**ASFA MISSION**

ASFA is an organization of physicians, scientists, and allied health professionals whose mission is to advance apheresis medicine for patients, donors and practitioners through education, evidence-based practice, research and advocacy.

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**COUNTDOWN TO THE ASFA & WAA JOINT CONFERENCE**

As the co-chair with Dr. Hans Vrielink of the Organizing Committee of the 35th ASFA Annual Meeting and the 15th WAA Congress, I would like to invite you to join us in San Francisco this April and enjoy a wonderful opportunity to learn and network.

This year’s joint meeting has been enriched by the involvement of friends and colleagues from around the world who will be sharing their experiences and expertise with us. The last combined ASFA-WAA conference occurred 10 years ago in Miami Beach. Since then, much has changed in our discipline and we are excited to share the news with everyone in San Francisco.

In order to provide more opportunities for our delegates, we added an additional Breakfast with the Experts session (physicians and allied health professionals from the United States and abroad) on Thursday, instead of the usual Networking Breakfast, for a total of three breakfast sessions. Please be sure to choose your topic of interest when you register for the meeting – the tables fill up fast!

Another addition will be more corporate dinners organized by our industry sponsors every night from Wednesday to Friday. While at the meeting, look for further information in the corporate program booklet and plan to participate, learn and have fun.

As always, we will have a welcome reception on Wednesday evening, followed by a corporate dinner and the graduate medical education session where we will learn from our international counterparts about their experiences training apheresis practitioners. We are pleased to be able to offer these two great options for differing interests.

On Friday evening, be sure to attend the poster session where more than 100 presenters will display their work and answer your questions. It is another wonderful opportunity to share experiences with seasoned and novice individuals who will do their best to impress us with their work in donor and therapeutic apheresis. While there, enjoy a reception of cocktails and hors d’oeuvres to start your Friday evening well!

To continue with our tradition, there will be three scientific and eight education sessions. The Opening Combined Symposium will highlight donor and
therapeutic apheresis in Africa, Asia and South America, the Scientific Symposium will focus on apheresis research in North America, Europe and Asia, and the Closing Combined Symposium will give you a glance at the future of apheresis. The eight Education Sessions will cover a variety of topics such as pediatric apheresis, research methods in apheresis, and regulatory challenges, among others, which will complement the Review Session on Wednesday; an excellent resource to freshen up on basic apheresis topics.

In summary, we sincerely hope to see you at the Hyatt Regency Hotel across from the Embarcadero Waterfront!

To learn more about the ASFA & WAA Joint Conference, review the preliminary program or register for the meeting please visit the conference web page.

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**ASFA UPDATES**

**ASFA Access**

We are excited to announce the launch of ASFA Access – a members-only section of www.apheresis.org that provides a number of free online educational materials.

Log in to your ASFA member account and visit the ASFA Access page to view past webinars, review guidelines developed by our committees, learn more about apheresis reimbursement or to read the Journal of Clinical Apheresis Special Edition.

**New Strategic Plan**

The ASFA Board of Directors is pleased to announce the launch of the new ASFA Strategic Plan for 2014-2017.

The ASFA mission is to advance apheresis medicine for patients, donors and practitioners through education, evidence-based practice, research and advocacy. Our vision is to lead apheresis medicine by continually improving patient and donor care. In order to achieve the mission and vision in the next 3 years, ASFA is focusing on the following strategic directions: Member Recruitment and Engagement, Education, Partnerships and Alliances, Organizational Structure, and Research.

To view the strategic plan in detail, visit the ASFA Strategic Planning page.

**Upcoming Webinars**

One of the new benefits offered with your ASFA membership for 2014 is free webinar registration. We are excited to provide our members with a number of expert speakers presenting on interesting topics and thank our first two presenters of the year for a great start to the 2014 webinar program.

Our next webinar will take place on **Wednesday, March 19 from 12:00 pm – 1:00 pm EDT**. Dr. Nicole Aqui will speak on Hematopoietic Stem Cell Transplantation. At the end of the presentation participants should be able to:

1. List indications for hematopoietic stem cell transplant.
2. Explain methods of stem cell mobilization.
3. Describe the immunological consequences of HSCT.

**ASFA’s on Facebook!**

Have you visited the ASFA Facebook page? ‘Like’ our page on Facebook to stay up to date with all of the latest ASFA news, events and more!

**Upcoming Journal Club**

The American Society for Apheresis is excited to offer members the opportunity to participate in the Apheresis
Journal Club (AJC). The AJC provides an opportunity for members to connect, discuss, and exchange ideas from current literature on apheresis topics. The sessions utilize an interactive online format. Manuscripts for discussion will be selected from the Journal of Clinical Apheresis, the official publication of ASFA, and other leading journals.

To guide your review, discussion points will be provided. In addition, each session will be led by a moderator. The AJC will be offered quarterly. This activity is a joint effort of the Education Committee and the Apheresis Physician Committee.

The next Journal Club will take place on Friday, April 25 from 12:00 pm – 1:00 pm EDT. Log in to your ASFA account and register.

**ASK AN APHERESIS EXPERT**

**Calcium Supplementation during Pediatric Therapeutic Apheresis**  
*Daniel K. Noland, MD*

One cannot discuss calcium supplementation in pediatric apheresis, without first delineating the various anticoagulation options available. The child's blood cannot be exposed to the plastic tubing of our instrument without anticoagulation. There are three options: citrate alone, citrate in combination with heparin, and heparin alone. My institution uses citrate alone. A large, retrospective cohort exploring the complications of pediatric apheresis used a combination of citrate and heparin. Combination heparin or heparin alone regimens have been advocated in the longest (therefore highest dose of citrate) procedures: leukocyte depletion and collection of hematopoietic progenitor cells. An international survey of pediatric apheresis reported in 2012, showed a majority of centers used citrate alone for both TPE/RCE (78.3%) and PBSC collection (65.7%). By contrast, the majority of centers used heparin alone as anticoagulation for ECP.

If any amount of citrate is used, then the apheresis physician needs to consider calcium replacement/supplementation. The paper by Michon and colleagues is a well documented reminder of how prone our pediatric patients are to the side effects of apheresis. The authors also reported their shift from oral calcium carbonate (10 mg/kg one hour prior to procedure and then hourly) to 10% IV calcium gluconate at 1 mg/kg/hour, but not the reasoning behind this change. The international survey showed that over 70% of respondents routinely provide calcium supplementation during TPE. All other types of apheresis had lower percentages of automatic calcium supplementation, with the lowest being in procedures where heparin anticoagulation is common (e.g. photopheresis at less than 20%).

At Children’s Medical Center Dallas, we routinely use calcium chloride (CaCl) IV supplementation due to local difficulties in obtaining calcium gluconate. The dose generally depends on the amount of albumin or plasma replacement required for the procedure. Replacement fluid serves as a useful surrogate to anticipated citrate dose. I order 500-750 mg CaCl for the rare TPE that is less than one liter replacement. I order one gram CaCl for procedures requiring 1,250-2,999 mL replacement and 1,500 mg CaCl for procedures requiring 3 liters or more replacement. Other centers dose their replacement entirely on the patients weight: 20 mg/mL calcium gluconate in NS run at patient’s weight in kilograms per hour or the amount of citrate administered (0.6 mg elemental calcium per mL of ACD-A).

The purpose of supplementation is to avoid the symptoms of hypocalcemia caused by citric acid binding multiple calcium ions. The incidence of symptomatic hypocalcemia is reported to vary from 1.3% to 15.2% of pediatric apheresis procedures. Common symptoms include:
paresthesias, nausea, vomiting, abdominal pain, pallor, diaphoresis, headache and dizziness. The difficulty is getting pediatric patients to relay these mild/moderate symptoms before severe effects of profound hypocalcemia (tetany/seizures and cardiac arrhythmias) occur. 

Therefore, the final part of calcium homeostasis is monitoring. In the international survey, 50% of responding institutions routinely monitored patient calcium levels. Another 37% of centers didn’t routinely monitor, but would check the ionized calcium level if clinically concerned. 

At Children’s Dallas we draw the ionized calcium prior to the procedure, to make certain the patient is in the normal range. Mid-point values are usually drawn during the first procedure in patients that cannot call attention to symptoms of mild hypocalcemia. They are always drawn in ICU patients especially those on additional extracorporeal circuits (i.e. ECMO and/or hemodialysis).

REFERENCES

COMMITTEE UPDATES

Allied Health Committee

Chairs: Alicia Garcia, RN, & Antonia Hagen-Coonradt

The Allied Health Committee is responsible for providing representation and recognition for allied health professionals and for promoting a forum for education, consultation and scientific exchange for allied health professionals.

This year, the Committee has focused its energy on developing an exceptional and expanded educational program for the annual meeting which will be held in conjunction with the World Apheresis Association annual congress. The committee is responsible for selecting topics and presenters for the education sessions, the apheresis review session, the networking breakfast, and breakfast with the experts at the annual meeting. These topics and speakers are determined through feedback provided on the conference evaluations from meeting attendees each year. The Committee is very excited about the diverse group of speakers and topics to be part of the 2014 meeting in San Francisco.

Over 50% of the attendees of the WAA and ASFA annual meetings are allied health members and the Allied Health Committee offers a great opportunity to communicate your thoughts and ideas on how to improve the program every year. We are committed to building a network of professionals who can share their extensive knowledge in the field of Apheresis with other members and provide insight into the advances and innovations that are available. The membership is appointed for 3 years for a maximum of 2 terms.

The Allied Health Committee is looking forward to the publication of the 5th edition of the Principles of Apheresis Technology textbook, which will be available at the annual meeting. This revision is geared toward professionals in the field of apheresis and focuses on evidence based practice to keep in line with scientific progress. With this edition the committee also worked towards fostering a...
more global approach and included some of the standards our European colleges have implemented.

One of the future charges for the Allied Health Committee will be to work on developing a leadership succession plan with a concentration on allied health, as well as a mentorship program.

We would like to invite all interested ASFA allied health members to join this committee for some exciting developments and opportunities. Please look for the date and time of the committee meeting in your 2014 ASFA & WAA Joint Conference program.

Clinical Applications Committee

Chairs: Laura Cooling, MD, MSc & Edward Wong, MD

The Clinical Applications Committee (CAC) had a very productive year with several laudable accomplishments. Among this year’s highlights is the acceptance of four CAC abstracts for oral presentation at this year’s ASFA and WAA Joint Conference in San Francisco. In total, work by the CAC accounts for nearly 20% of all the oral abstracts at this year’s meeting, and 25% of all presentations at the Plenary Abstract Session, which features the most noteworthy abstract submissions. We hope that members attending the Annual Meeting will come and hear the exciting work from the CAC.

The HPC Donor Subcommittee, chaired by Dr. Yara Park, has completed their project on venous access for HPC collection. The data will be presented by Dr. Mandy O’Leary at the Plenary Abstract Session: "Donor Vein Assessment for Hematopoietic Progenitor Cell Collection: An International Survey by the ASFA HPC Donor Subcommittee." A manuscript of the findings is currently being prepared. For this year’s project, the subcommittee is considering a literature review and/or multi-institutional retrospective study examining procedure-related platelet losses and thrombocytopenia in allogeneic HPC donors.

The Research Committee, chaired by Dr. Ed Wong, also has an abstract in the plenary abstract session entitled "TA Gap Analysis of Research in Apheresis-Knowledge Gained from System Review of Clinicaltrials.Gov". The work was performed by Dr. Ajay Perumbeti and Pruthul Patel, a fourth year medical student. The study is an in-depth critical analysis of 375 apheresis-related studies funded by the NIH or industry over the last 13 years and is a fascinating insight into research priorities related to apheresis research. A manuscript of the findings is currently in preparation by the authors. In addition, the Research Committee will be giving a seminar devoted to research design and analysis for allied health professionals at this year’s annual meeting. The workshop will take place Saturday, April 5th from 10:15 am - 10:45 am and is titled Apheresis Research Workshop—How to Design/Critique Research. The Research Committee continues to disseminate and promote research opportunities in apheresis to the ASFA membership.

The Rare Disease Registry, overseen by Dr. Ed Wong and Dr. Yanyun Wu, successfully launched last year. At this time, 9 institutions have joined the registry or are in the process of IRB approval, and an additional 6 facilities are in the preliminary stages of joining. Data entry is ongoing for Wilson's Disease, NMO and MuSK MG. A summary of the registry design and progress is being presented as an oral abstract by Dr. Ed Wong "Report of the ASFA Apheresis Registry". In addition, preliminary results on Wilson's Disease "Report of the ASFA Apheresis Registry Study on Wilson Disease" will be presented by Dr. Yanyun Wu. In addition to ongoing recruitment and expansion of the registry, the committee hopes to prepare several manuscripts based on registry data over the next year.

The Coagulation Subcommittee, chaired by Dr. Nicole Zantek, is in the final stages of a case-based survey of apheresis and coagulation monitoring and management, with distribution to the membership within the next year.

The Pediatric Subcommittee, chaired by Dr. Haewon Kim, is in the process of designing a prospective study of adverse events in pediatric apheresis.

The CAC has also launched a new subcommittee, chaired by Dr. Jennifer Schneiderman, with a focus on Extracorporeal Photopheresis. As its first project, this subcommittee is preparing an institutional survey of ECP practices in adult and pediatric patients.
International Affairs Committee
Chairs: Zbigniew M. Szczepiorkowski, MD, PhD, FCAP & YanYun Wu, MD, PhD


The committee has been actively engaging ASFA’s international members to promote interaction and information exchange internationally. Last year the committee distributed an international survey with a focus on capturing differences in apheresis practice. Not surprisingly, we did find differences existing in apheresis practice in various countries such as professional license requirements, training pathway, training certification, and reimbursement and research funding availability. This will help us to prepare a whitepaper for current status in apheresis. We plan to work in collaboration with international apheresis practitioners and organizations to improve practice standardization.

In your own country or region, if there are any education or practice needs that ASFA can help with, please contact the committee chairs by email: zbigniew.m.szczepiorkowski@hitchcock.org or yan.wu@yale.edu.

UPCOMING INTERNATIONAL CONFERENCES RELATED TO APHERESIS:

WAA (WORLD APHERESIS ASSOCIATION):

ISBT (THE INTERNATIONAL SOCIETY OF BLOOD TRANSFUSION):
33rd International Congress of the ISBT, May 31-Jun 05, 2014, Seoul, South Korea

ISCT (INTERNATIONAL SOCIETY FOR CELULAR THERAPY):
20th ISCT Annual Meeting, April 23-26, 2014, Paris, France
ASFA LEADERSHIP AND CONTACT US
ASFA Head Office 375 West 5th Avenue, Suite 201 Vancouver, BC | ASFA@apheresis.org

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