

BOOK REVIEW

Basic and Applied Concepts of Immunohematology

Kathy D. Blaney and Paula R. Howard, editors. St. Louis: Mosby, 2000. 376 pages. \$48.00. Hardcover.

Editors Kathy Blaney, MS, BB(ASCP)SBB and Paula Howard, MS, MT(ASCP)SBB have added another option to the list of immunohematology texts aimed at the entry level clinical laboratory science student. *Basic and Applied Concepts of Immunohematology* is a multi-authored book containing 16 chapters in six sections. The first section covers basic immunology, reagents, and genetic principles. The second section reviews the major blood group systems. Section three describes pretransfusion testing including antibody detection, antibody identification, and compatibility testing. Collection of blood, donor testing, component preparation, and indications for the use of components is covered in section four. The fifth section covers adverse reactions to transfusion, hemolytic disease of the newborn, and transfusion therapy for patient groups such as urgent transfusion, cardiac surgery, transplantation, oncology, renal disease, abnormal Hbs, and hemostatic disorders, and ends with a discussion of alternatives to transfusion. The final section covers quality assurance issues such as good manufacturing practice and quality program ele-

ments as well as a review of safety regulations, accrediting agency standards, and topics addressed in a blood bank safety program. The book covers topics expected in an entry level text. There are a few oversights such as the omission of crossmatched apheresis platelets and nucleic acid testing for HIV-1/2.

Each chapter is headed by a chapter outline and learning objectives. Major subject headings are underlined across the page. Important points are bulleted. Unfamiliar words are defined in the columns on the side of the text. The authors have used tables, pictorials, and boxes of lists to enhance the text. At the end of each chapter there is a paragraph summarizing the material in the chapter followed by "critical thinking exercises" that describe various scenarios. To develop problem-solving skills, the student is asked to make decisions on the most appropriate course of action. There are multiple-choice study questions to provide a tool for the student to assess mastery of the technical information and practice in answering questions in the format frequently used in certification examinations. References are short but adequate. However, previous editions of the AABB *Technical Manual* and AABB standards documents are used as references. Suggested readings follow some chapters and refer to texts and documents that are currently available. The index is adequate to find topics and spe-

cific details in the text. The authors indicate in the preface that an Instructor's Guide (not reviewed) is available that contains suggested laboratory exercises, additional study questions, and answers to the critical thinking questions in the text.

The chapter on reagents covers tube, microplate, and solid phase as well as gel methods. The chapters on antigen systems contain graphics that display the ISBT number and symbol, the clinical significance of the antibody, the antibody IgM/IgG class, optimal temperature, reactive phases, and reactions with enzyme-treated cells. The discussion includes genetics, any disease associations, biochemistry of the antigen structures, gene frequencies, and antibody characteristics. The chapter on blood component preparation and therapy contains pictures of components and equipment that enhance the text. The discussion of the indications for use of components is at a level suited to the clinical laboratory science student.

In summary, this text could be used as the primary text in a clinical laboratory science program or as a review text for basic immunohematology in a pathology resident training program.

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