Part A is concerned with more basic aspects of reticuloendothelial function ranging from lymphocyte kinetics to biochemical events in reticuloendothelial cells. A section entitled "The Phagocytic Event" is particularly concise and cogent. My major disappointment in this volume is with the photographs. For example, Meuret's elegant study on the geography of short and long-lived lymphocytes loses some clarity because of the fuzziness of the photographic reproductions. A more pleasant aspect of both volumes is inclusion of the workshops which though clearly less formal are highly informative.

The second volume addresses clinical aspects of reticuloendothelial system function and, although it is as extensive as Part A, the coverage seems a bit spotty. The latest update by Good and Hansen on primary immunodeficiency diseases is fine as it stands, but has been done more thoroughly in several other publications. On the other hand, Yunis et al. have very succinctly summarized the latest information on immunogenetic aspects of allotransplantation.

Given some good original studies, several topical reviews and a very good editing job, the question remains as to whom this book is addressed. In the two years since the conference took place much of what was presented has appeared in the journals. It is certainly convenient to have the conference papers collected in one place, but I wonder if a paperback edition might not make this a more accessible personal acquisition rather than volumes slated only for purchase by major libraries.

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The Science of Genetics: An Introduction to Heredity. Third Edition. By George W. Burns. New York, Macmillan Publishing Co., 1976. 564 pp. $13.95.

This introductory college textbook is entitled "the science of genetics" rather than "genetics" and rightfully so. Burns has taken a morass of historical observations and empirical discoveries and woven a narrative that is both clear and entertaining in describing the establishment of Mendelian genetics as a science. For the student interested less in entertainment and more in learning genetics (particularly human or medical genetics), however, this book has several critical deficiencies.

Not least among these is that the book is out-of-date. Although published in 1976, there are few references after 1972 and none after 1974; as a result, many of Burns' examples of genetic principles are either not current or simply incorrect, particularly with respect to human and medical genetics. Second, Burns has adopted an historical approach to the subject. As a result, the introduction of DNA and molecular genetics comes not as the foundation of heredity, but rather, tucked away in the last five chapters, as an explanation and justification for the science of genetics. The unaware reader is more apt, therefore, to suffer through, rather than learn from, the empiricism and trials of the early twentieth century geneticists. With respect to presentation, this book is inadequately illustrated and indexed and the selection of references seems rather arbitrary in places, although Burns includes an excellent general glossary and useful and probing questions (with answers) at the end of each chapter.

While this book, therefore, may not be as appropriate as other more standard general genetics texts for someone interested in an introduction to heredity, it should make enjoyable reading for the scientist well-versed in genetic facts, who seeks an
insightful reintroduction to the science and philosophy of genetics and a rekindling of one's wonderment at the continuum of heredity which makes man.

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THE THEORETICAL BASIS OF ELECTROCARDIOLOGY. Edited by C.V. Nelson and D.B. Geselowitz. New York, Oxford University Press, 1976. 544 pp. $67.00.

The Theoretical Basis of Electrocardiology, edited by C.V. Nelson and D.B. Geselowitz, attempts to bridge the gap between understanding of basic electrophysiology and the electrical representation of this activity on the body surface. In view of the increasing research importance and potential clinical usefulness of analyzing all the electrical information available at the body surface, their book serves an important function in detailing the considerations which translate the electrical activity within the heart to its expression on the body surface. This area is not emphasized in standard electrocardiographic textbooks and deserves considerable attention. Several chapters, such as those in the section in physical and mathematical theory of the electrocardiogram, are difficult for the clinical reader. Other chapters dealing with the effects of respiration and heart position, the influences of transfer factors, the properties of volume conductors and the techniques and use of body surface mapping are particularly interesting. The subject material and price of this book will make it most useful as a reference; to those with a special interest in electrocardiography it is a most valuable addition to standard electrophysiology and electrocardiography texts.

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LUNG LIQUIDS. CIBA FOUNDATION SYMPOSIUM 38 (NEW SERIES). New York, Elsevier, 1976. 330 pp. No price.

This book contains 16 papers on the ultrastructure of the capillary endothelium and the alveolar epithelium in the lungs, and on the movements of water, ions and proteins across these structures as well as across airway walls. Other topics—carbonic anhydrase and CO₂ storage in lung tissue, ion and water transport in fish gills and in amphibian lungs—enhance the scope of the book.

The book is nicely produced and I encountered no printing errors. The story it tells is important and fascinating, but the reader who does not work in this field must piece it together from what are, in part, highly technical papers written for experts. This is of course a common problem with symposium proceedings: it's a discussion between people in the field and hence the published papers are also directed to this small audience.

In the fetus, the lungs are filled with protein-poor liquid which rapidly disappears at the time of birth. Some of it may be squeezed out while the fetus passes through the birth canal but most of it is absorbed into the circulation. Right after birth, lymph flow from the lung increases several-fold during a few hours. The breathing movements of the newborn may help absorption of lung liquid into the interstitium because they create a subatmospheric pressure in the interstitial tissue. So far, there