International Review of Cytology is simply a collection of articles from all corners of the cytologists' globe and there is no attempt to place articles on related topics together. Not that this in itself is a criticism, but it is a small inconvenience to the reader wanting to use the volumes as a source of information on a particular topic. For instance, in volume 27 there is an article on wound healing in higher plants, while in volume 28 Jacobs (with the exemplary presentation we have come to expect of this author) discusses regeneration of seive tubes in plants. Because the two topics are obviously related why could not the two articles have been juxtaposed, or even combined into a single review of regeneration? Similarly, Taylor's article on the possible mode of evolution of chloroplasts could have been profitably placed alongside the article concerning evolution of mitochondria that appeared in a volume in this series last year. I feel the editors could prevent each volume from becoming just a hodge-podge of reviews by a more foresighted and integrative policy in assembling material for each volume, so turning the series into a more streamlined source of information.

The first volume of the new series Advances in Cell Biology has a more uniform content. Five out of its seven chapters deal with various aspects of structure and function of the nucleus. Replication of bacterial and eukaryotic chromosomes is fully discussed by Kuempel and Prescott respectively, while Goldstein and Zetterberg each contribute a chapter on protein metabolism in nuclei. A chapter by Brinkley and Stubblefield on the centromere and centriole contains interesting speculations on how these two bodies work in dividing the chromosomes in cell division. Indeed, a speculative approach in each review chapter is one of the aims of the editors, but only within the framework of a comprehensive survey and synthesis of the literature on the topic under discussion. And with these aims in mind each author has prepared a contribution that should wear well.

On the other hand, the editors of International Review allow their authors more latitude in the presentation of their articles. Besides the general workaday review, these volumes contain three other categories of review: the historical, the "self" review and the "hypothetical" review. The history comes from Steward who traces work over the past fifty years on the uptake of salts into plant cells, and from Raven writing about work on the cortex of *Limnea* eggs. The "self" review is by Benazzi-Lentati who describes the studies by herself and her husband into gametogenesis in planarians. This is a useful review because many of their original papers are in Italian, but sadly the editors have neglected to make the author's English more readable. The third type of review is by King who selects certain facts to construct an hypothesis on the process of meitotic crossing-over. seem to be a number of aspects of meiosis which the hypothesis will not account for, or it contradicts, and for this reason must be judged to be more of an essay in model building. Nevertheless, International Review remains an asset on library bookshelves and I imagine Advances in Cell Biology will become an asset too. It will be interesting to see how this latter series fares in the future. PETER BARLOW

IMMUNOLOGY WORKSHOP

Histocompatibility Testing 1970

Edited by Paul I. Terasaki. (Report of an International Workshop held at UCLA and Palm Springs, California, January 20–26, 1970; and the Fourth International Histocompatibility Conference at Los Angeles, January 17–29, 1970.) Pp. 658. (Munksgaard: Copenhagen; Williams and Wilkins: Baltimore, 1970.) 148.50 D.kr. This book is quite different from most of the rash of volumes resulting from meetings and symposia. The

usual form is a disconnected assembly of semi-review chapters that were hastily put on tape on the flight to (or from) the meeting; new data are carefully excluded by the unwilling contributor for fear nobody will see them, but contrary to the pleas of the organizers. By contrast this volume is a compendium of all the latest information on the subject. Inevitably it does not describe a coherent story but is arranged in well classified parts: results of the workshop, genetics, scrology, histocompatibility, chemistry, maternal-foetal incompatibility, mixed cultures, and methodology.

The reason for the quality of the book is historical; it is the fourth in a series (each being about 200 pages longer than the volume that preceded it), each resulting from a practical workshop and conference where the most up to date information is given and the most advanced ideas discussed. Because almost all those directly involved actually attend or are represented, the coverage

is essentially complete.

Important points that emerged from the workshop were: confirmation of recombinants between the two HL-A segregant series, giving a cross-over frequency of the order of 1 per cent; additions to the list of internationally agreed specificity nomenclature; definition of "long" and "short" specificity of antisera (only the short being classifiable as monospecific); inability to attain monospecificity by absorption because of cross-reactivity within each segregant series.

The volume continues the record of an astonishingly rapid advance of the subject, mediated by the workshop meetings. The 1970 book is relatively wide ranging, and because future workshops are likely to be restricted to much smaller aspects of the subject, it is likely to

remain a reference volume for some time.

Some basic ideas are still being questioned, for example, division into two segregant series, although this view has the majority in support. A third segregant series is mooted but is not finding much favour generally; to establish such a situation becomes extremely difficult in view of the serological cross-reactivity now demonstrated.

Possible association of HL-A phenotype with disease and of different haplotype patterns in different ethnic groups is discussed, and some differences in cell/tissue distribution could be a new important feature. On the central theme of practical tissue typing the methodology section has several contributions on micro-platelet complement fixation and other methods may also challenge the standard cytotoxicity techniques now in use.

All those involved in the transplantation field in its widest sense will find something important in the book, which makes a companion volume to the proceedings of the transplantation congresses. Outsiders would find the inevitable language problem for which there is no answer in sight.

D. A. L. DAVIES

METABOLISM OF INSECTICIDES

Biochemical Toxicology of Insecticides

Edited by R. D. O'Brien and Izuro Yamamoto (Proceedings of the Fifth US—Japan Cooperative Science Program held in Tokyo, June 1969.) Pp. vii+218. (Academic: New York and London, June 1970.) 79s; \$8.50.

International conferences provide a unique opportunity for specialists in a restricted field to meet and to exchange ideas. Frequently, however, the brief abstracts issued to delegates before the conference provide the only record of the proceedings, to the detriment of those unable to attend. The Tokyo conference of 1969, by its terms of reference, precluded the attendance of experts from many nations, and it is therefore particularly appropriate that seventeen of the contributions have now been published, together with tables, figures, experimental techniques and references.