


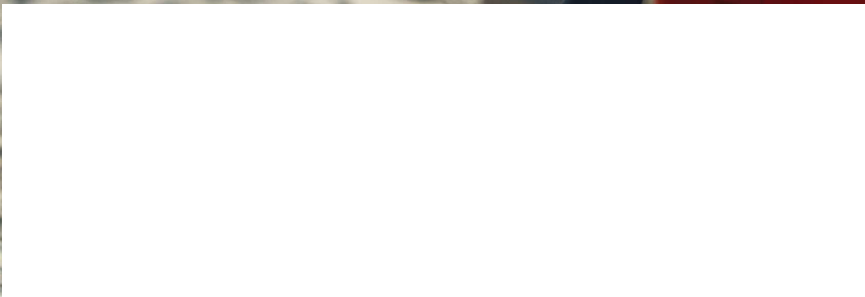
FEBRUARY 2025
Vol. 27 No. 2

AABB News

- 6 Preparation Plans Save Lives During Mass Casualty Events
- 12 Protecting Facilities From the Rise of Cyber Threats
- 16 Improving Disaster Response for Future Events



Disaster Preparedness: Ensuring a Strong Blood Supply During Emergencies



“Corporate members of the blood and biotherapies community have been a critical part of the field for many years and have helped spur advancements through innovations and support. AABB’s Corporate Partner Program is a novel way for this valuable part of our community to expand its engagement with our Association.”

Debra BenAvram
CEO of AABB

AABB’s Corporate Partner Program

celebrates the vital work of corporate members of the community and offers them new and innovative avenues to connect with professionals in the field.

aabb.org/corporatepartner

AABB thanks our Corporate Partners for their support to our Association and the blood and biotherapies field.

PREMIUM CORPORATE PARTNERS



CORPORATE PARTNERS



For more information about the AABB Corporate Partner Program, visit aabb.org/corporatepartner or contact businessdevelopment@aabb.org.





6

Preparation Plans Save Lives During Mass Casualty Events

Institutions share disaster preparedness strategies to mitigate risks and improve outcomes.

12

Protecting Facilities From the Rise of Cyber Threats

Key takeaways from the AABB Executive Cybersecurity Summit.



19

High Priority

AABB Congressional Briefing Highlighted Blood Donation and Biotherapies

AABB leaders spoke about the importance of the blood supply and critical issues in the field.



COLUMNS & INTERVIEWS

President's Message

2 **Advancing Transfusion Medicine and Biotherapies Through Advocacy**

AABB Foundation

3 **Grant Project Update: Jansen N. Seheult, MBBCh, BAO, MSc, MS, MD**

In Conversation

16 **Improving Disaster Response for Future Events With John Hagins**

Be Well

20 **Setting Healthy Boundaries in Relationships**

White Coats

22 **Bill Block, CEO, BCA: Safeguarding the Integrity of the Blood Supply**

DEPARTMENTS

25 **Membership Focus**

26 **Of Note**

29 **Calendar**

Advancing Transfusion Medicine and Biotherapies Through Advocacy

AABB is the leading voice in advancing policies that support patients' access to blood transfusions and biotherapies and life-saving laboratory procedures. On Jan. 28, 2025, AABB hosted a congressional briefing on Capitol Hill in Washington, D.C., to educate policymakers on the importance of the blood supply sustainability, biotherapies and laboratory testing. We also spotlighted other critical issues in our field, such as focusing recruitment efforts on young blood donors and ensuring robust disaster response preparations.

I attended this important event with several AABB board members and leaders in the field and am grateful for the opportunity to advocate for legislative solutions that advance patient care.

During the briefing, I highlighted the critical role of laboratories in transfusion medicine and biotherapies and addressed the new FDA final rule that regulates laboratory-developed tests (LDTs) under the medical device framework. The FDA final rule will have a direct impact on LDTs that are critical and impact patients with cancer, blood diseases and other illnesses. The impact of the final rule is also going to be profound for laboratories like mine, which focus on the care of children. As the rule is active and in place, I urge members to get ready for the May 6 deadline. Please review AABB's toolkit on the AABB website. AABB is committed to working with Congress and FDA to ensure that policies promote quality and safety.

Disaster Preparedness

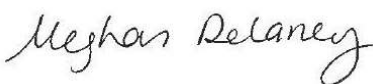
The briefing also highlighted the blood community's role in disaster preparedness. Transfusion medicine

plays an integral role in providing life-saving interventions, like prehospital blood transfusions for trauma and during mass casualty events. The articles in this issue of *AABB News* reflect our community's resilience, commitment and willingness to support one another in the face of an unexpected event, from cybersecurity attacks to hurricanes and mass shootings.

The first feature highlights strategies for improving disaster preparedness and response to save lives. The second article explores the growing threat of cyberattacks and shares key takeaways from the AABB Executive Cybersecurity Summit. In addition, this issue features a Q&A with John Hagins, chair of the AABB Disaster Task Force, who shares insight on improving disaster response for future events.

It is a privilege to serve our patients and provide a strong and safe supply of life-saving resources and quality care. Although we cannot predict when future disasters will strike, we can remain confident that AABB will provide members with the essential tools and resources to navigate the unknown.

By working together on our advocacy agenda, we can use our voice to drive change and improve transfusion medicine and biotherapies care at the state, national and international levels. ■



Meghan Delaney, DO, MPH
AABB President

President

Meghan Delaney, DO, MPH

Chief Executive Officer

Debra BenAvram, FASAE, CAE

Chief Communications and Engagement Officer

Julia Zimmerman

Director of Marketing and Communications

Jay Lewis, MPH

Managing Editor

Kendra Y. Applewhite, MFA

Senior Communications Manager

Drew Case

Design and Production

V Studio

Advertising

Contact Karl Franz

+1.603.416.0364

kfranz@wiley.com

Change of Address:

Make changes online at www.aabb.org > Membership

> My Account

Notice to Copiers:

Reproduction in whole or part is strictly prohibited unless written permission has been granted by the publisher. AABB members need not obtain prior permission if proper credit is given.

Postmaster:

Send address changes to AABB News; c/o Member Services; 4550 Montgomery Avenue; Suite 700 North Tower; Bethesda, MD 20814.

AABB News

(ISSN 1523939X) is published monthly, except for the combined November/December issue for the members of AABB; 4550 Montgomery Avenue; Suite 700 North Tower; Bethesda, MD 20814.

AABB is an international, not-for-profit association representing individuals and institutions involved in transfusion medicine, cellular therapies and patient blood management. The association is committed to improving health by developing and delivering standards, accreditation and educational programs that focus on optimizing patient and donor care and safety.

+1.301.907.6977

Email: news@aabb.org

Website: www.aabb.org

Copyright 2025 by AABB.

Periodicals postage paid at Bethesda, MD, and at additional mailing offices.

Views and opinions expressed in *AABB News* are not necessarily endorsed by AABB unless expressly stated.

Publications Mail Agreement No. 41248513.

Return undeliverable Canadian addresses to PO Box 503; RPO West Beaver Creek; Richmond Hill, ON L4B 4R6.

Thanks to you and the contributions of many supporters in 2024, we continued fueling innovative research together.

aabb 2024 HOUSTON Annual Meeting

24 former Foundation grantees participated in the AABB 2024 Annual Meeting program by presenting research or receiving an award.

24

19



Countries Represented

Program recipients and financial donors to the Foundation represented 19 countries throughout the world.

\$600K



Community Support

In 2024, generous financial donors helped raise funds to support \$600,000 in research grants.

To Our Supporters
Thank You!

aabb Foundation
Fueling Innovative Research

2



Hall of Fame

Two new inductees to the Foundation Hall of Fame were recognized for their scientific research contributions and exemplary leadership in the field.

19



Early-Career Grant Recipients

19 grant recipients conducted research projects in 2024, including 6 new early-career grant recipients awarded.

4



Foundation Scholars

Four new Foundation Scholars were recognized for completing their Foundation-funded research projects.

aabb.org/Foundation

Past Grant Recipients: Where Are They Now?

AABB Foundation Grant Recipient Works to Optimize Trials of Transfusion Strategies

By Leah Lawrence
Contributing Writer



Jansen N. Seheult, MBBCh, BAO,
MSc, MS, MD

Several years ago, Jansen N. Seheult, MBBCh, BAO, MSc, MS, MD, began the research necessary to help build a platform for the completion of in silico trials of transfusion strategies. Like many things in research though, it turned out to be a bit more challenging than he initially anticipated.

Seheult, a consultant and assistant professor in the divisions of hematology and computational pathology and AI, department of laboratory medicine and pathology, at Mayo Clinic,

Rochester, Minn., first became interested in trauma resuscitation during his residency in clinical pathology and fellowship training in blood banking/transfusion medicine at the University of Pittsburgh Medical Center (UPMC), a level 1 trauma center.

“Unintentional injury is the No. 3 leading cause of mortality in the United States and, in individuals younger than age 45, the leading cause of mortality,” Seheult explained. “About 40% of deaths in trauma are due to uncontrolled hemorrhage. [With this work,] we are trying to address the best way to resuscitate patients in severe trauma.”

Platform for in Silico Trials

In 2021, Seheult was awarded an AABB Foundation early-career scientific research grant for his project, “A Stochastic, Multicompartment, Dynamic Model of Hemostasis and Oxygenation During Trauma Resuscitation: Building a Platform for in Silico Trials of Transfusion Strategies.”

Although there is a growing body of evidence that early transfusion with blood products may be associated with improved survival compared with crystalloid infusion, the optimal transfusion strategy

remains unclear and is being actively investigated in clinical trials. In silico models of resuscitation offer a means to evaluate the effectiveness and safety of resuscitation protocols, including the effects on body fluid compartment volumes, tissue oxygenation and hemostatic factors. Researchers can use these computational models to simulate trials using real-world health care data, informing how future clinical trials should be designed.

As part of that project, Seheult and colleagues were trying to integrate a variety of models related to hemostatic resuscitation and tissue oxygenation that have been developed over the past 50 to 70 years and merge those with more recent models.

“Unfortunately, the literature was frequently incomplete,” Seheult said. “Researchers had not documented all of their assumptions rigorously, and we had to go back to the drawing board multiple times to derive assumptions mentioned in prior papers.”

According to Seheult, he and his colleagues are at the stage where they have developed a functioning model, and they currently have a manuscript detailing that model. The manuscript is about to be submitted for publication.

Casey R. Vieni, MD, PhD, a pathology resident at Mayo Clinic, and a colleague of Seheult’s, described the stochastic model as one that not only “incorporate[s] hemodynamic, hemostatic, resuscitation, biomarker and tissue-oxygenation domains into a single comprehensive model,” but also “accounts for variations in blood component composition and temporal features of transfusion therapy.”

Using this stochastic model, the team has replicated findings from their earlier deterministic model, demonstrating that whole blood may be associated with improved hemostatic factor levels and a smaller increase in interstitial fluid volume compared to conventional component therapy in severely bleed-

ing trauma patients. Notably, these results held true across a range of patient characteristics, bleeding rates and blood component compositions, moving beyond the single idealized patient scenario of the earlier deterministic model.

Eventually, the idea is that one can plan out a specific resuscitation strategy, test that strategy computationally and then implement that strategy for a more personalized treatment plan.

Advancing the Field

Although the project has taken a bit longer than expected, Seheult said that none of it would have happened without the support of the AABB Foundation grant and his mentor, Mark Yazer, MD, a professor of pathology at the University of Pittsburgh.

Foundation-funded research projects like Seheult's have helped to advance the field and support AABB's mission to improve lives by making transfusion medicine and biotherapies safe, available and effective worldwide.

"In silico clinical trials will help us derive better hypotheses and optimize the design of real-world studies," Seheult said, adding that this approach could

reduce sample size requirements in trauma resuscitation trials.

For example, the model could identify specific subgroups of patients, such as those with severe bleeding, who might benefit most from whole blood versus component therapy. This would allow researchers to conduct more targeted clinical trials, making better use of available resources.

"In the context of disaster preparedness, this model could help trauma centers and EMS better prepare for mass casualty events," Seheult said. "When multiple trauma cases occur simultaneously, blood product supplies can be quickly depleted. The model would enhance disaster preparedness by helping level 1 trauma centers simulate how many trauma patients they could manage concurrently based on their blood inventory levels, trauma severity and chosen transfusion strategies." ■

To learn more about the AABB Foundation and how you can donate to help further critical research that can change a patient's life, visit aabb.org/foundation



aabb

Invest in AABB eCasts

- Accommodates Your Schedule—Anytime and From Any Location
- Engage With Experts
- Latest Information About Research, Products and Services

aabb.org/education/ecasts

Preparation Plans Save Lives During Mass Casualty Events

By Kendra Y. Applewhite, MFA
Managing Editor

