fat boys, a valuable point in differentiating a difficult clinical group. This is a book for the specialist.

NICHOLAS MARTIN

FLUORESCENT PROTEIN TRACING 2nd Ed. Edited by R. C. Nairn. (Pp. xv + 335; illustrated. 45s.) Edinburgh and London: Livingstone. 1964.

It is not surprising that a second edition of this book should have been called for so soon after the first. It is admirable that it has actually appeared. The new edition is only 55 pages longer than the old and it is a measure of both the growth of the subject and the thoroughness of the revision that nearly half of the increase is due to the list of additional references quoted.

The general structure of the book is unchanged. The first six chapters give the physical, chemical, and immunological principles of the methods together with practical details. Unfortunately the practical details tend to be buried in the text and take some digging out. This criticism has been anticipated by the authors who say they have not included a synopsis of technical procedures because of the dangers of rule of thumb application; your reviewer disagrees. It is the duty of authors to present their material as clearly as possible. The intelligent reader would use a synopsis intelligently. The unintelligent should not be using the method at all.

The second half of the book is a valuable comprehensive review of the results of applying immunofluorescence methods to specialized fields of microbiology and immunology.

All those using immunofluorescence methods should possess this book. Many others should read it.

A. A. GLYN

IMMUNOELECTROPHORETIC ANALYSIS Edited by P. Grabar and P. Burtin. (Pp. xii + 302; 99 figures; 21 tables. 80s.) London: Elsevier. 1964.

A book on immunoelectrophoretic analysis by P. Grabar and P. Burtin must command the interest of everyone using this valuable technique, more especially because the editors themselves have written 11 of the chapters and collaborated in the twelfth. Though they have taken the opportunity in the preparation of this, the first English edition, of introducing some textural revision, readers should realize that the book is, in essence, that published in French in 1960. It does not contain, therefore, any reference to valuable technical modifications such as those introduced by Feinberg, Goldsmith, and Kekwick (1964) nor does it adopt the suggested nomenclature of the World Health Organization for γ -globulins.

Part I deals in sufficient detail with the techniques of immunoelectrophoresis using agar gel to guide a competent research worker with no previous experience. It seems unfortunate that the editors have not seen fit, in this section, to include a chapter on the preparation of satisfactory antisera. At the Pasteur Institute they have had unrivalled experience of the preparation of such sera.

Part II, the main bulk of the book, deals with the results obtained in the analysis of normal human plasma, of plasma fractions, and of anomalies which occur in a wide range of diseases associated with serum protein derangement. The authors do not claim that

these chapters are comprehensive but it does seem unfortunate that in chapter 11, the principal abnormal globulin component in Waldenström's macroglobulin aemia is stated to be the 12-17S globulin when it is now generally recognized that this is the 19S globulin, and that in chapter 13 the flocculation tests are dealt with in such a sketchy manner with no reference whatsoever to the fundamental work of MacLagan and Bunn (1947).

Part III gives a series of brief reviews of information which the technique has yielded in studies of the protein pattern of other biological fluids, such as human milk and colostrum, cerebrospinal fluid and seminal fluid. It also includes a brief section on the applications of immunoelectrophoresis to the study of the formed elements of the blood. It is hoped that in further editions the information which immunoelectrophoresis yields on tissue protein will be considerably expanded.

It would be churlish to denigrate a book so beautifully produced and so full of information but it does seem to the reviewer that it is ripe for a more comprehensive revision in the light of new work in the field and new concepts regarding the serum proteins that have developed in the last decade.

NICHOLAS MARTIN

CELLULAR INJURY Ciba Symposium. Edited by A. V. de Reuck and Julie Knight. (xi + 403; 81 figures. 60s.) London: Churchill. 1964.

It was fitting that the Ciba Foundation should arrange an international symposium on cellular injury in the year of Sir Roy Cameron's retirement from University College Hospital and that he himself should chair the meeting. The measure of Sir Roy Cameron's contribution to the topic is indicated by the fact that of the 19 chief speakers eight are former members of his department.

The volume follows the customary Ciba pattern of series of communications dealing with various aspects of the main topic, interlarded with lively discussion. Subjects dealt with include alkylation of cell components, the cytotoxicity of leucocidin, hepatic poisons, ionic shifts, peroxidation of lipids, folic acid antagonists, corticosteroids, viruses, dietary deficiency, and lysosomes. Additional papers were read on endogenous inflammatory mechanisms, the effect on living tissue and the classification of dead and dying cells, cell injury in the newborn, injury of cell membranes, and controlled degeneration during development.

All the speakers and those taking part in the discussion are active workers in their fields and the volume provides a readable and reliable guide to recent work in the field of cellular pathology, much of which will be new to the majority of readers. Where the text requires it, figures and photographic plates are included, the majority of the latter being electromicrographs, surely a sign of the times. A useful index is provided.

W. G. SPECTOR

BOOK RECEIVED

(Review in a later issue is not precluded by notice here of books recently received.)

ACTION OSTEOGENETIQUE DE LA GREFFE DE MUQUEUSE VESICALE By R. Dozinol. (Pp. 118; 30 figures) Brussels: Editions Arsacia S.A. 1964.