Biochemical Pharmacology, 1962, Vol. 11, pp. 681–683. Pergamon Press Ltd., Printed in Great Britain.

BOOK REVIEWS

H. CHANTRENNE: **The Biosynthesis of Proteins.** (Vol. 14 in *International Series of Monographs on Pure and Applied Biology, Modern Trends in Physiological Sciences Division*), Pergamon Press, 1961, pp. 220. Oxford, 42*s*. $6.50.

THIS is a masterly survey, written in lucid English which is a joy to read. There have, of course, been various multi-author surveys of protein synthesis, but they lack cohesion in comparison with this well balanced monograph, ranging as it does from genetics to antibody formation. To quote from the Preface, "the picture presented here should be regarded as a snapshot taken at the end of 1960; blurred spots on the picture are in part due to the lens, and in part to the fog that still covers large regions of the field". However, advances in the field since 1960 hardly affect the validity of the arguments.

One-quarter of the space is justly given over to the references and indices. The citation of publications in the text by author and year, rather than by a number, is to be commended. Unfortunately, where several papers by the same author or authors are cited for the same year, no distinction between them is made in the text. It would have been helpful to students if review articles had been distinguished from other references, and mention could have been made of an earlier monograph (1954) on *Protein Metabolism* by R. B. Fisher. Among other minor faults, the term "spire" used on page 1 in connection with the protein α-helix is hardly clear, particularly since Fig. 3 is nowhere mentioned in the text. Orotic acid is said to be a precursor of uracil on page 73, and of uridylic acid (a term usually reserved for the 2′- or 3′-isomer) on page 75; either statement might mislead a student reader.

There could usefully have been a short section on the applicability of radioisotopes and on pitfalls in interpretation of results thus obtained. Consideration is given to sites of protein formation in different parts of the cell, but not in different parts of the animal. In the chapter on regulatory mechanisms, hormones are given no attention except in connection with tryptophan oxidation. These gaps, which Fisher's monograph partly fills, do not seriously detract from the value of the book.

E. REID

Report of the Commission on Enzymes of the International Union of Biochemistry (I.U.B. Symposium Series, Vol. 20, 1961). Pergamon Press, Oxford. 50s.

THIS admirably produced book is a landmark in biochemistry, the need for systematization of enzyme nomenclature having long been apparent. The Commission, over which Dr. M. Dixon presided, has adopted rules which will no doubt meet with objections as well as praise; but the arguments put forward in the text should convince most objectors. Trivial names will be permitted, often identical with names now in use but modified where these are misleading: for example, fumarase becomes "fumarate hydratase". However, particularly in short communications, enzymes should also be identified by a "code number" preferably accompanied by the systematic name, for example, fumarase becomes "L-malate hydro-lyase", with the number 4.2.1.2. The term "synthetase" may, in certain contexts, be retained for trivial use, with "ligase" as the systematic term. Recommendations are also made for coenzymes, cytochromes, enzyme formation, and enzyme kinetics.

The Report should be compulsory reading for authors and editors: the changes called for are not so sweeping as to excuse inaction.

E. REID