As easy as (anti) -A, -B, -c and -D. An everyday kit to evaluate your routine reagents.
8 What Role Does Cell Source Have in the Future of Immune Cell Therapies?

The future of cellular therapies likely holds possibilities beyond just allogeneic versus autologous.

14 The Evolution of Blood Group Genotyping

Blood group genotyping has several distinct advantages over serological methods.

14 AABB History

AABB Establishes a Presence in the Nation’s Capital in the 1970s.
Personalized Medicine is Making Rapid Strides

This is a time of rapid growth in personalized medicine. Two topics within this area of medicine that AABB News is taking a closer look at this month are genotyping and cellular starting materials. These areas are both advancing quickly, and we expect to see more expansion in these and other related areas in the coming years.

Like something out of science fiction, CAR T-cell therapy involves taking T cells from a patient’s blood, editing those T cells to express a CAR to recognize a specific antigen, growing those cells in the laboratory and returning them to the patient to bind to cancer cells and kill them. This issue’s first feature article, beginning on page 8, discusses the role that cell product source may play in the future of such immune cell therapies.

Genotyping of blood groups is becoming an increasingly common alternative to more traditional serologic antibody-based methods to help transfusion medicine professionals determine the optimally matched unit of blood for patients in need of a transfusion. Our second feature article, which starts on page 14, delves into the benefits of blood group genotyping and where we may expect the science to go in the future.

In the 1970s, AABB found itself “at the vortex of matters important to blood bankers.” As part of AABB’s 75th anniversary celebration, AABB News continues its series of history articles with a discussion, starting on page 18, of how AABB weighed in on the new National Blood Policy during the 1970s.

The 2022 AABB Annual Meeting — See you in person in October in sunny Florida!

After two years of holding the AABB Annual Meeting virtually, we will be meeting in person for the 2022 AABB Annual Meeting, which will be held Oct. 1-4 in Orlando. I’m excited about our return to an in-person gathering and looking forward to seeing our community all together again this fall. If October seems to be a long way off, let me remind you that registration opens for AABB members on May 25 — less than a month from now — and general registration opens on June 1. Not only will we be able to see one another in person, but AABB is planning expanded networking opportunities as well. As usual, the AABB Annual Meeting will also feature the latest scientific research in transfusion medicine and biotherapies, the field’s top education sessions led by experts, an engaging Exhibit Hall highlighting new innovations, a captivating keynote speaker, and plenty of fun for all attendees. Finally, this year’s Annual Meeting will include our commemoration of AABB’s 75th Anniversary. I am glad we will be able to join together to mark the occasion; we truly have many reasons to celebrate.

Dana Devine, PhD
AABB President

Dana Devine, PhD
Judd’s Methods in Immunohematology, 4th edition

Judd’s Methods in Immunohematology, 4th edition is now available from AABB. The new edition includes a compilation of serologic methods to address dilemmas in areas such as detection, identification, and investigation of antibodies.

Updates Include:

- Lectin section expanded and improved.
- New methods added to many sections.
- Readability increased.
- Customization options enhanced.

A Word version of this book that can be customized is included with your purchase as a USB.

PRINT Product code: 212190 | Member: $140 | Nonmember: $190
DIGITAL Product code: 212190DB | Member: $140 | Nonmember: $190

aabb.org/store

Digi-Trax has presented the National Blood Foundation with a $5,000 grant to further support the education of this year’s NBF Scholars. The grant helps to offset the costs associated with attendance at the 2022 AABB Annual Meeting. It has been given in memory of the company’s late founder and CEO, Richard Kriozere. Digi-Trax provides identification solutions such as bar code labeling hardware, software and supplies to health care facilities such as hospitals and independent blood banks.

Kriozere gained his expertise in the label industry while serving as regional sales manager of the Fasson division of Avery-Dennison. In his key roles as vice president of TimeMed and president of Med-Graphics, he developed a strategic understanding of the health care arena. These experiences were essential to the core business development of his own company — Digi-Trax. Over the past 35 years, Kriozere devoted his efforts to finding innovative technological solutions to meet his clients’ identification requirements in health care.

AABB and the NBF are pleased to accept this meaningful contribution from Digi-Trax, which honors Kriozere. His commitment to innovation and advancing the field of transfusion medicine aligns directly with the NBF’s mission.

The grant will be used to provide incoming NBF Scholars with a $1,000 scholarship to attend the AABB 2022 Annual Meeting in Orlando, Fla. on Oct. 1-4. This money is earmarked for registration to the AABB Annual Meeting as well as travel expenses.

In order to be eligible for the scholarship, the NBF Scholar must have completed their NBF early-career Scientific Research Grant-funded project in 2021 and submitted a final report on their research to the NBF. In addition, 2022 NBF Scholars must present an update on their research during the NBF Research Symposium at the meeting, during which the Scholars will be recognized.

The 2022 NBF Scholars
Benjamin Samelson-Jones, MD, PhD

“The prestige and funding associated with the NBF support allowed me to continue my scientific training, which subsequently allowed me to compete successfully for National Institute of Health (NIH) funding.”

Grant Year: 2017

Project: Novel Therapeutics for Hemophilia B: A Rational Pursuit of Bioengineered Factor IX Variants with Enhanced Clotting Activity

Project Led To: A novel bioengineering strategy that can efficiently generate new hyperactive factor IX variants with translational potential to enhance gene and protein therapy for hemophilia B and may provide a platform to address other rare blood disorders.

Vijay Bhoj, MD, PhD

“Apart from contributing to my grant writing experience and general confidence, it enabled my lab to conduct a related pre-clinical study (not part of the original NBF proposal) that formed the basis of a recent NIH award that we were awarded to conduct an analogous clinical trial in patients. I played a lead role as a co-PI in putting this grant together and now continue my lead role, on this 7-year study.”
Grant Year: 2018  
Project: Dissecting the Humoral Response to FVIII for Therapeutic Applications  
Project Led To: A deeper understanding of CAR T therapies in cancer patients that set the stage for purposeful development of such therapies for antibody-mediated diseases and later developed a potential CAR T cell therapy for autoimmune pemphigus vulgaris leading to a currently enrolling clinical trial.

“I am indebted to the NBF for launching my independent research career, first with the generous research support, my first grant, and now support from Digi-Trax to present my work to our transfusion medicine community.”

Robert Sheppard Nickel, MD, MSc

“Without the Digi-Trax grant, I most likely would not be attending the AABB meeting. Now I am very much looking forward to the meeting to learn about others’ research and to connect with colleagues.”

Francesca Vinchi, PhD

“The results obtained from my NBF-funded study unraveled a major role of heme-activated macrophages in multiple complications associated with sickle cell disease. Importantly, this has set the ground for a major application to NIH funding within this exciting area of investigation, which was awarded in July 2020 in the context of a NHLBI-funded P01. This NIH award is currently funding further research progress on this topic in my laboratory and additional papers are in preparation for publication.”

Grant Year: 2019  
Project: Role of heme-activated macrophages in Acute Chest Syndrome  
Project Led To: An NHLBI-funded P01 and helped secure funding at the beginning of my independent research career and represented an important milestone for my appointment as adjunct Assistant Professor of Pathology and Laboratory Medicine at Weill Cornell Medicine.

“As an incoming NBF scholar, my gratitude goes to the Digi-Trax grant that is going to support my attendance to the annual AABB meeting, allowing myself to finally meet colleagues and friends in person after the pandemic, and giving me the opportunity to present and discuss my recent research findings with leaders in the field and expand my knowledge as well as my scientific collaborations in transfusion medicine.”

Grant Year: 2018  
Project: Hydroxyurea and Transfusion (HAT): Pilot Study of Combination Therapy for Patients with Sickle Cell Anemia  
Project Led To: A clinical trial that systematically investigated, for the first time, the benefits of adding hydroxyurea to chronic transfusion therapy for patients with sickle cell anemia. This combination therapy addresses an important problem that has become even more evident during the COVID-19 pandemic—blood shortages.

“This experience was invaluable, especially early in my career, and has provided me with both an expanded knowledge and confidence base to design and execute future clinical studies. Already I am currently co-leading another clinical trial (NCT03587272) investigating nonmyeloablative transplant for sickle cell disease.”

Grant Year: 2018

Project: Hydroxyurea and Transfusion (HAT): Pilot Study of Combination Therapy for Patients with Sickle Cell Anemia

Project Led To: A clinical trial that systematically investigated, for the first time, the benefits of adding hydroxyurea to chronic transfusion therapy for patients with sickle cell anemia. This combination therapy addresses an important problem that has become even more evident during the COVID-19 pandemic—blood shortages.