Often evolutionary/revolutionary changes in science and technology develop into more commonplace, frequently called upon choices to help prove or solve the unexplained or the challenging encountered by routinely utilized approaches. This is certainly true of the use of “molecular” typing that we often refer to, as immunohematology serologists, when serological complexities take us down that path, hopefully for an answer and resolution. Since the advent of blood group genotyping (the preferred terminology) in the immunohematology world, the blood group genotypers have provided us with test results and the final interpretation of the predicted blood group antigen status ascertained through one or more of the various tools used to analyze DNA. These results have provided a great deal of clarity about the basis and the origins of blood group antigens and their diversity. As a blood group serologist, I have found that reading and understanding publications and reports on blood group genotyping requires careful reading and sometimes a second read to fully grasp what the science is stating. The intent of this publication is to streamline and clarify the various terminologies and test methods utilized today, and the reported results. Furthermore, the authors of this publication provide direction on the when, why, and how of blood group genotyping. With those in-
tentions in mind, the authors have unique multidisciplinary backgrounds that give the book a well-rounded approach – serologists, molecular biologist, and transfusion medicine physician.

The use of blood group genotyping and DNA sequencing have given exceptional insights to blood group antigens and have become remarkable tools for the resolution of challenging problems in addressing provision of blood for transfusion needs for patients with complex diagnoses and evolving treatment modalities.

I sincerely hope that you find this publication a valuable tool to better understand the world of blood group genotyping and its applications in transfusion medicine.

Tony S. Casina, MT(ASCP) SBB
Immunohematology serologist at heart and a wishful blood group genotyper