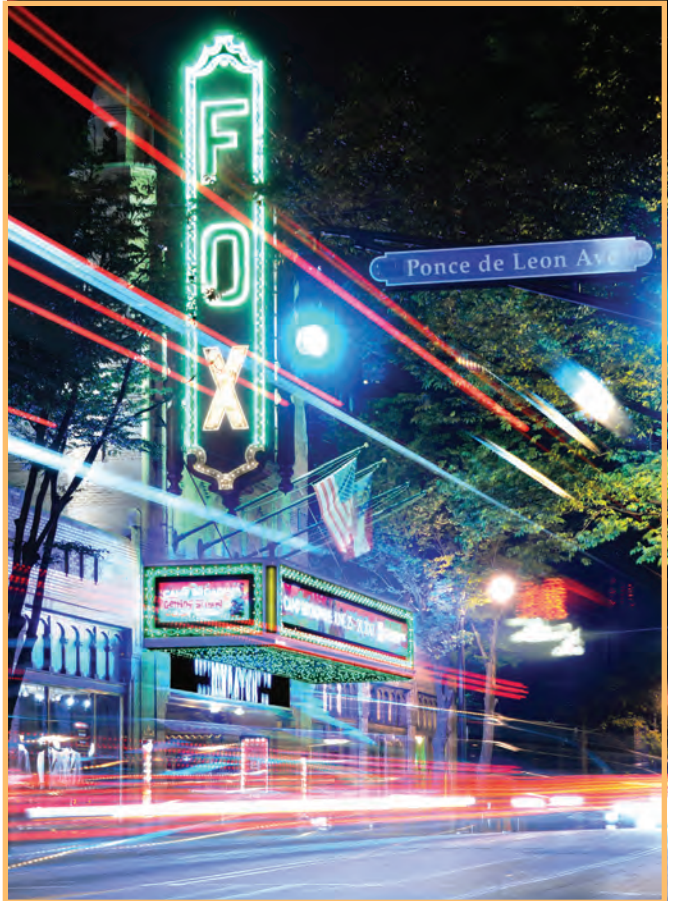




59th ASH[®] Annual Meeting and Exposition

December 9-12 • Atlanta, Georgia

Preliminary Program



Greetings From the President



Kenneth C. Anderson, MD
President

On behalf of the American Society of Hematology (ASH), I am pleased and honored to invite you to the 59th ASH Annual Meeting and Exposition, the premier event in malignant and non-malignant hematology. This year's meeting will take place in the vibrant city of Atlanta, Georgia, and will continue to provide an exceptional educational experience and welcoming space for trainees, physicians, scientists, educators, and industry professionals in hematology from around the globe.

We have an exciting program planned, which includes the highest-caliber science and invaluable information on the most important areas of clinical progress. In the era of precision medicine, I am particularly excited to highlight the high-impact and cross-cutting areas of genomics and immunology, which are making it possible to take these revolutionary treatments from the bench to the bedside, directly benefiting the patients we serve. These topics and others will be explored throughout the meeting in a forum that fosters scientific exchange and collaboration.

I encourage you to browse the pages of this program to discover the exceptional, diverse content that we have in store for this year's meeting as well as plenty of opportunities to connect and collaborate with peers from all over the world.

I look forward to seeing you all in Atlanta!

Kenneth C Anderson

Connect with
the global
hematology
community!

59th ASH[®] Annual Meeting and Exposition

Georgia World Congress Center
Atlanta, Georgia

Meeting: December 9-12, 2017

Exposition: December 9-11, 2017

DISCOUNTED RATES END NOVEMBER 1!



Download the App!

Get instant access to everything you need to enhance your annual meeting experience. Search for "ASH annual meeting" in the App Store or Google Play beginning in November.



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New This Year



Ticketed Session

Meeting Overview

The ASH annual meeting is the premier event in malignant and non-malignant hematology, celebrating the latest research and clinical advances in the field. The 59th ASH Annual Meeting will provide countless opportunities for participants to advance their research, improve their practice, and connect with colleagues.



Key Dates

Abstract Submission Website Available	June 1 – August 2, 11:59 p.m. Pacific Time
ASH Foundation Run/Walk Registration Opens	July 6, 11:00 a.m. Eastern Time
Early-Bird Registration and Housing Opens for ASH Members Only	July 19, 11:00 a.m. Eastern Time
Advance Registration Opens for ASH Members and Non-Members	August 9, 11:00 a.m. Eastern Time
Collaboration Room Request Website Available	September 27
Group Room Block Request Deadline	October 6
Call for Late-Breaking Abstract Submissions	October 20 – 30, 11:59 p.m. Pacific Time
Advance Registration Deadline	November 1, 11:59 p.m. Pacific Time
Child-Care Registration Deadline (Space is limited. Register by this date to ensure a spot.)	November 3, 11:59 p.m. Pacific Time
Hotel Reservation Deadline	November 15, 11:59 p.m. Pacific Time
Meeting Registration Cancellation Deadline	November 21, 11:59 p.m. Eastern Time

Meeting Materials

Free Resources

Attendees may learn more about the meeting by taking advantage of the following resources included with full meeting registration:

- On-site Program Book
- *Hematology 2017*, the ASH Education Program
- ASH News TV, a daily newscast
- *ASH News Daily*, the daily on-site newspaper

In addition, **download the mobile app to:**

- Browse and get detailed information on all sessions, exhibitors, and events
- Build your own custom itinerary
- Access abstracts
- Locate sessions quickly using interactive maps
- Search for and connect with speakers and attendees
- Complete session evaluations

Search for the app, beginning in November, in the App Store and Google Play.



Annual Meeting Webcasts

Relive the 2017 ASH Annual Meeting experience. Re-watch sessions of interest at your convenience, and get access to sessions you missed through nearly 100 hours of recorded content. Purchase the full webcast, or select either the Education or Scientific Program only. Individual sessions will be available for purchase after the meeting at www.ashondemand.org.

Advance Purchase Pricing

Pre-order during the annual meeting registration process or on site, and receive up to a \$100 discount as well as access to select sessions as early as 24 hours after the live session.

Registration Category	Full Webcast*	Education Program Only*	Scientific Program Only*
Active or International Member	\$300	\$200	\$200
Associate, International Associate, Resident, or Graduate/Medical Student Member	\$125	\$70	\$70
Non-Member	\$500	\$300	\$300
Non-Member in Training	\$125	\$70	\$70
Allied Health Professional	\$500	\$300	\$300
Honorary/Emeritus Member	\$125	\$70	\$70

*Please note that webcast packages do not include the oral abstract sessions.

Schedule-at-a-Glance

The following schedule is preliminary and subject to change. For the most up-to-date meeting information, download the annual meeting app or visit www.hematology.org/annual-meeting.

Thursday, December 7

3:00 p.m. – 7:00 p.m. Registration

Friday, December 8

7:00 a.m. – 6:00 p.m. Registration

7:00 a.m. – 11:00 a.m. Friday Satellite Symposia

12:00 noon – 5:00 p.m. Trainee Day
(Open only to trainees wearing a blue badge)

12:30 p.m. – 4:30 p.m. Friday Satellite Symposia

1:00 p.m. – 5:00 p.m. Training Program Directors' Workshop

1:00 p.m. – 6:00 p.m. Friday Scientific Workshops

5:00 p.m. – 7:00 p.m. Trainee Welcome Reception
(Open only to trainees wearing a blue badge)

6:00 p.m. – 10:00 p.m. Friday Satellite Symposia

Saturday, December 9

59th ASH Annual Meeting Begins


7:00 a.m. – 6:00 p.m. Registration

7:30 a.m. – 9:00 a.m. Education/Scientific Program

7:30 a.m. – 9:00 a.m. Simultaneous Oral Sessions

7:30 a.m. – 9:00 a.m. Special Education Session on New ASH Clinical Practice Guidelines on Venous Thromboembolism

9:00 a.m. – 9:30 a.m. Coffee Break (Poster Hall)

9:00 a.m. – 7:30 p.m. Global Capacity-Building Showcase 

9:00 a.m. – 7:30 p.m. Poster Viewing

9:30 a.m. – 11:00 a.m. Education/Scientific Program

9:30 a.m. – 11:00 a.m. Simultaneous Oral Sessions


9:30 a.m. – 11:00 a.m. Special Scientific Symposium

11:00 a.m. – 5:00 p.m. Exhibits Open


11:15 a.m. – 12:15 p.m. ASH Grassroots Network Lunch

11:15 a.m. – 12:15 p.m. Career-Development Lunch Sessions
(Open only to trainees wearing a blue badge)

11:15 a.m. – 12:15 p.m. Continuing Conversations With the Speakers

11:15 a.m. – 12:15 p.m. How I Treat: Bringing Science to Clinical Dilemmas 

11:15 a.m. – 12:15 p.m. How to Get Published in a Peer-Reviewed Journal

11:15 a.m. – 12:15 p.m. Meet the Scientist 

11:30 a.m. – 12:30 p.m. Product Theaters Open in Exhibit Hall

12:00 noon – 1:30 p.m. Simultaneous Oral Sessions

12:30 p.m. – 1:30 p.m. Ham-Wasserman Lecture

1:30 p.m. – 2:00 p.m. Coffee Break (Exhibit Hall)

2:00 p.m. – 3:30 p.m. Education/Scientific Program

2:00 p.m. – 3:30 p.m. Simultaneous Oral Sessions

2:00 p.m. – 3:30 p.m. Special Scientific Symposium

2:00 p.m. – 3:30 p.m. Special Symposium on Quality

3:30 p.m. – 4:00 p.m. Coffee Break (Exhibit Hall)

4:00 p.m. – 5:30 p.m. Education/Scientific Program

4:00 p.m. – 5:30 p.m. Simultaneous Oral Sessions

5:30 p.m. – 7:30 p.m. Poster Presentations

5:30 p.m. – 7:30 p.m. Welcome Reception (Poster Hall)



6:30 p.m. – 9:00 p.m. Promoting Minorities in Hematology Presentations and Reception



Sunday, December 10

7:00 a.m. – 5:00 p.m.	Registration
7:00 a.m. – 9:00 a.m.	Hematology Course Directors' Workshop
7:30 a.m. – 9:00 a.m.	ASH Foundation Run/Walk
7:30 a.m. – 9:00 a.m.	Education/Scientific Program
7:30 a.m. – 9:00 a.m.	Simultaneous Oral Sessions
9:00 a.m. – 8:00 p.m.	Poster Viewing
9:00 a.m. – 8:00 p.m.	Global Capacity-Building Showcase 
9:00 a.m. – 9:30 a.m.	Coffee Break (Poster Hall)
9:30 a.m. – 11:00 a.m.	Education/Scientific Program
9:30 a.m. – 11:00 a.m.	Simultaneous Oral Sessions
9:30 a.m. – 11:00 a.m.	Special Scientific Symposium
10:00 a.m. – 5:00 p.m.	Exhibits Open
11:00 a.m. – 12:30 p.m.	Complimentary Light Lunch Available in Exhibit Hall
11:15 a.m. – 12:15 p.m.	Continuing Conversations With the Speakers
11:15 a.m. – 12:15 p.m.	Featured Topic Discussion
11:15 a.m. – 12:15 p.m.	How I Treat: Bringing Science to Clinical Dilemmas 
11:15 a.m. – 12:15 p.m.	Meet the <i>Blood</i> Editors
11:15 a.m. – 12:15 p.m.	Meet the Scientist 
11:15 a.m. – 12:15 p.m.	Quality Conversations on Social Media: Achieving Credibility and Efficiency Together
11:15 a.m. – 12:15 p.m.	Trainee Didactic Sessions (Open only to trainees wearing a blue badge; lunch will be provided)
11:15 a.m. – 12:30 p.m.	ASH Practice Partnership Lunch
11:30 a.m. – 12:30 p.m.	Product Theaters Open in Exhibit Hall
12:00 noon – 1:30 p.m.	Simultaneous Oral Sessions
12:30 p.m. – 1:30 p.m.	ASH-EHA Joint Symposium
1:30 p.m. – 2:00 p.m.	Announcement of Awards (Wallace H. Coulter Award for Lifetime Achievement in Hematology, ASH Award for Leadership in Promoting Diversity, ASH Mentor Award, ASH Outstanding Service Award, and ASH Public Service Award)
2:00 p.m. – 4:00 p.m.	Plenary Scientific Session
4:00 p.m. – 4:30 p.m.	Coffee Break (Exhibit Hall)
4:30 p.m. – 6:00 p.m.	Blood and Beyond: The Art of Perception
4:30 p.m. – 6:00 p.m.	Simultaneous Oral Sessions
4:30 p.m. – 6:00 p.m.	Spotlight Sessions
6:00 p.m. – 8:00 p.m.	Poster Hall Reception
6:00 p.m. – 8:00 p.m.	Poster Presentations
6:00 p.m. – 8:00 p.m.	Global Capacity-Building Showcase Presentations With the Authors 

Monday, December 11

7:00 a.m. – 5:00 p.m.	Registration
7:00 a.m. – 8:30 a.m.	Education Program
7:00 a.m. – 8:30 a.m.	Simultaneous Oral Sessions
7:00 a.m. – 11:30 a.m.	Consultative Hematology Course 
9:00 a.m. – 10:00 a.m.	E. Donnell Thomas Lecture and Prize
10:00 a.m. – 10:30 a.m.	Coffee Break (Exhibit Hall)
10:00 a.m. – 2:00 p.m.	Exhibits Open
10:00 a.m. – 8:00 p.m.	Poster Viewing
10:00 a.m. – 8:00 p.m.	Global Capacity-Building Showcase 
10:30 a.m. – 12:00 noon	Education Program
10:30 a.m. – 12:00 noon	Simultaneous Oral Sessions
10:30 a.m. – 12:00 noon	Spotlight Sessions
12:00 noon – 1:30 p.m.	Complimentary Light Lunch Available in Exhibit Hall
12:15 p.m. – 1:15 p.m.	ASH Choosing Wisely® Campaign: 2017 ASH Choosing Wisely Champions
12:15 p.m. – 1:15 p.m.	Featured Topic Discussion
12:15 p.m. – 1:15 p.m.	Meet the <i>Blood</i> Editors
12:15 p.m. – 1:15 p.m.	Global Hematology Symposium
12:15 p.m. – 1:15 p.m.	Product Theaters Open in Exhibit Hall
12:15 p.m. – 1:15 p.m.	Trainee Didactic Sessions (Open only to trainees wearing a blue badge; lunch will be provided)
1:30 p.m. – 2:30 p.m.	Ernest Beutler Lecture and Prize
2:30 p.m. – 2:45 p.m.	Coffee Break (Poster Hall)
2:45 p.m. – 4:15 p.m.	Education Program
2:45 p.m. – 4:15 p.m.	Simultaneous Oral Sessions
2:45 p.m. – 4:15 p.m.	Spotlight Sessions
4:30 p.m. – 6:00 p.m.	Simultaneous Oral Sessions
4:30 p.m. – 6:30 p.m.	Special Symposium on the Basic Science of Hemostasis and Thrombosis
6:00 p.m. – 8:00 p.m.	Poster Hall Reception
6:00 p.m. – 8:00 p.m.	Poster Presentations
6:15 p.m. – 7:45 p.m.	Simultaneous Oral Sessions
7:30 p.m. – 9:00 p.m.	Networking Reception for Female Hematologists

Tuesday, December 12

7:00 a.m. – 1:30 p.m.	Registration
7:30 a.m. – 9:00 a.m.	Late-Breaking Abstracts
9:30 a.m. – 9:45 a.m.	Announcement of Awards (William Dameshek Prize and Henry M. Stratton Medal)
9:45 a.m. – 11:15 a.m.	Presidential Symposium
11:15 a.m. – 11:30 a.m.	Business Meeting
11:30 a.m. – 1:00 p.m.	Best of ASH

Program Guide

General Sessions

These signature sessions are designed to be of interest to a broad and diverse audience. They include the prestigious Plenary Scientific Session, Best of ASH, the Presidential Symposium, and special lectures and awards honoring distinguished leaders in the field.

Saturday

Ham-Wasserman Lecture

AL Amyloidosis: From Molecular Mechanisms to Targeted Therapies

Saturday, December 9
12:30 p.m. – 1:30 p.m.

This lectureship was named in honor of two past presidents of ASH, the late Thomas Hale Ham, MD, and the late Louis R. Wasserman, MD, distinguished hematologists who contributed extensively to the Society. The Ham-Wasserman lecture is traditionally given by an individual from outside the United States who has made a major contribution to our understanding of an area that relates to hematology.



SPEAKER:

Giampaolo Merlini, MD,
Fondazione IRCCS
Policlinico San Matteo,
Pavia, Italy

The hallmark of amyloidosis is the deposition in body tissues of protein fibrils associated with organ dysfunction. The most frequent type of systemic amyloidosis is AL amyloidosis, a rare disease caused by a small, dangerous B cell clone that

produces misfolded light chains which form amyloid deposits, thus causing rapid deterioration of organ function. In this lecture, Dr. Giampaolo Merlini will discuss the advances in understanding the multifaceted molecular mechanisms of amyloid disease and the complexity of its management. The distinct biology of the amyloidogenic clone and its vulnerability to specific drugs will be presented together with genetic changes that modulate treatment response. Dr. Merlini will outline the vital importance of early diagnosis, when target organ damage is still recoverable, following intervention. Furthermore, he will describe the central role of cardiac biomarkers in the management of AL amyloidosis – from diagnosis to risk stratification and assessment of response to therapy. The complexity and pitfalls of the diagnostic procedure will be illustrated. Patients are fragile and highly sensitive to treatment toxicity, requiring a risk-adapted approach which will be discussed in the context of several effective anti-clone drugs and regimens now available. Early cardiac death still occurs in nearly one-third of very high-risk patients and is a major, unresolved clinical problem. Novel drugs are enriching the therapeutic landscape, and immunotherapies aimed at accelerating the reabsorption of amyloid deposits are under evaluation in several clinical trials. The future lies in combination therapy, with anti-clone therapy combined with newer treatments holding promise of further improving survival in this very treatable disease.

Sunday

ASH-EHA Joint Symposium

Clinical Significance of Clonal Hematopoiesis

Sunday, December 10
12:30 p.m. – 1:30 p.m.

CO-CHAIRS:

Kenneth C. Anderson, MD, President, American Society of Hematology (ASH), Dana-Farber Cancer Institute, Boston, MA

Anthony R. Green, PhD, President, European Hematology Association (EHA), University of Cambridge, Cambridge, United Kingdom

SPEAKERS:

Benjamin L. Ebert, MD, PhD, Brigham and Women's Hospital, Boston, MA

George S. Vassiliou, MD, PhD, Wellcome Trust Sanger Institute, Cambridge, United Kingdom

Recent genetic analyses of large populations have identified somatic mutations in hematopoietic cells and clonal expansion, which is acquired and correlated with aging. This clonally restricted hematopoiesis is associated with an increased risk of myeloid or lymphoid neoplasms as well as increased cardiovascular and all-cause mortality. This symposium will update the audience on this topic and provide expert opinions on the biologic significance and potential clinical implications of these clonal abnormalities in hematology practice.

Atlanta Fun Fact



* Atlanta was named one of the *New York Times*' top places to visit since ASH last held its annual meeting in the city. Around every corner is a new attraction, restaurant, or shopping opportunity.

Announcement of Awards

Sunday, December 10
1:30 p.m. – 2:00 p.m.

Wallace H. Coulter Award for Lifetime Achievement in Hematology

Wallace H. Coulter was a prolific inventor, innovator, and entrepreneur. His Coulter Principle pioneered the development of flow cytometry, defined particle characterization, and made possible automated hematology, thus revolutionizing laboratory medicine. The Coulter Counter led to major breakthroughs in science, medicine, and industry. This award, in his name, recognizes an individual who has demonstrated a lasting commitment to the field of hematology through outstanding contributions to education, research, and practice.



**The 2017
Wallace H.
Coulter Award
for Lifetime
Achievement
in Hematology
will recognize
Marshall A.
Lichtman, MD,**

of the University of Rochester in Rochester, NY, for his more than 50 years of service to the field of hematology as an educator, mentor, researcher, and physician. Dr. Lichtman is a highly consulted expert on the diagnosis and management of the most complex hematologic problems. The breadth of his expertise is documented in his 375 publications, which include a broad reach of observations in the leukemias, lymphomas, hemolytic anemias, and other blood cell disorders. Dr. Lichtman's research contributions include work in blood cell membrane biochemistry and physiology, blood cell ionic and amino acid transport, hemoglobin function, hematopoiesis, blood rheology, and leukocyte physiology and pathophysiology. His research articles have appeared in high-impact journals. Dr. Lichtman presented his work at an ASH Presidential Symposium in the 1970s. He served as president of ASH in 1989.

ASH Award for Leadership in Promoting Diversity



The ASH Award for Leadership in Promoting Diversity honors hematologists who have supported the development of an inclusive hematology workforce, encouraged the career development of underrepresented minority trainees, or made a commitment to inclusiveness through contributions in support of ASH's mission.



**The first-ever
ASH Award for
Leadership in
Promoting Diversity
will be awarded to
Betty S. Pace, MD,**

of Augusta University in Augusta, GA, for her more than two-decade commitment to mentoring and promoting diversity in hematology research. Dr. Pace is a physician scientist and prominent national figure in sickle cell disease research. She has contributed to the diversification of the hematology workforce over the years by working to attract minority students from high schools and undergraduate programs and by providing training and mentoring to underrepresented minority trainees and junior faculty. Among the 80 individuals that Dr. Pace has trained during her academic career, 45 percent have been from underrepresented minority groups. Additionally, 60 percent of her publications and reviews have included minority trainees and collaborators. Dr. Pace has volunteered extensively over the years as a mentor for the ASH Minority Medical Student Award Program.

ASH Mentor Award

The ASH Mentor Award was established to recognize hematologists who have excelled in mentoring trainees and colleagues. Each year, the Society recognizes two outstanding mentors drawn from the areas of basic science, clinical investigation, education, or clinical/community care, who have had a significant, positive impact on their mentees' careers and who, through their mentees, have advanced research and patient care in the field of hematology.



**A 2017 ASH Mentor
Award will be
presented to Ronald
Hoffman, MD,** of the
Mount Sinai School
of Medicine in New

York, NY, for his devotion to the cause of mentoring. Throughout his distinguished career, Dr. Hoffman has decisively shaped the careers of 33 mentees, including physicians, physician-scientists, and basic scientists, many of whom have risen to positions of prominence within academic medical centers. During his tenure as ASH President in 2003, he helped to establish the Minority Recruitment Initiative, which has led to retention and mentoring of many underrepresented minorities in hematology and serves as the foundation of ASH's dedication to diversifying the field. Dr. Hoffman's mentees attest to the essential role he has played – and continues to play – in their careers.



**A 2017 ASH Mentor
Award will be
presented to Oliver
W. Press, MD, PhD,**
of the University of
Washington in Seattle,

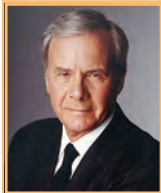
WA, for his long and consistent history of influencing the careers of mentees. Dr. Press has mentored more than 70 individuals since the 1980s, including medical students, trainees, and postdoctoral fellows. Many of his mentees have received career development grants and have gone on to become leaders in academic medicine and pharmaceutical companies. Dr. Press' mentees uniformly cite his exceeding generosity of time and his dedication to mentorship activities as having played a large role in advancing their careers. He is also cited for the value he places on work-life balance, patients, personal connections, and professionalism. Dr. Press has been working with the mentoring committee at his institution to develop a sustainable and enduring mentoring infrastructure.

Program Guide

General Sessions

ASH Outstanding Service Award

The ASH Outstanding Service Award is presented annually to an individual who has worked tirelessly to raise public awareness and increase research funding for hematologic diseases.



The 2017 recipient is former NBC Nightly News anchor, Tom Brokaw, for his dedication to increasing public awareness

about cancer and the need for additional research funding. Mr. Brokaw has shared his personal experience with multiple myeloma in his book *A Lucky Life Interrupted* and in essays in *The New York Times* and other publications, providing an example not only for patients, but also for their families, of how to best deal with their disease. He has also shared his story at numerous events throughout the country, listening to the stories of countless patients and helping them acquire access to specialized care.

ASH Public Service Award

The ASH Public Service Award is presented annually to an elected public official who has demonstrated unparalleled leadership on issues of importance to hematology research and/or practice.



The 2017 recipient is former Vice President Joseph R. Biden, Jr., for his leadership on the Cancer Moonshot

effort. Following the death of his son from brain cancer, Vice President Biden led the Obama Administration's Cancer Moonshot to accelerate cancer research. Under his leadership, the White House Cancer Moonshot Task Force catalyzed collaborations among 20 government agencies, departments, and White House offices and more than 70 private sector collaborations designed to achieve a decades' worth of progress in five years in the prevention, diagnosis, and treatment of cancer. In 2017, President Obama presented Vice President Biden with the Presidential Medal of Freedom with distinction for his service to the United States, including his leadership on the Cancer Moonshot effort. Vice President Biden has pledged to continue his efforts to support cancer research and the Moonshot through the Biden Foundation, which he and his wife founded since leaving public service in January 2017.

Plenary Scientific Session

**Sunday, December 10
2:00 p.m. – 4:00 p.m.**

During this highlight of the annual meeting, attendees will hear the presentations of the highest-caliber scientific abstracts selected by the Program Committee from among the thousands submitted from around the world.

Plenary Scientific Session speakers and topics will be announced in early November at www.hematology.org.

Monday

E. Donnal Thomas Lecture and Prize

The Molecular Pathology of Pediatric Acute Leukemia

**Monday, December 11
9:00 a.m. – 10:00 a.m.**

This lectureship and prize was created in 1992 and named after the late Nobel Prize laureate and past president of ASH E. Donnal Thomas, MD. The award recognizes pioneering research achievements in hematology that represent a paradigm shift or significant discovery in the field.



SPEAKER:

James R. Downing, MD,
St. Jude Children's Research
Hospital, Memphis, TN

Over the past 50 years, remarkable progress has been made in our understanding of the molecular genetics that underlies pediatric acute leukemia. This information has come from a variety of different lines of investigation, including cytogenetics and genomic sequencing efforts to identify the underlying lesions, as well as functional studies in cellular and murine model systems to characterize the biological consequences of the identified genetic alterations. The detailed understanding that has emerged from these studies has served as the foundation for efforts to individualize treatment so that each child with leukemia has the best possible chance for a cure.





Although our understanding of the landscape of somatic and germline mutations underlying acute leukemia has rapidly progressed, it remains incomplete. Moreover, why some patients respond to current therapeutic approaches and are cured, whereas others relapse and ultimately succumb to their disease remains a mystery. Fortunately, recent advancements in our ability to sequence leukemias at both a population and a single cell level are beginning to shed light on the diverse mechanisms that can lead to refractory disease.

This lecture will focus on the progress that has been made in the past 15 years in advancing our understanding of pediatric acute leukemia and the impact this information is having on our ability to further increase cure rates.

Ernest Beutler Lecture and Prize

Turning Foes Into Friends: Exploiting HIV to Generate Efficient and Safe Vectors to Cure Inherited and Acquired Blood Diseases

**Monday, December 11
1:30 p.m. – 2:30 p.m.**

The Ernest Beutler Lecture and Prize, named for the late Ernest Beutler, MD, past president of ASH and physician-scientist for more than 50 years, is a two-part lectureship that

recognizes major advances related to a single topic. This award honors two individuals, one recognized for enabling advances in basic science, and the other recognized for using clinical science or translational research to carry basic science advances through to tangible improvements in patient care.



SPEAKERS:

Luigi Naldini, MD, PhD,
San Raffaele Telethon
Institute for Gene Therapy,
Milan, Italy



Marina Cavazzana, MD,
PhD, Hôpital Necker-
Enfants Malades, Paris,
France

Early trials of hematopoietic stem cell (HSC) gene therapy reported clear patient benefits, but the trials also highlighted the limitations and risks of the first generation integrating vectors. In order to improve the safety and efficacy of gene transfer, a new integrating vector system was developed starting from HIV. The outcome of these efforts was lentiviral vectors that showed robust gene transfer and improved safety in several preclinical models. They have since become one of the most widely used gene transfer tools in biomedical research. More recently, upon entering clinical testing in HSC and T-cell gene therapy, lentiviral vectors are providing a long-sought hope of cure for some human diseases without satisfying treatments. Current results from ongoing HSC gene therapy trials for several different indications show substantial

therapeutic benefits. The inherited disorders of hemoglobin represent the most common monogenic disease, and it has been estimated that around 7 percent of humans are carrying one of the mutations responsible for these disorders. Patients affected by thalassemia major and sickle cell anemia have stably become transfusion-independent and completely asymptomatic upon lentiviral HSC gene therapy. Near-complete genetic engineering of hematopoiesis has been achieved without clinical or molecular signs of adverse effects of vector insertion to the latest follow up, reaching up to nine years in the earliest treated patients. In-depth analysis of the genomic landscape of vector insertion shows a picture of polyclonal multi-lineage reconstitution of hematopoiesis without emergence of expanding clones, consistent with efficient engraftment of transduced HSC. These findings validate the predictions from preclinical models and support improved efficacy and safety of lentiviral vectors as compared to earlier generation vectors. If safety and efficacy are confirmed in more patients and upon longer follow-up, autologous HSC gene therapy may eventually become a preferred option over allogenic HSC transplantation.

Dr. Luigi Naldini will review the development of lentiviral vectors and the molecular analyses showing safe and efficient HSC gene transfer in preclinical and clinical studies.

Dr. Marina Cavazzana will review the current stage of clinical application and benefit of HSC gene transfer by lentiviral vectors.

Tuesday

Late-Breaking Abstracts

**Tuesday, December 12
7:30 a.m. – 9:00 a.m.**

This highly anticipated session will highlight the Program Committee's selections of the highest-impact abstracts, featuring substantive, novel, and groundbreaking data that were not available by the general abstract submission deadline and would otherwise not be presented at the ASH annual meeting.

Late-breaking abstracts will be announced in late November at www.hematology.org.

Program Guide

General Sessions

Announcement of Awards

Tuesday, December 12
9:30 a.m. – 9:45 a.m.

William Dameshek Prize

The William Dameshek Prize, named for the late William Dameshek, MD, a past president of ASH and the original editor of *Blood*, recognizes an early- or mid-career individual who has made a recent outstanding contribution to the field of hematology.



The 2017 William Dameshek Prize will be awarded to Benjamin L. Ebert, MD, PhD, of Brigham and Women's Hospital

in Boston, MA, for his seminal discoveries in multiple areas of malignant hematology. Dr. Ebert has been noted for his leadership role in describing the genomic landscape of adult myelodysplastic syndromes. His lab has made significant contributions to understanding the biological basis of transformation of hematopoietic cells by somatic mutations. Dr. Ebert also published the first studies on CRISPR/Cas9 genome editing in hematopoietic stem cells to create novel models of hematologic malignancy. His work has displayed creativity, innovative methodology, and most importantly, direct human relevance. Many of his findings have been directly translated to the clinic as diagnostic tests or therapeutic targets.

Henry M. Stratton Medal

The Henry M. Stratton Medal is named after the late Henry Maurice Stratton, co-founder of Grune and Stratton, the medical publishing house that first published ASH's journal *Blood*. The prize honors two senior investigators whose contributions to hematology in both basic and clinical/translational research are well recognized and have taken place over a period of several years.



The 2017 Henry M. Stratton Medal for Basic Research will be awarded to Josef Tomas Prchal, MD, of the University

of Utah in Salt Lake City, UT, for his contributions to the fundamental understanding of both primary and secondary polycythemia. Dr. Prchal's many innovations in the field include the description of the von Hippel-Lindau (VHL) mutation in recessive Chuvash familial polycythemia and elaboration on the pathobiology of erythropoietin receptor (EPOR) mutations in autosomal dominant familial polycythemia. His genetic investigations of acquired polycythemia vera led to the association of chromosome 9p abnormalities – where the JAK2 gene is located – with the disease. More recently, Dr. Prchal and his collaborators showed that Tibetans are protected from high altitude polycythemia as a result of a high altitude genetic adaptation due to a variant EGLN1 gene.



The 2017 Henry M. Stratton Medal for Clinical/Translational Research will be awarded to Sherrill J. Slichter, MD, of the University of

Washington School of Medicine in Seattle, WA, for her major contributions to the field of transfusion medicine over a period of more than 40 years. Dr. Slichter's research contributions include the evaluation of methodologies for platelet storage prior to transfusion, the development of guidelines for prophylactic platelet transfusion, pre-transfusion treatment of platelets to reduce immunogenicity, the characterization of platelet kinetics in various disease states, especially autoimmune thrombocytopenia, and the evaluation of various commercial systems for preservation of platelets and other blood cells prior to transfusion. Her research efforts have helped improve current standards of platelet preservation and transfusion around the world, culminating in the execution of a large clinical study that provided an objective threshold for platelet transfusion. Her studies have also been critical to optimizing transfusion practices.

Atlanta Fun Fact



* Atlanta welcomes more than 1 million international visitors each year. From arts and culture to music and cuisine, the city is full of multicultural opportunities for everyone.

Presidential Symposium

Chromatin Modulation: Biology and Therapeutic Applications

Tuesday, December 12
9:45 a.m. – 11:15 a.m.

CHAIR:

Kenneth C. Anderson, MD, President,
American Society of Hematology, Dana-
Farber Cancer Institute, Boston, MA

SPEAKERS:

Richard A. Young, PhD, Whitehead Institute
for Biomedical Research, Cambridge, MA
*Chromosome Structure and Function in
Health and Disease*

Margaret A. Goodell, PhD, Baylor College of
Medicine, Houston, TX
*Epigenetic Regulation in Normal and
Malignant Hematopoiesis*

James Bradner, MD, Novartis, Cambridge, MA
Therapeutic Targeting of Chromatin

Major advances have delineated the central role of chromatin in cell lineage differentiation in health and disease. Parallel advances have defined epigenetic mechanisms regulating normal and malignant hematopoiesis. These insights have provided the framework and expanded the spectrum of novel therapeutic targets in hematologic malignancies. This session will span from biology to clinical translation of therapies modulating chromatin in cancer and other diseases.

Dr. Richard Young will discuss recent insights into the roles of chromatin structure in health and disease. Chromosomes have DNA, RNA, and protein components that form chromatin, which has essential roles in gene control.

Dr. Margaret Goodell will discuss the mechanisms through which DNA methylation, in particular, helps orchestrate stem cell differentiation as well as the cross-talk with other elements that control gene expression. The frequent mutation of epigenetic regulators observed in most hematologic malignancies has revealed their critical roles in ensuring normal blood development.

Dr. James Bradner will examine the remarkable progress in the optimization and translation of chromatin-targeting small molecules in cancer and, increasingly, in non-malignant hematologic diseases. The convergence of advances in epigenomic analysis, human genetics, and chemical biology have focused coordinated efforts in drug discovery around chromatin-associated protein complexes.



Business Meeting

Tuesday, December 12
11:15 a.m. – 11:30 a.m.

Information about the Society's leadership nominations as well as reports on ASH's financial status, awards, and journals, *Blood* and *Blood Advances*, are made available online for review by ASH members at least one month prior to the annual meeting. The Business Meeting will offer a forum for members to discuss the information presented in these documents and will conclude with the traditional passing of the gavel to the new ASH president.

Best of ASH

Tuesday, December 12
11:30 a.m. – 1:00 p.m.

CO-CHAIRS:

Scott A. Armstrong, MD, PhD, Dana-Farber
Cancer Institute, Boston, MA

Andrew S. Weyrich, PhD, University of Utah,
Salt Lake City, UT

Led by the 2017 Scientific Program Co-Chairs, Best of ASH provides an overview of the key themes discussed at this year's meeting. The biggest breakthroughs from the meeting's abstract presentations are also discussed.

Program Guide

Special-Interest Sessions

These smaller sessions provide the opportunity for ASH's various communities to focus on specific topics of interest, ranging from coping with physician stress and burnout, to counseling fellows on careers in hematology, to the impact of ASH's international outreach programs.

For Scientists

How to Get Published in a Peer-Reviewed Journal

Saturday, December 9
11:15 a.m. – 12:15 p.m.

CHAIR:

Bob Löwenberg, MD, PhD, Editor-in-Chief, *Blood*, Erasmus University Medical Center, Rotterdam, Netherlands

The ability to communicate one's work effectively by publication in high-impact journals is a benchmark for success in academic medicine. Even high-quality work may not be accepted if not presented in a well-crafted manuscript. This talk will provide insight into the elements of a high-quality manuscript worthy of publication in *Blood* and tips on avoiding common errors that might result in rejection.

Meet the *Blood* Editors

What Makes a Great Paper for *Blood*?

These sessions provide the opportunity for attendees to meet with the associate editors of *Blood* and discuss recent changes to the journal as well as submission and peer-review processes and policies, with each session giving a unique focus. Seating is limited and available on a first-come, first-served basis.

Sunday, December 10
11:15 a.m. – 12:15 p.m.

SPEAKERS:

Thomas L. Ortel, MD, PhD, Duke University Medical Center, Durham, NC

David M. Bodine, PhD, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD

Monday, December 11
12:15 p.m. – 1:15 p.m.

SPEAKERS:

Nancy Berliner, MD, Brigham and Women's Hospital, Boston, MA

Jose A. Lopez, MD, University of Washington, Seattle, WA

For Practicing Hematologists

Special Education Session on New ASH Clinical Practice Guidelines on Venous Thromboembolism (VTE)

Saturday, December 9
7:30 a.m. – 9:00 a.m.

CO-CHAIRS:

Adam Cuker, MD, University of Pennsylvania, Philadelphia, PA

Holger Schünemann, MD, PhD, McMaster University Health, Hamilton, Canada

SPEAKERS:

Adam Cuker, MD, University of Pennsylvania, Philadelphia, PA

Holger Schünemann, MD, PhD, McMaster University Health, Hamilton, Canada
Introduction to ASH Guideline Initiatives

PANELISTS:

David Anderson, MD, Dalhousie University, Halifax, Canada
Panel on Prevention of VTE in Surgical Hospitalized Patients

Mary Cushman, MD, University of Vermont, Burlington, VT
Panel on Prevention of VTE in Medical Patients

Thomas L. Ortel, MD, PhD, Duke University Medical Center, Durham, NC
Panel on Treatment of VTE

Daniel Witt, PharmD, University of Utah College of Pharmacy, Salt Lake City, UT
Panel on Optimal Management of Anticoagulation Therapy

Gary H. Lyman, MD, Fred Hutchinson Cancer Research Center, Seattle, WA
Panel on Prevention and Treatment of VTE in Patients With Cancer





Adam Cuker, MD, University of Pennsylvania, Philadelphia, PA

Panel on Heparin-Induced Thrombocytopenia

Saskia Middeldorp, MD, PhD, Academic Medical Center, Amsterdam, Netherlands

Panel on Thrombophilia

Paul Monagle, MBBS, MD, The Royal Children's Hospital Melbourne, Parkville, Australia

Panel on Pediatric VTE

Shannon Marie Bates, MD, McMaster University, Hamilton, Canada

Panel on VTE in the Context of Pregnancy

Wendy Lim, MD, McMaster University, Hamilton, Canada

Panel on Diagnosis of VTE

In response to long-standing member interest, ASH initiated an effort in 2014 to develop evidence-based clinical practice guidelines for hematology that meet the highest standards of development rigor and trustworthiness. The first ASH guidelines in development under this effort are a set of 10 guidelines on the prevention, treatment, and diagnosis of venous thromboembolism (VTE). Development of the guidelines, including systematic evidence review, is supported by the McMaster University GRADE Center.

As part of the VTE guideline development process, more than 100 thrombosis experts across 10 VTE guideline panels reviewed evidence and formulated more than 200 recommendations on VTE. In this session, the chairs of each of the 10 panels will present key recommendations from the upcoming chapters and enumerate the various Education Program sessions that will touch on these recommendations.

Special Symposium on Quality

Effective Implementation of Evidence-Based Pathways and Clinical Guidelines

Saturday, December 9
2:00 p.m. – 3:30 p.m.

CO-CHAIRS:

Colleen Morton, MD, Vanderbilt University Medical Center, Nashville, TN

William A. Wood, MD, The University of North Carolina at Chapel Hill, Chapel Hill, NC

SPEAKERS:

Craig Robbins, MD, MPH, Kaiser Permanente Care Management Institute, Oakland, CA
Health Care Quality: Overcoming Barriers to Evidence-Based Care

Anna Gagliardi, PhD, University of Toronto, Toronto, Canada
Implementation Science Research for Effective Guideline Implementation

Derek Raghavan, MD, PhD, Levine Cancer Institute, Charlotte, NC
Implementation Is Not Impractical: Examples of Successful, Large-Scale Guideline Implementations

Adhering to evidence-based clinical guidelines is recognized by both medical practitioners and administrators as a key pathway to improving quality of care, whether in complex, distributed health care systems or in community-based practices.

Yet despite the demonstrated advantages that guidelines provide in the context of care delivery, implementing recommendations is fraught with potential pitfalls. Culture, cost, and complexity are chief among a variety of barriers to successful implementation of evidence-based pathways and clinical guidelines. Notwithstanding these challenges, real-world examples have established that implementation is achievable across a variety of clinical settings. These issues are especially important in hematology, as both malignant and non-malignant hematologic disorders are uncommon and complex.

This session will explore issues related to the implementation of evidence-based pathways and clinical guidelines, examine research supporting effective strategies for developing implementation methodologies, and review practical examples of successful implementation of pathways or guidelines in large-scale clinical settings. The session will include practical takeaways for immediate use by practitioners and administrators alike.

Attend a "Meet the Scientist" session on how to conduct quality improvement research. See page 38 for more information.

Program Guide

Special-Interest Sessions

ASH Practice Partnership Lunch

Physician Stress and Burnout

Sunday, December 10
11:15 a.m. – 12:30 p.m.

CHAIR:

Joseph Alvarnas, MD, City of Hope, Duarte, CA

SPEAKERS:

Linda J. Burns, MD, National Marrow Donor Program/Be the Match, Minneapolis, MN

Beth Lown, MD, The Schwartz Center for Compassionate Healthcare, Boston, MA

Tait Shanafelt, MD, Mayo Clinic, Rochester, MN

The ASH Practice Partnership is the Society's network of practice-based hematologists with interests in practice-related policies, quality of care, new health care delivery systems, and practice management issues. The ASH Practice Partnership Lunch is a special session designed for this community.

A December 2015 study from the Mayo Clinic reported that physician burnout is on the rise; across all medical specialties, the physician burnout rate rose from 45 percent in 2011 to 54 percent in 2014. In 2015, *ASH Clinical News* reported in "Beating Burnout: When Clinicians Are Overworked, Overtired, and Overwhelmed" that the most common complaints among today's practicing hematologists are delayed, inadequate, and reduced reimbursement, high staff turnover, poor recruitment and retention, and understaffing – all causes of burnout. Reports indicate that the advent of electronic health records and federal reporting mandates have added to physician burnout and that the implementation of the Medicare Access and CHIP Reauthorization Act (MACRA) has the potential to create additional burden, especially for small practices lacking in administrative resources. Speakers will address the problem of physician burnout and focus on sustainability, proposing coping methods and potential solutions.

Consultative Hematology Course

Monday, December 11
7:00 a.m. – 11:30 a.m.

This interactive course, intended for clinical hematologists based in community practice in North America, will cover commonly encountered clinical problems that require the expertise of a hematologist. Faculty familiar with consultative practice issues will focus on non-malignant hematology topics, such as thrombosis, thrombocytopenia, and bleeding. For more information, visit www.hematology.org/chc.

If you are interested in registering for this course but are not planning to register for the annual meeting, please contact ashregistration@spargoinc.com. Advance online registration is limited to clinical hematologists practicing in North America; on-site registration will be possible for other groups if space is available.

Ticket Prices*

ASH Member With Annual Meeting Registration	\$125
ASH Member Without Annual Meeting Registration	\$200
Non-Member With Annual Meeting Registration	\$200
Non-Member Without Annual Meeting Registration	\$275

*The registration fee includes continental breakfast and a coffee break.

ASH Choosing Wisely® Campaign: 2017 ASH Choosing Wisely Champions

Monday, December 11
12:15 p.m. – 1:15 p.m.

CHAIR:

Lisa K. Hicks, MD, St. Michael's Hospital, Toronto, Canada

In cooperation with the ABIM Foundation, ASH has introduced the Choosing Wisely Champions initiative to recognize the efforts of practitioners who are working to eliminate costly and potentially harmful overuse of tests and procedures. Each year, three individuals are invited to present on successful utilization strategies that they have developed and implemented in their practice, institution, or hospital system, providing clinicians, administrators, and other medical professionals with opportunities to learn about projects that might be translated to their own practices. The 2017 ASH Choosing Wisely Champions will be announced prior to the annual meeting.

Atlanta Fun Fact

* Atlanta is America's most accessible city with direct, non-stop service to more than 150 U.S. destinations – 80 percent of those within a two-hour flight. It's also the second busiest city for international flights.

For Educators

Training Program Directors' Workshop

Friday, December 8
1:00 p.m. – 5:00 p.m.

CHAIR:

Ann S. LaCasce, MD, Dana-Farber Cancer Institute, Boston, MA

SPEAKERS:

Christian Cable, MD, Baylor Scott & White Health, Round Rock, TX
ACGME Update 2017

Alice J. Cohen, MD, Newark Beth Israel Medical Center, Newark, NJ
Gerald A. Soff, MD, Memorial Sloan Kettering Cancer Center, New York, NY
Having "The Talk" With Fellows

Alfred Lee, MD, PhD, Yale University School of Medicine, New Haven, CT
Michael J. Borowitz, MD, PhD, Johns Hopkins University, Baltimore, MD
It's in Our Blood

The Training Program Directors' Workshop provides an interactive forum for directors of all hematology-related training programs to learn from educators, regulators, and each other. This year's session will feature a new format. Three topics will be covered, and two of them will have table-top exercises to engage participants.

Dr. Christian Cable will return for an update from the Accreditation Council for Graduate Medical Education (ACGME). Dr. Cable is the current chair of the ACGME's Residency Review Committee for Internal Medicine and a former hematology/oncology training program director.

Drs. Alice Cohen and Gerald Soff will discuss how to have an effective career development talk with fellows, with a focus on counseling fellows for careers in hematology. Topics to be covered will include whether to double board and lab-based science versus clinical research.

Drs. Alfred Lee and Michael Borowitz will share innovative tools they have employed in hematology training. The session will provide a chance to refocus on the basics of a hematology fellowship: teaching hematology to fellows.



Hematology Course Directors' Workshop

Sunday, December 10
7:00 a.m. – 9:00 a.m.

CHAIR:

Leslie Renee Ellis, MD, Wake Forest School of Medicine, Winston-Salem, NC

SPEAKERS:

Jennifer C. Kesselheim, MD, MEd, Dana-Farber Cancer Institute, Boston, MA
Knowles' Adult Learning Theory

Rajiv K. Pruthi, MBBS, Mayo Clinic, Rochester, MN
The Flipped Classroom: Pros

Neil Lachant, MD, MD Anderson Cancer Center at Cooper, Camden, NJ
The Flipped Classroom: Cons

Amy K. O'Sullivan, PhD, Innovus Pharma, Medford, MA
An Overview of Qualitative Research Methodology

Ariela L. Marshall, MD, Mayo Clinic, Rochester, MN
ASH Medical Educators Institute Spotlight

The Hematology Course Directors' Workshop will continue to offer practical tips and a place of camaraderie for those involved with teaching hematology to medical students. The workshop will focus on pedagogy, new techniques, scholarship on a yearly basis, and a highlight of one participant's project from the 2016 ASH Medical Educators Institute. Topics to be covered include Knowles' adult learning theory, a pro and con discussion on the flipped classroom, and an examination of qualitative research methodology.

For U.S. Participants

ASH Grassroots Network Lunch

Saturday, December 9
11:15 a.m. – 12:15 p.m.

Thanks to ASH's advocacy efforts and the ASH Grassroots Network, issues important to the future of hematology have been brought to the attention of the U.S. Congress and federal agencies. The ASH Grassroots Network Lunch provides a forum for interested members to learn how they can participate in ASH's advocacy efforts, communicate with Congress and the White House, become effective advocates for hematology, and discuss the Society's legislative and regulatory priorities, including funding for the National Institutes of Health (NIH). An overview of the Society's 2017 advocacy accomplishments and a preview of the Society's 2018 advocacy agenda will also be provided.

Please note that this session will mainly focus on ASH's advocacy efforts related to NIH funding and research; those interested in the Society's practice-related advocacy efforts are encouraged to attend the ASH Practice Partnership Lunch on Sunday, December 10.

For All

Promoting Minorities in Hematology Presentations and Reception

Saturday, December 9
6:30 p.m. – 9:00 p.m.

This event will showcase training and research opportunities geared toward increasing the diversity of scholars in the field of hematology. The highlight of the session will be scientific presentations from ASH Minority Medical Student Award and Minority Resident Hematology Award Program participants. The reception will also feature poster presentations by students participating in two Minority Research Supplement programs from the National Institutes of Health (NIH) as well as an announcement about the ASH-AMFDP Award, a partnership between ASH and the Harold Amos Medical Faculty Development Program of the Robert Wood Johnson Foundation. Representatives from the NIH will be available to provide information about their training and research offerings.

Quality Conversations on Social Media: Achieving Credibility and Efficiency Together

Sunday, December 10
11:15 a.m. – 12:15 p.m.

CHAIR:

Joseph R. Mikhael, MD, Mayo Clinic, Scottsdale, AZ

SPEAKERS:

Elaine Schattner, MD, *Forbes* Contributor; Weill Cornell Medical College, New York, NY

Mohamad Mohty, MD, PhD, Saint-Antoine Hospital, Paris, France

John P. Leonard, MD, NewYork-Presbyterian/Weill Cornell Medical Center, New York, NY

Panelists will discuss their personal best practices for starting and maintaining quality conversations relevant to hematology on Twitter and other social media platforms. Topics to be addressed include using social media for collaboration and crowdsourcing as well as tips for more efficient use of social media.

Blood and Beyond: The Art of Perception

Sunday, December 10
4:30 p.m. – 6:00 p.m.

CHAIR:

Bob Löwenberg, MD, PhD, Editor-in-Chief, *Blood*, Erasmus University Medical Center, Rotterdam, Netherlands

SPEAKER:

Amy E. Herman, JD, MA, Author, *Visual Intelligence*, New York, NY

Scientifically and clinically, the study of blood commands a professional engagement that can lead hematologists to lose sight of the complex notions held by the non-medical world. This session will showcase art historian Amy E. Herman, whose work shines a unique light on the intersection of medicine and humanity. In her celebrated seminar, *The Art of Perception*, Ms. Herman has trained experts from many fields how to perceive and communicate better. By showing people how to look closely at images, she helps them hone their visual intelligence, a set of skills all individuals possess but that few know how to use effectively. Ms. Herman has spent more than a decade teaching



doctors to observe patients instead of their charts, helping police officers separate facts from opinions when investigating a crime, and training professionals from the Federal Bureau of Investigation, the State Department, Fortune 500 companies, and the military to recognize the most pertinent and useful information. Her lessons highlight far more than the physical objects you may be missing; they teach you how to recognize visual clues. Ms. Herman developed and conducts all sessions of *The Art of Perception* using the analysis of works of art to improve perception and communication.

Networking Reception for Female Hematologists

Monday, December 11
7:30 p.m. – 9:00 p.m.

CO-CHAIRS:

Linda J. Burns, MD, National Marrow Donor Program/Be the Match, Minneapolis, MN

Christine Chomienne, MD, PhD, INSERM Hôpital Saint-Louis, Paris, France

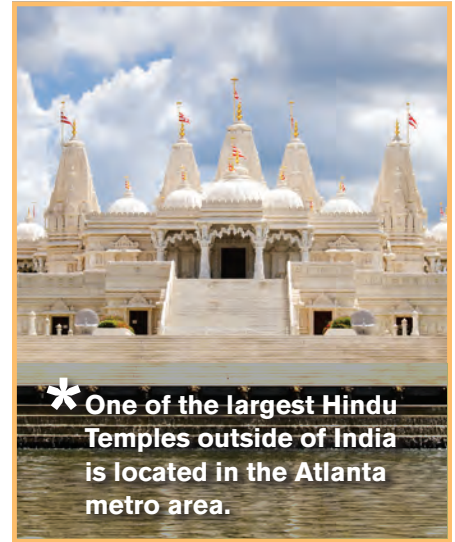
This workshop and networking reception will provide an opportunity for female hematologists to gather in an informal environment. The goal of the event is to facilitate an exchange between senior and more junior hematologists in an effort to cultivate mentoring. The emphasis of this year's program underscores the importance of being proactive. In addition to remarks from the co-chairs, participants will work in small groups, led by more senior hematologists, to discuss strategies to address real-life challenges that participants will identify in advance.

To RSVP for this event, please visit www.hematology.org/annual-meeting.

Global Hematology Symposium

Monday, December 11
12:15 p.m. – 1:15 p.m.

This session will highlight the inspiring and innovative work of hematologists around the world to combat blood diseases in low-resource settings. Hear from the individuals leading these initiatives, and learn about the research, training, and clinical practices that drive efforts to deliver health care to some of the world's most disadvantaged populations. Attendees will also learn how they can make an impact on hematology care in other regions through ASH's international outreach programs.



Program Guide

Trainee Activities and Services

ASH provides a variety of high-quality educational, career-development, and networking opportunities to help trainees make the most of their meeting experience. The following activities and services have been identified as most relevant to the unique interests of undergraduates, medical and graduate students, residents, and fellows and are open only to annual meeting attendees with a blue trainee badge.

Trainee Day

Friday, December 8

12:00 noon – 5:00 p.m.

CHAIR:

Alison W. Loren, MD, University of Pennsylvania, Philadelphia, PA

This half-day workshop is intended to support and encourage trainees in the field of academic hematology and enhance their career development. The program will be presented through didactic and interactive small-group breakout sessions, which will allow ample time for discussion. Important information on trial design, how to build a research team, and non-traditional career development opportunities in hematology will be presented.

A boxed lunch will be provided. Space is available on a first-come, first-served basis. As seating is limited, attendees are strongly encouraged to arrive early. No additional participants will be allowed in the rooms once these sessions are filled.

Didactic Session: Statistics and Trial Design

12:00 noon – 1:15 p.m.

SPEAKER:

Sara K. Vesely, PhD, University of Oklahoma Health Sciences Center, Oklahoma City, OK

This session will discuss the importance of an effective trial design as well as how best to partner with a statistician to make sure your study is appropriate, achievable, and meaningful.

Breakout Sessions

1:30 p.m. – 2:30 p.m.

SPEAKERS:

Rosemarie Mick, MS, University of Pennsylvania, Philadelphia, PA
Statistical Considerations for Basic, Translational, and Phase I Trials

Navneet S. Majhail, MD, Cleveland Clinic, Cleveland, OH
Statistical Considerations in Health Outcomes and Clinical Effectiveness Research

Mikael A. Sekeres, MD, Cleveland Clinic, Cleveland, OH
Statistical Considerations in Phase II and III Clinical Trials

Rosemarie Mick will cover how to collaborate with a statistician to create effective statistical models for basic, translational, and phase I trials. It will also address sample size, power calculations, confounding variables, and bias.

Dr. Navneet Majhail will cover how to write a clearly defined research question and how to select appropriate statistical models for health outcomes and clinical research.

Dr. Mikael Sekeres will cover how to collaborate with a statistician to create effective statistical models for phase II and III clinical trials.

Breakout Sessions

2:45 p.m. – 3:45 p.m.

SPEAKERS:

David P. Steensma, MD, Dana-Farber Cancer Institute, Boston, MA
Research Teams in Clinical Trials

Linda J. Burns, MD, National Marrow Donor Program/Be the Match, Minneapolis, MN
How to Build a Research Team: Research Teams in Health Outcomes and Clinical Effectiveness Research

Neil P. Shah, University of California – San Francisco, San Francisco, CA
Research Teams in Translational Studies

Dr. David Steensma will cover how to develop a team to engage in clinical research, including how to position yourself as a junior researcher to ultimately design and lead clinical trials.

Dr. Linda Burns will cover the important roles within health outcomes and clinical effectiveness research as well as how to participate in and eventually lead a research team.

Dr. Neil Shah will cover how to find, engage, and define roles of research collaborators as well as how to value all members of the team. It will also address how to find collaborators who understand both the science and clinical aspects of a research program and how to effectively partner with those who do not see both sides.

Didactic Session: Non-Traditional Career Development

4:00 p.m. – 5:00 p.m.

SPEAKERS:

Benjamin Kim, MD, Genentech, Los Angeles, CA

Danielle M. Townsley, MD, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD

Ann Farrell, MD, U.S. Food and Drug Administration, Silver Spring, MD

This session will highlight careers in hematology outside the “usual” realms of academic medicine and clinical practice. There will be speakers from the U.S. Food and Drug Administration, the National Institutes of Health, and industry. Each speaker will address the pros and cons of his/her particular career path, followed by an interactive discussion and Q&A.

Trainee Welcome Reception

Friday, December 8

5:00 p.m. – 7:00 p.m.

This informal social event provides the opportunity for undergraduates, medical and graduate students, residents, and fellows (MD and PhD) to gather with their peers. The reception will include an overview of ASH trainee resources, a guide to the annual meeting for trainees, and brief remarks from the ASH president.

Career-Development Lunch Sessions

Saturday, December 9
11:15 a.m. – 12:15 p.m.

CHAIR:

Jennifer C. Kesselheim, MD, Dana-Farber Cancer Institute, Boston, MA

These roundtable discussions will provide an intimate venue for trainees to meet with leaders in hematology to discuss specific career development topics. There will be two rooms reserved for these sessions, with two tables per room for each career area and one faculty member at each table leading the discussion. Each table will hold approximately six to 10 people.

A boxed lunch will be provided. Space is available on a first-come, first-served basis. As seating is limited, attendees are strongly encouraged to arrive early. No additional participants will be allowed in the rooms once these sessions are filled.



Career Area	Room 1	Room 2
Clinical Careers in Hematology	Burton F. Alexander III, MD, Virginia Oncology Associates, Norfolk, VA Harriet Bering, Harvard Vanguard Medical Associates, Beverly, MA	Kenneth Adler, MD, Regional Cancer Care Associates, Morristown, NJ David C. Portnoy, MD, West Clinic, Memphis, TN
Clinical Malignant Hematology/ Blood and Marrow Transplant	Hetty E. Carraway, MD, Cleveland Clinic, Cleveland, OH Gabriel Mannis, University of California – San Francisco, San Francisco, CA	Joseph H. Antin, MD, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA Elihu H. Estey, MD, University of Washington, Seattle, WA
Clinical Non-Malignant Hematology	Anita Rajasekhar, MD, University of Florida – Shands Hospital, Gainesville, FL Ted Wun, MD, University of California Davis School of Medicine, Sacramento, CA	Andrew D. Leavitt, MD, University of California – San Francisco, San Francisco, CA Cindy A. Leissing, MD, Tulane University School of Medicine, New Orleans, LA
Government	Albert Deisseroth, MD, PhD, U.S. Food and Drug Administration, Silver Spring, MD Elaine S. Jaffe, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD	Craig Hooper, PhD, Centers for Disease Control and Prevention, Atlanta, GA Keith Hoots, MD, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD
Industry	James Bradner, MD, Novartis, Boston, MA Patrick F. Fogarty, Pfizer Inc., Collegeville, PA	Sophia Khaldoyanidi, Spectrum Pharmaceuticals, Inc., Weston, MA Stephen J. Simko, MD, Genentech, San Francisco, CA
Laboratory and Translational Hematology	Neil Shah, MD, PhD, University of California – San Francisco, San Francisco, CA Michelle Sholzberg, MDCM, St. Michael's Hospital, Toronto, Canada	Janis L. Abkowitz, MD, University of Washington, Seattle, WA Karin E. Finberg, MD, PhD, Pathology, Yale School of Medicine, New Haven, CT
Medical Educators	Karen Hook, MD, University of Connecticut Health Center, Farmington, CT Martina Trinkaus, MD, St. Michael's Hospital, Toronto, Canada	Kristie Blum, MD, Emory University Medical Center, Atlanta, GA Elaine Muchmore, MD, University of California – San Diego, San Diego, CA
Pediatric Hematology/Oncology	Anthony Chan, MBBS, McMaster University, Hamilton, Canada Cindy Neunert, MD, Columbia University Medical School, New York, NY	Neil Goldenberg, MD, PhD, Johns Hopkins All Children's Hospital, St. Petersburg, FL Naomi Winick, MD, University of Texas Southwestern Medical Center, Dallas, TX
PhD	Tucker LeBien, PhD, University of Minnesota, Minneapolis, MN Nancy E. Speck, PhD, University of Pennsylvania, Philadelphia, PA	Patricia Liaw, PhD, McMaster University, Hamilton, Canada Vesna Najfeld, PhD, Icahn School of Medicine at Mount Sinai, New York, NY
Transfusion Medicine	Richard Kaufman, MD, Brigham and Women's Hospital, Boston, MA Gary Schiller, MD, David Geffen School of Medicine at UCLA, Los Angeles, CA	Lawrence Goodnough, MD, Stanford University, Stanford, CA Cassandra Josephson, MD, Emory University School of Medicine, Atlanta, GA

Program Guide

Trainee Activities and Services

Trainee Didactic Sessions

CHAIR:

Angela R. Smith, MD, University of Minnesota, Minneapolis, MN

During lunch on Sunday and Monday, ASH will offer didactic sessions designed to provide trainees with an overview of timely and relevant career-oriented issues.

Lunch will be provided. Space is available on a first-come, first-served basis. As seating is limited, attendees are strongly encouraged to arrive early. No additional participants will be allowed in the rooms once these sessions are filled.

Sunday, December 10
11:15 a.m. – 12:15 p.m.

SPEAKERS:

Jean Koff, MD, Emory University, Atlanta, GA
Sara E. Meyer, PhD, Thomas Jefferson University, Philadelphia, PA
Angela R. Smith, MD, University of Minnesota, Minneapolis, MN
Time Management and Balance

This session will focus on the importance of time management and balance from both the clinical and lab perspectives. The expert panel will discuss time management challenges and successful strategies for dealing with issues. Using examples, they will also discuss various models for achieving work-life balance.

Michael R. Grever, MD, The Ohio State University, Columbus, OH
Drug Development

This session will focus on drug development for targeted therapy and immunotherapy. Dr. Michael Grever will describe the steps in the regulatory process for investigational new drug applications with a focus on drug testing, early phase clinical trials, and newer adaptive trials designs.

Monday, December 11
12:15 p.m. – 1:15 p.m.

SPEAKERS:

Monica L. Guzman, PhD, Weill Cornell Medical College, New York, NY
How to Set Up a Laboratory Research Program

This session will detail how to set up a laboratory research program, beginning with the necessary start-up package. Dr. Monica Guzman will describe laboratory management, including personnel and money, and discuss various avenues for lab funding.

Nigel Mackman, PhD, The University of North Carolina at Chapel Hill, Chapel Hill, NC
Bridging the Translational Divide

This session will help trainees identify cultural differences between basic science investigators and clinical researchers. The discussion will center on the interface between biomedical science and clinical medicine. The session will also help trainees develop the skills to participate in and lead translational research teams.

Trainee Lounge

Trainees are invited to visit the Trainee Lounge located in ASH Central (Building B, Level 1, Hall B1) to meet with colleagues and recharge with complimentary refreshments. The Trainee Lounge will be open on the following days:

Saturday, December 9 7:00 a.m. – 6:00 p.m.
Sunday, December 10 7:00 a.m. – 5:00 p.m.
Monday, December 11 7:00 a.m. – 5:00 p.m.
Tuesday, December 12 7:00 a.m. – 1:30 p.m.

Additional Opportunities and Sessions of Interest to Trainees

How to Get Published in a Peer-Reviewed Journal	12
ASH Grassroots Network Lunch (for U.S. trainees)	15
Promoting Minorities in Hematology Presentations and Reception.....	16
Blood and Beyond: The Art of Perception.....	16
Education Spotlight Sessions	29
How I Treat: Bringing Science to Clinical Dilemmas.....	30
Continuing Conversations With the Speakers.....	31-35
Special Scientific Symposia.....	36
Meet the Scientist.....	38



The Education Program will be held from Saturday, December 9, through Monday, December 11, with each session being offered twice. A question-and-answer period will occur at the end of each individual speaker presentation. Chapters based on these sessions will be published in *Hematology 2017*, the ASH Education Program.

EDUCATION PROGRAM CO-CHAIRS



Adam Cuker, MD
University of Pennsylvania,
Philadelphia, PA



Laurie Sehn, MD
British Columbia Cancer
Agency, Vancouver,
Canada

The Challenge of Primary and Secondary Central Nervous System (CNS) Lymphoma

CHAIR:

James L. Rubenstein, MD, PhD, University of California – San Francisco, San Francisco, CA

SPEAKERS:

Andres J.M. Ferreri, MD, IRCCS San Raffaele Scientific Institute, Milan, Italy
Therapy of Primary CNS Lymphoma: Role of Intensity, Radiation, and Novel Agents

James L. Rubenstein, MD, PhD, University of California – San Francisco, San Francisco, CA
Biology of CNS Lymphoma and the Potential of Novel Agents

Kerry J. Savage, MD, British Columbia Cancer Agency, Vancouver, Canada
CNS Prophylaxis for Lymphoma: Who, What, and When?

Chronic Myeloid Leukemia (CML): Where Are We in the Current TKI Era?

CHAIR:

Francois-Xavier Mahon, MD, PhD, Bordeaux Segalen University, Bordeaux, France

SPEAKERS:

Ravi Bhatia, MD, University of Alabama at Birmingham, Birmingham, AL
Novel Approaches to Therapy in CML

Francois-Xavier Mahon, MD, PhD, Bordeaux Segalen University, Bordeaux, France
Treatment-Free Remission: Who, How, and Why?

Javid Moslehi, MD, Vanderbilt School of Medicine, Nashville, TN
TKI-Associated Cardiovascular Toxicity: What to Consider

Malignant Hematology

Acute Lymphocytic Leukemia (ALL): New Approaches in Management

CHAIR:

Wendy Stock, MD, The University of Chicago, Chicago, IL

SPEAKERS:

Monika Brueggemann, MD, University Hospital Schleswig-Holstein, Kiel, Germany
Implications of Minimal Residual Disease in Adult ALL

Farhad Ravandi, MD, The University of Texas MD Anderson Cancer Center, Houston, TX
Current Management of Philadelphia Chromosome Positive ALL and the Role of Stem Cell Transplantation

Wendy Stock, MD, The University of Chicago, Chicago, IL
How Should We Incorporate Novel Therapies Into the Management of ALL?

Acute Myeloid Leukemia (AML): How Can We Improve Upon “Standard” Therapy?

CHAIR:

Selina M. Luger, MD, University of Pennsylvania, Philadelphia, PA

SPEAKERS:

Herve Dombret, MD, PhD, Hôpital Saint-Louis, Paris, France
How and When to Decide Between Epigenetic Therapy and Chemotherapy in Patients With AML

Elli Papaemmanuil, PhD, Memorial Sloan Kettering Cancer Center, New York, NY
Classification and Risk Assessment in AML: Integrating Cytogenetics and Molecular Profiling

Alexander E. Perl, MD, University of Pennsylvania, Philadelphia, PA
Role of Targeted Therapy in the Management of Patients With AML

Program Guide

Education Program

Controversies in Myeloma

CHAIR:

Ola Landgren, MD, PhD, Memorial Sloan Kettering Cancer Center, New York, NY

SPEAKERS:

Faith E. Davies, MD, University of Arkansas for Medical Sciences, Little Rock, AR
Is Molecular Remission the Goal of Multiple Myeloma Therapy?

Ola Landgren, MD, PhD, Memorial Sloan Kettering Cancer Center, New York, NY
Should Smoldering Myeloma Be Treated?

Heinz Ludwig, MD, Wilhelminen Hospital, Vienna, Austria
Continuous Versus Fixed Duration Therapy in Multiple Myeloma

Dilemmas in Pediatric Hematologic Malignancy

CHAIR:

Lewis B. Silverman, MD, Dana-Farber/Boston Children's Cancer and Blood Disorders Center, Boston, MA

SPEAKERS:

Rachael E. Hough, BMedSci, BMBS, MD, University College London Hospitals NHS Foundation Trust, London, United Kingdom
Crisis Management in the Treatment of Childhood Acute Lymphocytic Leukemia: Putting Right What Can Go Wrong (Emergency Complications of Disease and Treatment)

Sharon A. Savage, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD
Premalignant Pediatric Hematologic Disorders: When to Treat and How

Lewis B. Silverman, MD, Dana-Farber/Boston Children's Cancer and Blood Disorders Center, Boston, MA
Incorporation of Non-Chemotherapeutic Agents in Pediatric Acute Lymphocytic Leukemia

Evolving Strategies in Aggressive B-Cell Lymphoma

CHAIR:

Kieron Dunleavy, MD, George Washington University, Washington, DC

SPEAKERS:

Andrew J. Davies, PhD, University of Southampton, Southampton, United Kingdom
Tailoring Frontline Therapy in Diffuse Large B-Cell Lymphoma: Who Should We Treat Differently?

Kieron Dunleavy, MD, George Washington University, Washington, DC
Primary Mediastinal B-Cell Lymphoma: Biology and Evolving Therapeutic Strategies

Peter Martin, MD, Weill Cornell Medical College, New York, NY
Optimizing Therapy in Mantle Cell Lymphoma

The Expanding Role of Immunotherapy in Non-Hodgkin Lymphoma (NHL)

CHAIR:

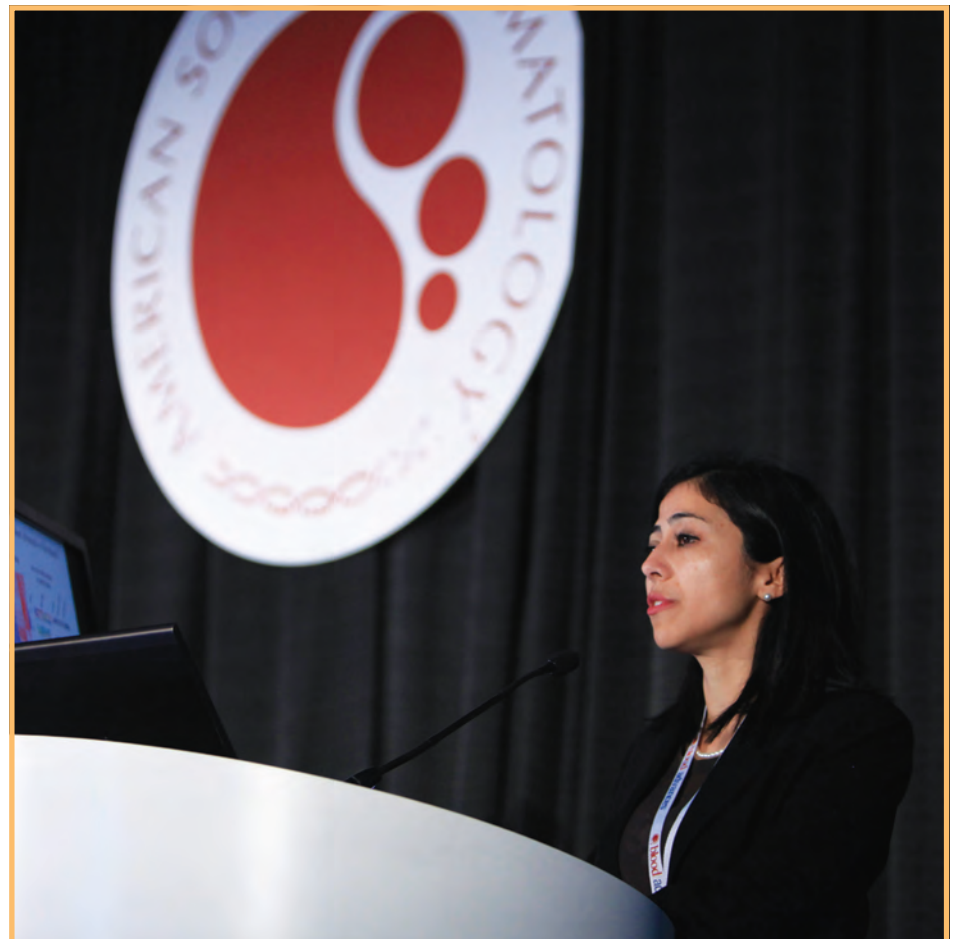
Stephen M. Ansell, MD, PhD, Mayo Clinic, Rochester, MN

SPEAKERS:

Stephen M. Ansell, MD, PhD, Mayo Clinic, Rochester, MN
Harnessing the Power of the Immune System in NHL: Immunomodulators, Checkpoint Inhibitors, and Beyond

Catherine M. Bollard, MD, Children's National Health System, Washington, DC
Cellular Immunotherapy for NHL

Karin Tarte, PhD, Rennes University Hospital, Rennes, France
Role of the Microenvironment Across Histological Subtypes of NHL





Hodgkin Lymphoma: New Insights and New Approaches

CHAIR:

Nancy L. Bartlett, MD, Siteman Cancer Center, St. Louis, MO

SPEAKERS:

Nancy L. Bartlett, MD, Siteman Cancer Center, St. Louis, MO

Emerging Role of Novel Therapies in Hodgkin Lymphoma: Proceed With Caution

Dennis A. Eichenauer, MD, University of Cologne, Cologne, Germany
Nodular Lymphocyte-Predominant Hodgkin Lymphoma: A Unique Disease Deserving Unique Management

Margaret A. Shipp, MD, Dana-Farber Cancer Institute, Boston, MA
Insights Into Hodgkin Lymphoma Biology: Implications for Prognosis and Novel Therapeutics

Individualizing Therapy in Chronic Lymphocytic Leukemia (CLL)

CHAIR:

Matthew S. Davids, MD, Dana-Farber Cancer Institute, Boston, MA

SPEAKERS:

Matthew S. Davids, MD, Dana-Farber Cancer Institute, Boston, MA

How Should We Sequence and Combine Novel Therapies in CLL?

Kirsten Fischer, MD, University Hospital Cologne, Cologne, Germany
Optimizing Frontline Therapy of CLL Based on Clinical and Biological Factors

Gianluca Gaidano, MD, PhD, University of Eastern Piedmont Amedeo Avogadro, Novara, Italy
The Mutational Landscape of CLL and Its Impact on Prognosis and Treatment

Indolent Lymphoma: How Understanding Disease Biology Is Influencing Clinical Decision-Making

CHAIR:

Brad S. Kahl, MD, Washington University in St. Louis, St. Louis, MO

SPEAKERS:

Jorge J. Castillo, MD, Dana-Farber Cancer Institute, Boston, MA
Biology and Management of Lymphoplasmacytic Lymphoma

Brad S. Kahl, MD, Washington University in St. Louis, St. Louis, MO
Follicular Lymphoma: Are We Ready for a Risk-Adapted Approach?

Catherine Thieblemont, MD, PhD, Hôpital Saint-Louis, Paris, France
Update on Nodal and Primary Splenic Marginal Zone Lymphoma

Program Guide

Education Program

Myeloproliferative Neoplasms (MPN): New Insights in the Current Treatment Paradigm

CHAIR:

Alessandro M. Vannucchi, MD, University of Florence, Florence, Italy

SPEAKERS:

Anthony R. Green, PhD, University of Cambridge, Cambridge, United Kingdom
Where Did It Start? Mutation Order and What It Means in MPN

Claire N. Harrison, DM, Guys and St. Thomas, London, United Kingdom
Current Treatment Algorithm for the Management of Patients With Myelofibrosis, JAK Inhibitors, and Beyond

Alessandro M. Vannucchi, MD, University of Florence, Florence, Italy
What Are the Current Treatment Approaches for Patients With Polycythemia Vera and Essential Thrombocythemia?

Myelodysplastic Syndromes (MDS): Understanding the Current Treatment Landscape

CHAIR:

Olatoyosi Odenike, MBBS, The University of Chicago, Chicago, IL

SPEAKERS:

Aristoteles Giagounidis, MD, Marien Hospital Düsseldorf, Düsseldorf, Germany
Current Treatment Algorithm for the Management of MDS

R. Coleman Lindsley, MD, PhD, Dana-Farber Cancer Institute, Boston, MA
Uncoding the Genetic Heterogeneity of MDS

Olatoyosi Odenike, MBBS, The University of Chicago, Chicago, IL
Incorporating Novel Approaches in the Management of MDS Beyond Hypomethylating Agents

Novel Therapeutics in Myeloma

CHAIR:

Maria-Victoria Mateos, MD, PhD, University Hospital of Salamanca, Salamanca, Spain

SPEAKERS:

Shaji Kumar, MD, Mayo Clinic, Rochester, MN
Emerging Options in Multiple Myeloma: Targeted, Immune, and Epigenetic Therapies

Maria-Victoria Mateos, MD, PhD, University Hospital of Salamanca, Salamanca, Spain
Management of Multiple Myeloma in the Newly Diagnosed Patient

Pieter Sonneveld, MD, PhD, Erasmus Medical Center, Rotterdam, Netherlands
Management of Multiple Myeloma in the Relapsed/Refractory Patient

When Graft Versus Tumor Fails: The Biology and Treatment of Relapse After Allogeneic Stem Cell Transplantation

CHAIR:

Mohamad Mohty, MD, PhD, Saint Antoine Hospital, Paris, France

SPEAKERS:

J.H. Frederik Falkenburg, MD, PhD, Leiden University Medical Center, Leiden, Netherlands
Graft Versus Tumor Effects and Why People Relapse

Robert J. Soiffer, MD, Dana-Farber Cancer Institute, Boston, MA
Drugs to Prevent and Treat Relapse Following Allogeneic Stem Cell Transplantation

Alan Wayne, MD, Children's Hospital Los Angeles, Los Angeles, CA
Cells to Prevent and Treat Relapse Following Allogeneic Stem Cell Transplantation





The Changing Landscape of Hemophilia Therapy

CHAIR:

Margaret V. Ragni, MD, University of Pittsburgh, Pittsburgh, PA

SPEAKERS:

Lindsey A. George, MD, Children's Hospital of Philadelphia, Philadelphia, PA
Gene Therapy Comes of Age

Alfonso Iorio, MD, PhD, McMaster University, Hamilton, Canada
Using Pharmacokinetic Data to Individualize Therapy

Margaret V. Ragni, MD, University of Pittsburgh, Pittsburgh, PA
Hemostatic Therapy for Patients With Inhibitors: Beyond Bypassing Agents

Common Clinical Questions in Cancer-Associated Venous Thromboembolism (VTE)

CHAIR:

Ingrid Pabinger, MD, Medical University of Vienna, Vienna, Austria

SPEAKERS:

Agnes Y.Y. Lee, MD, University of British Columbia, Vancouver, Canada
When Can We Stop Anticoagulation in Patients With Cancer-Associated Thrombosis?

Marcello Di Nisio, MD, PhD, University of Chieti-Pescara, Chieti, Italy
Incidental VTE: Is Anticoagulation Indicated?

Ingrid Pabinger, MD, Medical University of Vienna, Vienna, Austria
Direct Oral Anticoagulants: Now Also for Prevention and Treatment of Cancer-Associated VTE?

Non-Malignant Hematology

Bone Marrow Failure: Acquired

CHAIR:

Adrianna Vlachos, MD, Northwell Health, Manhasset, NY

SPEAKERS:

Jaroslav P. Maciejewski, MD, PhD, Taussig Cancer Center, Cleveland, OH
Clinical Implications of Somatic Mutations in Aplastic Anemia and Myelodysplastic Syndromes in the Genomics Age

Christopher Y. Park, MD, PhD, New York University School of Medicine, New York, NY
Hematopoiesis, Aging, and Bone Marrow Failure

Adrianna Vlachos, MD, Northwell Health, Manhasset, NY
Acquired Ribosomopathies, Red Cell Failure, and Myelodysplastic Syndromes

Bone Marrow Failure: Inherited

CHAIR:

Blanche P. Alter, MD, National Cancer Institute, National Institutes of Health, Rockville, MD

SPEAKERS:

Blanche P. Alter, MD, National Cancer Institute, National Institutes of Health, Rockville, MD
Inherited Bone Marrow Failure Syndromes: Considerations Pre- and Post-Transplant

Jane Churpek, MD, The University of Chicago, Chicago, IL
Old and New Tools in the Clinical Diagnosis of Inherited Bone Marrow Failure Syndromes

Rodrigo T. Calado, MD, PhD, University of Sao Paulo, Ribeirão Preto, Brazil
Treatment of Inherited Bone Marrow Failure Syndromes Beyond Transplant

Program Guide

Education Program



Common Hematologic Consults in Pregnancy

CHAIR:

Shannon Marie Bates, MD, McMaster University, Hamilton, Canada

SPEAKERS:

Christian Breymann, MD, Swiss Perinatal Institute, Zurich, Switzerland
Iron-Deficiency in Pregnancy: Clinical Implications and Management

Douglas B. Cines, MD, University of Pennsylvania, Philadelphia, PA
Thrombocytopenia in Pregnancy: Evaluation and Management

Leslie Skeith, MD, University of Ottawa, Ottawa, Canada
Preventing Venous Thromboembolism During Pregnancy and Postpartum: Crossing the Threshold

Congenital and Acquired Neutropenia

CHAIR:

Seth J. Corey, MD, Virginia Commonwealth University, Richmond, VA

SPEAKERS:

Seth J. Corey, MD, Virginia Commonwealth University, Richmond, VA
New Diseases, New Mechanisms, and New Therapies in Congenital Neutropenia

Brian R. Curtis, PhD, BloodCenter of Wisconsin, Milwaukee, WI
Drug-Induced Neutropenia

Thomas P. Loughran, MD, University of Virginia Cancer Center, Charlottesville, VA
Chronic Neutropenia in Large Granular Lymphocytic Leukemia and Rheumatoid Arthritis

Controversies in Venous Thromboembolism: To Treat or Not to Treat

CHAIR:

Marc Carrier, MD, Ottawa Hospital Research Institute, Ottawa, Canada

SPEAKERS:

Jan Beyer-Westendorf, MD, University Hospital Carl Gustav Carus, Dresden, Germany
Superficial Vein Thrombosis

Marc Carrier, MD, University of Ottawa, Ottawa, Canada
Subsegmental Pulmonary Embolism

Marc Righini, MD, Geneva University Hospital, Geneva, Switzerland
Distal Deep Vein Thrombosis

Emerging Issues in Clinical Care in Thalassemia

CHAIR:

Maria Domenica Cappellini, MD, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy

SPEAKERS:

Maria Domenica Cappellini, MD, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy
New Therapeutic Targets in Transfusion-Dependent and Non-Transfusion-Dependent Thalassemia

Antonio G. Piga, MD, University of Turin, Turin, Italy
The Impact of Bone Disease and Pain in Thalassemia

Ali T. Taher, MD, PhD, American University of Beirut Medical Center, Beirut, Lebanon
Iron Overload in Thalassemia: Different Organs at Different Rates

It All Starts Here: Disorders of Primary Hemostasis

CHAIR:

Cindy Neunert, MD, Columbia University, New York, NY

SPEAKERS:

Veronica H. Flood, MD, Medical College of Wisconsin, Milwaukee, WI
Advances in the Diagnosis and Treatment of von Willebrand Disease

Cindy Neunert, MD, Columbia University, New York, NY
Management of Newly Diagnosed Immune Thrombocytopenia: Can We Change Outcomes?

Patrizia Noris, MD, University of Pavia, Pavia, Italy
Hereditary Thrombocytopenias: A Growing List of Disorders

Lessons Learned From Quality Improvement Initiatives in Sickle Cell Disease (SCD)

CHAIR:

Joshua J. Field, MD, BloodCenter of Wisconsin, Milwaukee, WI

SPEAKERS:

Joshua J. Field, MD, BloodCenter of Wisconsin, Milwaukee, WI
Lifespan Approaches to Care and Transition in SCD

Jeffrey Glassberg, MD, Mount Sinai Medical Center, New York, NY
Improving Care in the Emergency Department for Patients With SCD

Suzette O. Oyeku, MD, Albert Einstein College of Medicine, Bronx, NY
Rigorous and Practical Quality Indicators in SCD Care

Management of SCD: Present and Future

CHAIR:

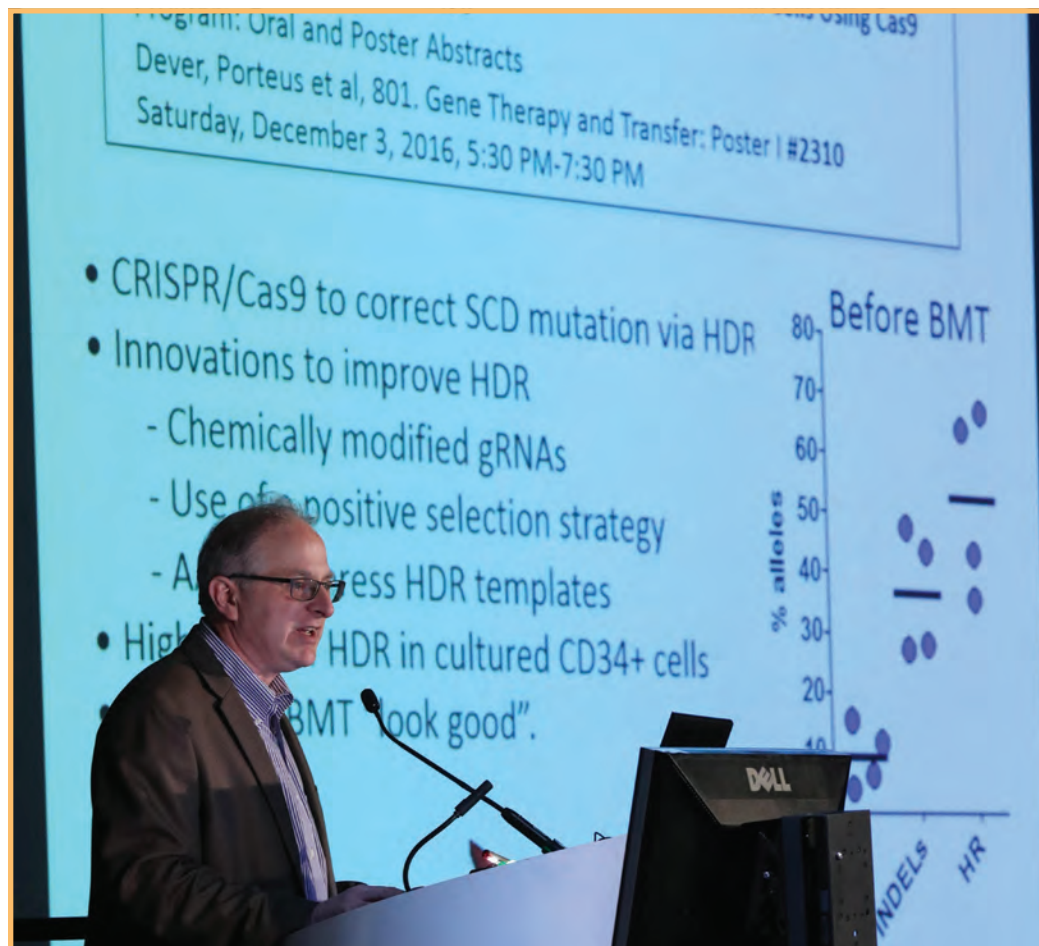
Mark Gladwin, MD, University of Pittsburgh, Pittsburgh, PA

SPEAKERS:

Mark Gladwin, MD, University of Pittsburgh, Pittsburgh, PA
Emerging Cardiovascular Implications of SCD

Angela Rivers, MD, PhD, University of Illinois at Chicago, Chicago, IL
Evolving Treatment Paradigms in SCD

Elliott Vichinsky, MD, UCSF Benioff Children's Hospital Oakland, Oakland, CA
Chronic Organ Failure in Adult SCD



Program Guide

Education Program

Practical Aspects of Acute and Chronic Pain Management in Sickle Cell Disease (SCD)

CHAIR:

Amanda M. Brandow, DO, Medical College of Wisconsin, Milwaukee, WI

SPEAKERS:

Amanda M. Brandow, DO, Medical College of Wisconsin, Milwaukee, WI

Pain Measurement Tools in SCD: Where Are We Now?

Kalpna Gupta, PhD, University of Minnesota, Minneapolis, MN

Targeting Novel Mechanisms of Pain in SCD

Paul Telfer, MD, Barts Health NHS Trust, London, United Kingdom

Optimizing the Care Model for an Uncomplicated Acute Pain Event in SCD

Thrombocytopenia in Hospitalized Patients

CHAIR:

Lawrence Rice, MD, Houston Methodist Hospital, Houston, TX

SPEAKERS:

Lawrence Rice, MD, Houston Methodist Hospital, Houston, TX

HITs and Misses of 100 Years of Heparin

Marie Scully, MD, University College London Hospitals, London, United Kingdom

Approach to the Patient With Thrombotic Microangiopathy

Ryan Zarychanski, MD, Cancercare Manitoba University of Manitoba, Winnipeg, Canada

Assessing Thrombocytopenia in the Intensive Care Unit: The Past, Present, and Future

Thrombosis, Devices, and Interventions

CHAIR:

Leslie J. Raffini, MD, Children's Hospital of Philadelphia, Philadelphia, PA

SPEAKERS:

William Geerts, MD, Sunnybrook Health Science Centre, Toronto, Canada

Inferior Vena Cava Filters

Leslie J. Raffini, MD, Children's Hospital of Philadelphia, Philadelphia, PA

Anticoagulation With Ventricular Assist Devices and Extracorporeal Membrane Oxygenation: Walking the Tightrope

Suresh Vedantham, MD, Washington University School of Medicine, St. Louis, MO

Thrombectomy and Thrombolysis for the Prevention and Treatment of Post-Thrombotic Syndrome

Therapeutic Apheresis as an Immunomodulatory Tool

THIS SESSION IS JOINTLY SPONSORED WITH AABB.

CHAIR:

Jeffrey Winters, MD, Mayo Clinic, Rochester, Rochester, MN

SPEAKERS:

Douglas E. Gladstone, Johns Hopkins University, Baltimore, MD

Desensitization of Human Leukocyte Antigen Alloimmunized Recipients of Allogeneic Transplant

Jennifer Schneiderman, Northwestern Medicine Feinberg School of Medicine, Chicago, IL

Extracorporeal Photopheresis for Graft Versus Host Disease

Jeffrey Winters, MD, Mayo Clinic, Rochester, Rochester, MN

Plasma Exchange for Thrombotic Microangiopathies Other Than Thrombotic Thrombocytopenic Purpura



Education Spotlight Sessions

These sessions are intended to provide a more in-depth review on a specific topic. Each 90-minute session will be presented once in a small-venue format on either Sunday or Monday and will include ample time for audience questions and participation. The sessions are restricted to medical professionals only.

A Sticky Business: New Insights Into Neutrophil Extracellular Traps (NETs) in Physiology and Disease

CHAIR:

Mary C. Dinauer, MD, PhD, Washington University School of Medicine, St. Louis, MO

SPEAKERS:

Denisa D. Wagner, PhD, Boston Children's Hospital, Boston, MA
NETs: "Nuclear" Weapons of Inflammation

Christian Yost, MD, University of Utah, Salt Lake City, UT
NETs as Friends or Foes: Lessons From Human Neonates and Translational Models

Identification and Management of Toxicities Induced by Immunotherapies

CHAIR:

Helen E. Heslop, MD, DSc (Hon), Baylor College of Medicine, Houston, TX

SPEAKERS:

Daniel W. Lee, MD, University of Virginia, Crozet, VA
Toxicities of Chimeric Antigen Receptor T Cells

Suzanne Topalian, MD, Johns Hopkins University, Baltimore, MD
Toxicities of Checkpoint Inhibitors

Debate: Patients With Acquired TTP in Remission Should Be Treated to Prevent Relapse

CHAIR:

J. Evan Sadler, MD, PhD, Washington University in St. Louis, St. Louis, MO

SPEAKERS:

Paul Coppo, MD, PhD, Saint-Antoine Hospital, Paris, France
The Case For

James N. George, MD, University of Oklahoma, Oklahoma City, OK
The Case Against

Emerging Pathogens From A to Zika and Their Impact on Transfusion Safety

CHAIR:

Michael Busch, MD, PhD, Blood Systems Research Institute, San Francisco, CA

SPEAKERS:

Lyle Petersen, MD, National Center For Emerging and Zoonotic Infectious Diseases, Fort Collins, CO
Emerging Infectious Diseases: Clinical Significance and Implications for Transfusion

Susan L. Stramer, PhD, American Red Cross, Washington, DC
Prevention of Pathogen Transmission via Blood Transfusion



Getting Patients to Transplant: Myths and Reality

CHAIR:

Krishna V. Komanduri, MD, University of Miami, Miami, FL

SPEAKERS:

Navneet S. Majhail, MD, Cleveland Clinic, Cleveland, OH
Getting Patients to Transplant: Barriers and Bridges

Daniel J. Weisdorf, MD, University of Minnesota, Minneapolis, MN
Too Many Donors to Choose From: Which Way Do We Turn?

Atlanta Fun Fact



* In the past five years, Atlanta chefs have garnered 60 semifinalist nominations for the prestigious James Beard Awards.

Program Guide

Education Program

How I Treat: Bringing Science to Clinical Dilemmas

Saturday, December 9, 11:15 a.m. – 12:15 p.m.

Sunday, December 10, 11:15 a.m. – 12:15 p.m.

These sessions will provide an opportunity for a small number of attendees to meet with a clinical expert in a setting that fosters interaction. ASH has invited experts from around the world to facilitate informal discussions, allowing participants to present their questions and gain new perspectives on specific disease topics. A boxed lunch will be provided.

Tickets are restricted to medical professionals only and will be available on site on a first-come, first-served basis; no businesspersons or media will be admitted. Only one ticket per person is allowed. Tickets may be purchased on site during registration hours beginning Thursday, December 7, at the Ticketed Sessions Counter in Building A, Level 1, Hall A1.

Ticket Prices (per session)	
ASH Active, International, Associate, International Associate, Resident, or Graduate/Medical Student Member	\$50
Non-Member	\$75
Non-Member in Training	\$50
Allied Health Professional	\$50

Attention Trainees!

A number of tickets for these sessions will be reserved for trainees. Proof of status as an Associate, International Associate, Resident, or Graduate/Medical Student member, or Non-Member in Training will be required to purchase a ticket.

SPEAKERS:

Stephen M. Ansell, MD, PhD, Mayo Clinic, Rochester, MN
Tailored Therapy for Patients With Hodgkin Lymphoma

Rodrigo T. Calado, MD, PhD, University of Sao Paulo, Ribeirão Preto, Brazil
Aplastic Anemia

Marc Carrier, MD, Ottawa Hospital Research Institute, Ottawa, Canada
How Long to Anticoagulate My Patient With VTE

Douglas B. Cines, MD, University of Pennsylvania, Philadelphia, PA
Immune Thrombocytopenia

Mark Crowther, MD, St. Joseph's Hospital, Hamilton, Canada
Reversal of Anticoagulants

Shaji Kumar, MD, Mayo Clinic, Rochester, MN
Novel Therapy Combinations in Multiple Myeloma

Selina M. Luger, MD, University of Pennsylvania, Philadelphia, PA
Individualized Therapy in Patients With AML

Francois-Xavier Mahon, MD, PhD, Bordeaux Segalen University, Bordeaux, France
Treating and Monitoring Patients With CML

Lawrence Rice, MD, Houston Methodist Hospital, Houston, TX
Heparin-Induced Thrombocytopenia

Marie Scully, MD, University College London Hospitals, London, United Kingdom
Thrombotic Thrombocytopenic Purpura

Laurie H. Sehn, MD, British Columbia Cancer Agency, Vancouver, Canada
Relapsed/Refractory Diffuse Large B-Cell Lymphoma

Wendy Stock, MD, The University of Chicago, Chicago, IL
ALL in Adolescents and Young Adults



The Scientific Program will be held Saturday, December 9, and Sunday, December 10, with each session being offered twice. A question-and-answer period will occur at the end of each individual speaker presentation. Invited abstracts from these sessions will be available in the annual meeting app and on the ASH website.

SCIENTIFIC PROGRAM CO-CHAIRS



Scott A. Armstrong, MD, PhD
Dana-Farber Cancer Institute, Boston, MA



Andrew S. Weyrich, PhD
University of Utah, Salt Lake City, UT



Continuing Conversations With the Speakers

Scientific Program sessions marked with this icon offer an additional informal and interactive discussion session to supplement the traditional didactic Q&A format. These sessions are available on a first-come, first-served basis and are intended to give interested individuals, especially trainees and junior investigators, increased accessibility both to information on the topic and to the opinions of experts in those particular fields. Attendees should come prepared to actively participate in the discussions.

JOINT SESSION: Scientific Committee on Myeloid Biology & Scientific Committee on Myeloid Neoplasia



Clonal Evolution in Myeloid Malignancies

CO-CHAIRS:

Lucy A. Godley, MD, PhD, The University of Chicago, Chicago, IL

Reuben Kapur, PhD, Indiana University School of Medicine, Indianapolis, IN

SPEAKERS:

Christina Curtis, PhD, Stanford University School of Medicine, Stanford, CA
Population Genetics Approaches to Quantify Clonal Evolution

Timothy J. Ley, MD, Washington University in St. Louis, St. Louis, MO
Clonal Evolution and Relapse in Adult De Novo Acute Myeloid Leukemia

Daniel C. Link, MD, Washington University School of Medicine, St. Louis, MO
Clonal Evolution During Stress Hematopoiesis

Anna L. Brown, PhD, University of South Australia, Adelaide, Australia
Clonal Evolution in the Setting of Germline Predisposition

Ad Hoc Scientific Committee on Epigenetics and Genomics



Novel Epigenetic Modifications in Cancer and Development

CHAIR:

Grant A. Challen, PhD, Washington University School of Medicine, St Louis, MO

SPEAKERS:

Maria E. Figueroa, MD, University of Miami, Miami, FL
DNA Methylation in Cancer and Development: An Evolving Paradigm

Anjana Rao, PhD, La Jolla Institute for Allergy and Immunology, La Jolla, CA
Beyond Cytosine Methylation: Ten-Eleven Translocation Proteins, Oxidized Methylcytosines, and Cancer

Frank Lyko, PhD, German Cancer Research Center, Heidelberg, Germany
RNA Methylation and Its Role in the Hematopoietic System

Scientific Committee on Blood Disorders in Childhood

Primary Immunodeficiencies From Childhood to Adulthood

CHAIR:

Marina Cavazzana, MD, PhD, Hôpital Necker-Enfants Malades, Paris, France

SPEAKERS:

Anne Durandy, MD, PhD, Hôpital Necker-Enfants Malades, Paris, France
Primary Antibody Deficiencies: Scientific Discoveries Leading to Challenging Paradigms in a Complex Disease Landscape

Troy Torgerson, MD, PhD, Seattle Children's Hospital, Seattle, WA
Genetic Disorders of Immune Tolerance: The Flip Side of Immune Deficiency Where Autoimmunity Trumps Infection

Jennifer Puck, MD, University of California – San Francisco, San Francisco, CA
Diagnostic Challenges in the Era of Genomic Sequencing and Newborn Screening

Program Guide

Scientific Program

Scientific Committee on Bone Marrow Failure

Genetic Pathways That Disrupt Hematopoietic Stem Cell Function in Inherited Bone Marrow Failure

CHAIR:

Colin Sieff, MB, BCh, Dana-Farber/Boston Children's Cancer and Blood Disorders Center, Boston, MA

SPEAKERS:

Inderjeet Dokal, MD, Barts and Queen Mary's University London, London, United Kingdom
New Bone Marrow Failure Genes: DNAJC21 and ERCC6L2

Steven Holland, MD, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD
GATA2 in Bone Marrow Failure

Marc Raaijmakers, MD, PhD, Erasmus Medical Center, Rotterdam, Netherlands
Deconstructing Niche Contributions to Bone Marrow Failure and Leukemogenesis in Shwachman-Diamond Syndrome



Scientific Committee on Hematopathology and Clinical Laboratory Hematology

Next-Generation Sequencing (NGS) in Routine Diagnostics: Are We There Yet?

CHAIR:

Maria A. Proytcheva, MD, University of Arizona, Tucson, AZ

SPEAKERS:

Kojo S.J. Elenitoba-Johnson, MD, University of Pennsylvania, Philadelphia, PA
NGS-Based Diagnostics in Hematopathology: Strategies for Implementation in a Clinical Environment

Elaine Lyon, PhD, ARUP Laboratories, Salt Lake City, UT
Understanding the Genome: Professional Guidelines in Clinical Genomic Testing and Interpretation

Torsten Haferlach, MD, Munich Leukemia Laboratory GmbH, Munich, Germany
Whole Exome Sequencing in Patients With Hematologic Malignancies: Ready for Real-Time Precision Medicine?

Scientific Committee on Hematopoiesis

Hematopoietic Stem Cell Generation: Reprogramming and Expansion

CHAIR:

Warren S. Alexander, PhD, The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

SPEAKERS:

Kateri A. Moore, DVM, Mount Sinai School of Medicine, New York, NY
In Vitro Hematopoietic Reprogramming and Generation of Hematopoietic Stem Cells

Jonas Larsson, MD, PhD, Lund University, Lund, Sweden
RNAi Screens for Maintenance of Hematopoietic Stem Cell Phenotype During Culture

Kristin Hope, PhD, McMaster University, Hamilton, Canada
Enforcing Post-Transcriptional Circuitries to Achieve Human Hematopoietic Stem Cell Expansion

Scientific Committee on Hemostasis

Impact of the Contact Pathway on Disease States: Molecular Mechanisms

CHAIR:

Rodney M. Camire, PhD, Children's Hospital of Philadelphia, Philadelphia, PA

SPEAKERS:

James H. Morrissey, PhD, University of Illinois, Urbana, IL
Poly-P as Modulator of Hemostasis, Thrombosis, and Inflammation

Patricia C. Liaw, PhD, McMaster University, Hamilton, Canada
Mediators of Disseminated Intravascular Coagulation: Molecular Mechanisms

Sidney Strickland, PhD, Rockefeller University, New York, NY
Impact of the Coagulation System on the Pathogenesis of Alzheimer's Disease

Scientific Committee on Immunology and Host Defense

New Approaches to Understanding Microbial Immune System Interactions

CHAIR:

Jonathan S. Serody, MD, University of North Carolina at Chapel Hill, Chapel Hill, NC

SPEAKERS:

Mark Davis, PhD, Stanford University, Stanford, CA

New Approaches to Human Immunology

Sarah Gaffen, PhD, University of Pittsburgh, Pittsburgh, PA

IL-17-Driven Immune Signaling in Autoimmunity and Fungal Infections

Antonio Lanzavecchia, MD, Institute for Research in Biomedicine, Bellinzona, Switzerland

Dissecting Human Antibody Responses: Useful, Basic, and Surprising Findings

Scientific Committee on Iron and Heme

Iron Trafficking: Ins and Outs in Organelles, Organs, and Organisms

CHAIR:

Martina U. Muckenthaler, PhD, University of Heidelberg, Heidelberg, Germany

SPEAKERS:

Mark D. Fleming, MD, DPhil, Boston Children's Hospital, Boston, MA
Congenital Sideroblastic Anemias: Iron and Heme Lost in Mitochondrial Translation

Nancy C. Andrews, MD, PhD, Duke University School of Medicine, Durham, NC
Understanding the Transferrin Receptor and Cellular Iron Deficiency Outside the Erythron

Iain Macdougall, MD, King's College Hospital, London, United Kingdom
Iron Supplementation: What's New?

Scientific Committee on Lymphoid Neoplasia

Advances in Cellular Immunotherapy for Lymphoid Malignancies

CHAIR:

Adolfo A. Ferrando, MD, PhD, Columbia University, New York, NY

SPEAKERS:

Gianpietro Dotti, MD, University of North Carolina at Chapel Hill, Chapel Hill, NC
Emerging T Cell Engineering Approaches: New Targets and New Cell Sources

Cameron Turtle, MBBS, PhD, Fred Hutchinson Cancer Research Center, Seattle, WA
Understanding Outcomes of CD19-Targeted CAR T Cell Immunotherapy

Crystal L. Mackall, MD, Stanford University, Stanford, CA
Enhancing the Efficacy of CAR T Cells



Program Guide

Scientific Program



Scientific Committee on Megakaryocytes and Platelets



New Innovations in Platelet Regulation of Tumor Growth and Metastasis

CHAIR:

Michael Holinstat, PhD, University of Michigan, Ann Arbor, MI

SPEAKERS:

Tatiana V. Byzova, PhD, Cleveland Clinic, Cleveland, OH
Reciprocal Interactions Between Platelets and Metastatic Tumors

Elisabeth M. Battinelli, MD, PhD, Brigham and Women's Hospital, Boston, MA
Platelet and Megakaryocytic Regulation of Tumor Progression

Anil Sood, MD, The University of Texas MD Anderson Cancer Center, Houston, TX
Role of Platelets in Adaptive Changes to Anti-Angiogenesis Therapy

Scientific Committee on Plasma Cell Neoplasia

The Yin and Yang of Myeloma: Understanding and Harnessing Normal Plasma Cell Biology to Better Treat Myeloma

CHAIR:

Rafael Fonseca, MD, Mayo Clinic, Phoenix, AZ

SPEAKERS:

Katia Georgopoulos, PhD, Massachusetts General Hospital, Boston, MA
Normal Plasma Cell Biology: Natural Achilles Heels as Targets in Myeloma

Lawrence H. Boise, PhD, Emory University, Atlanta, GA
Protein Homeostasis: A Key Target in Myeloma

Florian Bassermann, MD, PhD, Technical University of Munich, Munich, Germany
Cereblon and Redox in Plasma Cells

Scientific Committee on Red Cell Biology

Editing and Enhancing Erythropoiesis

CHAIR:

Merav Socolovsky, MBBS, PhD, University of Massachusetts Medical School, Worcester, MA

SPEAKERS:

Mitchell J. Weiss, MD, PhD, St. Jude Children's Research Hospital, Memphis, TN
Genome-Editing Strategies to Treat Beta-Hemoglobinopathies

Jian Xu, PhD, University of Texas Southwestern Medical Center, Dallas, TX
In Situ Capture of the Molecular Composition of Erythroid Transcriptional Enhancers

Janis L. Abkowitz, MD, University of Washington, Seattle, WA
Delayed Globin Synthesis Leads to Excessive Heme and the Macrocytic Anemia of Diamond Blackfan Anemia and del(5q) Myelodysplastic Syndrome

Scientific Committee on Stem Cells and Regenerative Medicine

Evolving Approaches to Gene Therapy for Blood Diseases

CHAIR:

Hans-Peter Kiem, MD, PhD, Fred Hutchinson Cancer Research Center, Seattle, WA

SPEAKERS:

Philip D. Gregory, DPhil, bluebird bio, Inc., Cambridge, MA
Gene Therapy: Where We Started and Where the Field Is Going

Hiromitsu Nakauchi, MD, PhD, University of Tokyo, Tokyo, Japan
Valine as a Key Metabolic Regulator of Hematopoietic Stem Cell Maintenance

Judith A. Shizuru, MD, PhD, Stanford University Medical Center, Stanford, CA
Novel Conditioning Regimens for Blood Stem Cell Transplantation

Scientific Committee on Transfusion Medicine

Targeted for Destruction: Clearance and Hemostatic Activity of Endogenous and Transfused Platelets

CHAIR:

Martin Olsson, MD, PhD, Lund University, Lund, Sweden

SPEAKERS:

Karin M. Hoffmeister, MD, BloodCenter of Wisconsin, Milwaukee, WI
Novel Glycan Dependent Platelet Clearance Mechanisms

Andrew P. Cap, MD, PhD, U.S. Army Institute of Surgical Research, Fort Sam Houston, TX
Targeting Hemorrhage: Alternative Storage of Platelets for Hemostatic Transfusion

John W. Semple, PhD, Lund University, Lund, Sweden
Splenic Mechanisms of Thrombocytopenia

Scientific Committee on Transplantation Biology and Cellular Therapies

Targeting T-Cell Exhaustion

CHAIR:

W. Nicholas Haining, BM, BCh, Dana-Farber Cancer Institute, Boston, MA

SPEAKERS:

Rafi Ahmed, PhD, Emory University Vaccine Center, Atlanta, GA
T-Cell Memory and Exhaustion

Arlene H. Sharpe, MD, PhD, Brigham and Women's Hospital, Boston, MA
Biology of PD-1 Checkpoint Blockade

Dario Vignali, PhD, University of Pittsburgh School of Medicine, Pittsburgh, PA
Biology of LAG3 Checkpoint Blockade

Scientific Committee on Thrombosis and Vascular Biology

Thrombosis: A View From the World of Bioengineering

CHAIR:

David A. Garcia, MD, University of Washington, Seattle, WA

SPEAKERS:

Wilbur A. Lam, MD, PhD, Emory University/Georgia Tech, Atlanta, GA
Thrombosis-on-a-Chip: A New Way to Model a Complex Process

Keith B. Neeves, PhD, Colorado School of Mines, Golden, CO
Colloidal Microwheels: A Novel Approach to Thrombolysis?

Jeffrey Lawson, MD, PhD, Duke University, Durham, NC
Engineered Blood Vessels



Friday Scientific Workshops

The Friday Scientific Workshops are interactive discussions of the latest scientific developments in a particular field of hematology. Information about specific session topics will be available closer to the meeting at www.hematology.org/annual-meeting and in the annual meeting app.

Special Scientific Symposia

These sessions will take place from Saturday through Monday and will feature transformative research with implications for scientific investigation and clinical practice across the field of hematology.

Special Scientific Symposium on Hot Topics in Hematology: New Pathways Linking Hematopoiesis, Thrombosis, and Cardiovascular Disease

CHAIR:

Cynthia E. Dunbar, MD, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD

SPEAKERS:

Benjamin L. Ebert, MD, PhD, Brigham and Women's Hospital, Boston, MA
Clonal Hematopoiesis Influences Cardiovascular Risk

E. Dale Abel, MD, PhD, University of Iowa, Iowa City, IA
Sex Matters: The Hormonal Milieu Regulates Thrombosis

Alan Tall, MD, Columbia University, New York, NY
Lipids, Hematopoiesis, and Athero-Thrombosis



Special Scientific Symposium on Targeted Therapy: What Is the Best Target?

CHAIR:

Ross L. Levine, MD, Memorial Sloan Kettering Cancer Center, New York, NY

SPEAKERS:

Neil P. Shah, MD, PhD, University of California – San Francisco, San Francisco, CA
Targeting Somatic Kinase Mutations

Mark Dawson, MD, PhD, Peter MacCallum Cancer Centre, Melbourne, Australia
Targeting the Epigenome

Kimberly Stegmaier, MD, Dana-Farber/Boston Children's Cancer and Blood Disorders Center, Boston, MA
Targeting Regulators of Differentiation

Special Scientific Symposium on Understanding and Modulating the DNA Damage Response

CHAIR:

Alan D. D'Andrea, MD, Dana-Farber Cancer Institute, Boston, MA

SPEAKERS:

Andre Nussenzweig, PhD, National Cancer Institute, National Institutes of Health, Bethesda, MD
Genome Organization Drives Chromosome Fragility

Alan D. D'Andrea, MD, Dana-Farber Cancer Institute, Boston, MA
DNA Repair Targets in Bone Marrow Failure and Cancer

Feyruz Rassool, PhD, University of Maryland, Baltimore, MD
Targeting DNA Damage and Repair in Cancer: Bench to Bedside in Acute Myeloid Leukemia

Special Symposium on the Basic Science of Hemostasis and Thrombosis

CO-CHAIRS:

Rodney M. Camire, PhD, Children's Hospital of Philadelphia, Philadelphia, PA

David A. Garcia, MD, University of Washington, Seattle, WA

Michael Holinstat, PhD, University of Michigan, Ann Arbor, MI

SPEAKERS:

James A. Huntington, PhD, University of Cambridge, Cambridge, United Kingdom
Targeting Activated Protein C to Treat Hemophilia

Steve P. Watson, PhD, University of Birmingham, Birmingham, United Kingdom
Targeting ITAM Receptors in Disease With Ibrutinib and Other Tyrosine Kinase Inhibitors

David Gailani, MD, Vanderbilt University, Nashville, TN
Initiation of Surface-Mediated Thrombosis Events

Scientific Spotlight Sessions

These sessions are intended to provide an in-depth review on specific scientific topics. This year, speakers will discuss current challenges and controversies in two exciting topics. The talks will cover the current state of knowledge, translational and clinical applications, and future directions. Each 90-minute session will be presented once in a small-venue format on either Sunday or Monday and will include ample time for audience questions and participation. These sessions are restricted to medical and research professionals only; no businesspersons or media will be admitted.

Beyond Sequencing: Emerging Tools for Analysis of Multi- Omic Genomic Data in Acquired and Inherited Hematologic Disease

CHAIR:

Paul F. Bray, MD, University of Utah, Salt Lake City, UT

SPEAKERS:

Jinghui Zhang, PhD, St. Jude Children's Research Hospital, Memphis, TN
Finding Driver Variants in Leukemia Genomic Datasets

Ernest Turro, PhD, University of Cambridge, Cambridge, United Kingdom
Statistical and Genomic Approaches in Rare Disease Research

The Impact of the Microbiome on the Hematologic System: Thrombosis and Graft- Versus-Host Disease

CHAIR:

Ami S. Bhatt, MD, PhD, Stanford University, Stanford, CA

SPEAKERS:

Stanley Hazen, MD, PhD, Cleveland Clinic, Cleveland, OH
Gut Microbiota as a Therapeutic Target for Platelet Function and Thrombosis Risks

Pavan Reddy, MD, University of Michigan, Ann Arbor, MI
Microbiome Metabolites Regulate Graft-Versus-Host Disease

Atlanta Fun Fact



* The Center for Civil and Human Rights is one of many recently opened attractions in Atlanta.



Program Guide

Scientific Program

Meet the Scientist

Saturday, December 9, 11:15 a.m. – 12:15 p.m.

Sunday, December 10, 11:15 a.m. – 12:15 p.m.

These sessions will provide an opportunity for a small number of attendees to meet with a scientific expert in a setting that fosters interaction. ASH has invited experts from around the world to facilitate informal discussions, allowing participants to present their questions and gain new perspectives. A boxed lunch will be provided.

Tickets are restricted to medical professionals only and will be available on site on a first-come, first-served basis; no businesspersons or media will be admitted. Only one ticket per person is allowed. Tickets may be purchased on site during registration hours beginning Thursday, December 7, at the Ticketed Sessions Counter in Building A, Level 1, Hall A1.

Ticket Prices (per session)

ASH Active, International, Associate, International Associate, Resident, or Graduate/Medical Student Member	\$50
Non-Member	\$75
Non-Member in Training	\$50
Allied Health Professional	\$50

Attention Trainees!

A number of tickets for these sessions will be reserved for trainees. Proof of status as an Associate, International Associate, Resident, or Graduate/Medical Student member, or Non-Member in Training will be required to purchase a ticket.

SPEAKERS:

Lawrence H. Boise, PhD, Emory University, Atlanta, GA

Plasma Cells and Myeloma

Mark Davis, PhD, Stanford University, Stanford, CA

Understanding Microbial Immune System Interactions

Torsten Haferlach, MD, Munich Leukemia Laboratory, Munich, Germany

Next Generation Sequencing as a Diagnostic Tool for Precision Medicine

Lisa K. Hicks, MD, St. Michael's Hospital, Toronto, Canada

Vishal Kukreti, MD, Princess Margaret Cancer Center, Toronto, Canada

Scholarly Work in Quality Improvement

Karin M. Hoffmeister, MD, BloodCenter of Wisconsin, Milwaukee, WI

Platelet Clearance

Steven Holland, MD, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD

The Role of Genetic Pathways in Bone Marrow Failure

Kateri A. Moore, DVM, Mount Sinai School of Medicine, New York, NY

Hematopoietic Stem Cell Generation, Reprogramming, and Expansion

James H. Morrissey, PhD, University of Illinois, Urbana, IL

Contact Pathways in Health and Disease

Jennifer Puck, MD, University of California – San Francisco, San Francisco, CA

Genome Sequencing in the Newborn: Diagnostic Challenges and Emerging Opportunities

Anil Sood, MD, The University of Texas MD Anderson Cancer Center, Houston, TX

Platelet Regulation of Tumor Growth and Metastasis



Abstracts selected for oral and poster presentations

represent important, novel research in the field and are considered the best of the thousands submitted for the annual meeting. The full text of all selected abstracts will be available in early November at www.hematology.org and in the annual meeting app. To submit an abstract for consideration, visit www.hematology.org for more details.

Simultaneous Oral Sessions

These sessions will feature 15-minute presentations of high-scoring abstracts. Sessions on related topics will be scheduled in close proximity to one another to make it easy to move from room to room and hear individual presentations of interest.

Saturday, December 9

7:30 a.m. – 9:00 a.m.
9:30 a.m. – 11:00 a.m.
12:00 noon – 1:30 p.m.
2:00 p.m. – 3:30 p.m.
4:00 p.m. – 5:30 p.m.

Sunday, December 10

7:30 a.m. – 9:00 a.m.
9:30 a.m. – 11:00 a.m.
12:00 noon – 1:30 p.m.
2:00 p.m. – 4:00 p.m. (Plenary Scientific Session)
4:30 p.m. – 6:00 p.m.

Monday, December 11

7:00 a.m. – 8:30 a.m.
10:30 a.m. – 12:00 noon
2:45 p.m. – 4:15 p.m.
4:30 p.m. – 6:00 p.m.
6:15 p.m. – 7:45 p.m.

Tuesday, December 12

7:30 a.m. – 9:00 a.m. (Late-Breaking Abstracts)

Poster Sessions

Posters will be available for viewing in Building A, Level 1, Hall A2 at the times listed below. Abstract authors will be available to answer questions and discuss their research during the presentation times listed.

Saturday, December 9

9:00 a.m. – 7:30 p.m. (Viewing)
5:30 p.m. – 7:30 p.m. (Presentations)

Sunday, December 10

9:00 a.m. – 8:00 p.m. (Viewing)
6:00 p.m. – 8:00 p.m. (Presentations)

Monday, December 11

10:00 a.m. – 8:00 p.m. (Viewing)
6:00 p.m. – 8:00 p.m. (Presentations)

Listen to audio presentations of posters



Use the free PosterCast app to stream audio explanations of posters, recorded by the authors themselves. Download the app by searching for "PosterCast" in the App Store or Google Play.

Featured Topic Discussions

These sessions will feature expert analyses of several annual meeting abstract presentations that provide insights into a particularly timely topic area. To view featured topics for each session, visit www.hematology.org/annual-meeting in late September.

Sunday, December 10

11:15 a.m. – 12:15 p.m.

Monday, December 11

12:15 p.m. – 1:15 p.m.

Global Capacity-Building Showcase

This new annual meeting poster category will showcase research and capacity-building initiatives in low- and middle-income countries and will shine a spotlight on the details and results of each program. Posters will be presented in an electronic format and will highlight existing partnerships with measurable outcomes.

Posters will be available for viewing in Building A, Level 1, Hall A2 at the times listed below. Presenters will be available next to their posters to answer questions and discuss their initiatives during the presentation time listed.

Saturday, December 9

9:00 a.m. – 7:30 p.m. (Viewing)

Sunday, December 10

9:00 a.m. – 8:00 p.m. (Viewing)
6:00 p.m. – 8:00 p.m. (Presentations)

Monday, December 11

10:00 a.m. – 8:00 p.m. (Viewing)

Please note that global posters are different from the scientific abstracts submitted for oral and poster presentation at the annual meeting.



Educational Objectives

Upon completion of this educational activity, participants should be able to:

- Employ the knowledge gained regarding the diagnosis and treatment of non-malignant and malignant hematologic disorders to improve patient care
- Discuss state-of-the-art research in hematology
- Analyze the potential contribution of novel, not-yet-approved modalities of therapy to current evidence-based management of hematologic disorders

CME

The American Society of Hematology (ASH) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education (CME) for physicians.

ASH designates this live activity for a maximum of 36.5 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ASH is accredited to provide *AMA PRA Category 1 Credits*[™] to physicians only. The American Medical Association (AMA) defines physicians as those individuals who have obtained an MD, DO, or equivalent medical degree from another country.

Physicians not licensed in the United States who participate in this CME activity are also eligible for *AMA PRA Category 1 Credits*[™].

Non-physicians may request a certificate of attendance for their participation.

ABIM MOC

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn American Board of Internal Medicine (ABIM) Maintenance of Certification (MOC) points. Attendees will earn ABIM MOC points equivalent to the number of CME credits claimed for the activity.

If you are an ABIM diplomate, you will be asked to submit a reflective statement on how you intend to change your practice based on the knowledge you gained from participation in the meeting. Upon review and approval of your statement, your points will be submitted to the ABIM by ASH.



How to Claim CME Credit/ABIM MOC Points or Request a Certificate of Attendance

The deadline to claim CME credits and ABIM MOC points or to request a Certificate of Attendance is April 13, 2018.

If you plan to claim CME credit or ABIM MOC points for your participation at the meeting, please check the appropriate box during the registration process. In order to claim CME credit and ABIM MOC points or to request a Certificate of Attendance, you must complete the online program evaluation. The evaluation can be accessed once the meeting is underway by clicking the “CME Certificate” link at www.hematology.org/annual-meeting. The evaluation will be available on the ASH website through April 13, 2018.

A processing fee of \$25 will be charged for CME credit/ABIM MOC points.

CME and ABIM MOC Accreditation of Hematology 2017

ASH will be offering CME credit and ABIM MOC points to physicians upon completion of multiple-choice questions based on the manuscripts in *Hematology 2017*, the ASH Education Program.

ASH designates this enduring material for a maximum of 40 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Physicians may earn up to 40 credits by taking two 20-credit exams – one on malignant hematology and the other on non-malignant hematology. More information will be available this fall at www.ashacademy.org.

Conflict-of-Interest Policy for the ASH Annual Meeting

ASH is committed to providing quality, objective, balanced, and scientifically rigorous continuing medical education activities that are free from commercial and non-commercial bias. In accordance with the rules of the ACCME, all meeting session chairs, speakers, and moderators are required to disclose any conflicts they may have in writing prior to the meeting. All poster presenters are required to disclose any conflicts they may have in writing prior to the meeting and display their disclosures on their poster boards. If bias, actual or perceived, occurs during a presentation, session attendees are encouraged to address such bias during the question-and-answer period following the presentation.

Annual meeting contributors are asked to disclose any relationships of the following types: employment, consultancy, equity ownership, research funding, honoraria, patents and royalties, speakers bureau, membership on an entity's board of directors or advisory committee, and any other financial relationship.

Any questions about this policy or concerns regarding disclosures should be directed to the ASH Meeting and CME Information Desk in ASH Central located in Building B, Level 1, Hall B1 or by emailing cme@hematology.org.

Exposition

Exhibit Hall

Visit the state-of-the-art exhibit hall (Building B, Level 1, Halls B2-B4) to see the latest technology and research, and learn about a wide range of products and services offered by more than 250 exhibitors, including pharmaceutical companies, medical suppliers, publishers, nonprofit organizations, and clinical diagnostic and research-based companies.

Hours

Saturday, December 9	11:00 a.m. – 5:00 p.m.
Sunday, December 10	10:00 a.m. – 5:00 p.m.
Monday, December 11	10:00 a.m. – 2:00 p.m.

Lunch Available Sunday and Monday

ASH will provide a complimentary light lunch in the exhibit hall at the following times:

Hours

Sunday, December 10	11:00 a.m. – 12:30 p.m.
Monday, December 11	12:00 noon – 1:30 p.m.

Exhibit Hall Product Theaters

Product Theaters feature exhibitor presentations on new research findings and products and are solely promotional in nature. Product Theater sessions will be offered at the times listed below to small groups of up to 150 people. Check the annual meeting mobile app or visit www.hematology.org/annual-meeting for specific session information.

Hours

Saturday, December 9	11:30 a.m. – 12:30 p.m.
Sunday, December 10	11:30 a.m. – 12:30 p.m.
Monday, December 11	12:15 p.m. – 1:15 p.m.

ASH Booth

Stop by the ASH Booth (#1933) to learn about the Society's resources and opportunities for hematologists at all career levels. ASH staff will be available at the booth to answer questions about ASH meetings, programs, resources, and initiatives and to assist with membership applications and renewals. While you are at the booth, be sure to grab the most recent issues of ASH publications, including *Blood*, *The Hematologist*, and *ASH Clinical News*. Remember to ask about the product discounts available exclusively at the annual meeting.



ASH Foundation Run/Walk

Sunday, December 10, 7:30 a.m. – 9:00 a.m.

Start your day in a fun, healthy, and philanthropic way by participating in the fifth annual ASH Foundation Run/Walk before attending the Sunday sessions. Participants may run or walk through the designated event course in Atlanta, choosing either a 3K or 5K route.

Proceeds from all individual and group registration fees as well as additional individual donations will benefit the ASH Sickle Cell Disease Initiative Fund. ASH and the ASH Foundation may opt to designate a portion or all of corporate sponsorship revenues associated with the Run/Walk to help support the cost of administering the event.

Learn more and register at www.hematology.org/runwalk.

Registration Fees	
Individuals	\$50
Trainees	\$35



Networking Events

Join your colleagues for social and networking events throughout the annual meeting.

Welcome Reception

Saturday, December 9
5:30 p.m. – 7:30 p.m.

This event will be held in the poster hall (Building A, Level 1, Hall A2).

Poster Hall Receptions

Sunday, December 10
6:00 p.m. – 8:00 p.m.

Monday, December 11
6:00 p.m. – 8:00 p.m.

This event will be held in the poster hall (Building A, Level 1, Hall A2).

Networking Reception for Female Hematologists

To learn more, see page 17.

Promoting Minorities in Hematology Presentations and Reception

To learn more, see page 16.

Trainee Welcome Reception

Open only to attendees with a blue trainee badge. To learn more, see page 18.

ASH Foundation Donor Lounge

All individuals who have donated \$250 or more throughout the 2017 calendar year are invited to visit the ASH Foundation Donor Lounge on the International Boulevard Concourse between Buildings A and B.

The ASH Foundation is dedicated to advancing hematology through private charitable support for research, career development, quality care, and education. Your donation helps enhance and expand existing ASH programs and pursue new, visionary initiatives – allowing ASH to do more for hematology worldwide. One hundred percent of charitable gifts to the ASH Foundation directly benefit programs sponsored by ASH and are tax deductible as allowable by law.

Find all essential attendee services together in one convenient location. ASH Central offers a place for attendees to relax, collaborate, view sessions remotely, purchase ASH products, and more. ASH Central will be located in Building B, Level 1, Hall B1.



ASH Live: Remote Session Viewing

Experience select sessions located elsewhere in the convention center without having to navigate through the building. Attendees will be able to view the session slides from television monitors/screens in the remote session viewing area and will be provided with headphones so that they may listen to the speaker. Treadmills will also be located in this area so that participants can walk while viewing sessions.

To find out which sessions will be broadcast in the remote session viewing area, please check the annual meeting mobile app closer to the meeting.

ASH Store

ASH offers a variety of products to aid hematologists in their professional development. Stop by the ASH Store to browse the latest ASH educational products, which will be available for a discounted on-site rate, including:

- *ASH Self-Assessment Program (ASH-SAP), Sixth Edition*
- *How I Treat: A Compendium for the Practicing Hematologist*
- *Hematology 2017, the ASH Education Program*
- ASH annual meeting webcasts

Attendees will also be able to apply for or renew their membership at the ASH Store.





Collaboration Rooms

Small conference rooms for 10-20 people will be available for attendees to collaborate in a more private space. Rooms will be pre-set with a conference table and chairs; and each attendee will be limited to one 45-minute reservation per day.

Interested in reserving a room?

Reservation requests may be submitted beginning September 27 at www.hematology.org/annual-meeting or through the annual meeting mobile app. Reservations may also be made on site in ASH Central. Please note that space is limited and available on a first-come, first-served basis. Back-to-back reservations are prohibited.



Selfie Zone

Capture the excitement of the meeting with your friends and colleagues by taking a photo at the ASH selfie station.

Trainee Lounge

Open only to those with a blue trainee badge, this space is designed for trainees to gather, regroup, and recharge. For Trainee Lounge hours, see page 20.

ASH provides the following resources in order to make it possible for parents to attend and enjoy their time at the ASH annual meeting,

Child Care

For safety reasons, children under the age of 12 are not permitted in the exhibit hall or poster halls. Additionally, ASH prohibits children and infants in sessions, as they may distract the speakers and other attendees.

ASH has made arrangements with KiddieCorp to provide subsidized child-care services on site from Friday, December 8, through Tuesday, December 12. KiddieCorp staff members are certified child-care specialists. The cost to parents will be \$5 per hour, per child, with a two-hour minimum required per child, per day. Snacks, light meals, and beverages will be provided each day.

To register and for additional program information, please contact KiddieCorp's Program Manager, Lesley Medina, at 800-942-9947 ext. 201, or visit www.kiddiecorp.com.

Space is limited, so please register your child by November 3 to ensure participation.

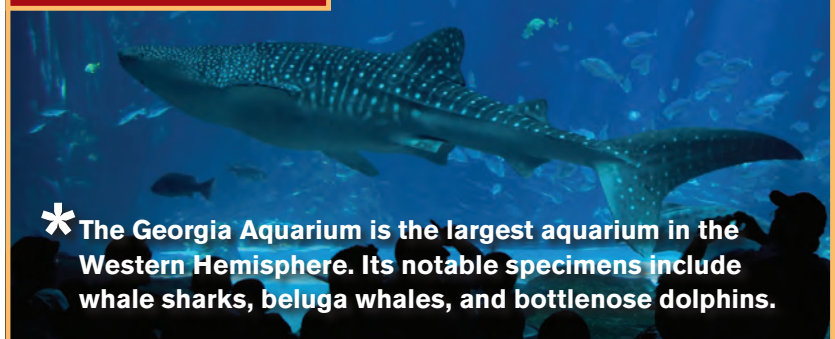
Child Care Hours

Friday, December 8	6:30 a.m. – 7:30 p.m.
Saturday, December 9	6:30 a.m. – 7:30 p.m.
Sunday, December 10	6:30 a.m. – 8:00 p.m.
Monday, December 11	6:30 a.m. – 8:00 p.m.
Tuesday, December 12	6:30 a.m. – 1:00 p.m.

Lactation Room

Nursing mothers will have a calm restful environment for their pumping sessions during the ASH annual meeting. Each nursing mother's lounge will provide a private, comfortable area equipped with lockable doors, furniture, and power outlets. Lounges will be available in safe, accessible areas throughout the convention center. For exact locations, please refer to the annual meeting app or to the printed ASH Campus Map on site.

Atlanta Fun Fact



* The Georgia Aquarium is the largest aquarium in the Western Hemisphere. Its notable specimens include whale sharks, beluga whales, and bottlenose dolphins.

Registration and Hotel Information



Important Dates

ASH Member-Only Early-Bird Registration

July 19, 11:00 a.m. Eastern Time –
August 9, 10:59 a.m. Eastern Time

ASH Member and Non-Member Advance Registration

August 9, 11:00 a.m. Eastern Time –
November 1, 11:59 p.m. Pacific Time

Late Registration

Begins November 2

On-Site Registration

Begins December 7

Registration Rates

ASH members who have paid their dues for 2017 are eligible for early-bird registration. If you need to renew your membership, please do so in advance of registration opening. Applicants approved for membership after registering for the meeting will not be refunded the difference between the member and non-member rates.

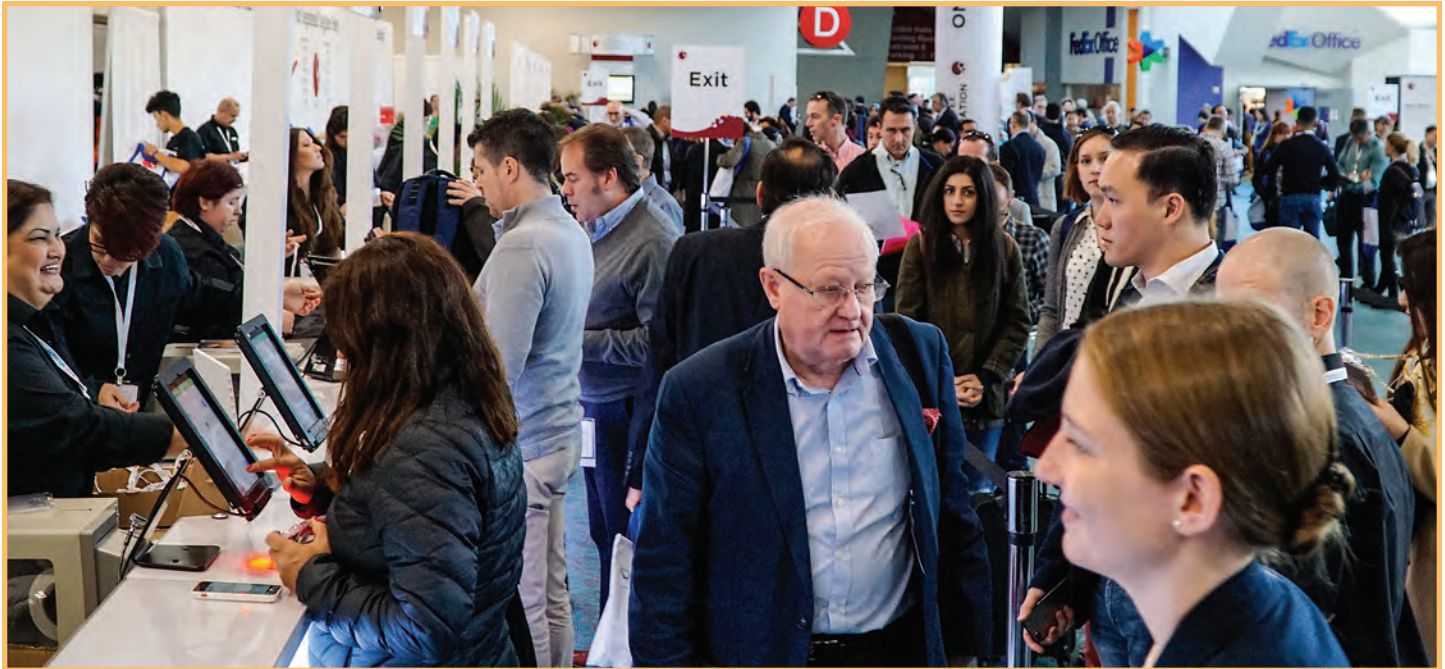
To join ASH or renew your membership, visit www.hematology.org and click on “My Account” to log in and renew online, or call 866-828-1231 (international callers dial 001-202-776-0544).

Registration fees may be paid by credit card or check only. Wire transfers will not be accepted.

Registration Category	Early-Bird/ Advance	Late/On-Site
Active or International Member	\$700	\$800
Associate, International Associate, Resident, or Graduate/Medical Student Member	\$100	\$100
Non-Member	\$1,200	\$1,300
Non-Member in Training	\$200	Not available*
Allied Health Professional	\$600	\$650
Spouse/Guest	\$125	\$125
Honorary/Emeritus Member (before 1/1/15)	No charge	No charge
Honorary/Emeritus Member (as of 1/1/15)	\$100	\$100

To register as a non-member in training, you **must register and submit your verification by November 1. After this date, you will need to register as a non-member, meaning you will not get access to trainee activities and services.*

Registration and Hotel Information



Registration Materials

The following are included with registration:

- Hematology 2017, the ASH Education Program
- Program Book
- Access to ASH annual meeting mobile app and online scheduler
- Admission to the General, Special-Interest, Education, Scientific, Oral, and Poster sessions
- Admission to the exhibit hall*
- Admission to receptions in the poster hall*
- Complimentary light lunch in the exhibit hall on Sunday and Monday*
- Daily coffee breaks*

*Spouse/guest registrants are only eligible for the events marked with an asterisk.

Questions?

Contact the ASH Registration and Housing Center. Assistance is available Monday through Friday from 8:30 a.m. to 5:00 p.m. Eastern Time.

Phone: 888-273-5704
(International callers dial 001-703-449-6418)

Email (Registration): ashregistration@spargoinc.com

Email (Housing): ashhousing@spargoinc.com

How to Register

To register online and find more information about the process, visit the registration page at www.hematology.org/annual-meeting.

Please note that in order to register, you will need to log in using your ASH username and password. If you are planning to have someone else process your registration and hotel reservation for you, please provide him or her with your ASH username (usually your email address, unless you have customized it) and password. If you do not have an ASH account, you can create one when you begin the registration process. If you forgot your username or password, you may reset it by going to www.hematology.org and clicking on "My Account."

On-site registration will be located in Building A, Level 1, Hall A1 during the times listed below. To avoid lines at the on-site registration counters, ASH encourages you to register for the meeting in advance.

On-Site Registration Hours	
Thursday, December 7	3:00 p.m. – 7:00 p.m.
Friday, December 8	7:00 a.m. – 6:00 p.m.
Saturday, December 9	7:00 a.m. – 6:00 p.m.
Sunday, December 10	7:00 a.m. – 5:00 p.m.
Monday, December 11	7:00 a.m. – 5:00 p.m.
Tuesday, December 12	7:00 a.m. – 1:30 p.m.

Meeting badges will be mailed in mid-November to all those registered by November 1.

Hotel Reservations

Hotel rooms have been reserved throughout Atlanta for meeting attendees. For a list of participating hotels and their room rates, please visit www.hematology.org/annual-meeting. ASH will provide complimentary shuttle service between these hotels and the Georgia World Congress Center.

Hotel reservations must be made directly with the official ASH Housing Center no later than Wednesday, November 8, using any of the methods listed below. You must register for the meeting before you make your hotel reservation. Only one hotel room may be reserved for each individual registering for the meeting.

Online: <https://show.jspargo.com/ashAM17/>

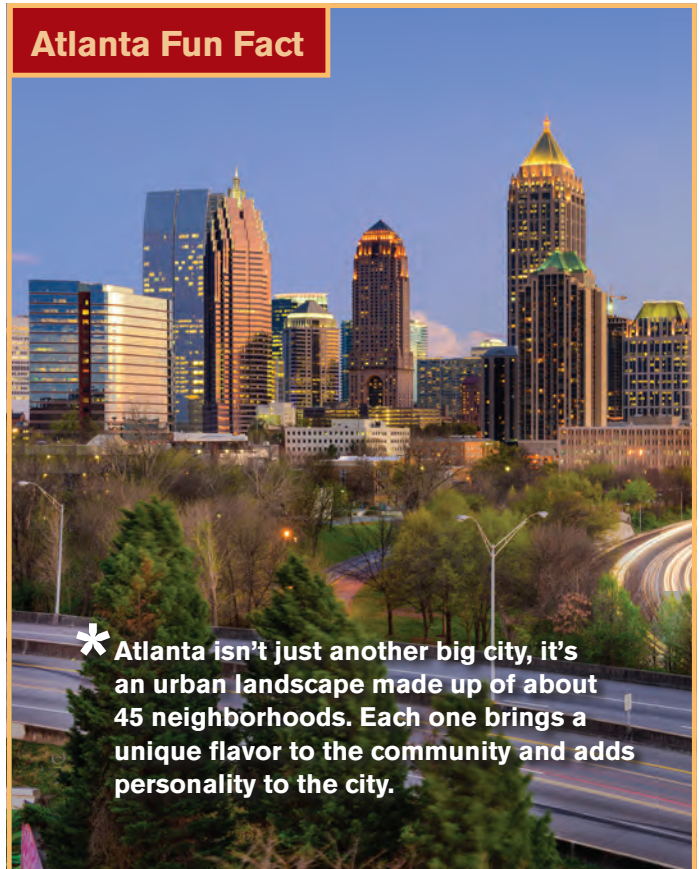
Phone: 888-273-5704 (International callers dial 001-703-449-6418)

Email: ashhousing@spargoinc.com

Housing Fraud Alert

Please note that SPARGO, Inc. is the only official housing provider for the 59th ASH Annual Meeting & Exposition. Do not be misled by "pirate" housing companies that may solicit you over the phone and misrepresent themselves as ASH's official housing provider. If you are contacted by one of these companies, please contact the ASH Housing Center immediately at the email or phone numbers listed above.

Atlanta Fun Fact



* Atlanta isn't just another big city, it's an urban landscape made up of about 45 neighborhoods. Each one brings a unique flavor to the community and adds personality to the city.

Headquarters and Member Hotels

The Omni Atlanta at CNN Center is the official headquarters hotel for the 2017 ASH Annual Meeting and is designated for ASH members only. In addition, the following hotels are available to Society members:

- AC Atlanta Hotel Downtown
- Aloft Atlanta Hotel Downtown
- Courtyard Atlanta Downtown
- DoubleTree by Hilton Atlanta Downtown
- The Ellis Hotel
- Embassy Suites Centennial Park
- Glenn Hotel, an Autograph Collection
- Hampton Inn & Suites Atlanta Downtown
- Hilton Garden Inn Atlanta Downtown
- Holiday Inn Express & Suites Atlanta Downtown
- HOME2 Suites by Hilton Atlanta Downtown
- Hyatt Regency Atlanta
- Inn at the Peachtrees
- Marriott Marquis Atlanta
- The Ritz-Carlton Atlanta
- Westin Peachtree Plaza



Mark Your Calendar

High-quality educational content. Top experts in the field. Intimate, interactive settings.

www.hematology.org/meetings

ASH Meeting on Hematologic Malignancies

Chicago, IL
September 8-9, 2017
September 7-8, 2018

Join the top experts who specialize in hematologic malignancies to learn and share innovative approaches to patient care in a relaxed setting. Learn how patients are treated based on the available data, and get answers to your own challenging clinical questions.



Highlights of ASH®

January-April 2018

These smaller, clinically focused meetings feature top research presented at the ASH annual meeting and its implications for patient management and care strategies. The international Highlights of ASH meetings will include additional topics relevant to the region.

North America

San Francisco, CA, and Washington, DC (January 12-13)

Dallas, TX, and Miami, FL (January 19-20)

Chicago, IL, and New York, NY (January 26-27)

Asia-Pacific

Bali, Indonesia (March 9-10)

Latin America

Rio de Janeiro, Brazil (April 27-28)

ASH Summit on Emerging Immunotherapies for Hematologic Diseases

Washington, DC
July 12-13, 2018

Attend ASH's newest meeting to examine preclinical and clinical factors influencing the effective development, regulation, and implementation of immunotherapies for hematologic diseases. The summit's interactive format will include didactic and breakout sessions, panel discussions, and opportunities to foster strategic collaborations among researchers, clinicians, funders, regulators, and payers interested in these therapies.

ASH Meeting on Lymphoma Biology

Washington, DC, metro area
August 2-5, 2018

Join world-class experts in lymphoma research to review the state of the science and identify current challenges and next steps to move the field forward.



Acknowledgments

Special thanks to the Program Committee:

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Join the #ASH17 conversation.



American Society of Hematology
2021 L Street NW, Suite 900
Washington, DC 20036
Phone: 202-776-0544

