Synthesis and degradation of labeled steroids," and A. A. Benson and M. Calvin on "Intermediates of photosynthesis."

Presumably due to limitations of space, a number of articles in this volume contain a review of general principles plus references to appropriate sources for detailed laboratory directions. On the other hand, when detailed directions for a method are given, as in the earlier volumes, only one of a number of commonly used techniques is usually covered. An example of this is the section on "Determination of amino acid sequence in proteins." R. R. Porter contributes a comprehensive manual on the use of fluorodinitrobenzene for this purpose. The pipsyl method is also described, but the Edman and hydrazinolysis methods are omitted.

The over-all quality of the book is very good. The review articles have sufficient detail to make them useful to the average biochemist who is not actually working in the field. Among the more detailed articles, the following should be particularly useful: "Techniques for assay of respiratory enzymes," by B. Chance, which covers mainly the sensitive spectrophotometric methods; "Micromethods for the assay of enzymes," by O. H. Lowry; and the section on "Synthesis and degradation of isotopically labeled compounds," which contains directions for making more than 150 preparations of interest to biochemists. The editors plan a supplementary volume to remedy deficiencies and revise outdated procedures.

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Biochemical Cytology. Jean Brachet. Academic Press, New York, 1957. xi + 516 pp. Illus. $8.80.

This book is the outcome of a series of lectures given by the author at the Indian Cancer Research Centre in Bombay in 1956, as well as lectures to his own students at the University of Brussels. It is intended for rather advanced students and investigators who have much background knowledge of biology and chemistry, including descriptive cytology, biochemistry, embryology, and genetics. The book is written in a very direct and clear style. This is particularly impressive inasmuch as English is not Brachet's native language. For help in this and other aspects of the work he acknowledges the assistance of A. R. Gopal Ayengar, H. Peters, W. A. Jensen, R. Logan, and P. Couillard.

The field that one may designate as biochemical cytology has been developing rapidly and extensively in recent years. An up-to-date text in this important area of biology is, therefore, most welcome and useful to all students and investigators whose interests impinge thereon. Brachet has succeeded admirably in including the most current research in this field. In fact the references listed are largely to publications appearing within the last three or four years. This work also has the merit of having been written by one who has long been active in research in this field and who has made some of the most important contributions to it. The opinions and estimates that he gives of the significance of the work of others are thus largely based on firsthand experience with the materials and techniques.

Brachet does not present a definition of "biochemical cytology," but in a sense the contents of the book serve to indicate what he considers mainly to comprise the domain of this field. Some idea of the scope of the work may be obtained from the chapter titles, which are as follows: "The recent history of biochemical cytology"; "Brief survey of the techniques"; "The cytoplasm of the resting cell"; "The nucleus of the resting cell"; "Mitosis"; "Nucleic acids in heredity and protein synthesis"; "Nucleocytoplasmic interactions in unicellular organisms"; "The nucleus and cytoplasm in embryonic differentiation"; and "Remarks on cancer cells." There is a final short chapter, called "Final remarks," in which the difficulties in defining "life" are discussed in relation to cell fragments and cell constituents.

Throughout the text Brachet has paid particular attention to the nucleic acids. Such attention is certainly merited in view of the great advances that have been made concerning the role of these substances in heredity and protein synthesis and in view of the considerable research activity in this field. These substances provide, to a large extent, a central and integrating theme for the extensive biochemical and modern morphological studies that are reviewed. One might think of a number of topics that are not discussed, or that receive scant attention in the text, and that could be considered a part of this field. For example, current research on collagen and on myofibrillae provides excellent and interesting material for discussion of correlations between biochemistry and structure. Another topic of great current interest is that of the abnormal hemoglobins, which would seem as appropriate for discussion under biochemical cytology as under biochemical genetics. However, one certainly cannot hope to find included in a text of reasonable size, written by one author, all that might be considered a part of a field that encompasses as much of biology as biochemical cytology does. The author has done an excellent job of bringing together, in a well-coordinated and integrated form, most of the research that is of special current interest in the new cytology.

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Doctor and Patient in Soviet Russia. Mark G. Field. Harvard University Press, Cambridge, 1957. xviii + 266 pp. $5.

Reviewing a book on medicine in the Soviet Union is beset with dangers common to all studies of the Soviet system: "failure explicitly to condemn is viewed by some as tantamount to approval, and failure explicitly to praise is taken by others as the equivalent of criticism."

This is a serious study by a serious student of Soviet matters. The author is not a physician and stays close to the sociological study of the doctor and the patient and their interrelationship within the Soviet system. He does not undertake to deal with the technical aspects of the practice of medicine, or with such related topics as postgraduate training and medical research. One could wish that the book had been based on more extended personal observation than that provided by a month's tour in the Soviet Union and that interviews with refugees did not represent so important a proportion of the total information, upon which some deductions are, inevitably, framed. These shortcomings are recognized clearly by the author and should be remembered as clearly by the reader.

For me, the most penetrating insight into the role of the physician in the Soviet Union was derived from a sentence on page 26: "his living conditions, his satisfaction and dissatisfaction, the importance given the kind of services he dispenses, and even the sex composition of the profession resemble to a striking degree those of the elementary and secondary school teacher in the United States."

The book deserves careful reading by physicians and, for that matter, by patients, including those of professional calling. An exposition of this kind should yield a greater understanding of Soviet medicine and its relation to the Soviet system as a whole, and perhaps even some useful reflections about American medicine and its role in our social structure.

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