

*Advances in Prostaglandin and Thromboxane Research*

Edited by B. Samuelsson and R. Paoletti

Raven Press; New York, 1976

2 volumes: xvi + 506 pages, \$ 45.00 and xvi + 522 pages, \$ 47.00; set price \$ 90.00

These two volumes are the first of a new series which is intended to keep pace with the explosive increase in research on the biological roles and clinical applications of the prostaglandins and related compounds. They contain the proceedings of the international conference on prostaglandins held in Florence in May 1975, and comprise some 102 full research papers together with 300 abstracts of material presented as poster displays.

'Specificity' might well be taken to be the keynote of this symposium which ranges widely over fifteen different subject areas. Several elegant mass spectrometric and radio-immunoassay methods each specific for different prostaglandins or their metabolites are described, and they are vital tools required to disentangle the relationships of different prostaglandins in health or disease. It is evident, too, from the symposium that the multiple actions of prostaglandins limit their therapeutic usefulness. Several papers illustrate how pharmacological specificity might be achieved — either by the design of synthetic analogues tailored for agonist actions at certain sites only, or by the development of aspirin-like drugs which selectively inhibit prostaglandin synthetase enzymes in specified target organs. There is also considerable emphasis on the specificity of prostaglandin action in cellular terms, with progress towards understanding receptor binding, subcellular mechanisms in terms of cyclic nucleotides and the characteristics of the important enzyme of metabolism, 15-hydroxyprostaglandin dehydrogenase. Yet one cannot help feeling that despite the large accumulation of knowledge about these substances, simple conclusions about their actions or their primacy in the control of the organism are still lacking.

However, considerable excitement at this meeting was generated by the announcement of the discovery of the thromboxanes — closely related to members of the prostaglandin family — and the notion that the

short-lived thromboxane A<sub>2</sub> might be a local mediator of vascular reactivity with important roles in platelet aggregation and anaphylactic processes. The key discovery that the prostaglandin endoperoxides, themselves unstable, may break down either to stable 'traditional' prostaglandins or via the thromboxane pathway, has sufficiently important implications to tempt the publishers to include both names in the title. Let us hope that they are justified, and that there is a rich expansion of interest in these ephemeral mediators.

The quality of the research papers and abstracts varies as one might expect, both in terms of interest and scientific merit, and in presentation. On the whole, the papers are well referenced, and most authors have taken the trouble to include the titles of papers in their reference lists — necessary for any volume intended to stand as a major source of reference.

The editors and publishers are to be congratulated for the speed and efficiency with which these well produced volumes have appeared. No doubt this reflects a commendable degree of cooperation on the part of the conference speakers. The material is well set out, the graphics usually excellent, and there are few mistakes or typographical errors in the text. There is a reasonable subject index, although critical examination shows that it does not extend to points of detail. Indeed, compilation of a complete index for a work of this size would be a herculean task.

It is a pity that the comprehensive collection of diverse abstracts is not catalogued by title or subject group, and that its content is not included in the index. Thus many interesting topics and new developments may pass unnoticed by all but the most assiduous reader. A pity, too, that the lively discussion at the meeting could not have been recorded and included in this book. Such discussion, although sometimes banal or trivial if not competently edited, adds additional information and debate, as well as

bringing to the written account a welcome sense of interest and vitality.

Although the two volumes are available separately, the whole work is an expensive acquisition, but it must be recommended without reserve as a necessary companion for the researcher specialising in prostaglandins who wishes to keep abreast of recent developments across the whole field. It is perhaps less to be recommended to the biological scientist or student

seeking a survey of prostaglandinology, as there is little attempt either to review in a general manner or to draw together the different areas in which prostaglandins have biological relevance. Nevertheless, this up to the minute series should establish a place in the libraries of institutions interested in this exciting and fast developing area of clinically relevant research.

J. R. S. Hoult

*Lymphocytes and their Interactions: Recent Observations. (Kroc Foundation Symposia Series Volume 4)*

Edited by R. C. Williams, Jr.  
Raven Press; New York, 1975  
xi + 228 pages. \$12.50

There are several current books on the general theme of this volume; this one, like some of the others, is a transcript of a conference, and is partly concerned with basic immunology and partly with clinical studies. The complexity of cellular interactions in the immune response, however, leaves room enough for frequent colloquia and successive volumes and will no doubt continue to do so for some time.

The publication of any conference report raises difficulties for the editor. Firstly, there will usually be a substantial delay between the two events, and secondly, the reasons for holding a conference generally differ from those for publishing a book. The editor of this volume has dealt admirably with the first problem, for he has added a 16 page 'epilogue' which bridges the gap and which develops some themes raised earlier. The second problem has proved more difficult. Part of the purpose of a conference is to bring experts together and encourage their conversation. Whereas it may be tempting to put this discussion 'on the record' in practice it is often kinder not to do so. This is demonstrated in the first exchange after the first paper, when the speaker is tempted into claiming that the heavy chain of an immunoglobulin T molecule is 'slightly smaller than one micrometer' and indeed the verbatim transcripts of discussions which form about 15% of the book are marred by

the infelicities, ambiguities and irrelevances of casual discussion. There is a strong case for firm editing here, as is done, for example, with the CIBA series of symposia.

Papers written for a specialist audience can be of restricted interest, but in this volume a number of papers could tempt a more general readership. The first contribution, by Feldman, Erb and Kontiainen on cell collaboration in antibody production gives a summary of their views but the usefulness of this article to those not in the field is marred by the inaccuracy of the bibliography. The paper of most interest to biochemists is that by the Haddens and the Johnsons on cyclic nucleotides which is well written and argued and manages to include data on, for example, RNA polymerase that does not duplicate pre-existing publications, and in this case, the open discussion after the paper does bring out further useful points. The following articles, on surface immunoglobulin (Sell and Linthicum), role of accessory cells in the immune response (Mishell and Miller) and leucocyte migration factors (Weisbart) are all useful but for their exposition of immunological rather than biochemical ideas. The second section of the book is concerned with clinical studies, primarily autoimmunity and malignancy (Talal and others), immunocompetence and surveillance (Wybran and Fudenberg),