We believe.

- In enabling cell and gene therapies with an industry-leading cell processing and cell collection platform
- In simplifying data collection for cell transplant teams
- In supporting clinicians to use peripheral vascular access through training
- In ensuring customers can rely on their sterile tubing connections

We believe in the potential of blood to do even more for patients than it does today.

Stop by our booth at ASFA to learn more about Terumo BCT.

TERUMOBC.T.COM

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ASFA wishes to acknowledge the support of all of the companies and organizations who contributed generously to the ASFA 2019 Annual Meeting.
## PROGRAM

### WEDNESDAY, MAY 15, 2019

<table>
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<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>6:00PM – 8:00PM</td>
<td>WELCOME RECEPTION</td>
<td>Atrium Ballroom &amp; Plaza Foyer</td>
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### THURSDAY, MAY 16, 2019

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>12:30PM – 1:30PM</td>
<td>CONCURRENT CORPORATE LUNCH SYMPOSIUM Supported by Terumo BCT (open to all registered delegates – arrive early as seating is limited)</td>
<td>Grand Ballroom I</td>
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<tr>
<td></td>
<td>Perspectives on the Role and Impact of Cellular Therapy Workflow and Data Management Software</td>
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<tr>
<td></td>
<td>Speaker: Betsy Blunk, BSN, RN, CHTC, BMTCN</td>
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<tr>
<td></td>
<td>The presentation discusses:</td>
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<tr>
<td></td>
<td>• The role of workflow and data management software within a stem cell transplant program</td>
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</tr>
<tr>
<td></td>
<td>• What to consider in the software evaluation process</td>
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<tr>
<td></td>
<td>• How Sarah Cannon benefits from its software</td>
<td></td>
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<tr>
<td></td>
<td>• Tips for a successful implementation</td>
<td></td>
</tr>
<tr>
<td>12:30PM – 1:30PM</td>
<td>CONCURRENT CORPORATE LUNCH SYMPOSIUM Supported by Sanofi Genzyme (open to all registered delegates – arrive early as seating is limited)</td>
<td>Grand Ballroom II</td>
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<tr>
<td></td>
<td>A New Treatment for aTTP</td>
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<tr>
<td>7:00PM – 9:30PM</td>
<td>CORPORATE EDUCATIONAL EVENT Key Concepts in ECP Management with the Therakos® CELLEX® Photopheresis System – Part 2 Live Event Supported by Mallinckrodt Pharmaceuticals (pre-registration with Mallinckrodt Pharmaceuticals required)</td>
<td>Galleria</td>
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<tr>
<td></td>
<td>Participate in a 5-station rotation on-site at ASFA 2019 where the concepts discussed in the webinar will be demonstrated or discussed to maximize learning retention.</td>
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<tr>
<td></td>
<td>Speakers:</td>
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<tr>
<td></td>
<td>James Greco, RN, Principal Clinical Specialist</td>
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<td></td>
<td>Kharlene Finnigan, RN, Manager, Clinical Specialist Team, North America</td>
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<tr>
<td></td>
<td>Lisa Vinegar, RN, MSN, CPNP, Senior Clinical Specialist</td>
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<tr>
<td></td>
<td>Austin Davis, RN, BSN, Senior Clinical Specialist</td>
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<tr>
<td></td>
<td>Jessica Jones, BSN, RN, Senior Clinical Specialist</td>
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**FRIDAY, MAY 17, 2019**

<table>
<thead>
<tr>
<th>Time</th>
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<th>Location</th>
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</table>
| 6:00AM – 7:00AM | **5K FUN RUN**  
Support by Mallinckrodt Pharmaceuticals |  
Meet in hotel lobby at 5:45AM |
| 12:30PM – 1:30PM | **CONCURRENT CORPORATE LUNCH SYMPOSIUM**  
Supported by Fresenius Kabi  
(open to all registered delegates – arrive early as seating is limited) | Grand Ballroom I  
Comparison of Two Apheresis Systems for Hematopoietic Progenitor Cell (HPC) Collection for Multiple Myeloma  
Speaker: Edwin A. Burgstaler, MT, HP (ASCP), Associate Professor of Laboratory Medicine and Pathology, College of Medicine, Mayo Clinic, Apheresis Technical Specialist, Mayo Clinic, Rochester, Minnesota  
This session will address a comparison study, performed at our center, focused on timing to reach HPC collection target for multiple myeloma patients using Fenwal Amicus and Spectra Optia. |
| 12:30PM – 1:30PM | **CONCURRENT CORPORATE LUNCH SYMPOSIUM**  
Supported by Alexion Pharmaceuticals  
(open to all registered delegates – arrive early as seating is limited) | Grand Ballroom II  
Evidence-Based Guidelines in Therapeutic Apheresis  
Speaker: Dr. Paul Eastvold, Chief Medical Officer, Inland Northwest Blood Bank, Vitalant Blood Center, Inland Northwest Blood Bank  
The presentation discusses:  
- The underlying causes of thrombotic microangiopathy (TMA) and the initial steps to take a diagnosis  
- The current role of therapeutic plasma exchange (TPE) in the management of TMA according to the American Society for Apheresis (ASFA) guidelines  
- Limitations of TPE in the management of atypical hemolytic uremic syndrome (aHUS)  
- The role of the apheresis care team in differentiating between the causes of TMA and improving management of patients |
### EXHIBITOR FLOORPLAN

![Floorplan Diagram]

### EXHIBITORS

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<td>Fresenius Medical Care/Apheresis Care Group</td>
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<td>Kaneka Pharma America, LLC</td>
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<td>Machaon Diagnostics</td>
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<td>BD (formerly Bard Peripheral Vascular)</td>
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<td>Cerus Corporation</td>
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<td>University of Virginia</td>
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<td>UC San Diego Health System</td>
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<td>Seattle Cancer Care Alliance</td>
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EXHIBITORS

ALEXION PHARMACEUTICALS
Alexion is a global biopharmaceutical company focused on serving patients and families affected by rare diseases through the innovation, development and commercialization of life-changing therapies. Alexion is the global leader in complement inhibition and has developed and commercialized the first and only approved complement inhibitor to treat patients with paroxysmal nocturnal hemoglobinuria (PNH), atypical hemolytic uremic syndrome (aHUS), and anti-acetylcholine receptor (AchR) antibody-positive generalized myasthenia gravis (gMG). In addition, Alexion has two highly innovative enzyme replacement therapies for patients with life-threatening and ultra-rare metabolic disorders, hypophosphatasia (HPP) and lysosomal acid lipase deficiency (LAL-D). As the leader in complement biology for over 20 years, Alexion focuses its research efforts on novel molecules and targets in the complement cascade, and its development efforts on the core therapeutic areas of hematology, nephrology, neurology, and metabolic disorders.

ANGIODYNAMICS
AngioDynamics, Inc. (NASDAQ: ANGO), is a leading provider of innovative, minimally invasive medical devices used by professional healthcare providers for vascular access, peripheral vascular disease and oncology. AngioDynamics’ diverse product lines include market-leading ablation systems, fluid management systems, vascular access products, angiographic products and accessories drainage products, thrombolytic products and venous products. For more information, visit www.angiodynamics.com.

BAXTER
Baxter renal products help make renal care options more accessible to the individual. We’re advancing renal care for the millions of patients with end-stage renal disease and acute kidney injury worldwide, while investing in the research and breakthrough technologies to simplify dialysis and therapy. We provide a full range of dialysis and therapy options for patient-specific care, including in-center hemodialysis, peritoneal dialysis and continuous renal replacement therapy, backed by industry-leading services for patients and clinicians.

BD (Formerly Bard Peripheral Vascular)
BD is one of the largest global medical technology companies and is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. In 2017, BD welcomed C.R. Bard into the BD family and through this collaboration is accelerating the delivery of innovative technologies, world-class clinical education, and disease awareness programs that are helping to transform the standard of patient care. BD.com

BE THE MATCH BIOThERAPIES®
Be The Match BioTherapies is the only cell and gene therapy solutions provider with customizable services to support the end-to-end cell therapy supply chain. Backed by the industry-leading experience of the National Marrow Donor Program®/Be The Match®, and a research partnership with the CIBMTR® (Center for International Blood and Marrow Transplant Research®), our experts design solutions that advance cell and gene therapies in any stage of development. We have extensive experience providing cellular starting
material consented for research, clinical and commercial use, developing and managing expansive cell collection networks, and navigating cell therapy regulatory compliance. Our proven infrastructure for managing autologous and allogeneic cell therapy supply chains is enabled by personalized case managers, MatchSource® Supply Chain Software and logistics experts with experience managing more than 86,000 product transports. Through the CIBMTR we provide long-term follow-up tracking for the first two FDA-approved CAR-T therapies. www.BeTheMatchBioTherapies.com.

CERUS CORPORATION

Cerus Corporation is a biomedical products company focused in the field of blood transfusion safety. The INTERCEPT Blood System is designed to reduce the risk of transfusion-transmitted infections by inactivating a broad range of pathogens such as viruses, bacteria and parasites that may be present in donated blood. The nucleic acid targeting mechanism of action of the INTERCEPT treatment is designed to inactivate established transfusion threats, such as hepatitis B and C, HIV, West Nile virus and bacteria, as well as emerging pathogens such as Chikungunya, malaria and dengue. Cerus currently markets and sells the INTERCEPT Blood System for both platelets and plasma in the United States, Europe, the Commonwealth of Independent States, the Middle East and selected countries in other regions around the world. The INTERCEPT red blood cell system is in clinical development.

FRESSENIUS KABI USA, LLC

Fresenius Kabi (http://gentlescience.fresenius-kabi.us/) is a leading global health care company focused on putting lifesaving medicines and technologies in the hands of those who care for critically and chronically ill patients. We bring more than 60 years of innovation in cell collection, separation and processing. Today, the team is focused on serving the needs of the Therapeutic Apheresis and Cellular Therapy communities. The Gentle Science design of the Fenwal Amicus platform brings precision MNC collection, therapeutic plasma exchange (TPE), and red blood cell exchange (RBCX) to customers.

Fresenius Medical Care

FRESSENIUS MEDICAL CARE/APHERESIS CARE GROUP

Fresenius Medical Care is the largest Therapeutic Apheresis provider supported by a quarter century of industry leading expertise. Providing customers with a fully equipped apheresis program to include state-of-the-art equipment, apheresis trained registered nurses, and Medical Director oversight. Improving the hospital’s financials by eliminating the need for expensive medical equipment, maintenance, and overhead of running a specialized apheresis program. Improving patient outcomes and decreasing the length of hospital stay.

KANEKA PHARMA AMERICA, LLC

Liposorber LDL Apheresis System is indicated for the use of pediatric and adult patients with LDL>160mg/dl and with known CAD or PAD and who have failed maximum diet and drug therapy. Another indication is for Focal Segmental Glomerulosclerosis pediatric and adult patients who have failed CNI & Corticosteroid therapy and have a GFR >60 ml/min/1.73m2 or who are Post Renal Transplant.

MALLINCKRODT PHARMACEUTICALS

Mallinckrodt is a global business that develops, manufactures, markets and distributes specialty pharmaceutical products and therapies. Mallinckrodt is the only provider of integrated systems for the delivery of Extracorporeal Photopheresis (ECP). Visit www.therakos.com.
MACHAON DIAGNOSTICS

Machao Diagnostics is a clinical reference laboratory, serving apheresis providers by providing 24-hour turnaround times, nation-wide, for ADAMTS-13 testing and one-week turnaround times for aHUS genetic testing. We are a key component in helping correctly diagnosis and treat TMA patients. Our lab specializes in the diagnosis, treatment and monitoring of hemostatic and thrombotic conditions.

MILTENYI BIOTEC

Miltenyi Biotec is a global provider of products and services that advance biomedical research and cellular therapy. Our innovative tools support research at every level, from basic research to translational research to clinical application. Used by scientists and clinicians around the world, our technologies cover techniques of sample preparation, cell isolation, cell sorting, flow cytometry, and cell culture. Our 30 years of expertise spans research areas including immunology, stem cell biology, neuroscience, and cancer. Today, Miltenyi Biotec has 2,500 employees in 28 countries – all dedicated to helping researchers and clinicians make a greater impact on science and health.

NOVARTIS

At Novartis, our mission is to discover new ways to improve and extend people’s lives. We use science-based innovation to address some of society’s most challenging health care issues. We discover and develop breakthrough treatments and find new ways to deliver them to as many people as possible.

OCTAPHARMA

Octapharma is one of the largest plasma products manufacturers in the world and has been committed to patient care and medical innovation in human protein therapies for over 30 years. Octapharma’s core business is the development, production and sale of high quality human protein therapies from both human plasma and human cell-lines.

SANOFI GENZYME

Sanofi Genzyme, the specialty care global business unit of Sanofi, focuses on rare diseases, rare blood disorders, multiple sclerosis, oncology, and immunology. We help people with debilitating and complex conditions that are often difficult to diagnose and treat. Our approach is shaped by our experience developing highly specialized treatments and forging close relationships with physician and patient communities. We are dedicated to discovering and advancing new therapies, providing hope to patients and their families around the world. Learn more at www.sanofigenzyme.com.

NORFOLK MEDICAL

Norfolk Medical is a privately-held company that focuses on the design, manufacture, and distribution of medical devices. Since 1981, Norfolk Medical has provided innovative access solutions for the needs of healthcare providers and patients worldwide. All of our products are made domestically in our Skokie, IL facility, and we pride ourselves on producing the highest quality products on the market today.
SEATTLE CANCER CARE ALLIANCE

Seattle Cancer Care Alliance, in Seattle, Washington, is part of a dynamic collaboration among three organizations known nationally and internationally for their patient care and research: Fred Hutchinson Cancer Research Center, University of Washington, and Seattle Children’s. These three organizations have worked together to support their mission of world class adult and pediatric oncology patient care services, research and education.

At Seattle Cancer Care Alliance every patient, every life matters. Our dedicated nurses are a driving force making SCCA a global leader in the prevention, treatment, and cure of cancer. Our nurses rank among leading experts in oncology. Our nurses provide exceptional patient and family-centered care as they coordinate and assist in individualized treatment. They integrate care with support for the research and development of innovative therapies. Embarking with each patient on a journey through cancer treatment and survival, our compassionate nurses walk hand-in-hand with courage and hope with each individual to ensure the best possible patient outcome.

TERUMO BCT

Unlocking the Potential of Blood

TERUMO BCT

Terumo BCT is a global leader in blood component, therapeutic apheresis and cellular technologies. We believe in the potential of blood to do even more for patients than it does today. This belief inspires our innovation and strengthens our collaboration with customers.

UC San Diego Health

UC SAN DIEGO HEALTH SYSTEM

UC San Diego Health System is San Diego’s only academic health system and is comprised of hospitals in San Diego, including UC San Diego Medical Center in Hillcrest, and UC San Diego Thornton Hospital, Moores Cancer Center, Shiley Eye Center, Sulpizio Cardiovascular Center and Jacobs Medical Center (opening in 2016) in La Jolla. UC San Diego Health.

UC San Diego Health System has one of the largest therapeutic apheresis programs in the United States. Directed by David Ward, MD, an international leader in the field, the Apheresis Program is dedicated to the highest level of patient care.

UC San Diego Health System Apheresis Program offers:

- The only photopheresis and LDL apheresis in San Diego County.
- Outpatient plasmapheresis, photopheresis, LDL apheresis, red cell exchange apheresis, white cell reduction apheresis, platelet reduction apheresis and hematopoietic stem cell harvest apheresis.
- The largest hematopoietic stem cell (HSC) collection facility in San Diego County.
- Onsite physician presence during treatment.
- Latest state-of-the-art technology.

UNIVERSITY OF VIRGINIA

The Therapeutic Apheresis Academy is a multidisciplinary 2½ day course for physicians in nephrology, hematology, pathology/blood banking, and other allied health professionals with an interest in therapeutic apheresis. This conference will build upon previously established interprofessional learning using modern learning techniques. The interactive didactic sessions on Thursday and Friday will present an overview of current practice and information on building a new therapeutic apheresis service. The small group and fully interactive Saturday demonstration workshops will showcase clinical applications and provide an opportunity to glean practical tips from expert practitioners.
Watch Dr. Aycinena’s story at renalacute.com/stories

With the PRISMAFLEX System, we can easily treat patients requiring therapeutic plasma exchange (mTPE) right then and there in the ICU.
— Juan Carlos Aycinena, MD

Dr. Aycinena dedicated himself to becoming a nephrologist because he wanted to be able to offer hope to the sickest patients. In the past 4 years that he has been using the PRISMAFLEX System, he feels like his team has been able to do so much more for those patients, many of which have a variety of illnesses requiring plasmapheresis. The PRISMAFLEX System gives them the flexibility to do both therapeutic plasma exchange and continuous renal replacement therapy concurrently on one machine without additional capital equipment. Just another example of how we’re working everyday to support teams like Dr. Aycinena’s.
SPEND TIME WITH PATIENTS, NOT AUDITORS

Is your organization on the quality system audit (QSA) merry-go-round? Take back your time by streamlining your audit process with the Be The Match BioTherapies® Quality System Audit Program (QSAP).

Our American Society for Quality-certified auditors conduct your QSA. Multiple cell and gene therapy companies can license your results. Your apheresis center has one audit instead of many.* And with your QSA already done, you can bring new cell and gene therapies to your patients sooner.

Stop by booth 205 to learn how QSAP can help save you time.

BeTheMatchBioTherapies.com/ASFA
info@BeTheMatchBioTherapies.com

*Participation in QSAP does not guarantee acceptance of the audit by every cell and gene therapy company.
An Implantable Solution
Designed for your long-term therapeutic apheresis needs

Bench Testing Results
119 mL/min
Flow Rates¹
When Accessed with
16G IV Catheter ²,³

Bench Tested
UP TO 1,000
Accesses⁴

72-96 Hours
Continuous Access⁵
Between Dressing Changes

POWERFLOW®
Implantable Apheresis IV Port

¹ Mean flow rate, 25 cm 9.6F ChronoFlex™ catheter, when tested in a benchtop model using a blood simulant with viscosity of 3.5cP, N=27. Simulated testing may not be indicative of actual clinical performance. Changes in blood viscosity, catheter length, and IV type will affect achievable flow rates.
² Precaution: Follow all contraindications, warnings, precautions and instructions for all infusates as specified by their manufacturers.
³ Precaution: PowerFlow® IV Port is not accessed with Huber non-coring needles. To access the PowerFlow™ Port, use BD Insyte™ Autoguard™ Shielded IV Catheters, 16G or 14G, 1.75 inches (44mm) or longer. The exact IV catheter length should be determined by the clinical situation.
⁴ After 1000 IV catheter insertions, bench top leak testing was successfully performed both with the device accessed (both 14G and 16G IV catheters tested separately) and without IV catheter present. Bench testing may not be indicative of actual clinical performance. Different test methods may yield different results. Data on file, Bard Peripheral Vascular, Inc., Tempe, Arizona.
⁵ For continuous access, change IV catheter and transparent dressing every 72-96 hours, or when clinically indicated.