

An Update on the ABC Data Warehouse

The America's Blood Centers Data Warehouse (DW) project has been underway for some time. However, ABC Director of IT and Business Intelligence Sameer Ughade and his team have rapidly formulated a new architecture and strategy to push forward real results that will help shape the future of the blood industry.

The goal for the DW is to help blood centers meet their strategic initiatives and objectives by using donor and blood operational data that will in turn help increase efficiencies and eliminate waste. But the DW project has capabilities to move beyond data analytics into delivering actionable business insights. The project is also critical to support both ABC's mission and strategy of helping member centers with advocacy and scientific research efforts impacting the entire blood industry.

How does the DW work?

Blood centers operate using software systems known as Blood Establishment Computer Systems (BECS). Depending on the system, the BECS can include operational data-points on donor blood types, frequency of donations, and donor demographic information, as well as manufacturing, testing, labeling, and blood product distribution and tracking. To make it easy for BECS systems to provide data to the ABC DW, data extraction interfaces have been developed as well as online secure transfer methods allowing each contributing member center to provide their data to the ABC system. This interface pushes the center's BECS data points to the ABC DW automatically and stores them within this secure repository for further analysis and reporting. Data points are also pulled from ABC surveys, e.g. financial and human resources data, and external data

sources like the U.S. Census Bureau are used as well.

The data is further enhanced and provides more meaning using metadata consisting of standardized definitions and metrics, allowing the members to easily retrieve and analyze the information. The standardization allows blood centers the ability to benchmark their operations based on common metrics amongst other centers and allows sharing of best practices. The ABC DW team has had to manually review the data from each blood center to "clean up" and



standardize these fields, because all BECS systems have customizable fields, with every blood center creating its own set of fields and codes. The team has successfully cleaned and loaded data for a few participating centers already and the team plans to have data from additional centers available to reach 51 percent of ABC collections by end of ABC fiscal year 2017. The team continues to vigilantly work on the other centers and have created systems so that when new data is streamed into the DW, the fields match perfectly and less "clean up" is needed

Issue #20 June 2, 2017

INSIDE:





OUR SPACE

Kate Fry, ABC's Chief Administrative Officer

Formulating Solutions

Not a week goes by that I don't sit in a congressional office, educating a staff member on the need to address the sustainability of the blood supply and associated issues that impact the daily operations of ABC member blood centers. We discuss both near- and long-term topics, and then hit an inevitable question – "What do you want us to do about it?"

Finding the answers to today's greatest challenges in the blood industry, along with the greatest opportunities, are at the core of ABC's current efforts and the essence of ABC's value to our member centers. Whether it is through partnerships currently underway with various federal agencies to address sustainability issues or through the ever-growing Data Warehouse, we have a laser focus on our work to answer the whats, ifs, and hows surrounding key areas of the industry. However, we are continually looking for new ways to reach our goals, as was illustrated this week in the re-establishment of the Foundation for America's Blood Center's (FABC) member grant program.

The FABC member program has returned in fiscal year 2018 (FY18) with a narrow focus on three main areas of translational research: iron depletion mitigation, adverse reactions in young donors, and donor health, safety, and management. This last topic is part of the newly created <u>Dr. Louis Katz Research Grant</u>. Awardees of FY18 grants will be announced at the ABC Summer Meeting (registration is now open) and findings from all research projects will be available to ABC members and FABC donors. The results of this research, as well as separate FABC funds dedicated to third-party policy research, will guide our advocacy work in these areas. To learn more, and invest in these efforts today, visit, <u>www.theFABC.org</u>.

While our industry's story is impressive, it is not enough. We must not only articulate the issues, but formulate the solutions. Through the direct work of ABC, coordinated work with FABC and our member centers, and third-party public-private partnerships, ABC has a multi-dimensional strategy to answer today's toughest questions. Although if anyone has figured out what "convfefe" means, please let me know.

Katheindry

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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. America's Blood Centers President: Martin Grable Editor: Lisa Spinelli Subscriptions Manager: Trudy Thompson Annual Subscription Rate: \$390

Send subscription queries to <u>TThompson@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>.



DATA WAREHOUSE UPDATE (continued from page 1)

going forward. Once all the data is available, the power in numbers can be fully appreciated.

Once loaded into the DW, the data is visible through a web-based business intelligence tool from the ABC vendor Microstrategy.



Heat map display of donations from the DW dashboard

Status of the DW

Currently, the ABC DW team has created data extraction interfaces with numerous BECS systems, including Wyndgate, Blood Bank Computer Systems (BBCS), and IT Synergistics (ITSY), among others. The DW team is actively working on finalizing the remaining BECS systems' ABC member centers are using, including ones from Haemonetics, MAK Systems, and other homegrown systems. In total, the ABC DW is capable of obtaining data from 75 percent of ABC blood centers, 46 member centers.

The team is diligently working with a multidisciplinary group of experts through the Requirements Advisory Committee (RAC). The RAC is working on identifying the most common business questions and the reporting requirements that will be of most interest to ABC members. These reports are going to be available as a reporting package to the participating ABC members very shortly. The team has worked on upgrading the infrastructure and newer toolset, used automation to streamline common processes, worked on implementing interfaces for the different BECS systems and developed reports.

Using the business intelligence tool, member centers can self-serve and easily create their own reports or customize standard delivered reports for their own use. There are multiple dashboards available to perform slicing/dicing and other analytical operations on the data, including trend analysis. For example, a user could display their donor location information using a map of North America. The information can be drilled down from a national level to the state, all the way down to zip code, and filtered by blood types, ethnicity, age, etc. During the 2017 ABC Annual Meeting, the team was able to successfully demonstrate this and other capabilities of the tools.

With the power of our member centers' data, the DW can help blood center executives answer a number of questions they struggle with every day regarding donor recruitment, product waste, and product sales. The DW is a powerful data analytics platform coupled with a dynamic business intelligence application that can help shape the blood center operations to reduce waste and inefficiencies and capitalize on the power of information.

We invite all our members to email <u>Sameer Ughade</u> today to set up an information session to receive a demonstration of the data warehouse.



INSIDE ABC

The programs and services described in the Inside ABC section are available to ABC member blood centers and their staff only, unless otherwise specified.

The Foundation for America's Blood Centers (FABC) Announces Membership Grant Opportunities



The FABC is proud to announce numerous membership grants for the fiscal year 2018. The FABC is committed to helping ABC members, individually and collectively, achieve their missions. These grants will help support member programs and initiatives that work toward ensuring a safe and adequate blood supply. As such, the Foundation is pleased to solicit proposals for research, with a maximum ask of \$20,000, in the following areas:

1. Iron Depletion Mitigation

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America's Blood Centers

It's About Life.

Objective: Operational/translational research related to iron mitigation strategies that may include, but not limited to, development and validation of messaging and donor comprehension and/or donor compliance with recommendations.

2. Adverse Reactions in Young Donors

Objective: Evaluation of various interventions or approaches to further reduce reaction rates including, but not limited to, blood volume limitations, distraction, applied muscle tension, and fluid or salt loading.

3. Donor Health, Safety, and Management (Louis Katz, MD, Research Grant -*NEW*)

Objective: Execution of operational research in a blood center, defined as investigations involving the application of scientific and statistical principles to donor health and safety, center management (latter can include blood supply adequacy, supply chain, and inventory management), or provision of a scientific/qualitative basis for complex decisions.

4. Other

The Foundation will consider funding programs and projects that do not fall under any of the aforementioned categories should the program or project meet the eligibility criteria established. Proposals must be submitted in full by **Friday**, **June 30**, **2017**, **no exceptions**, and must not exceed \$20,000. A review committee will make a decision on funding no later than Friday, July 31, 2017. The applicant(s) will be notified of the status of the proposal within four weeks after a decision has been made. Funds will be awarded prior to September 15, 2017.

Learn more about the member grants and download the application <u>here</u>. For questions, please contact <u>Leslie Maundy</u>.

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INSIDE ABC (continued from page 4)



Register for the Links for Life Golf Tournament!

Join us for the 7th Annual Links for Life Golf Tournament during the ABC Summer Meeting! The tournament will take place on Thursday, August 3, at the Warwick Country Club. located on picturesque Narragansett Bay. Established in 1924, the Warwick Country Club is Rhode Island's premier full-service waterfront country club. Located on the beautiful Bay, this historic club offers unparalleled views of the west passage, East Greenwich Bay, and the Jamestown and Newport Bridges.

Transportation will be provided to and from the ABC Summer Meeting hotel, the Renaissance Providence Downtown Hotel, to the golf course. Transportation will start at 11:30 a.m. to the country club. Registration fees are \$200 per person and includes lunch, cart, green fees, and an awards reception directly following conclusion of play. Lunch will be provided and the shotgun tee-off time starts at 1 p.m. After the tournament, golfers will be transported back to the Renaissance.

All funds raised for the Links for Life tournament will go towards FABC's member grants (see article on page 4), policy research, sponsorships, and benchmarking reports. Register through your <u>Summer Meeting registration</u> or contact <u>Leslie Maundy</u> for registration. Industry partners are also welcome and encouraged to attend. Please contact <u>Leslie Maundy</u> for sponsorship opportunities.

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RESEARCH IN BRIEF

Clinical improvements were found using convalescent plasma in addition to standard care versus standard for severe influenza patients care only. This approach was originally described during the 1918 "Spanish flu" pandemic and reemerged as a therapeutic option for severe flu cases in 2009. In this first randomized, open-label, multicenter, phase two trial of convalescent plasma, 98 patients with severe influenza A or B, were assigned to the plasma group (plasma with hemagglutination inhibition antibody titers of 1:80 or more for the infecting strain) and the standard care group. The patients were followed for 28 days with the primary endpoint being normalization of respiratory status. By the end of the trial, 24 (53 percent) of the 45 participants in the standard care versus 28 (67 percent) of the plasma group had normalized their respiratory status. One patient died in the plasma versus five in the standard care group and the plasma group had fewer serious adverse events as well. Early treatment appeared more effective than delayed.

"It was a small study, limited in sample size, but I am pleased with the results," said John Beigel, MD, with the National Institute of Allergy and Infectious Diseases (NIAID), sponsors of the study. "It is supportive of prior studies for the role of convalescent plasma to treat severe flu, it is not definitive, but certainly supportive."

"Their broad antiviral spectrum, encompassing diverse subtypes of influenza A viruses, make these antibodies appealing candidates for responding to severe infections by both emerging and seasonal influenza virus strains, although their clinical efficacy, safety, cost-effectiveness, production capacity, and stockpiling potential remain to be established," according to a comment authored by Jay Epstein MD, the director of the Office of Blood Research and Review, Center for Biologics, FDA and others.

A number of ABC member centers were instrumental in supplying the high anti-influenza titer plasma for this study, including Mississippi Valley Regional Blood Center, New York Blood Center, Innovative Blood Resources, and Gulf Coast Regional Blood Center.

Citations: Beigel J.H., Tebas P., Elie-Turenne M.C., *et al.* Immune plasma for the treatment of severe influenza: an open-label, multicentre, phase 2 randomised study. *The Lancet.* May 15, 2017 online. DOI: http://dx.doi.org/10.1016/S2213-2600(17)30174-1.

Scott D., Epstein J.S., and Hayden F.G. Serotherapy for patients with severe influenza. *The Lancet*, May 15, 2017 online. DOI: <u>http://dx.doi.org/10.1016/S2213-2600(17)30173-X</u>. ♦

BRIEFLY NOTED

Medical devices lack cybersecurity, reads a new report from Ponemon Institute. The survey found only about one third of device makers and healthcare providers are aware of potential security risks for their medical devices, but do not have the resources to provide security against cyberattacks. Most medical devices do not come with security built in; they have to be anchored to legacy healthcare systems that are sometimes 20 years old. Testing and security of the devices is left to healthcare providers who are unaware and do not have the resources or expertise to dedicate to ensuring security. (Source: *Healthcare IT News*, Hospital survival guide for a world overflowing with unsecured medical devices. May 30, 2017)



RECENT REVIEWS

ABC Newsletter

Dutch neurologists review treatment options for Guillain-Barré Syndrome (GBS). The recommendations provided consider the timing of interventions and when to treat mild forms and variant types of GBS. The authors also list inadequately studied cohorts like children, and approaches for use in the face of insufficient clinical response to plasma exchange (PE) or intravenous immunoglobulin (IVIg). While studies demonstrate that IVIg and PE are effective for treating GBS patients, there is a proportion of patients who continue to experience weakness, pain, and severe fatigue for months. The authors recommend continued randomized controlled trials to study which treatment is the most effective and for understudied subgroups of patients.

Citation: Verboon C., van Doorn P.A., and Jacobs B.C. Treatment dilemmas in Guillain-Barré syndrome. *Journal of Neurology, Neurosurgery & Psychiatry*. April 2017. DOI: <u>http://dx.doi.org/10.1136/jnnp-2016-314862</u>.

The journal *Blood* **has published up-to-date reviews of five clinical platelet disorders this month.** The journal covers new findings on the physiologic roles platelets play, research on the pathophysiology of clinical platelet disorders, and novel and improved therapies for such disorders. The review series contains the following titles: *Clinical updates in adult immune thrombocytopenia* (Lambert M.P et al); *Thrombotic thrombocytopenic purpura* (Joly B.S. et al); *HUS and atypical HUS* (Jokiranta, T.S. et al); *None of the above: thrombotic microangiopathy beyond TTP and HUS* (Masias C. et al); *Heparin-induced thrombocytopenia* (Arepally G.M.); and *Hematopoietic transcription factor mutations: important players in inherited platelet defects* (Songdej N. et al). Almost all the disorders covered in these reviews display thrombocytopenia, except for some of the inherited platelet defects.

Citation: Lopez J.A. and Berliner N. Introduction to a series of reviews on clinical platelet disorders. *Blood*. May 25, 2017. DOI: <u>https://doi.org/10.1182/blood-2017-04-773507</u>.

A review in *Vox Sanguinis* discusses the impact of antiplatelet agents on transfusion medicine. Antiplatelet therapy is widely used in patients with and at risk for cardiovascular disease, and the number of patients on potent antiplatelet therapy is increasing. This review covers the antiplatelet therapies aspirinonly; aspirin taken in conjunction with oral adenosine diphosphate (ADP) receptor inhibitors, e.g. clopidogrel, prasugrel, and ticagrelor; and the protease-activated receptor-1 inhibitor vorapaxar. The authors conclude there are few current data to support dosing of platelet transfusions in severely bleeding patients on dual antiplatelet therapy, but short term interruption of antiplatelet agents with preoperative platelet transfusion is promising for patients on aspirin and clopidogrel. Patients receiving ticagrelor need special consideration and most data suggest that platelet transfusion was not effective for these patients. There is a lack of randomized clinical trials from which to base conclusions, noted the authors."

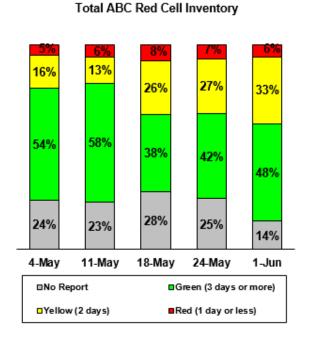
Citation: Gremmel T. and Panzer S. Oral antiplatelet therapy: impact for transfusion medicine. *Vox Sanguinis*. May 30, 2017. DOI: 10.1111/vox.12537. ▲

ABC Calendar of Events

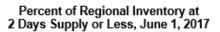
ABC offers a variety of meetings, workshops and virtual opportunities for education and networking as well as participation in ABC business. The <u>calendar of events</u> includes annual and summer meetings, board meetings, workshops, and webinars, and details will be updated as confirmed. We look forward to your support and participation!

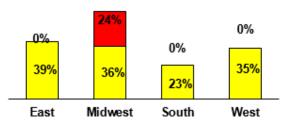


ABC Newsletter



STOPLIGHT®: Status of the ABC Blood Supply





Percent of Total ABC Blood Supply Contributed by Each Region East: 20%; Midwest: 25%; South: 24%; West: 31%

Daily updates are available at: www.AmericasBlood.org



INFECTIOUS DISEASE UPDATES

The Centers for Disease Control and Prevention (CDC) have updated their Zika statistics. From 2015 until May 23, 2017, there have been 5,300 symptomatic cases of Zika virus reported in the continental U.S. with 1,883 of them lab-confirmed pregnant women; and in the U.S. territories, there have been 36,582 reported cases with 3,916 of those lab-confirmed in pregnant women. While the World Health Organization declared the global Zika crisis over and Brazil has also declared their national emergency situation over, public health officials are gearing up for another summer of Zika. In <u>New York City</u>, there have been 83 travel-related Zika cases since the start of 2017 and in <u>Florida</u>, there have been 50 travel related Zika infections, four locally acquired this year. (Source: <u>CDC website</u>)

An assay sensitive enough to detect inducible, replicationcompetent HIV-1 in its latent cellular reservoir(s) was reported in Nature Medicine. HIV-1 infection can be suppressed using antiretroviral drugs to the point of being undetectable in plasma and blood, but the virus persists in latency. Researchers from the University of Pittsburgh's Graduate School of Public Health, reported that they created a rapid and incredibly accurate reporter cell-based assay for HIV-1 that showed the inducible la-HIV-1 reservoir in aviremic participants tent on antiretroviral therapy is about 70-fold larger than previous estimated.

Citation: Sanyal A. Mailliard R.B., Rinaldo C.R., *et al.* Novel assay reveals a large, inducible, replication-competent HIV-1 reservoir in resting CD4⁺ T cells. *Nature Medicine*, May 29, 2017. DOI: 10.1038/nm.4347. ●

WORD IN WASHINGTON

June 2, 2017

Divisions amongst Senate Republicans have emerged as they review the House Republicanbacked American Health Care Act (AHCA), the repeal bill of the Affordable Care Act (ACA). Most notable of the disagreements involves Medicaid, as many of Republicans represent Senate states that opted for an expansion of Medicaid services in the ACA, and the AHCA looks to retract those expansions while cutting \$860+ billion from the overall program. After the Congressional Budget Office reported last week that 23 million more Americans would lose coverage by 2050 under AHCA, a number of Republican Senators took issue with the bill. "There's blinking yellow lights throughout the whole thing," Sen. Patrick Toomey (R-Pa.) said of the report to *Time* magazine. Republican Senators said they are drafting their own healthcare bill during the congresweek-long sional recess. underway as of May 30. (Source: The Hill, Dems plot recess offensive on ObamaCare. May 28, 2017) 🌢





Voted best annual charity event of last

year by Lehigh Valley Style, the Miller-Keystone "Cruise Aboard the Lifeline" charity event celebrated its 23rd year. This year the fundraiser had a Hollywood theme with the "cruiser" stopping at some of the area's top restaurants and caterers. The fundraiser also had themed music, a silent auction, the ever-

popular casino deck, and other live entertainment. Guests purchased tickets at \$100 per person and "set sail" for four hours in their finest themed clothing.

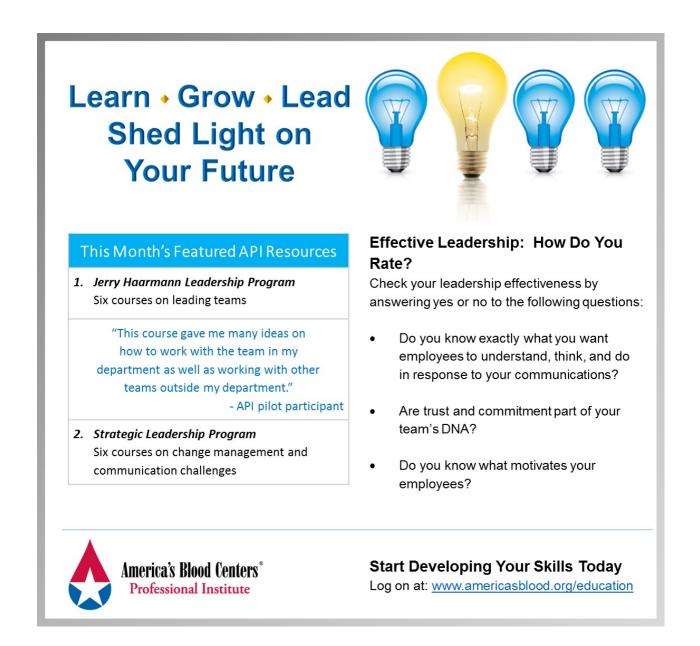
GLOBAL NEWS

The World Health Assembly of the World Health Organization (WHO) stressed the importance of developing guidelines for the prevention, diagnosis, and treatment of sepsis. Sepsis can be a life-threatening disease. The Centers for Disease Control and Prevention listed sepsis as <u>6 percent of all deaths</u> in the U.S. between 1999 and 2014, with 80 percent of those happening outside the hospital. The WHO's



GLOBAL NEWS (continued on page 10)

resolution urges governments to examine their sepsis polices and processes and emphasize healthcare worker training, tracking, and reporting of sepsis cases, and promoting research in this area, while also noting the healthcare agency will help in the development of these resources. The WHO will also create a report with guidance for the prevention and management of sepsis and calls on partners to help fund economically-constrained countries with their prevention and control of this disease. (Source: <u>WHO press release</u>) \blacklozenge





CALENDAR

2017

June 6-7. Integrating Human Factors into Medical Device Design Control and Beyond Workshop, Minneapolis, Minn. More information and registration <u>here</u>.

June 6-8. **Technical & Quality Workshop, America's Blood Centers, Omaha, Neb.** Contact: ABC Meetings Dept. Phone: (202) 654-2901; e-mail: <u>meetings@americasblood.org</u>.

June 13. Webinar: CFR Part 11 and Annex 11 Compliance; Specifics Needed to Eliminate 483s. 10 a.m. – 11 a.m. More information and registration here.

June 17-21. 27th Regional Congress of the ISBT, Copenhagen, Denmark. Click here to register for the event.

July 26. Transfusion Safety Officer & Patient Blood Management Seminars (Advanced Program), Ft. Lauderdale, FL. If you are interested in taking part in one of these new and engaging programs, please contact: <u>Cathy Shea</u>, Executive Assistant or call (727) 568-1151.

Aug. 1-4. Summer Meeting, MD Workshop & Golf Tournament, America's Blood Centers, Providence, R.I. Contact: ABC Meetings Dept. Phone: (202) 654-2901; Register <u>here</u> or e-mail: <u>meetings@americasblood.org</u>.

Aug. 4. Board Meeting, America's Blood Centers, Providence, R.I. Contact: ABC Meetings Dept. Phone: (202) 654-2901; e-mail: <u>meetings@americasblood.org</u>.

Sept. 18-19. Public Workshop- Advancing the Development of Pediatric Therapeutics (ADEPT): Application of "Big Data" to Pediatric Safety Studies, Silver Spring, MD. For more information, click <u>here</u>.

Sept. 11-12. IPFA/BCA 3rd Global Symposium on The Future for Blood and Plasma Donations, Atlanta, Ga. <u>Registration is open</u>.

Sept. 27-28. **Financial Management & IT Workshops, America's Blood Centers, Houston, Texas.** Contact: ABC Meetings Dept. Phone: (202) 654-2901; e-mail: <u>meetings@americasblood.org</u>.

Oct. 7-10. AABB Annual Conference, San Diego, Calif. More information and registration here.

Nov. 7-8. **Transfusion Safety Officer & Patient Blood Management Seminars (Basic & Advanced Programs), Jack-sonville, FL.** If you are interested in taking part in one of these new and engaging programs, please contact: <u>Cathy Shea</u>, Executive Assistant or call (727) 568-1151.

Nov. 8-10. **10th World Federation of Hemophilia Global Forum, Montreal, Canada.** For more information and to register, click <u>here</u>.

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 Lisa Spinelli at the ABC office. Phone: (202) 654-2982; fax: (202) 393-1282; e-mail: lspinelli@americasblood.org.



POSITIONS

More openings available on our <u>website</u>

Director of Administrative Services. Lifeline Blood Services is an independent blood center that has been serving the West Tennessee communities since 1947. Lifeline has an exciting role available for the person that likes to be challenged. The Director of Administrative Services is responsible for six staff members in three departments. This person will oversee the areas of human resources, information technology, facilities, and outsourced accounting. Successful candidates will have a bachelor's degree, master's degree preferred, contract negotiations skills, management experience, and accounting knowledge. For additional requirements and information please see job listing at <u>www.LIFELINEbloodserv.org</u>. CV or resumes may be emailed to <u>Sheila.Bosley@lifelinebloodserv.org</u>.

Reference Lab Supervisor. OneBlood is currently recruiting for a Lab Supervisor in our Orlando AABB-Accredited Immunohematology Reference Laboratory. This position provides leadership and technical expertise, manages staff, and performs training and quality activities for the staff responsible for performing basic through advanced testing procedures on patient and/or donor samples. Applicants must have a bachelor's degree in medical technology, biological science or related scientific field from an accredited college or university. Three or more years in a clinical laboratory, preferably blood banking environment including one or more years' experience in supervision and management experience or an equivalent combination of education, certification, training and/or experience. Applicants are preferred to have SBB certification. Applicant must also have a valid and current Florida Clinical Laboratory Technologist license, or eligible, in Immunohematology or Blood Banking. To apply and view a complete Job Description of this position, go to www.oneblood.org and click on the careers tab. OneBlood, Inc. is an Equal Opportunity Employer/Vet/Disability.