Trauma Centers Able to Rapidly Provide Thawed Universal Donor Plasma

Over the past decade, clinical research and US Military experience have suggested the use of a resuscitation protocol for trauma patients using a balanced transfusion ratio – maintaining a plasma: platelet: red blood cell (RBC) ratio close to a 1:1:1 ratio, mimicking whole blood. This protocol requires rapid access to thawed universal donor plasma (type AB), but can be challenging due to its limited supply and short shelf-life. A study in Transfusion describes how 12 trauma centers involved in a clinical trial of balanced transfusion were able to provide quick access to thawed universal donor plasma in support of a 1:1:1 resuscitation protocol.

Previous studies and the US Military have credited resuscitation protocols calling for balanced transfusion with improving survival among severely injured patients. The Pragmatic, Randomized, Optimal Plasma and Platelets Ratios (PROPPR), published Feb. 3 in the Journal of the American Medical Association, showed that among patients transfused according to the 1:1:1 ratio, fewer died from exsanguination and more achieved hemostasis when compared with patients transfused according to a 1:1:2 ratio. The study confirmed that the 1:1:1 ratio is safe, with no differences between the two groups in mortality or complications (see ABC News-letter, 2/6/15).

Deborah J. Novak, MD, of the University of Arizona, and colleagues from the PROPPR study group analyzed the PROPPR data and described the efforts of the transfusion services at the 12 participating trauma centers to provide thawed plasma in a timely manner with minimal wastage.

Eleven of the 12 participating PROPPR centers met the study’s goal of delivering the initial universal donor products 10 minutes after they were ordered; the 12th center took an average of 15 minutes. While plasma wastage increased with the maintenance of an inventory of thawed plasma for immediate use, wastage was minimal across all trauma centers, and one-third of sites reported no significant increase in waste. The authors note that the ideal quantity for inventory will vary according to the facility’s baseline plasma use and how unused thawed plasma is rotated back into the inventory.

Nine of the sites used thawed AB plasma, while three sites used pre-thawed A (whether titered for anti-B or not) to meet their needs for emergency plasma resuscitation. Importantly, the data suggest that group A plasma can be used safely

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OUR SPACE

Jason Carney, COO, Transfusion Safety Officer, SunCoast Blood Bank

Anemia Management and the Perioperative Surgical Home

While moving towards a value-based payment system has been disruptive to the healthcare industry, the benefits of these changes are now apparent in reduced patient complications and mortality due to a stronger focus on patient-centric care. As experts in transfusion medicine, we are vital to the patient care experience and it is essential to understand that improving patient outcomes is a top priority for our hospital partners. Through understanding the reimbursement process, blood centers can work alongside hospitals and physicians to share in the benefits of improved patient outcomes. This strategy is critical for blood centers to move our discussions away from blood product costs and to truly align ourselves as partners with the healthcare systems in our communities.

As my blood center pursued this strategy, I was intrigued by the Perioperative Surgical Home (PHS) concept, which focuses on the patient’s surgical experience from scheduling the procedure to the last postoperative visit. When I was first introduced to the concept of the blood center “anemia clinic,” I was intrigued as to how it could work and where the hospital buy-in would be. Unless we can find new ways to maximize our value to hospitals in this role, we will miss our opportunity to stay on top of the ever-changing waves in healthcare and risk becoming viewed as merely a commodity in the supply chain. Using our expertise to support anemia management and reduce transfusion – and its associated costs and risks – offers hospitals a value-added service.

Hospitals have already harvested the low hanging fruit – decreasing blood use by establishing restrictive transfusion guidelines. We can help maintain those savings (and recover some of our own lost revenue from this reduction) by identifying the pre-surgical interventions that elevate a patient’s iron levels and prevent pre- and post-surgical anemia. We can position ourselves to determine whether a patient will receive a transfusion or pre-surgical iron supplementation. Many orthopedic and OB/GYN patients are already benefiting from this approach. The blood center “anemia clinic” can take on many forms, and local hospitals will take a strong interest in these programs.

The PSH has many synergies with our own patient blood management initiatives, as their goal is to improve health, advance healthcare delivery, and reduce healthcare costs. Communicating to hospitals where we can insert our expertise to support value-based care will better align our centers with hospitals and their requirements for improved margins. Due to our commitment to become a more dynamic healthcare partner for our hospitals, SunCoast Blood Bank is pursuing the formation of an anemia clinic within one of our hospital systems. ABC is the ideal forum to discuss these and other innovative concepts and share our results.

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ABC is an association of not-for-profit, independent community blood centers that helps its members provide excellence in transfusion medicine and related health services. ABC provides leadership in donor advocacy, education, national policy, quality, and safety; and in finding efficiencies for the benefit of donors, patients, and healthcare facilities by encouraging collaboration among blood organizations and by acting as a forum for sharing information and best practices.
Availability of Thawed Universal Donor Plasma (continued from page 1)

as universal donor plasma – 141 units were transfused to AB and B patients at three sites without evidence of hemolysis or other reactions. Of those, 97 units were not titered for anti-B. The researchers said that “this experience is valuable but needs further exploration.” The use of male-only, group A, low-titer B plasma for trauma resuscitations would free up limited AB plasma for other critical uses, wrote the authors.

In observing the efforts of transfusion services at the participating PROPPR trauma centers, the authors concluded that maintaining a five-day thawed plasma inventory, using blood group A low-titer anti-B plasma for emergency resuscitation, and rapid-thaw systems can help make plasma more widely and quickly available.

These observations are especially relevant given that the American College of Surgeons Trauma Quality Improvement Program (TQIP) and AABB’s Patient Blood Management Standards now call for balanced hemostatic resuscitation, which is becoming a common feature in many massive transfusion protocols. A recent review of massive transfusion protocols at 177 major US trauma centers showed that 86 percent had adopted systems to deliver components 1:1:1, point out PROPPR study co-authors, John R. Hess, MD, and John B. Holcomb, MD, in an accompanying editorial.

“Each service met the goal of rapidly providing plasma to the patient’s bedside and did so with minimal wastage. The improvement in survival after severe hemorrhage would not have been possible without this effort,” conclude Drs. Hess and Holcomb.


Hess JR, Holcomb JB. Resuscitating PROPPRly. Transfusion. 2015 April 10. [Epub ahead of print] ☀

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We Welcome Your Articles

We at the ABC Newsletter welcome freelance articles on any subject relevant to the blood banking community. Writers are encouraged to submit short proposals or unsolicited manuscripts of no more than 1,100 words. While ABC cannot pay for freelance pieces, the writer’s name and title will be included at the end of the story, brief news item, or commentary. If proposing a story, please write a few paragraphs describing the idea and sources of information you will use, your present job and background, and your qualifications for writing on the topic. ABC staff cannot guarantee all stories will be published, and all outside writing will be subject to editing for style, clarity, brevity, and good taste. Please submit ideas and manuscripts to ABC Publications Editor Betty Klinck at newsletter@americasblood.org. You will be sent a writer’s guide that provides information on style conventions, story structure, deadlines, etc.
Research recently published in the Proceedings of the National Academy of Sciences confirms previous research suggesting that red blood cells (RBCs) require nitric oxide (NO) to deliver oxygen to tissues. The current convention describes the respiratory cycle as using blood to transport two gases – oxygen and carbon dioxide. Jonathan S. Stamler, MD, of Case Western Reserve University School of Medicine, and colleagues describe research suggesting that the respiratory cycle also involves a third gas – NO – that controls the release of oxygen from RBCs into the tissues that need it. The researchers show that hemoglobin, which transports oxygen from RBCs to the lungs, also needs to carry NO to enable blood vessels to open and supply the oxygen to tissues – known as vasodilation. In a previous study, the authors showed that the respiratory cycle involved more than the exchange of carbon dioxide and oxygen – but also RBCs carrying and releasing NO. In the current study, the researchers show how NO controls the blood flow in small blood vessels inside tissue in a process known as “blood flow autoregulation.” For their investigation, the researchers used mice engineered to lack a particular amino acid in their hemoglobin that mediates the ability to carry nitric oxide in their red blood vessels. They found that these mice were unable to oxygenate their muscle tissue – their blood flow autoregulation did not function in the absence of NO. Even though their RBCs were able to carry oxygen, they were unable to release it to the tissues. When the researchers induced hypoxia in the mice, the blood flow to their organs dropped sharply, triggering heart attacks and heart failure. In normal mice, the lack of oxygen prompts a spike in blood flow, so more oxygenated blood reaches tissues and cells. This process did not occur in the mice.

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RESEARCH IN BRIEF (continued from page 4)

whose RBCs lacked NO. The study shows that when the mechanism that releases NO from the amino acid binding site in the hemoglobin is functioning, the blood vessels dilate and allow oxygen-rich RBCs to flow into the tissue. The study has implications for blood transfusions, as recent evidence has shown that blood transfusions lacking NO are linked to higher risk of heart attacks, disease, and death. “Essentially, blood flow cannot autoregulate without NO. In terms of developing future therapies, the goal must be restoring RBC function, complete with NO delivery capability. As for the nation’s blood supply, the blood should be replenished with nitric oxide,” Dr. Stamler told Medical News Today.

Citation: Zhang R, et al. Hemoglobin βCys93 is essential for cardiovascular function and integrate response to hypoxia. Proc Natl Acad Sci USA. 2015 Mar 25 [Epub ahead of print]

A study in the Journal of Clinical Oncology reports that Jehovah’s Witness patients with relapsed lymphoma or multiple myeloma were able to undergo high-dose chemotherapy followed by autologous stem cell transplantation (ASCT) without transfusion. High-dose chemotherapy followed by ASCT has been shown to benefit patients with relapsed lymphoma or multiple myeloma, however treatment options are believed to be limited for Jehovah’s Witnesses and other patients who refuse blood products. Patricia A. Ford, MD, and colleagues of Pennsylvania Hospital at the University of Pennsylvania, investigated whether Jehovah’s Witnesses could safely undergo this treatment without transfusion support. From May 1996 to March 2014, 125 Jehovah’s Witness patients with lymphoma, multiple myeloma, or amyloidosis were treated with high-dose chemotherapy and ASCT without transfusion by using basic blood management techniques. These included optimizing pre-transplantation hemoglobin with erythropoiesis stimulating agents and intravenous iron, limiting iatrogenic blood loss by minimizing phlebotomy, and controlling or preventing bleeding with hemostatic agents. Post-transfusion, combinations of granulocyte colony-stimulating factor, erythropoietin, epsilon aminocaproic acid, and phytonadione (vitamin K) were administered. At 100 days post-transplantation, 115 (92 percent) were still alive. There were two major and 15 minor bleeding complications, none occurring at platelet levels less than 5.0 x 10^3/µL, with six (4.8 percent) treatment-related deaths. There were no bleeding-associated fatalities. The researchers observed a low incidence of bleeding even in the absence of prophylactic platelet transfusions. The median decrease in hemoglobin from baseline was 5.0 g/dL, with median hemoglobin nadir of 7.0 g/dL. Cardiac complications occurred in 40 patients (20 percent). They note that the absence of major bleeding events at platelet counts greater than 5.0 x 10^3/µL suggests that a transfusion threshold trigger of 5.0 x 10^3/µL may be appropriate in select patients. The authors conclude that due to the low mortality and morbidity, high-dose chemotherapy followed by ASCT may be offered to certain patients refusing blood transfusion, noting that simple blood management strategies were effective alternatives in select patients.


We Welcome Your Letters

The ABC Newsletter welcomes letters from its readers on any blood-related topic that might be of interest to ABC members. Letters should be kept relatively short and to the point, preferably about a topic that has recently been covered in the ABC Newsletter. Letters are subject to editing for brevity and good taste. Please send letters to ABC Publications Editor Betty Klinck at newsletter@americasblood.org or fax them to (202) 393-1282. Please include your correct title and organization as well as your phone number. The deadline for letters is Wednesday to make it into the next newsletter.
RECENT REVIEWS

An article published April 9 in Transfusion reviews health economic outcomes methods in risk-based decision-making for blood safety (RBDM). Analytical methods appropriate for health economic assessments of transfusion safety interventions have not been adequately described in a way that facilitates their use. Within the context of RBDM, health economics can be important for optimizing decisions among competing interventions, explain Brian Custer, PhD, MPH, of Blood Systems Research Institute, and Mart P. Janssen, PhD, of Sanquin in the Netherlands, in their recent review. Their review addresses key considerations and limitations of current methods as they apply to blood safety. The Alliance of Blood Operators (ABO) has developed a RBDM framework specifically designed to facilitate sound blood safety decisions. “Over the past three decades, adopting blood safety interventions that exceed generally accepted cost-effectiveness thresholds in health and medicine has come to represent the normative approach to decision-making, even when the safety improvements gained have been marginal,” write the authors. They add that the often sought after “zero risk” goal in blood safety is neither achievable nor realistic. Due to the complexity of blood safety challenges and new interventions, it is timely to explore whether it is possible to create a better decision-making framework that takes into account social values, ethics, politics, economics, public expectations, and historical context. Many issues facing blood safety today – such as pathogen reduction and emerging infections – pose fundamental health economics outcomes challenges. The authors describe the methods, context, and considerations related to health economics outcomes necessary for analyses of blood safety interventions. Specifically, they explore

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RECENT REVIEWS (continued from page 6)

budget impact analysis, which measures the cost to implement an intervention both to the blood operator but also in a broader context; they also describe cost-utility analysis, which measures the ratio of costs to health gain achieved, in terms of reduced morbidity and mortality, by use of an intervention. A combination of these two methods “can provide a comprehensive assessment of costs and benefits that can be expected from implementing (or not) interventions for specific safety threats,” write the authors.

Citation: Custer B, Janssen MP. Health economics and outcomes methods in risk-based decision-making for blood safety. Transfusion. 2015 April 9. [Epub ahead of print]

BRIEFLY NOTED

The ECRI Institute recently published a report of the Top 10 Patient Safety Concerns for Healthcare Organizations for 2015. ECRI is a non-profit organization that researches medical procedures, devices, drugs, and processes, as well as a federally certified patient safety organization (PSO) under the Patient Safety and Quality Improvement Act (PSQIA). The top 10 list is based upon the organization’s review of patient safety event reports, research requests, and root-cause analyses submitted to ECRI Institute PSO. ECRI offers this list as a catalyst for discussion among healthcare leaders about top patient safety issues faced by their organizations. Under the PSQIA, healthcare organizations can voluntarily submit patient safety reports to PSOs in a protected environment for PSOs to aggregate, analyze, and share findings and lessons learned. Among the top 10 concerns are data integrity, mix-up of IV lines leading to misadministration of drugs and solutions, and failure to conduct independent double checks independently. (Source: ECRI Institute, 4/16/15)

REGULATORY NEWS

The Food and Drug Administration recently granted Community Blood Center, Dayton, Ohio, the first license to manufacture and distribute Apheresis Cryoprecipitated AHF, Apheresis Pooled Cryoprecipitated AHF and Apheresis Plasma Cryoprecipitate Reduced. Cryoprecipitate is a concentrated blood component made from fresh frozen plasma (FFP) that contains clotting factors like fibrinogen, Factor VIII, Factor XIII, and Von Willebrand factor. Susan Middleton, Community Blood Center’s (CBC) quality/regulatory affairs manager led the effort to license these new products and explained that previously, cryoprecipitate could only be manufactured utilizing plasma derived from whole blood donations and therefore, a pooled product required multiple donations from multiple donors. “Being able to use apheresis plasma as the source component allows a blood center to manufacture cryoprecipitate from all blood types without expiring an associated red blood cell component that is not needed,” said Ms. Middleton. She added that, “This really improves product management, and it’s better for our donors because we’re better utilizing their gift. It also saves cost and staff time.” In 2013, the lab staff at CBC began producing cryoprecipitate from apheresis plasma and performed validation testing even though at that time, FDA did not allow distribution, even as an unlicensed product. The validation data was excellent, so Ms. Middleton began communicating with FDA staff in an attempt to initiate the licensure process. “When we first spoke with officials at FDA, they said there had been some discussion between America’s Blood Centers and FDA on this subject, so it seemed that my e-mail came at the right time. In February 2014, FDA agreed to entertain our submission if we could pull the necessary data together,” said Ms. Middleton. The blood center began working with FDA to collect the data, develop standard operating procedures, and eventually engaged the International Council for Commonality in
REGULATORY NEWS (continued from page 7)

Blood Banking Automation (ICCBBA) to create ISBT 128 product codes. Additionally, the blood center was required to modify the current Circular of Information. Keys to the FDA approval were that CBC is using collection devices that are already validated and licensed to produce apheresis FFP, they will not be pooling whole blood derived cryoprecipitate and apheresis derived cryoprecipitate together, and the center will use the same production steps to manufacture both products. Ms. Middleton said that FDA licensure for this product would not have been possible without the efforts of Joe Hulina, technical director; Sharon Wing, component lab supervisor; Kathy Paulick, quality coordinator; Cyndi Condrey, IT blood project manager, and the support of the center’s senior management staff. Blood centers who have questions about this regulatory process may contact Ms. Middleton at smiddleton@cbccts.org.

AABB recently announced the new AABB Standards Portal, which will serve as the online gateway to provide new and easier ways to access AABB’s standards, curated content, reference materials, and other information. The first set of standards available through the platform are the Standards for Cellular Therapies Services, 7th edition. The portal offers the user the ability to create a customized profile based on the activities performed at a given facility. The user profile allows the portal to provide only those standards related to the selected activities; others are available but are “grayed out.” The portal also features a search functionality to search by standard number, phrase, and key word. AABB is now offering a two-week complimentary trial period to try the portal. More information and a link to FAQs about the portal can be found here. (Source: AABB, 4/16/15)
THE WORD IN WASHINGTON

The US Senate voted overwhelmingly on Tuesday to permanently repeal Medicare’s contentious sustainable growth rate (SGR) formula for paying doctors, ending more than a decade of legislative gridlock. The 92-8 vote approving HR 2, the Medicare Access and Chip Reauthorization Act, staved off a 21.2 percent cut in payments to doctors one day before the Centers for Medicare & Medicaid Services was set to begin processing claims at the reduced rate. President Obama has indicated that he will sign the legislation, which passed the House on March 26, ending a cycle of 17 consecutive short-term fixes. Enactment of the legislation permanently ending Medicare SGR cuts means that each year’s threatened 21 percent or greater Part B reductions are coming to an end. Theoretically, there will now be a transition of Medicare payment from fee-for-service models to alternative models focused more on quality, patient outcomes, and cost-efficient healthcare delivery. More information about the bill can be found here. See how your representative voted at http://clerk.house.gov/evs/2015/roll144.xml. (Sources: Modern Healthcare, 4/14/15; Energy & Commerce Committee website, 3/24/15)

GLOBAL NEWS

Global Blood Fund (GBF) recently led a blood donor recruitment training program for the marketing team at the Blood Transfusion Service of Namibia, Africa. GBF is a non-profit charity established in 2008, run by US and European blood donation management professionals seeking to improve the availability and safety of blood in some of the world’s poorest nations. The week-long classroom and field-based coaching gave the team new insights into donor engagement along with a list of 40-plus action items to increase donation. All trainees agreed that they would “strongly recommend this development program to other blood services,” according to a GBF e-mail update. GBF plans to repeat the training in other low- and middle-income countries in the near future. (Source: GBF e-mail update, 4/10/15)

INFECTIOUS DISEASE UPDATES

CHAGAS DISEASE

A study published in the European Journal of Heart Failure suggests parasite persistence is a central driver to the development of Chagas cardiomyopathy. Chagas cardiomyopathy is one of the most prevalent cardiac infectious diseases and the primary cause of non-ischemic heart failure in Latin America. Chagas disease, caused by the Trypanosoma cruzi parasite affects more than 8 million people worldwide. Despite the high disease burden of Chagas cardiomyopathy on South American communities, little is known about the pathogenesis of Chagas heart disease. It is unclear whether cardiac symptoms are caused by the persistent presence of parasites in the cardiac tissues, or rather from a sustained autoimmune reaction that is triggered by transient infection. E.C. Sabino, MD, PhD, from the University of Sao Paulo and colleagues from the Retrovirus Epidemiology Donor Study-II International Component, (continued on page 10)
INFECTIONOUS DISEASE UPDATES (continued from page 9)

c conducted a case-control study nested within a retrospective cohort developed in Brazil to better understand the history of Chagas disease. The study enrolled 499 T. cruzi seropositive blood donors and 488 seronegative control donors who had donated between 1996 and 2002, and 101 patients with clinically diagnosed Chagas cardiomyopathy. They used a sensitive real-time polymerase chain reaction (PCR) assay to determine whether the development of Chagas cardiomyopathy is associated with sustained T. cruzi infection. PCR detected parasite DNA in the blood of 75 percent of cardiomyopathy patients, but only 51 percent of seropositive donors without overt cardiomyopathy. Parasitemia was also associated with markers of disease progression, including electrocardiographic changes and indices of ventricular dysfunction. Further, increased parasite concentrations were seen in cardiomyopathy and those markers of disease progression without overt clinical heart disease compared to seropositive donors with neither. “T. cruzi PCR positivity is associated with the presence and severity of cardiomyopathy, suggesting a role of parasite persistence in disease pathogenesis,” concluded the authors. B. Daan Westenbrink and J. Herre Kingma, of the University Medical Center Groningen in the Netherlands, note that this research highlights how little is known about “this prevalent, debilitating, and deadly disease.” “Failure to diagnose Chagas cardiomyopathy may have severe consequences for those affected and may also increase the likelihood of transmission. Neglecting this devastating disease is no longer an option, neither from the perspective of the masses of individuals infected in Latin America, nor from a public health perspective in western societies, which attract an increasing number of Chagas-infected immigrants,” they conclude.


MEMBER NEWS

Community Blood Center of the Carolinas (CBCC) recently honored its top area blood drive hosts and donors from 2014 in the second of two appreciation banquets. Nearly 100 people attended the Hickory, N.C., event that was emceed by Danny Hearn of the Hickory Chamber and took place at the Crowne Plaza Hickory. Other special guests included the Walker-Jennings family who were directly impacted by the need for blood when Carter Jennings needed multiple transfusions as a baby. CBCC acknowledged the commitment of blood drive hosts that held exceptional blood drives in 2014. Categories included: the highest collecting blood drives in 2014; organizations that have collected the most units over several years; and first-year blood drive hosts who impacted the most lives through blood donation. Individual donors were also recognized for their exemplary service to the community. “It is a tremendous honor to thank and recognize all of these businesses, organizations, and donors for working together in the spirit of community to support local

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MEMBER NEWS (continued from page 10)

patients,” said Martin Grable, president and CEO of CBCC. “Keeping blood donations local provides the blood our family, friends and neighbors need when battling cancer, sickle cell and other life-threatening illnesses. This appreciation banquet was our way of saying thank you to all those dedicated to supporting local patients and making a difference in our community.”

STOPLIGHT®: Status of America’s Blood Centers’ Blood Supply

Total ABC Red Cell Inventory

Percent of Regional Inventory at 2 Days Supply or Less, April 15, 2015

Daily updates are available at:
www.AmericasBlood.org

Correction

The April 3 issue of the ABC Newsletter, in describing the presentation at ABC’s Annual Meeting by Jan Bult, CEO of the Plasma Protein Therapeutics Association (PPTA), stated that Mr. Bult “explained challenges facing the plasma fractionation industry that can lead to shortages of plasma therapeutics used to treat patients with bleeding disorders.” This recap has been clarified to read that Mr. Bult “explained challenges facing the plasma fractionation industry and the importance of accurate distribution data, as provided by PPTA. The North American Data Program is a voluntary manufacturer initiative that provides information on the availability of life-saving plasma protein therapies.”
PEOPLE

Bruce E. Kloster, MD, who passed away on April 1, will be memorialized in a Celebration of Life on April 20 hosted by LifeServe Blood Center in Des Moines, Iowa. The event will be open to the public and his family will be present for the celebration. LifeServe Blood Center invites colleagues, family, and friends to join in remembrance and to celebrate Dr. Kloster’s life. The event will be held at 5 p.m. at LifeServe Blood Center, located at 431 E. Locust St., Des Moines, Iowa. Those wishing to send flowers in honor of Dr. Kloster may send them to the Celebration of Life service. Questions may be directed to Diana Mavis at Diana.Mavis@lifeservebloodcenter.org.

MEETINGS

April 20  

On Monday, April 20 from 1 to 2 p.m. EDT, the Office of Medical Policy Management in the Food and Drug Administration’s Center for Drug Evaluation and Research, will present a webinar on the Draft Guidance: Use of an Electronic Informed Consent in Clinical Investigations, Questions and Answers. More information can be found here.

May 11-12  
HHS Symposium on Accessibility and Development of Tissue Products for Emergency Preparedness, Washington, D.C.

The Department of Health and Human Services will host a Symposium on Accessibility and Development of Tissue Products for Emergency Preparedness at the National Archives in Washington, D.C., from May 11 to 12. This symposium will provide the needed exposure to illuminate the gaps between tissue supply and demand to improve efficiency in the delivery of care, and will lay the groundwork for further collaboration among various responsible US government agencies and private organizations that play a critical role in public health emergency preparedness and response capacity. This symposium is co-sponsored by the Office of the Assistant Secretary for Health, the Assistant Secretary for Preparedness and Response, and the Biomedical Advanced Research and Development Authority – in collaboration with the Department of Defense and the US Medical Research and Material Command. More information can be found here.

May 19-20  
FDA & Biomedical Engineering Society: Frontiers in Medical Devices Conference, Hyattsville, Md.

The Food and Drug Administration and the Biomedical Engineering Society will hold a May 18 to 20 public conference in Hyattsville, Md. to discuss strategies that use computational modeling and simulation in the development and evaluation of medical devices. More information and registration details can be found here.

May 27-28  
FDA Science Forum, Silver Spring, Md.

The Food and Drug Administration will hold the 2015 FDA Science Forum from May 27 to 28 at the FDA White Oak Campus, Building 31, the Great Room in Silver Spring, Md. The FDA Science Forum is held every few years to highlight the cutting-edge science.

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MEETINGS (continued from page 12)

conducted at the agency and to show how this scientific research informs FDA’s regulatory decision-making. More information and registration details can be found here.

Contact: Leslie Wheelock: FDASciProDev@fda.hhs.gov

June 4  

*The New England Journal of Medicine* (NEJM) will host an Innovation in Healthcare Leadership Webinar titled “A New World: Competition. Consolidation. Integration.” Co-hosted with the Harvard Business Review and the Northwestern University Kellogg School of Management, this webinar will explore the evolving healthcare marketplace in the face of increased mergers and consolidation. Topics include mergers, acquisitions, provider consolidation and payer-provider vertical integration, as well as value-based payment system.

June 23-24  

AdvaMed will hold an FDA Submissions Strategy Workshop in Washington, D.C. from June 23 to 24. This workshop will explore strategies for effective Investigational Device Exemptions, Premarket Approvals, Humanitarian Device Exemptions, and Premarket Notifications. More information is available here. ✪

CLASSIFIED ADVERTISING

Classified advertisements, including notices of positions available and wanted, are published free of charge for a maximum of three weeks per position per calendar year for ABC institutional members. There are charges for non-members: $139 per placement for ABC Newsletter subscribers and $279 for non-subscribers. A six (6) percent processing fee will be applied to all credit card payments. Notices ordinarily are limited to 150 words. To place an ad, contact Leslie Norwood at the ABC office. Phone: (202) 654-2917; fax: (202) 393-5527; e-mail: mnorwood@americasblood.org.

POSITIONS AVAILABLE

Mobile Collections Supervisor. Blood Bank of Hawaii, a medium-size blood center (50,000 RBC collections annually / 57 percent from mobiles), is looking for a Mobile Collections Supervisor to join our management team. Reporting to the Mobile Collections Manager, this position’s responsibilities include the overall supervision of the mobile collection team ensuring the collection operations are in compliance with internal SOPs and external regulations. This position will collaborate through interaction and communication with other departments to ensure policies and procedures are in place to optimize the quality and integrity of the blood supply and donor safety. This “lead from the front” position will be quality driven; customer service focused, and have the ability to remain flexible in times of need. Neighbor island supervision and travel is an essential. The ideal candidate will have three years in a health-related field with at least one year of supervisory experience and demonstrate strong leadership, customer service, and communication skills. A current, valid driver’s license is required for this position. If you have supervisory experience in a healthcare-related field, are able to lead by example, be a team player, and are available to work flexible hours including evenings, weekends and holidays please apply today at http://hiblood.me/bbhmobilesupervisor.

HLA Tech (Carter BloodCare – Tyler, Texas). The HLA Tech works under the direct supervision of the HLA Manager, performing medical laboratory tests (continued on page 14)
POSITIONS (continued from page 13)

pertaining to organ transplantation and has the capability to perform disease association and platelet matching. This position also participates in extensive quality control exercises to ensure that all reagents and equipment perform correctly and that results are reported accurately. This position shares all with other Technologists and Manager. Baccalaureate degree in Medical Technology and CHT (ABHI) or CHS (ABHI) accreditation preferred. One year previous laboratory experience preferred. Must have the ability to work an on call schedule. We maintain a drug-free workplace and perform pre-employment substance abuse testing. Carter BloodCare (CBC) is an EEO/Affirmative Action employer. CBC provides equal employment opportunities (EEO) to all employees or applicants and will not discriminate in its employment practices due to an applicant’s race, color, religion, age, sex, national origin, and veteran or disability status. CBC is a Pro Disabled & Veteran Employer. Qualified candidates should apply online at www.carterbloodcare.com.

Product Manager / Sr. Product Manager. Cerus Corporation is searching for a Product Manager/Sr. Product Manager responsible for managing the lifecycle of the INTERCEPT Blood System products. Works with cross-functional project teams to define, prioritize, plan, and drive the implementation of product enhancements and extensions to meet customer requirements and corporate objectives. Requires extensive interaction with all Cerus functional departments globally and with external contractors and customers. Position Requirements: bachelor’s degree in a scientific or engineering discipline, with a minimum of five years of product management experience in transfusion medicine and/or medical devices. To apply, please submit resume to HR@cerus.com. Visit our website at www.cerus.com.

Technical Service Engineer. Cerus Corporation is searching for a technical service engineer responsible for installation, maintenance, servicing, and calibration of illuminators and for support of data management systems in North America. This position interfaces with internal Cerus teams, external customers/collaborators, suppliers, contractors, and third party technical service providers to deliver technical services with a high degree of professionalism. Position Requirements: bachelor’s degree with five plus year’s medical device experience. Experience/knowledge of blood banking industry preferred, excellent technical aptitude and good understanding of ISO 9000 and ISO 13485. To apply, please submit resume to HR@cerus.com. Visit our website at www.cerus.com.

Blood Donor Recruiter. Make a difference in the lives of others putting campaign, sales, and leadership skills to work enlisting blood drive sponsors and recruiting blood donors. The Blood Donor Recruiter is a public ambassador, consistently representing Hoxworth Blood Center, University of Cincinnati in a professional manner to meet the needs of patients in the Tri-State area. This position will manage assigned blood drive accounts in a defined territory; implement account-specific plans to develop, maintain, and build blood drive groups. Position requires an outgoing personality, attention to detail, persistence, and resourcefulness. Daily driving to visit accounts requires valid driver’s license and reliable transportation. Excellent computer and social media skills expected. UC offers great benefits including tuition remission. Minimum requirements: bachelor’s degree with one (1) year experience; -OR- Associate’s degree with three (3) years’ experience; -OR- five (5) years’ experience. Experience must be in sales or marketing. The University of Cincinnati is an affirmative action/equal opportunity employer/M/F/Vet/Disabled. Apply online here: http://bit.ly/1Ip9GMI.

Director of Donor Recruitment (American Red Cross; Portland, Ore.). Based in Portland, this position would oversee Blood Donor Recruitment activities for the Pacific Northwest and Northern California blood regions. This position would work closely with the regional CEO and Vice President of Donor Recruitment to set and achieve blood collections goals for the regions and ensure compliance of all associated FDA and ARC regulations. Job posting found online: www.americanredcross.apply2jobs.com or www.redcross.org. Qualified candidates may contact or referrals can be sent to sara.sutherland@redcross.org.

Lab Supervisor of Testing (Full-Time, 3rd Shift). The Rhode Island (RI) Blood Center has an immediate opening for a full-time 3rd Shift Lab Supervisor of Testing. This position is responsible for the safe and efficient operation of the Testing Lab. The position also has general management responsibilities such as scheduling staff, training, and ordering supplies. Educational Requirements: RI License as Clinical Lab Scientist. ASCP MT, SBB, BB, NCA CLS certification. Must meet requirements for Supervisor in Immunohematology, Hematology, Diagnostic Immunology and Chemistry as described in the Clinical Laboratory Improvement Act of 1988. Must also meet NY State Department regulations for a lab supervisor. We have earned an excellent reputation as an employer of choice, and our culture enables our staff members to perform at their best. We have one of the most competitive benefits and compensation programs available. Our training programs, investment in technology, and commitment to innovation have enabled us to steadily grow over more than 30 years. As a Blood Center employee, you’ll truly make a difference in the lives of Rhode Island residents. PLEASE APPLY ONLINE AT www.ribc.org. We are proud to be an equal employment opportunity employer.

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**Donor Services Working Supervisor (Evans, GA Location).** Full-time RN/LPN/MT with five years’ apheresis/transfusion experience preferred; performs/supervises daily donor room activities; on call 24/7; exceptional customer service; achieves collection goals; 30+ hour workweek/irregular hours/weekends. Additional information/requirements on how to apply are available at [www.savealifenow.org](http://www.savealifenow.org). EOE for Individuals with Disabilities & Protected Veterans.

**Manager, Business Development.** A not-for-profit organization, the Community Blood Center (CBC) in Kansas City is a partner of the New York Blood Center and active member with ABC and the AABB. Responsibilities: Manage portfolio of key accounts. Develop detailed action plans. Works with high level designees at Key Accounts and with CBC Account Managers. Coordinate resources to execute the action plans. Develop/maintain strong relationships throughout account organizations. Identify/Develop new business. Manage/Mentor Account Managers. Requirements: bachelor’s degree; three to five years of sales/marketing experience with demonstrated track record of increased sales; and experience in sales management/public speaking required. Skills: Train team; plan/appraise job results; sales/marketing skills; management of events including recognition events; highly motivated/high energy with good organization skills; sense of urgency to achieve goals; outstanding customer service/relationship building skills; experience developing new businesses/networking; deal with change/unpredictability; flexible hours/some weekends/evenings; proficient computer skills; valid driver’s license/maintain good driving record. Knowledge: Proficiency with Microsoft Office Suite; database management; all applicants must apply at [www.savealifenow.org](http://www.savealifenow.org).

**Quality Assurance Specialist.** The Quality Assurance Department at Hoxworth Blood Center provides regulatory and quality oversight for all processes at the center. The Quality Assurance Specialist will assist with the development of new and revised department Standard Operating Procedures (SOPs), perform audits, analyze data, report results, assist with process validations, and ensure compliance with applicable regulations. The candidate will be responsible for HIPAA compliance for all patient-related activities and provide necessary training for staff with regards to these regulations. The ideal candidate will have experience with some or all of the following standards or regulations; 21 CFR 200-299, 21 CFR 600-699, 21 CFR 11, 21 CFR 1271, 42 CFR 493, 45 CFR 160 and 164, AABB Standards, FACT Standards, and ASHI Standards. The ideal candidate will have experience in the clinical laboratory or FDA-regulated environment. Minimum, Qualifications: bachelor’s degree with three (3) years’ experience; OR-Associate’s degree with five (5) years’ experience; OR-seven (7) years’ experience. Degree and experience must be in a related field. Experience may require at least one (1) year supervision. Apply for this position (Req ID 282) at: [http://bit.ly/1yKnhFP](http://bit.ly/1yKnhFP).

**Operation Systems Administrator.** Mississippi Valley Regional Blood Center (MVRBC) is conducting a search for an Operation Systems Administrator to support growth of our Davenport, Iowa team. This position is responsible for the application administration for the organization’s operational systems: Life-Tec Elite software suites, which is the blood establishment computer system (BECS); BloodHub (Order Management System); eDonor (Donor Recruitment, Loyalty and Scheduling); Hemashere (CRM tool, staffing resources and calendar features); and other departmental applications. This is a full-time position working Monday through Friday with occasional evenings and weekends, if needed. This position may require some travel within the MVRBC service territory to center locations and/or training events. What to Expect: You will be working with the Operation Systems team and various cross functional team members in the development and administration of the mission-critical software systems at MVRBC, software release/upgrades, project management, interaction with Quality Support Services, and vendor communications as it relates development and administration. Experience: The ideal candidate will possess a demonstrated background in software/systems administration. Previous blood center experience and knowledge of LifeTec Elite is highly desired. Knowledge of web based software applications and database administration. To apply: Complete our online application at [http://bit.ly/1bUFP9D](http://bit.ly/1bUFP9D), attaching a resume. EOE: MWVD

**Director, Donor Services.** Mississippi Valley Regional Blood Center (MVRBC) is searching for a dynamic individual to join our Davenport, Iowa Donor Services management team as a director, Donor Services. We are excited to announce this opening as an expansion to our current team. This individual will support our current operations with oversight to the assigned mobile and fixed site staff located in eastern Iowa and western Illinois. As director, Donor Services you can expect to be involved in all aspects of staffing management including; but not limited to, interviewing and hiring, staff development, annual performance reviews, counseling and coaching. Additionally, this position will ensure compliance to established regulations, procedures, cGMP, criteria, and standards. The ideal candidate will have two to five years’ experience in previous blood center setting or similar experience with supervisory experience preferred. A bachelor’s degree in biology or related science or business field is preferred. This position does require the ability to travel 25-50 percent of the workweek within the MVRBC service territory. To
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apply: Complete our online application at www.bloodcenter.org/join-our-team, attaching a resume. EOE: MWVD

**Manager, Donor Recruitment.** Mississippi Valley Regional Blood Center (MVRBC) has an exciting opportunity in our Davenport, Iowa office for an experienced leader to support the growth and development of our 19 donor centers through donor recruitment and retention activities/programs. We are searching for a creative and energetic individual to develop new programs, enhance existing programs, increase our donor base, and provide direction to our call center operations and Donor Scheduling teams. You will be working with our distribution and business development teams to determine blood collection needs and applying that information to the direction of the donor outreach. This is a full-time position working Monday through Friday with occasional evenings and weekends. This position may require some travel within the MVRBC service territory to center locations and/or local community events. Experience: The ideal candidate will possess previous supervisory experience with demonstrated achievement of meeting defined metrics. Previous call center management experience is a plus. A bachelor’s degree, or equivalent combination of experience and education, is required to be considered; preferred studies include business, communications, or marketing. To apply: Complete our online application at www.bloodcenter.org/join-our-team, attaching a resume. EOE: MWVD

**Account Manager.** Mississippi Valley Regional Blood Center (MVRBC) is growing and searching for an account manager (AM) to cultivate and develop successful relationships with existing blood center clients as well as grow our national customer base (cold-calling, etc.). This dynamic position will consist of approximately 25 percent travel primarily in MVRBC’s southern service area (Central IL to St. Louis region), with occasional overnight travel. The AM will support distribution of blood products to national MVRBC customers by supporting sales and conducting inventory management as appropriate. Experience: Candidate should have strong sales background with demonstrated success, knowledge of transport logistics, product marketing, and an understanding of inventory management. Statistical and data analysis experience is preferred. Education: Candidates should have a bachelor’s degree in biology or related science field, business degree with demonstrated science background, or equivalent combination of experience and education will be considered. To apply: Complete our online application at http://bit.ly/1bUFF9D, attaching a resume. EOE: MWVD

**Client Service Coordinator.** Mississippi Valley Regional Blood Center (MVRBC) is growing and searching for client service coordinators (CSC) to support our Business Development team by maintaining successful relationships with client accounts. The CSC will provide technical education on blood; blood industry updates; and support regulatory compliance to our hospital clients. Experience: This position requires a high understanding of laboratory science, specifically blood banking, in order to effectively communicate between hospital clients and lab staff. Previous experience in blood banking is required. The ideal candidate will also possess experience in customer service/product marketing and/or understanding of inventory management. Statistical and data analysis experience is preferred. Education: Ideal candidates should have a bachelor’s degree in medical laboratory science, biology or related science field. Opportunities are available in the Davenport, Iowa; Springfield, Ill., and St. Louis offices. To apply: Complete our online application at www.bloodcenter.org/join-our-team, attaching a resume. EOE: MWVD

**Business Development Manager (Biomedical Sales Account Manager).** (Department: Administration; Location: St. Paul, Minn.; Status: Full-Time, 1.0 FTE (40 hours per week), Exempt) Position Summary: The business development manager is responsible for identifying and obtaining new business partners to expand current research and clinical trial activities (“Activities”) to support our blood center mission. This position will improve Innovative Blood Resources’ (IBR) market position by diversifying IBR’s revenue. This position is ultimately responsible for achieving increased revenues from these activities. This position will be part of a team to define long-term organizational strategic goals, build key customer relationships, and identify, pursue and attain business opportunities compatible with IBR’s values and mission. To apply please directly to our website with an updated resume: http://bit.ly/1CCRr0X.

**Assistant, Associate, or Full Professor.** Bloodworks Northwest has two full time positions for assistant, associate, or professor (without tenure) for physicians with expertise in transfusion medicine and related fields. Successful applicants will provide transfusion medical/apheresis services that will focus on patient care, medical and administrative coordination in the delivery of transfusion medicine, blood collections, and apheresis programs as well as medical education. Qualified candidates will be considered for appointments in the University of Washington School of Medicine at appropriate faculty rank. Applicants should have an M.D. or D.O., and board certification or eligibility in transfusion medicine or hematology boards, or equivalent experience. Candidates with PhD in cellular therapy or molecular biology may also be considered. Please send application, CV, and four references to Maxine Sellers (MaxineS@psbc.org), PSBC, 921 Terry Avenue, Seattle, WA 98104. Salary is DOQ, DOE.

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Deadline: Open until filled. For eligibility for University sponsorship for an H-1B visa, graduates of non-U.S. medical schools must show successful completion of all three steps of the USMLE, or equivalent as determined by the Secretary of HHS. UW is an affirmative action and EEO employer. Qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, age, veteran status, or disability.

Manager Donor Testing. (Department: Donor Testing; Location: St. Paul, Minn.; Status: Full-Time, 1.0 FTE (40 hours), Exempt) Position Summary: In accordance with federal, state, AABB, cGMPs and blood center policies, procedures, regulations and quality control standards, is responsible for all aspects of testing, technical operation, and workload of the Donor Testing laboratory including staff supervision, employee counseling, evaluation, and other standard supervisory functions. Performs other tasks as assigned including budget management, relevant projects, training, and education. To apply please go directly to our website with an updated resume: http://bit.ly/1CmyP1U