

Preface



IN PREPARING THE 16th edition of the *Technical Manual*, the editors were mindful of the important role this textbook plays in the education and clinical practice of blood banking and transfusion medicine worldwide. We carefully considered the results of an extensive readership survey performed after the publication of the 15th edition, as well as key input from numerous chapter authors and *Technical Manual* users. Our primary goal was to maintain the unique components that make the *Technical Manual* a first-line resource: comprehensive, yet succinct and clearly written chapters addressing all major areas of blood banking, transfusion medicine, and cellular therapy; detailed methods and appendices designed as how-to guides for users; and up-to-date references to AABB *Standards* and other resources.

At the same time, however, we made changes that we believe improved the final book. One of the changes the reader will notice immediately is that the chapters are no longer written by a standing AABB committee (the Technical Manual Program Unit), but rather by selected authors. We made this change for two reasons. First, populating a single program unit with all the expertise needed to maintain the respected stature of the *Technical Manual* has become too difficult with the continued expansion and diversification of our field. Additionally, there were a number of subject matter experts who wanted to contribute to this project but did not have time to devote to committee service. By

selecting individual authors for the chapters, we were able to overcome these challenges and more fully access the expertise of AABB membership for the 16th edition. Second, the authored-chapter format simplifies referencing *Technical Manual* chapters in other scholarly works, which serves to further raise the profile of this flagship AABB publication.

Technical Manual readers will note other important additions and changes. We have expanded the material relevant to hematopoietic stem cells and tissue transplantation and included representative methods. In these chapters, we use the now-accepted terminology HPC, Apheresis; HPC, Marrow; and HPC, Cord Blood (although these are abbreviated HPC-A, HPC-M, and HPC-C, respectively, for simplicity). The chapters on quality control have also been completely updated.

In order to remain current with advances in technology, some new methods have been added. Conversely, in order to keep the size of the book manageable, some methods have been deleted. The methods included in the 16th edition are not the only approaches available to fulfill the requirements of AABB *Standards*, although in many cases the authors and editors believe they reflect best practices. If any method or statement in the *Technical Manual* is in conflict with the *Standards*, the authority of the *Standards* supersedes that of the *Technical Manual*.

Some less obvious changes also bear mentioning. We have endeavored to follow the accepted nomenclature of italicizing gene

names (unless those names are followed by the word “gene” or “allele”), while not italicizing protein names. Additionally, we have used the term “prevalence” to describe the background occurrence of a trait in a population, whereas “incidence” is used to describe new occurrences of a trait.

One aspect of the text that has not changed, however, continues to set the *Technical Manual* apart from other texts in the field. That feature is the extensive degree of peer-review that each chapter and method went through before publication. Initially, each chapter was reviewed and revised at least twice by an editor working closely with the authors. As Chief Editor, I also reviewed each chapter multiple times during this process. Additionally, chapters were submitted to subject-matter-appropriate A A B B committees

and program units for additional, detailed content review (see list on following pages).

We made every effort to ensure that the 16th edition is the most up-to-date, accurate, and complete resource available. Nonetheless, the field of blood banking, transfusion medicine, and cellular therapy is complex, detail-oriented, and continues to evolve. If you find omissions, errors, or inconsistencies, or if you have suggestions for improving the next edition of the *Technical Manual*, do not hesitate to contact us. We value your opinions and look to the readership for help as we strive to keep this valuable resource current with our dynamically evolving field.

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