

# Preface

Antibody identification and serologic problem solving involve much more than knowing how to perform the procedures. Once the mechanics of basic tests such as ABO/Rh type, direct and indirect antiglobulin tests, elutions, and adsorptions are learned, true mastery comes from understanding how and when to use the procedures to resolve unexpected reactivity in a patient's sample. This is why many say that antibody identification is an art as well as a science.

This book steps in where hands-on practice struggles to go. Case studies that begin with a clinical scenario and initial test results guide the learner through a sequence of multiple choice questions that offer testing options and protocols for resolution. As each problem unfolds, the reader is provided with detailed feedback designed to enhance reflection and critical thinking. The difficulty of the cases ranges from basic to advanced, allowing use by multiple levels of students, residents, transfusion medicine fellows and practicing medical laboratory scientists (medical technologists).

The cases in this volume are similar in that they address alloantibodies only. Autoantibodies or other situations involving positive autologous control tests or direct antiglobulin tests are not included. Advanced techniques for alloantibody identification such as the use of chemicals, inhibition, adsorption, and adsorption/elution are presented to challenge the learner who has mastered single alloantibody cases.

Written by practicing serologists and educators, the processes in these cases represent practical and efficient paths to problem resolution. This book will supplement didactic learning in a variety of settings from formal education programs to on-the-job instruction. Each case is designed as a stand-alone lesson enabling the instructor/supervisor to use just those

cases most appropriate for their learner. However, the book is equally suited for self-study because practice can take place without immediately accessing the feedback.

Through cases that present serologic problem solving as a series of logical and systematic steps, the authors hope to demonstrate that the *art* of antibody identification, as well as the science, can be a learned skill.

Susan T. Johnson, MSTM, MT(ASCP)SBB  
Sally V. Rudmann, PhD, MT(ASCP)SBB  
Jan Hamilton, MS, MT(ASCP)SBB