

COMPREHENSIVE BIOCHEMISTRY

EDITED BY A. NEUBERGER

VOLUME 19^{B/II}

PROTEIN METABOLISM

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COMPREHENSIVE BIOCHEMISTRY

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ALBERT NEUBERGER

*Chairman of Governing Body, The Lister Institute
of Preventive Medicine, University of London,
London (Great Britain)*

LAURENS L.M. VAN DEENEN

ed.

*Professor of Biochemistry, Biochemical Laboratory,
Utrecht (The Netherlands)*

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CONTRIBUTORS TO THIS VOLUME

R. CASEY

John Innes Institute, Colney Lane, Norwich NR4 7UH (U.K.)

P. FEIGELSON

Department of Biochemistry and the Institute of Cancer Research,
Columbia University, New York, NY 10032 (U.S.A.)

G.H. GOODWIN

Institute of Cancer Research, Royal Cancer Hospital, Chester Beatty Research
Institute, Fulham Road, London SW3 6JB (U.K.)

A.M. GOTTO Jr.

Department of Medicine, The Methodist Hospital and Baylor College
of Medicine, Houston, TX 77030 (U.S.A.)

E.W. JOHNS

Institute of Cancer Research, Royal Cancer Hospital, Chester Beatty Research
Institute, Fulham Road, London SW3 6JB (U.K.)

L.A. KILLEWICH

Department of Biochemistry and the Institute of Cancer Research,
Columbia University, New York, NY 10032 (U.S.A.)

H. LEHMANN

University of Cambridge, Department of Biochemistry, Tennis Court Road,
Cambridge CB2 1QW (U.K.)

J.P. MILLER

University Hospital of South Manchester, Manchester
M20 8LR (U.K.)

J. MONTREUIL

Laboratoire de Chimie Biologique et Laboratoire Associé au C.N.R.S.
No. 217, Université des Sciences et Techniques de Lille I,
Villeneuve d'Ascq (France)

B.J. SMITH

Institute of Cancer Research, Royal Cancer Hospital, Chester Beatty Research
Institute, Fulham Road, London SW3 6JB (U.K.)

D.I. STOTT

Department of Bacteriology and Immunology, and the Department of
Biochemistry, University of Glasgow, Glasgow, Scotland (U.K.)

J.M. WALKER

Institute of Cancer Research, Royal Cancer Hospital, Chester Beatty Research
Institute, Fulham Road, London SW3 6JB (U.K.)

A.R. WILLIAMSON

Glaxo Group Research Ltd., Greenford Road, Greenford,
Middlesex UB6 0HE (U.K.)

GENERAL PREFACE

The Editors are keenly aware that the literature of Biochemistry is already very large, in fact so widespread that it is increasingly difficult to assemble the most pertinent material in a given area. Beyond the ordinary textbook the subject matter of the rapidly expanding knowledge of biochemistry is spread among innumerable journals, monographs, and series of reviews. The Editors believe that there is a real place for an advanced treatise in biochemistry which assembles the principal areas of the subject in a single set of books.

It would be ideal if an individual or a small group of biochemists could produce such an advanced treatise, and within the time to keep reasonably abreast of rapid advances, but this is least difficult if not impossible. Instead, the Editors with the advice of the Advisory Board, have assembled what they consider the best possible sequence of chapters written by competent authors; they must take the responsibility for inevitable gaps of subject matter and duplication which may result from this procedure.

Most evident to the modern biochemists, apart from the body of knowledge of the chemistry and metabolism of biological substances, is the extent to which we must draw from recent concepts of physical and organic chemistry, and in turn project into the vast field of biology. Thus in the organization of Comprehensive Biochemistry, sections II, III and IV, Chemistry of Biological Compounds, Biochemical Reaction Mechanisms, and Metabolism may be considered classical biochemistry, while the first and fifth sections provide selected material on the origins and projections of the subject.

It is hoped that sub-division of the sections into bound volumes will not only be convenient, but will find favour among students concerned with specialized areas, and will permit easier future revisions of the individual volumes. Towards the latter end particularly, the Editors will welcome all comments in their effort to produce a useful and efficient source of biochemical knowledge.

Liège/Rochester

M. Florkin[†]
E.H. Stotz

PREFACE TO VOLUME 19B PART II

The second and final part of our treatment of protein metabolism consists of six chapters. We wish to repeat briefly the policy which we have already indicated in the preface to the first volume. The Editors have selected special areas of investigation which appear to be important and topical, and in which significant advances have been made in the last ten or fifteen years. This applies, for instance, to the chapter on lipoproteins where both structure and function and their interrelationship is much better understood now than it was twenty years ago. Particularly fast has been the development in our knowledge of glycoproteins, where again an intimate relationship between the structure and the function has been demonstrated. We also felt some emphasis should be given to the important advances which have been made in our knowledge of chromosomal proteins which comprise both histones and non-basic proteins. The topic of haemoglobin also continues to attract a great deal of interest for a variety of reasons, and this also applies to the chemistry and function of immunoglobulins. Enzyme induction is also a field of some importance, and we have chosen to concentrate on one particular enzyme, the biosynthesis of which commands widespread interest.

We are conscious that we have neglected other aspects of protein metabolism, but to aim at complete coverage would have presented an impossible task.

L.L.M. van Deenen
A. Neuberger

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