

spread peptidergic systems in the brain — but this book should be compulsory reading for anyone with an interest in cellular aspects of the physiology of integration. While exploring frontiers and beyond, much of the book is written with such clarity that it will provide an excellent basis for teaching these facets

of biochemical endocrinology and is to be highly recommended for advanced undergraduate reading. It is well illustrated and delightfully free from those trivial errors which spoil many publications of symposia.

J. A. Edwardson

Prostaglandins: An Introduction to their Biochemistry, Physiology, and Pharmacology

by P. B. Curtis-Prior

North-Holland; Amsterdam, New York, 1976

xii + 160 pages. Dfl. 42.00, US \$16.25

This book is offered by the publishers as a basic text on prostaglandins for the uninitiated, and is directed particularly to undergraduate and post-graduate students. A cheap but reasonably wide-ranging and critical survey of prostaglandins could well be valuable, but despite its attractive presentation, I feel that this book falls far short of these requirements.

In fifteen very brief chapters (the whole 160 page book contains no more than 65 pages of double spaced text, after deducting the numerous blank pages, diagrams, chapter synopses and references) Dr Curtis-Prior deals in logical sequence with the historical background to the discovery of prostaglandins, their synthesis and breakdown, effects on cellular and metabolic processes, pharmacological actions, and involvement in some pathological conditions. A short chapter on thromboxanes has been added at the end.

However, there are many important areas that are ignored completely, or passed over in a couple of lines, such as the roles of prostaglandins in fever and platelet aggregation, actions at adrenergic nerve-endings, and on respiratory smooth-muscle. Other neglected topics include rabbit-aorta contracting substance, prostaglandins in anaphylaxis and interactions with lymphokines. A more serious failing is the lack of experimental evidence for many of the actions and functions which are described, and the absence of any unified discussion of the most important methods used in prostaglandin research.

Some of the biochemical topics are emphasised in more detail, and no doubt this reflects the author's own special interests, although it is disappointing in a basic text to find so many references to his own work which cannot be pursued, since 11 of the 16 titles are quoted as being 'in preparation'. Some of these biochemical sections might prove rather hard going for undergraduates, such as this passage which describes prostaglandin synthetase: '... distinguishing property is dual positive/negative feed-back system whereby initially the positive feed-back system operates and a product-dependent velocity increment occurs'.

Chapter 6 is entitled 'Prostaglandin-like substances', and it fares particularly badly. In the light of present knowledge, substance *P* does not appear to merit classification as prostaglandin-like or as a local hormone, and I think that the kinins would be unhappy to hear that 'they are related to prostaglandins by being organic compounds with a single carboxyl group'. In addition, section (d) on 'miscellaneous agents' has been omitted entirely from the text, and the whole of page 71 is wasted on a figure showing the amino acid sequence of substance *P* and which occupies a mere two lines.

I was also very disappointed by the consistently poor quality of the writing. The author has sensibly chosen to adopt a relatively informal style for this lightweight work, but nonetheless it is disturbing to find so many examples of poor English, spelling

mistakes, and ambiguities of meaning, such as the following representative examples: 'This fits well with the ancient custom of precious metal bangles to ward off the situation we now know as arthritis', '... this information is too recent to have found its way in a very comprehensive review ...', 'Prostaglandin structures possess the possibility of stereoisomerism', 'Of those of which the structure is known, are two venom kinins ...', 'The state of knowledge of the

role of prostaglandins in ... is presently in a dichotomy'.

In conclusion, this book compares unfavourably with many other general reviews on prostaglandins, and certainly cannot be recommended. In any case, since it is priced at about £9 it is hardly likely to make a serious claim on the student's pocket.

Robin Hoult

Gluconeogenesis: Its Regulation in Mammalian Species

Edited by R. W. Hanson and M. A. Mehlman
John Wiley and Sons; New York, Sydney, London, Toronto, 1976
xxvi + 592 pages. £19.65, \$35.40

Since study of metabolism and its control appears at present to be an area of diminishing research interest a volume entirely devoted to studies on regulation of a single metabolic pathway is something of a rarity. The occasion of Professor Henry Lardy's 60th birthday has provided the impetus to gather invited contributors from his former coworkers and friends in an area to which Professor Lardy has himself made and continues to make major contributions. Significant progress in understanding of the pathway and mechanisms of regulation of gluconeogenesis from various precursors began early in the 1960's and although the pathway now seems clearly defined, the regulatory mechanisms have for the most part defied identification despite more than 10 years of intensive investigation. Some new ideas are now emerging but it seems clear that proof of their importance will be as difficult to achieve as before. Indeed gluconeogenesis illustrates well many of the complexities which may arise in such investigations. Variants of this pathway exist in different species. The pathway involves participation of, and interaction between, at least two intracellular compartments. And part of the pathway appears to proceed by steps also used, although in the opposite direction, by another pathway hence creating several substrate cycles. In addition attempts to evaluate potential regulatory mechanisms for

gluconeogenesis have been largely inconclusive, despite the fact that much effort has been devoted to this thorny problem.

One may then evaluate this book in two different ways. First, to what extent does it as a whole bring together, analyse and illuminate progress towards a full understanding of the role and regulation of gluconeogenesis? And second, how useful are the individual chapters in promoting this goal with respect to one or more of the potential sites of regulation? A rapid perusal of the book reveals that this is a typical multi-author volume. By their own admission the editors have made no attempt to correlate the content of the various chapters (other than by providing an extended summary of the contributions as an introduction) and indeed have allowed the authors to write in whatever format they wished with the result that research reports and analytical reviews are juxtaposed. It also seems clear that publication was delayed since some of the articles carry addenda and few references are made to literature published later than 1973. Those who are seeking a coherent incisive and up-to-date account and evaluation of the mechanisms which may be responsible for regulation of gluconeogenic-flux will be disappointed.

However, among the individual chapters there are a number of outstanding contributions which are of