

A B C N E W S L E T T E R

CURRENT EVENTS AND TRENDS IN BLOOD SERVICES

Visit ABC's Web site at: www.americasblood.org

2015 #34

September 11, 2015

Please Note: This issue of the ABC Newsletter is abbreviated due to the Labor Day holiday.

Karen Midthun to Retire as Director of FDA's CBER

After 22 years of service to the Food and Drug Administration (FDA), Karen Midthun, MD, announced in an e-mail on Tuesday to FDA staff that she will retire at the end of this year from her position as director of the agency's Center for

Biologics Evaluation and Research (CBER), which most blood bankers know is responsible for assuring the safety and effectiveness of biological products including blood products and cellular, tissue, and gene therapies.



"It has been a great privilege to work with all of you. CBER is a special place to work, and I appreciate all the talented and dedicated individuals who contribute in so many ways to the public health through the important work of our Center and FDA," wrote Dr. Midthun to her CBER colleagues.

Dr. Midthun joined FDA in 1993 as a medical officer, later becoming director of the Office of Vaccines Research and Review, then deputy director and finally director of CBER. During her career with CBER, she has worked to advance public health, including through legislative and policy initiatives, international collaborations, and many significant product approvals.

"Throughout her tenure as Center director, Dr. Midthun has played a critical role in facilitating policy and technology development in the areas of blood products, vaccines, and cell, tissue, and gene therapies ... Dr. Midthun will leave behind an FDA Center strengthened by her strong and creative leadership," said William Gardner, chief of CBER's Consumer Affairs Branch.

Of relevance to the blood community, Dr. Midthun oversaw the approval of important therapeutic products intended to treat bleeding disorders, as well as the development of a regulatory framework for human cell and tissue products and the approval of several cord blood products for hematopoietic reconstitution. Further, she notes that during her time with CBER, the Center has been proactive in facilitating the development of many cellular and gene therapy products that hold great therapeutic potential, as well as the development of guidance documents that speak to these unique products.

INSIDE:

Our Space: Spreading the Word2
Susan Berry-Buckley Retires as Lifeblood CEO, Danny Garrick Named Executive Director
RESEARCH IN BRIEF5
BRIEFLY NOTED6
REGULATORY NEWS6
GLOBAL NEWS7
GRANT OPPORTUNITIES
STOPLIGHT [®] : Status of America's Blood Centers' Blood Supply .8
MEMBER NEWS8
MEETINGS10
CLASSIFIED ADVERTISING10



OUR SPACE

ABC CEO Christine S. Zambricki, DNAP, CRNA, FAAN

Spreading the Word

Last week marked the end of a successful America's Blood Centers-led grassroots campaign, culminating in the submission of two comment letters from ABC within a one week period and a face-to-face meeting with the Centers for Medicare & Medicaid Services (CMS) and the blood community delegation. During the past seven days, ABC has <u>commented</u> to CMS in opposition to the proposed <u>cuts</u> in reimbursement for blood and blood products, as well as to the Department of Labor expressing concern about the impact of the proposed increase in the threshold for exempt status and payment of overtime on non-profit organizations like blood centers.

ABC member support through our grassroots initiative has been incredible. Of ABC's 64 member blood centers, 43 participated in the grassroots initiative by sending letters to their members of Congress, CMS, or both. ABC members rose to the occasion, contacting nearly 130 members of Congress and writing 43 letters to CMS. According to our follow-up, eight members of Congress have contacted CMS expressing the blood community's concerns. (I should note that these numbers are based off of voluntary reporting and may not represent all CMS contacts.) Thank you ABC members for making your voice heard! Now, we wait for CMS to publish the final rule, around the end of October, at which time the agency will respond in the Federal Register to all comments received during the comment period.

The issues facing the blood community are weighty and sometimes appear to be intentionally challenging. That is where our responsibility for educating legislators and policy makers comes into play. Congressional representatives, as well as government agency staff are truly trying to do what is best for this country based on the available facts, data, and knowledge. They are faced with so many topics to comprehend, that it is a form of public service to educate them on the nuances of the blood industry and the details of the issues that are important to sustaining a safe and adequate blood supply. ABC members took on this challenge and made their voices heard with the recent advocacy effort. ABC is grateful for the support and collaboration of other key organizations in this initiative including AABB, the American Red Cross, and the American Hospital Association.

Looking to the future, ABC is planning a national Virtual Advocacy Week to be held Jan. 18 to 22 during which time we encourage you to meet with your legislators in your home district. Timed in conjunction with the congressional recess, ABC will provide members with all of the necessary tools to effectively reach out and educate their legislators, right in their communities. Stay tuned for more information as we work toward spreading the word about the value that ABC members bring to our communities and to the nation's public health. And thank you for your brilliant execution of a job well done!

Christine & Zambricki

The *ABC Newsletter* (ISSN #1092-0412) is published 46 times a year by America's Blood Centers® and distributed by e-mail. Contents and views expressed are not official statements of ABC or its Board of Directors. Copyright 2015 by America's Blood Centers. Reproduction of the *ABC Newsletter* is forbidden unless permission is granted by the publisher. (ABC members need not obtain prior permission if proper credit is given.)

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. czambricki@americasblood.org

America's Blood Centers President: Susan Rossmann CEO: Christine S. Zambricki ABC Publications Editor: Betty Klinck Subscriptions Manager: Leslie Norwood Annual Subscription Rate: \$390

Send subscription queries to <u>mnorwood@americasblood.org</u>. America's Blood Centers 725 15th St. NW, Suite 700, Washington, DC 20005 Phone: (202) 393-5725 Send news tips to <u>newsletter@americasblood.org</u>. Karen Midthun Retires (continued from page 1)

Dr. Midthun added that CBER has played a critical role in responding to public health challenges, such as recognizing the need to screen blood for West Nile virus and working with the industry to facilitate the development and licensure of screening tests. She also recognized CBER's work in developing influenza vaccines and its efforts with other Department of Health and Human Services agencies to enhance pandemic preparedness.

During Dr. Midthun's tenure, CBER has provided input on many cross-cutting agency and departmental initiatives on issues including biosimilar and interchangeable biological products, pediatrics, counterterrorism, user fees, 21st Century Cures, and vaccine, blood, and tissue safety.

"These are but a few examples of the work that has been accomplished at CBER during my tenure, and they underscore the importance of our mission and the tremendous professionalism, knowledge, dedication, and collegiality of our CBER team," said Dr. Midthun.

ABC CEO Christine Zambricki, DNAP, CRNA, FAAN, thanked Dr. Midthun for her work with the blood community. "When it came to the tough issues, Dr. Midthun welcomed input from the blood community and did not hesitate to bring together her top advisers to consider the perspective of ABC and other industry leaders," said Dr. Zambricki.

With Dr. Midthun's help, CBER has begun searching for her replacement, seeking to have no or minimal gap in permanent leadership at the Center. • (Source: E-mail to CBER staff, 9/8/15)

Susan Berry-Buckley Retires as Lifeblood CEO, Danny Garrick Named Executive Director

After guiding a six-year turnaround of Lifeblood, Memphis, Tenn., Susan Berry-Buckley announced that she will retire as CEO of the Mid-South Blood Center, better known as Lifeblood, as of Sept. 30, announced the blood center on Thursday. Following her retirement, Danny Garrick, SPHR, currently Lifeblood's chief operating officer (COO), will become the center's executive director on Oct. 1.

Ms. Berry-Buckley was recruited to Lifeblood in February 2009, a year after her retirement from Kentucky Blood Center where she had led a transformation that included expanding the geographic reach of service, raising funds for and building a new \$10-million headquarters facility, and renaming the organization to better connect with the community, according to the Lifeblood press release.

At Lifeblood Ms. Berry-Buckley has led the organization to become both leaner and more robust, expanding its mobile presence in the community, while also streamlining donor center operations. She successfully steered efforts to



Susan Berry-Buckley

engage not only individual donors but also corporate sponsorship for events like the annual Donor Fest celebration and volunteer recognition luncheon, both established in 2010, and also for a new \$250,000 bloodmobile that will be delivered in March 2016.

Internally, she has focused on developing strong leadership and improving quality indicators, while also helping the organization navigate through a time of dramatic change in blood banking. During her tenure, she helped to build high levels of customer service, donor satisfaction, and clinical quality, all of which

led to Blood Systems' interest in working with the organization and the recent decision that Lifeblood will become a Blood Systems company, effective Oct. 1 (see <u>ABC Newsletter</u>, 8/28/15).

"Susan has cultivated a strong management team and positioned Lifeblood for continued growth," said Larry Hilbun, chairman of Lifeblood's board of directors. "Under her leadership, the organization has strengthened both its depth of knowledge and its community engagement."

America's Blood Centers Chief Medical Officer Louis Katz, MD, expressed his thanks to Ms. Berry-Buckley for her past service to both ABC and the blood community.

Mr. Garrick, who will step into the role of executive director, has served as Lifeblood's COO since 2002. Mr. Garrick has served in leadership positions at the blood center for more than 20 years, representing Lifeblood on many industry boards and committees, including those of ABC, Blood Centers Exchange, and Blood Centers of America. Prior to his joining Lifeblood, Mr. Garrick was the senior executive vice president of operations in Mississippi and Louisiana for Regions Bank.

"This is an exciting time for Lifeblood and for our community," said Garrick. "I'm honored to continue building on Susan's work here by expanding services, strengthening our community, and improving patient care."

For More Information - Margie Boraz - T: 404.328.5148 - margie@macopharmausa.com







-4-

RESEARCH IN BRIEF

A study published Thursday in *Nature* suggests that in a rare circumstance, amyloid pathology like that seen in Alzheimer's disease may be transmissible. The authors caution that the research is very preliminary, based on an observational study of only eight participants, and does not establish that the process can be transmitted. Sebastian Brandner, MD, and colleagues of the University College of London, reported that autopsies of eight people who died of iatrogenic Creutzfeldt-Jakob disease (CJD) after receiving human pituitary-derived growth hormone demonstrated plaques of amyloid- β (A β), a protein associated with Alzheimer's. Another three patients had lower levels of the protein. "The $A\beta$ deposition in the gray matter was typical of that seen in Alzheimer's disease and AB in the blood vessel walls was characteristic of cerebral amyloid angiopathy," they reported. Moreover, the deposits were not located in the same places where the CJD prions were deposited. The eight patients were treated during childhood with human growth hormone derived from pituitary glands taken from cadavers, a practice that ceased in 1985 when it was discovered that some extracts were contaminated with CJD prions, leading to 226 cases of iatrogenic CJD by 2012. Because it is rare to see this type of amyloid pathology at such young ages, the researchers suspected that amyloid "seeds" may have been transferred with the human growth hormone injections, analogous to the iatrogenic transmissions of CJD. None of the eight individuals carried the genetic polymorphisms that predispose to early-onset Alzheimer's or other neurodegenerative diseases. They also were unable to find significant amyloid pathology in patients of a similar age who had died of CJD or other prion diseases but were never exposed to human pituitary-derived growth hormone. Further, they investigated whether amyloid pathology can spread from the brain to the pituitary gland, located just outside the brain. Of 49 people who had died with amyloid plaques in their brains, seven contained pituitary amyloid deposits. The researchers suggest that their results should spark further investigation into whether other routes of prion transmission may also be relevant to $A\beta$ and potential Alzheimer's transmission. Mathias Jucker, PhD, of the University of Tübingen, Germany, who coauthored an accompanying News and Views piece, cautions that the authors fall short of providing the final proof of this concept. That would require injecting the cadaver-derived human growth hormones into animals under controlled conditions and examining whether amyloid deposits develop as a result. "So far, there is no indication that Alzheimer's disease can be transmitted between people under ordinary circumstances. Furthermore, the replacement of cadaver-derived human growth hormone by genetically engineered growth hormone has eliminated the risk that growth-hormone treatment will inadvertently transmit brain disorders between humans," wrote Dr. Jucker. Classical CJD has not been transmitted via blood transfusion, and substantial epidemiological follow-up of classical CJD patients has not suggested any such association.

Citations: Jaunmuktane Z, *et al.* Letter: Evidence for human transmission of amyloid- β pathology and cerebral amyloid angiopathy. Nature. 2015 Sept; 525(7568): 247-250.

Abbott A. Autopsies reveal signs of Alzheimer's in growth-hormone patients. Nature. 2015 Sept; 525(7568).

Jucker M, *et al.* Neurodegeneration: Amyloid- β pathology induced in humans. Nature. 2015 Sept; 525(7568): 193-194.

Dorsey K, *et al.* Lack of evidence of transfusion transmission of Creutzfeldt-Jakob disease in a US surveillance study. Transfusion. 2009 May; 49(5):988-84.

BRIEFLY NOTED

For the past week, blood centers around the US have been celebrating the 11th Annual Blood Collectors Week, facilitated by AABB and Fresenius Kabi. Blood Collectors Week recognizes the outstanding contributions of phlebotomists, apheresis operators, and others in the US who help keep the nation's blood supply safe and available for those in need, according to AABB. More information and resources for Blood Collectors Week can be found here. The website also features success stories about those who have gone above and beyond the call of duty to support the nation's blood supply and create a positive donor experience. Many stories were submitted by America's Blood Centers' member centers. ABC members who recognized Blood Collectors Week can send information about their celebrations or events to newsletter@americasblood.org. (Source: AABB Weekly Report, 8/28/15)

A Viewpoint <u>piece</u>, available online for free, published Thursday in the *Journal of the American Medical Association* suggests that advances in genomic medicine could be used to guide transfusion by providing a more individualized approach to the decision to transfuse. Harvey G. Klein, MD, and colleagues of the National Institutes of Health describe the benefits offered by genomic typing, including providing more precisely typed red blood cell units, particularly to chronically transfused patients who are more likely to become alloimmunized, like sickle cell disease patients. They explain that while genomic typing and the emergence of initiatives on precision medicine have led to a movement toward more individualized medical care, the decision to transfuse red blood cells "has become less precise." They explain that current transfusion guidelines rely primarily upon a single hemoglobin transfusion trigger, "while it is unlikely that single measure is appropriate for all patients." The authors suggest that precision medicine techniques should be applied to the transfusion of red blood cells.

Citation: Klein HG, *et al.* Red blood cell transfusion: precision vs. imprecision medicine. JAMA. 2015 Sept. 10. •

REGULATORY NEWS

The Food and Drug Administration has published the final Guidance for Industry, "Use of Donor Screening Tests to Test Donors of Human Cells, Tissues, and Cellular Tissue-Based Products (HCT/Ps) for Infection with Treponema pallidum (T. pallidum) (Syphilis)." This document finalizes the draft guidance of the same name published in October 2013 and supersedes the recommendations regarding T. pallidum testing in "Guidance for Industry: Eligibility Determination for Donors of Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps)", published in August 2007. When the 2007 guidance was published, there were insufficient T. pallidum tests that were licensed, cleared, or approved by the FDA. The guidance therefore indicated that the FDA would exercise enforcement discretion, allowing the use of FDA-cleared diagnostic tests for T. pallidum for donor screening purposes in donors of HCT/Ps. Since that time, more FDA-licensed, approved, and cleared test systems have become available, negating the need for enforcement discretion. This final guidance provides notice that the FDA intends to enforce the requirement to use appropriate FDA-licensed, approved and/or cleared devices for screening HCT/P donors for T. pallidum. The use of diagnostic tests or pre-amendment devices for this purpose is no longer acceptable. This guidance should be implemented as soon as possible and no later than March 2016. A list of approved donor screening tests can be found on FDA's website. (Source: FDA Guidance for Industry, 9/10/15)

(continued on page 7)

REGULATORY NEWS (continued from page 6)

The Food and Drug Administration recently provided 510(k) approval to Fresenius Kabi for its Amicus Separator System and Amicus Apheresis Kits. This clearance makes available two new functionally closed kits, "Fenwal Amicus Apheresis Kit – Double Needle Functionally Closed (4R2365)" and "Fenwal AMICUS Apheresis Kit – Single Needle Functionally Closed (4R2367)." The shelf life for the functionally closed kits is 24 months vs. 15 months for the closed kits. Labeling has been created for the new functionally closed kits. More information can be found in the FDA approval <u>letter</u>. (Source: FDA 501(k) approval documents, 8/26/15)

GLOBAL NEWS

The Alliance for Blood Operators (ABO) recently announced the launch of the Risk-Based Decision-Making Framework for Blood Safety, now available online. ABO is an international network of seven non-profit blood organizations including America's Blood Centers, the American Red Cross, the Australian Red Cross Blood Service, Blood Systems, Inc., Canadian Blood Services, the European Blood Alliance, and NHS Blood and Transplant of England and North Wales. ABO's framework offers blood services a structured approach to blood safety risk management, laying out step-by-step methodology for planning a course of action with regard to blood safety interventions under certain conditions, by identifying, assessing, acting on, and communicating risk. ABO launched a consultation version of the framework in October 2014, seeking input from various stakeholders (see page 4, ABC Newsletter, 11/7/14). It has been transformed into a user-friendly, interactive online tool that guides the user through the step-by-step decision-making process. It also provides guidance on risk management policy foundations and principles that are critical to good decision-making. A suite of worksheets, charts, diagrams, reference materials, and examples complete the toolkit. ABO expressed in a recent e-mail update its gratitude for the many contributors who have worked over the last three years to develop this tool. Over the next several months, ABO will schedule a series of webinars to walk users through the risk-based decision-making process; check out the website for webinar dates. Questions may be directed to abosecretariat@redcrossblood.org.au. (Source: ABO Communiqué 8, 9/9/15) •

GRANT OPPORTUNITIES

The Department of Health and Human Services (HHS) recently announced a funding opportunity titled "FDA Scientific Conference Grant Program." The purpose of this program is to facilitate the provision of federal financial assistance to support small conferences and scientific meetings clearly aligned with the FDA mission. Blood centers seeking to hold meetings or conferences regarding blood safety, transfusion medicine, or other relevant topics may be interested in seeking funding through this opportunity. Prior approval (advance permission) is required before submission of an application for conference support. Advance permission to submit an application must be requested early in the process and no later than eight weeks before the application submission date. Permission to submit a conference grant application does not assure funding or funding at the level requested. Applicants are encouraged to apply no later than six months prior to the anticipated conference date. (Source: http://grants.nih.gov, 9/10/15)

STOPLIGHT[®]: Status of America's Blood Centers' Blood Supply







Daily updates are available at: www.AmericasBlood.org

MEMBER NEWS

The first human milk bank has arrived in Florida and OneBlood, an America's Blood Centers member in Florida, helped make it a reality. Mothers' Milk Bank of Florida, Inc., a non-profit organization, opened its doors in central Florida and provides local

support for area hospitals eager to have local access to lifesaving breast milk for treating premature babies. "Breast milk is vital for premature babies to survive. The digestive system in



these tiny babies is so underdeveloped that the only food their bodies can handle is breast milk," said Karen Kesler, RN, BSN, CLS, executive director of Mothers' Milk Bank of Florida. "Breast milk is a true lifeline for premature babies and is basically medicine that protects them from infections and potentially life-threatening diseases," said Ms. Kesler. Many times the mothers of premature babies are unable to provide the breast milk their babies so desperately need to survive because their milk has not come in yet due to the baby arriving early. That's why human milk donors are so important. Having a local milk bank means area hospitals now have faster access to the lifesaving product and do not have to rely on out-of-state facilities. OneBlood learned of the need for a human milk bank in Florida and was quick to help spearhead efforts to get the milk bank up and running by providing the organization the space they need-ed to set-up operations at a low cost. "Their mission of saving lives aligns exactly with ours. We

(continued on page 9)

MEMBER NEWS (continued from page 8)

have the right accommodations they need and are proud to be a part of getting this lifesaving partner operational in Florida and giving premature babies and local hospitals easier access to human donor milk," said OneBlood CEO Don Doddridge. OneBlood, Orlando Health, Florida Hospital, and the Edyth Bush Charitable Foundation all provided various forms of assistance to Mothers' Milk Bank of Florida to get the organization off the ground. "We are grateful to all the organizations that rallied around us so we could finally establish the first human milk bank in Florida," said Ms. Kesler. (Source: Mother's Milk Bank of Florida press release, 8/28/15)

New York Blood Center (NYBC) and the New York Yankees celebrated 20 years of partnership on Sept. 9 during a home plate ceremony shortly before the 7:05 p.m. home game at Yankee Stadium.

The ceremony thanked the dedicated high school students who have organized blood drives during the summer months, when donations are typically low. Student representatives from 25 area high schools attended. Both the one-millionth student donor and her high school were recognized during the ceremony. The New York Yankee High School Blood Donor Championship began in 1995 as a way to motivate students in the metro-area to give the gift of life while encouraging peers to do the same. About 500 area high schools host blood drives with NYBC each year, and these student-run blood drives play an important role in maintaining the community's blood supply. The one-millionth donor is a senior at Staten Island Technical High School and a blood donation advocate who has helped organize several blood drives. "The New York Yankees value our partnership with the New York Blood Center and are proud that our combined ef-



Bahira Ahmed, a senior from Staten Island Tech High School is New York Blood Center's 1 millionth high school blood donor, honored in a home plate ceremony before a Yankees game. Later in the game, Bahira gave up her VIP seats to her friend and sister and joined the rest of her friends in the upper seats.

forts and commitment over the past twenty years have motivated high school students, staff, and administrators throughout New York and New Jersey to donate in excess of one million life-saving units of blood," stated Brian Smith, senior vice president of the Corporate/Community Relations Department at the New York Yankees. "The Yankees have been an incredible partner for the past twenty years, and it is exciting to reach both milestones in the same year," said Andrea Cefarelli, executive director of Donor Recruitment at NYBC. "We are proud to be celebrating our high school blood donation ambassadors tonight. While school was out of session, these students stepped up to support our community's blood supply," said Ms. Cefarelli the evening of the event. NYBC awards hundreds of thousands of dollars in scholarships to students each year. NYBC is a proud participant in the Bloodstock Scholarship Program, which encourages and rewards students who organize blood drives in their communities. Students work closely with NYBC account managers and learn valuable marketing, organizational, and leadership skills. (Source: New York Yankees, NYBC press release, 9/10/15) •

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 <u>newsletter@americasblood.org</u> 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.

MEETINGS

March 14-16, **12th Annual FDA and the Changing Paradigm for HCT/P Regulations, Bethesda, Md.** 2016

This conference, produced by Pharma Conference Inc., provides an excellent balance of industry and FDA speakers, presenting the latest thinking on critical issues, as well as interactive workshops and the opportunity to network with peers. More information and registration details can be found <u>here</u>. Register by Oct. 30 for a \$200 discount.

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: <u>mnorwood@americasblood.org</u>.

POSITIONS AVAILABLE

Technical Services Liaison - HS003 (San Antonio, TX). Responsible to assist in building positive and lasting customer relations with hospital customers and collaborating to resolve technical issues. Will audit hospital customers and ensure compliance with regulations for all blood components returned to South Texas Blood & Tissue Center (STBTC). Associate's degree in Medical Laboratory Technology, or bachelor's degree in Chemical, Physical or Biological Science and/or Medical Laboratory Science required. Blood banking experience required. Five years laboratory experience in a hospital or blood center required with a bachelor's degree or 10 years laboratory experience in a hospital or blood center required with an associate's degree. Five years' experience with hospital Laboratory Information System (LIS). Computer experience required. Must be at least 21 years old with three years driving experience and a good driving record. Certified Medical Laboratory Technologist (MLT) required, Certified Medical Technologist (MT) or Certified Laboratory Scientist (CLS) required. Visit our website at www.biobridgeglobal.org. E-mail résumé to hr_dept2@biobridgeglobal.org. Call Human Resources: (210) 757-9557. BioBridge Global and its subsidiaries are proud to be an EEO/AA-M/F/D/V/Genetic Data employer that maintains a Tobacco & Drug-Free Workplace. All qualified applicants will receive consideration for employment without regard to race, color, ethnicity, religion, sex, national origin, disability, veteran status, genetic data or other legally protected status.

Director of Technical Services. Blood Bank of Hawaii, a medium-size blood center (50,000 RBC distribution annually), is seeking a strong leader to oversee all technical operations in the component manufacturing, quality control, and immunohematology reference laboratories and the 16-member team. Headquartered in Honolulu, we are the sole provider of blood to the state's hospitals. If you are a CLS and/or SBB with at least five years' technical and management experience in a blood bank setting, come join a dynamic, cohesive team that is effecting positive change. We offer a competitive salary and excellent benefits. Apply online now at http://www.bbh.org/about-bbh/employment.html.

Clinical Laboratory Scientist (CLS). A full-time Clinical Laboratory Scientist (CLS) is needed to perform serological testing at the Northern California Community Blood Bank (NCCBB). The position is open immediately to replace a CLS who will be retiring in the summer of 2016. The position requires current California CLS and experience in serological testing including RBC antibody ID. NCCBB is a not for profit blood center operating on the beautiful northwest coast of California. We supply all of the blood products to five local hospitals and also resource share with other institutions. To apply, please contact: Chris Stenlund at: (707) 443-8004 or <u>cstenlund@nccbb.org</u>.

Technical Director. The Northern California Community Blood Bank is seeking a technical director. The position is full-time and requires current California CLS and experience in serological testing including RBC antibody ID. The technical director oversees laboratory, component production and product management. To apply, or for a copy of the job description, please contact Thomas Schallert at (707) 443-8004.