Engage With Experts

Connect with expert speakers who are driving innovation and excellence in the fields of blood and biotherapies. Benefit from the latest research and up-to-date information while earning CME/CE credits. Register for the 2021 AABB Virtual Annual Meeting today!

Expert speakers include:

**MAGALI J. FONTAINE, MD, PhD**
University of Maryland School of Medicine
*Cryoprecipitated Anti-Hemophilia Factor: Challenges, Solutions and Innovation*

**JED GORLIN, MD, MBA**
Innovative Blood Resources, division of New York Blood Center
*COVID-19 Convalescent Plasma: Impact on Donation Safety and Eligibility*

**STELLA CHOU, MD**
Children's Hospital of Philadelphia
*Evolving Use of Rh Antigen Genotyping for Improved Red Cell Transfusion Matching*

On-Demand Access Through November 19
Register Today at aabb.org/annualmeeting
The Road to Platelet Safety

Blood centers are deploying a variety of strategies to mitigate the risk of bacterial contamination and ensure compliance with the FDA guidance implementation deadline of Oct. 1, 2021.

Balancing Act
Platelet inventory management has become a challenge during COVID-19.
It is rare for a specific blood component to be the subject of extra attention, but platelets seem to be top of mind for many in the blood community lately. This focus is due to the upcoming implementation deadline for the guidance we were first made aware of almost 3 years ago. In December 2018, FDA issued a new draft guidance defining bacterial risk control strategies to enhance the safety and availability of platelets. That guidance was finalized in September 2019 and the original timeline for implementation was April 2021. However, due to the ongoing challenges associated with the COVID-19 pandemic, in late December 2020 the FDA announced it was pushing the implementation back to Oct. 2021.

Now, the implementation is almost upon us and many of us have spent significant time throughout the past few months updating policies and protocols to ensure our facilities adhere to the guidance by the Oct. 1 deadline.

Prioritizing safety
Most importantly, the guidance is designed to enhance safety and reduce the risk of bacterial contamination of room-temperature-stored platelets intended for transfusion. As the highest level of safety is one of the keystones of our field, it is essential that all facilities adhere to the guidance’s recommendations.

AABB has developed various resources and education programs to help ensure facilities can meet the recommendations set forth in the new guidance. (More are available on the AABB website.) This issue of AABB News focuses on platelets and includes feature articles that may serve as additional resources to help facilities prepare.

The first feature article, “The Road to Platelet Safety,” begins on page 10 and offers insight on steps facilities can take to mitigate any risk of bacterial contamination of platelets, as well as recommendations for bacterial testing.

Our second feature article, beginning on page 16, examines platelet inventory management, which can always be challenging because of platelets’ short shelf life, but has been exacerbated during the pandemic.

Annual Meeting
I’d also like to take this opportunity, once again, to remind all AABB members that our 2021 Annual Meeting is quickly approaching. This year’s meeting will be held virtually Oct. 17-19 and will feature the top education sessions and scientific abstracts in the blood and biotherapies field. It will include more than 75 sessions and more than 300 scientific abstracts. There will also be abundant opportunities to earn continuing education credits, network with colleagues from throughout the world, and, as always, to have fun!

I’m really looking forward to this year’s meeting and hope to see many of you on the virtual platform in October.

David Green, MSA
AABB President

David Green, MSA
NEW! UltraCW II Automatic Cell Washer

Exceptional performance and consistent, reproducible results for high performance automated cell washing

» Intuitive programming makes creating streamlined workflows a breeze
» Designed to provide consistent, reproducible results with precise saline fills
» Safe and easy to use with time saving performance

Reliable, safe, and effective solutions help you provide the highest standard of patient care.

For more information:
info.helmerinc.com/ultracwII

TrueBlue™
Safety is the top priority at Vitalant. Since the Food and Drug Administration’s (FDA) release of final guidance for “Bacterial Risk Control Strategies for Blood Collection Establishments and Transfusion Services to Enhance the Safety and Availability of Platelets for Transfusion” on Sept. 30, 2019, we have collaborated with our hospital partners to meet the revised implementation deadline of Oct. 1, 2021. Vitalant evaluated all options listed in the final guidance with three key objectives in mind:

- Provide a safe and sufficient supply of platelets.
- Provide cost-effective options for hospital partners.
- Improve inventory management capabilities and facilitate ease of use by prioritizing options.

With hospital partner input, Vitalant moved forward with large volume delayed sampling (LVDS) 48-hour/7-day and pathogen reduction technology (PRT), also known as psoralen-treated platelets, to meet the objectives and continue to provide transfusion-ready clinical choices for hospital partners. While PRT platelets were already available, LVDS platelets have been implemented on a rolling schedule in our regional blood centers, with some hospitals receiving LVDS platelets as early as July 1, 2021.

Implementation of the transfusion-ready options required significant changes within Vitalant to include:

- Enhanced recruitment strategies to strengthen and increase our platelet donor base, retention and frequency.
- Software upgrades for platelet collection equipment.
- Updates to our blood establishment computer system (BECs) to accommodate the process changes.
- Updates to billing software to include invoice and pricing changes.
- Operating process and manufacturing procedural updates to accommodate the new requirements.
- Replacement and/or the purchase of additional manufacturing equipment.
- Purchase of additional sampling devices and bacterial detection bottles.
- Validation and submission of the new process to FDA for licensure.
- Hiring and training of new staff to accommodate the additional workload.

Concurrently, we held regular discussions with hospital partners to clearly communicate product offerings, understand their needs and timelines and prepare them to accept updated ISBT codes.

As with any change, we have had the opportunity to make process improvements based upon hospital partner feedback and share best-practices and lessons-learned within our enterprise as well as the industry. For example, we improved our overall platelet manufacturing process by forming a cross-functional team to develop a streamlined manufacturing process which would be supported by the BECs. We also continue to flexibly adjust production levels and manage the platelet inventory to minimize disruptions through this transition.

As of August 2021, Vitalant is on track to meet the deadline. While the implementation of the “Bacterial Risk Control Strategies for Blood Collection Establishments and Transfusion Services to Enhance the Safety and Availability of Platelets for Transfusion” final guidance has resulted in significant changes for Vitalant and our hospital partners, our focus continues to be on providing the safest platelet product choices possible for their patients.
The Run for Research is a virtual 5K run or 1-mile walk; you can complete your run or walk on any day of the AABB Annual Meeting, to be held Oct. 17-19.

$55 registration includes an event t-shirt. Register as an individual or as part of a 5- or 10-member team. Teams will receive discounted registration.

Add the Run for Research to your meeting registration or pay separately through RunSignup.

runsignup.com/nbf2021
Impactful.

That is what those of us who have gone into research want out of our efforts. For our work to make a difference, to have a real impact on our field. Since its inception in 1985, that has been what the National Blood Foundation’s (NBF) Scientific Research Grants Review Committee (SRGRC) looks for when we assess the 30 or 40 submissions every year. We are looking for the five or six proposals that we think will have the most impact. The most impact on our field, and, because of our focus on the early-career investigator, the most impact on the applicant themself. We are very much trying to see into the future. Will this investigator be making important contributions to our field for not only the next 1 or 2 years, but also in 5, 10, 20 years?

It’s a big responsibility for the SRGRC, one which, if truth be told, makes us pretty nervous. How can we tell if we have done our job well? In the moment, when we make our selections, we cannot; we have to wait for time to run its course, to see what transpires, hoping that decisions we made 5, 10, 20 years ago indeed were good ones.

This year’s AABB Virtual Annual Meeting provides a great deal of reassurance to me and to the whole Committee. NBF grant recipients are everywhere! Ten research posters will be presented at the 2021 AABB Annual Meeting by our NBF grant recipients, ranging from 1989 NBF grant recipient Neil Blumberg, MD, to two very recent 2020 NBF grant recipients, Larry Luchsinger, PhD, and Robert Lee, PhD. The Sally Frank Memorial Award is going to Connie Westhoff, SBB, PhD (NBF, 1999), while the Tibor Greenwalt Memorial Award is being presented to Don Siegel, PhD, MD (NBF, 1991). Mike Busch, MD, PhD (NBF, 1992) is receiving a prestigious AABB President’s Award. David Gibb, MD, PhD (NBF, 2016) is being honored with the NBF Award for Innovative Research, based on his insights into the role of interferon signaling in RBC alloimmunization. The RISE award is presented to the most impactful paper published the preceding year in the journal Transfusion; lo and behold, two of the co-authors are NBF grant awardees Jose Cancelas, MD, PhD (NBF, 2005) and Angelo D’Alessandro, MD, PhD (NBF, 2016). Among the four abstracts selected as the most impactful — given Plenary Oral Abstract status — two are being presented by NBF grant recipients Ed Snyder, MD (NBF, 1986) and Jeanne Hendrickson, MD (NBF, 2006).

And we are not done yet. The future promises to continue showing the impactful effects of NBF grant recipients on our field. Brian Curtis, PhD, D(ABMLI), MT(ASCP)SBB (NBF, 1995) and Cheryl Lobo, PhD (NBF, 2007) have been elected as new members to the NBF Hall of Fame, and four 2018 NBF recipients have earned NBF Scholar status this year: Arunoday Bhan, PhD, Avital Mendelson, PhD, Antonella Nai, PhD and Hideyuki Oguro, PhD, MSc, BSc.

I am thrilled to be able to witness the potential of the NBF realized before our eyes. Young, hungry investigators, brimming with ideas, yet focused enough to bring those ideas to fruition, not just at the time of their initial award, but on and on, again and again, continuing to march to the drumbeat of research in transfusion medicine, making important contributions year after year, decade after decade. Transfusion medicine advances sometimes incrementally, sometimes by great leaps and bounds; our NBF recipients are there at every step, making a difference.

Now, that’s impactful.
# NBF early-career Scientific Research Grant recipients at the 2021 AABB Virtual Annual Meeting

## 2 Plenary Oral Abstracts

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Title</th>
<th>Presenter Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM21-33</td>
<td>Complement Plays a Critical Role in Inflammation Induced Immunoprophylaxis Failure in Mice</td>
<td>Jeanne Hendrickson, MD</td>
</tr>
<tr>
<td>AM21-34</td>
<td>The Piper Phase 4 Study: Pathogen Inactivated Platelets Entering Routine Practice</td>
<td>Edward Snyder, MD</td>
</tr>
</tbody>
</table>

## 10 Accepted Posters

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Presenter Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>8678</td>
<td>Reducing the Need for HLA Matched Platelets</td>
<td>Neil Blumberg, MD</td>
</tr>
<tr>
<td>8938</td>
<td>RBC Alloimmunization in Type 1 Interferon-Dependent and -Independent Lupus Models</td>
<td>David Gibb, MD, PhD</td>
</tr>
<tr>
<td>9063</td>
<td>Blood Transfusion Under Pro-Inflammatory Conditions Promotes Red Blood Cell Alloimmunization</td>
<td>Yan Zheng</td>
</tr>
<tr>
<td>9150</td>
<td>Donor and Procedural Factors Associated with Thrombocytopenia in Older Allogeneic Peripheral Blood Stem Cell Donors</td>
<td>Laura Cooling, MD, MS</td>
</tr>
<tr>
<td>9655</td>
<td>Platelet Refractoriness Attributed to Platelets Stored in Platelet Additive Solution (PAS)</td>
<td>Laura Cooling, MD, MS</td>
</tr>
<tr>
<td>9350</td>
<td>The Transfusion Associated Dyspnea: Prospective Observation and Laboratory Assessment (TADPOL) Study in Relation to the COVID-19 Pandemic</td>
<td>Christine Cserti-Gazdewich, MD, FRCP</td>
</tr>
<tr>
<td>9595</td>
<td>The N-Terminus Cytosolic Domain of Band 3 Regulates Red Blood Cell Storage Quality</td>
<td>Angelo D‘Alessandro, PhD</td>
</tr>
<tr>
<td>9681</td>
<td>The Role of Caveolae in Hematopoietic Stem Cell Function</td>
<td>Larry Luchsinger, PhD</td>
</tr>
<tr>
<td>9761</td>
<td>Thrombocytopenia Exacerbates Dual Antiplatelet Therapy-Associated Bleeding</td>
<td>Robert Lee, PhD</td>
</tr>
<tr>
<td>9824</td>
<td>Heme- and Iron-Triggered Defective Macrophage Functionality Contributes to the Pathophysiology of Hemolytic Anemias</td>
<td>Francesca Vinchi, PhD</td>
</tr>
</tbody>
</table>
## 6 Award Recipients

<table>
<thead>
<tr>
<th>Award Recipient</th>
<th>Description</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBF Award for Innovative Research</td>
<td>For his 2016 National Blood Foundation-funded research on characterizing innate immune mechanisms underlying the link between inflammation and RBC alloimmunization. Dr. Gibb generated and utilized mouse transfusion models to test the role of type 1 interferons (IFNα/β) in alloimmunization to human RBC antigens. Dr. Gibb discovered that IFNα/β receptor signaling is required for alloimmunization to the human KEL antigen expressed on transfused murine RBCs. Since the completion of his NBF grant in 2018, Dr. Gibb has co-authored eight scientific papers, including a senior author publication.</td>
<td>David Gibb, MD, PhD</td>
</tr>
<tr>
<td>RISE Award</td>
<td>For their original research article titled “Hypoxic storage of red blood cells improves metabolism and post-transfusion recovery,” published in the 2020 volume year of TRANSFUSION.</td>
<td>Jose Cancelas, MD, PhD</td>
</tr>
<tr>
<td>RISE Award</td>
<td>For their original research article titled “Hypoxic storage of red blood cells improves metabolism and post-transfusion recovery,” published in the 2020 volume year of TRANSFUSION.</td>
<td>Angelo D’Alessandro, MD, PhD</td>
</tr>
<tr>
<td>Sally Frank Memorial Award and Lectureship</td>
<td>For her extensive academic achievements and outstanding track record in teaching and service in the field of immunohematology.</td>
<td>Connie M. Westhoff, SBB, PhD</td>
</tr>
<tr>
<td>Tibor Greenwalt Memorial Award and Lectureship</td>
<td>For his development and pioneering use of antibody phage display and of antibody and chimeric antigen receptor T cell constructs in transfusion medicine and related disciplines, including autoimmune disease, dermatology, infections disease and cancer.</td>
<td>Donald L. Siegel, PhD, MD</td>
</tr>
<tr>
<td>President’s Award</td>
<td>In recognition of your exceptional leadership on the NHLBI REDS-IV-P RESPONSE and CDC Multistate Assessment of SARS-CoV-2 Seroprevalence in Blood Donors programs, which are providing critical data to help advance the field to address blood safety concerns and use blood donors to monitor the COVID-19 Pandemic in the U.S.</td>
<td>Michael P. Busch, MD, PhD</td>
</tr>
</tbody>
</table>