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Book Reviews

The Principles and Practice of Blood Grouping. Second Edition. By A.G. Erskine and W.W. Socha. St Louis: C.V. Mosby Co., 1978 , 424 pp, $16.95.

The authors of this book have created, with the advice and encouragement of the late Dr Alexander Wiener, an honest-to-goodness textbook in a field which has sorely needed one. Although a number of books have been published in the area of blood groups, their chief value has been as reference books and so they do not easily serve the purpose of didactic education.

The book is divided into three main parts. Part 1 (Principles) includes an up-to-date description of the history, immunology, and genetics of the various blood group systems. There is also a chapter on erythroblastosis fetalis which discusses in more detail than I have ever seen the anatomical basis and physiological sequelae of the disease, as well as the usual serological testing procedures. There is a very brief (a little over two pages), and thoroughly inadequate, description and discussion of blood group disease associations.

Part 2 presents a detailed review of the work in simian blood groups done by Wiener and his colleagues. The review covers tests with reagents originally made to detect human blood group antigens and tests with reagents made against simian blood cells. The work is of interest to the highly specialized immunogeneticist but can hardly be considered useful to the prime users of this book, ie, blood bankers.

Part 3 describes the techniques of blood grouping in cook-book detail. The major divisions of this section cover the techniques of typing, the tests (which tests and how done) used in medicolegal typing, and tests made before a transfusion. The section also includes a chapter on "mathematics and blood groups" a rather ingenuous title for gene frequency analysis.

The glossary is more than a dictionary; each term is defined and elaborated upon so that each entry becomes a short essay on the subject. The book concludes with a thorough index.

To note that a text is badly needed is not to propose that this volume satisfactorily meets that need. The quantity and quality of the information presented is certainly and clearly adequate for a complete comprehension of the field. However, I found it difficult to accept the text on two grounds: 1) The authors "politicize" the text by the large amount of space devoted to defending the late Dr A.S. Wiener. The number and importance of Dr Wiener's contributions is not to be challenged, but I grow weary of the constant reminders and proofs (not really relevant to an understanding of the subject at

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issue) that he was first, or right, or both. 2) The organization of the text is confusing and leads to a large amount of repetition. Each of the chapters in the blood group systems discusses the serology of the system and of each of the variant antigens and introduces some aspects of genetics. But there is a separate chapter on heredity which first presents the basics of the genetics of *each* system and *then* repeats, within the same chapter, more genetics of each system under the guise of a catch-all heading "Methods of Determining Possible Phenotypes of Children in Various Matings." When I want to know about the ABO system, I don't want to have to keep rereading the same information in three or more places in my efforts to make sure I haven't missed anything.

The techniques section is overexpanded by the repetitive detail in which tests for some systems are described (eg, tests for the Rh system include *complete* procedures for testing for Rh antigens, and then separately, again, for rh^W and for Hr antigens). If each technique section (tests in ABO and Lewis, tests in Rh, tests in MNS, etc) had been written as handout pamphlets, I could understand the repetition, but this, after all, is a book, and not a collection of pamphlets.

As might have been anticipated from colleagues of Dr Wiener, heavy emphasis is placed on the thesis that *serological* complexity (i.e., cross-reactivity and heterogeneity of the antibody response) is the real source of the phenomena attributed, by some, to *genetic* complexity (eg, interactions, deletions). A better understanding of the phenomenon might have been provided by presenting a more thorough, general discussion in the chapter entitled "Immunology of the Blood Groups" rather than relegating it, piecemeal, to the specific discussion 7 on the LW system and on anti-C of the ABO system.

I commend the authors on their effort but must admit that my initial enthusiasm waned as I read. Nonetheless, the book will be useful to those who wish to have the detailed collection of recipes at their fingertips.

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The Molecular Basis of Cell-Cell Interaction. Proceedings of the First International Conference, La Jolla, California, 1977. Richard A. Lerner and Daniel Bergsma (eds). Birth Defects: Original Article Series 14(2), 1978. 566 pp. New York: Alan R. Liss, Inc, for the National Foundation–March of Dimes, $58.00.

Cellular interaction, the subject of this book, is an extremely important branch of biological knowledge that deals with mechanisms related to carcinogenesis, embryological development and its normal and abnormal variations, immune recognition and rejection, differentiation, and others. This volume is a collection of well-written and illustrated papers on these subjects. It is divided into six sections: 1) cell surface membrane complexes; 2) organelles and supramolecular assemblies; 3) cell surface proteins; 4) cell–cell interactions; 5) communicating cell systems; and 6) cell patterning.

The papers in each section represent current knowledge in each area. There is an absence of papers on electrical, ionic, and hormonally mediated communications, perhaps