52nd ASH® Annual Meeting and Exposition

Preliminary Program

Orlando, FL
Orange County Convention Center

Meeting Dates:
December 4-7, 2010

Exposition Dates:
December 4-6, 2010
Greetings From the President

It gives me great pleasure to extend a warm invitation to you and your hematology colleagues to attend the 52nd Annual Meeting and Exposition of the American Society of Hematology (ASH) at the Orange County Convention Center in Orlando, Florida. I hope you will agree that the 2010 program is of stellar quality and provides ample opportunity to learn about the exciting new advances in our specialty.

I am pleased to announce several new additions to the 2010 program. New this year are “Practice Makes Perfect Sessions,” which are geared toward the practicing hematologist. Presenters will discuss timely topics that practitioners won’t want to miss, including Pay for Performance, the Physician Quality Reporting Initiative, new models for payment, and maintenance of certification (MOC). In addition, for hematologists who are due to recertify in the next few years, a special Friday morning session will provide an opportunity to collaborate with workshop leaders and your colleagues to answer questions included in the newest American Board of Internal Medicine MOC hematology module and earn recertification credit.

Another new offering is a special symposium that celebrates the 60th anniversary of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Chaired by Griffin P. Rodgers, MD, Director of NIDDK, and featuring presenters Kenneth Kaushansky, MD, Alan N. Schechter, MD, and Nancy C. Andrews, MD, the speakers will highlight historical advances made in three key areas of hematology research supported by NIDDK – hematopoiesis, hemoglobin, and iron – and discuss future opportunities for progress in these areas.

This year’s Education Program, chaired by Joseph R. Mikhael, MD, and Bradford S. Schwartz, MD, will offer nearly 30 sessions covering a variety of hematologic topics, including advances made in caring for special populations such as the elderly, pregnant women, and children, and military and civilian approaches to providing transfusion support to trauma patients. The Education Program will also offer two sessions of particular interest to hematology trainees: “Grant Writing for Junior Faculty” and “Junior-Faculty Development: The Economics of Academic Hematology.”

Leonard I. Zon, MD, will present the E. Donnall Thomas Lecture on stem cell self-renewal and differentiation. Those interested in this topic may also wish to hear the scientific committee session titled “Life Cycle of the Hematopoietic Stem Cell.” This is one of 17 sessions on a wide range of topics in this year’s Scientific Program chaired by Robert A. Hromas, MD, and David T. Scadden, MD.

On Monday, be sure to catch the presentation of the Ernest Beutler Lecture and Prize, a two-part lectureship named for this past president of ASH who made many important contributions to the field in a career spanning more than 50 years. The lecture, “From the Mechanism of Platelet Aggregation to the First Rationally Designed Antiplatelet,” will be given by Barry S. Coller, MD, and Joel S. Bennett, MD. Together, the achievements of these two hematologists have enabled advances in basic science as well as in clinical science and translational applications. At the Ham-Wasserman Lecture, also named after two past Society presidents, Tsvee Lapidot, PhD, of The Weizmann Institute in Rehovot, Israel, will evaluate the inner workings of stem cell homing and mobilization.

Back for its fifth year, the “Special Symposium on the Basic Science of Hemostasis and Thrombosis,” presented on Tuesday by the Scientific Committees on Hemostasis, Platelets, and Thrombosis and Vascular Biology, will highlight seminal research advances made this year in the areas of thrombosis, blood coagulation and fibrinolysis, and platelet biology.

Also on the last day of the meeting, the Presidential Symposium will focus on “Innovations and the Future of Umbilical Cord Blood Transplantation.” Featured speakers will be Eliane Gluckman, MD, of the Hôpital St. Louis in Paris, France, John Wagner, MD, of the University of Minnesota, and Joanne Kurtzberg, MD, of Duke University Medical School in Durham, NC. Dr. Gluckman performed the first successful human umbilical cord blood transplant, and I was privileged to collaborate with her on successfully proving that cord blood could be used as a source of hematopoietic stem cells. I have also had the good fortune to collaborate with Drs. Wagner and Kurtzberg in their initial work in this clinical field in which they also made major contributions.

Prior to the symposium, David T. Scadden, MD, will receive the William Dameshek Prize for his landmark contributions to stem cell biology, along with Sanford Shattil, MD, who will be honored with this year’s Henry M. Stratton Medal for his remarkable achievements in the area of platelet cell biology and signal transduction. On Sunday afternoon, before the Plenary Scientific Session, I look forward to honoring Volker Diehl, MD, for his pioneering research on Hodgkin lymphoma by presenting him with the Society’s highest accolade – the Wallace H. Coulter Award for Lifetime Achievement in Hematology.

All in all, I think we can look forward to another outstanding program this year, and I hope you will join us in Orlando!

Sincerely,

Hal Broxmeyer, PhD
President
### Program Information

#### Continuing Medical Education (CME) Credits

- **Total Credits:** 2

#### Meeting Overview

- **Important Dates:** 3
- **What’s New:** 3
- **Schedule At-a-Glance:** 4

#### General Sessions

- **Ham-Wasserman Lecture:** 7
- **ASH/ASCO Joint Symposium:** 7
- **ASH/EHA Joint Symposium:** 7
- **Announcement of Awards:** 8
  - Mentor Award
  - Wallace H. Coulter Award for Lifetime Achievement in Hematology
- **Plenary Scientific Session:** 8
- **E. Donnall Thomas Lecture and Prize:** 8
- **Ernest Beutler Lecture and Prize:** 9
- **Announcement of the Dameshek Prize and the Stratton Medal:** 9
- **Presidential Symposium:** 10
- **Business Meeting:** 10
- **Best of ASH:** 10

#### Special-Interest Sessions

- **Training Program Directors’ Workshop/Business Meeting:** 11
- **Practice Forum:** 11
- **Practice Forum Reception:** 12
- **Promoting Minorities in Hematology:** 12
- **Presentations and Reception:** 12
- **Grassroots Network Breakfast:** 12
- **Hematology Course Directors’ Workshop:** 12
- **Blood and Beyond: Searching the Scientific Literature Online:** 12
- **The HVO Volunteer Experience: Sharing Your Hematology Expertise Globally:** 13
- **Special Symposium – 60th Anniversary of the National Institute of Diabetes and Digestive and Kidney Diseases:** 13
- **Special Symposium on the Basic Science of Hemostasis and Thrombosis:** 14

#### Trainee Activities and Services

- **Trainee Day:** 15
- **Trainee Welcome Reception and Meeting Overview:** 15
- **Trainee Simultaneous Didactic Sessions:** 15
- **Career-Development Lunch Sessions:** 16
- **Trainee Lounge:** 17
- **Trainee Resources:** 17

#### Education Program

- **Total Sessions:** 18

#### Scientific Program

- **Total Sessions:** 30

#### Ticketed Sessions

- **Education Spotlight Sessions:** 34
- **Practice Makes Perfect Sessions:** 37
- **American Board of Internal Medicine Maintenance of Certification Learning Session:** 37
- **Meet-the-Expert Sessions:** 38

#### Oral and Poster Sessions

- **Total Sessions:** 40

#### Social Events

- **Welcome Reception:** 40
- **Poster Hall Receptions:** 40

#### Exposition

- **Total Spaces:** 41

### General Information

#### Registration

- **Total Registration:** 43

#### Continuing Medical Education (CME) Credits

- **Total Credits:** 46

#### Hotel Accommodations

- **Map of Hotels:** 46

#### Travel Information

- **Air Travel:** 50
- **Visa Application Process for International Travelers:** 50
- **Public Transportation:** 50
- **Car Rental:** 51
- **Parking:** 51
- **Shuttle Bus Service:** 51

#### Attendee Services

- **ASH Job Bank:** 52
- **ASH Store:** 52
- **Child Care:** 52

#### ASH Publications and Meeting Materials

- **Abstract Book:** 52
- **Abstracts on CD-ROM:** 52
- **Abstracts Online/Program Planner:** 52
- **Hematology 2010:** 53
- **Program Book:** 53
- **Annual Meeting Sessions on DVD:** 53
- **On-Demand Webcasts:** 53

#### Meeting Rules and Regulations

- **Total Pages:** 54

#### Upcoming ASH Meetings

- **Total Pages:** 55

#### Acknowledgments

- **Total Pages:** 56
The American Society of Hematology is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education (CME) for physicians.

This program has been approved for AMA PRA Category 1 Credits™. Physicians not licensed in the United States who participate in this CME activity are also eligible for AMA PRA Category 1 Credits™. Please see page 46 for information on how to obtain these credits, as well as how to claim CME credits through the European Hematology Association.
Important Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>June 14 – August 12</td>
<td>Abstract Submission Website Open</td>
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<tr>
<td></td>
<td>Only electronic submissions will be permitted. Visit the ASH website</td>
</tr>
<tr>
<td></td>
<td>at <a href="http://www.hematology.org">www.hematology.org</a> for abstract submission information.</td>
</tr>
<tr>
<td>July 20 – August 2</td>
<td>Online Early-Bird Registration Open for ASH Members Only</td>
</tr>
<tr>
<td>August 3 – November 4</td>
<td>Advance Registration Open for ASH Members and Non-Members</td>
</tr>
<tr>
<td>September 17</td>
<td>Group Room Block Request Deadline</td>
</tr>
<tr>
<td>October 5</td>
<td>Rooming Lists and Full Payments for Group Room Blocks Due to the ASH</td>
</tr>
<tr>
<td></td>
<td>Housing Center</td>
</tr>
<tr>
<td>October 5</td>
<td>Group Room Block Cancellation Deadline</td>
</tr>
<tr>
<td>October 21-28</td>
<td>Late-Breaking Abstract Submission Website Open</td>
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<tr>
<td></td>
<td>The selection process for late-breaking abstracts is extremely</td>
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<tr>
<td></td>
<td>competitive; only six abstracts will be selected, regardless of the</td>
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<tr>
<td></td>
<td>number of submissions. This deadline is not intended as an</td>
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<tr>
<td></td>
<td>extension of the general submission deadline. Abstract reviewers will</td>
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<td>focus on capturing abstracts with ground-breaking, novel data that</td>
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<tr>
<td></td>
<td>otherwise could not be presented at the annual meeting.</td>
</tr>
<tr>
<td>November 4</td>
<td>Advance Registration Deadline</td>
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<tr>
<td></td>
<td>Registration must be received by this date in order to qualify for</td>
</tr>
<tr>
<td></td>
<td>the reduced advance registration rates.</td>
</tr>
<tr>
<td>November 4</td>
<td>Individual Hotel Reservation Deadline</td>
</tr>
<tr>
<td>November 4</td>
<td>Child-Care Registration Deadline</td>
</tr>
<tr>
<td>November 24</td>
<td>Meeting Registration Cancellation Deadline</td>
</tr>
</tbody>
</table>

What’s New

In a continuing effort to improve and enhance the ASH annual meeting experience and offerings, each year the Society adds new sessions and programs to meet the varied needs and address the interests of attendees from all areas of hematology. Attendees should take note of the new offerings listed below that are making their debut at this year’s annual meeting; these activities will be indicated throughout this brochure with the following icon:

- Special Symposium – 60th Anniversary of the National Institute of Diabetes and Digestive and Kidney Diseases (page 13)
- International Post-Doctoral Fellow Program (page 17)
- Practice Makes Perfect Sessions (page 37)
- American Board of Internal Medicine Maintenance of Certification Learning Session (page 37)
- Mailing of the Abstract Book (page 52)
# Schedule At-a-Glance

Final schedule and meeting room assignments will be provided in the program material distributed at the annual meeting.

## Thursday, December 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 p.m. – 8:00 p.m.</td>
<td>Training Program Directors’ Workshop/Business Meeting</td>
</tr>
<tr>
<td>3:00 p.m. – 7:00 p.m.</td>
<td>Registration</td>
</tr>
</tbody>
</table>

## Friday, December 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m. – 6:00 p.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>7:00 a.m. – 11:00 a.m.</td>
<td>Friday Satellite Symposia (sponsored by nonprofit organizations)</td>
</tr>
<tr>
<td>7:00 a.m. – 12:00 noon</td>
<td>Trainee Day (open to trainees wearing a blue badge only; pre-registration is required for this event)</td>
</tr>
<tr>
<td><strong>NEW</strong> 9:00 a.m. – 12:00 noon</td>
<td>American Board of Internal Medicine Maintenance of Certification Learning Session (ticketed session)</td>
</tr>
</tbody>
</table>
| 12:30 p.m. – 10:00 p.m. | Friday Satellite Symposia (sponsored by nonprofit and for-profit organizations)  
**These symposia are not part of the official ASH annual meeting and are planned solely by the sponsoring organizations. Brief symposium descriptions are included in a separate booklet provided with this brochure.** |
| 4:30 p.m. – 6:00 p.m. | Trainee Welcome Reception and Meeting Overview  
(open to trainees wearing a blue badge only) |

## Saturday, December 4: ASH Annual Meeting Begins

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>7:30 a.m. – 9:00 a.m.</td>
<td>Education/Scientific Program</td>
</tr>
<tr>
<td>9:00 a.m. – 9:30 a.m.</td>
<td>Coffee Break (poster hall)</td>
</tr>
<tr>
<td>9:00 a.m. – 7:30 p.m.</td>
<td>Poster Session I – Viewing</td>
</tr>
<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>Education/Scientific Program</td>
</tr>
<tr>
<td>11:00 a.m. – 12:30 p.m.</td>
<td>Open Time for Lunch</td>
</tr>
<tr>
<td>11:00 a.m. – 4:00 p.m.</td>
<td>Exhibits Open</td>
</tr>
<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>Meet-the-Expert Sessions (ticketed sessions)</td>
</tr>
<tr>
<td><strong>NEW</strong> 11:15 a.m. – 12:15 p.m.</td>
<td>Practice Makes Perfect Sessions (ticketed sessions)</td>
</tr>
</tbody>
</table>
| 11:15 a.m. – 12:15 p.m. | Career-Development Lunch Sessions  
(open to trainees wearing a blue badge only) |
| 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                          |
| 3:30 p.m. – 4:00 p.m. | Coffee Break (exhibit hall)                            |
| 4:00 p.m. – 5:30 p.m. | Education/Scientific Program                          |
| 5:30 p.m. – 7:30 p.m. | Poster Session I – Presentations                       |
| 5:30 p.m. – 7:30 p.m. | Welcome Reception (poster hall)                        |
| 6:00 p.m. – 7:30 p.m. | Practice Forum (reception follows from 7:30 p.m. – 8:30 p.m.) |
| 6:30 p.m. – 9:00 p.m. | Promoting Minorities in Hematology Presentations and Reception |
### Sunday, December 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>Registration</td>
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<tr>
<td>7:00 a.m. – 8:00 a.m.</td>
<td>Grassroots Network Breakfast</td>
</tr>
<tr>
<td>7:00 a.m. – 9:00 a.m.</td>
<td>Hematology Course Directors’ Meeting</td>
</tr>
<tr>
<td>7:30 a.m. – 9:00 a.m.</td>
<td>Education/Scientific Program</td>
</tr>
<tr>
<td>9:00 a.m. – 9:30 a.m.</td>
<td>Coffee Break (poster hall)</td>
</tr>
<tr>
<td>9:00 a.m. – 8:00 p.m.</td>
<td>Poster Session II – Viewing</td>
</tr>
<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>ASH/ASCO Joint Symposium</td>
</tr>
<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>Education/Scientific Program</td>
</tr>
<tr>
<td>11:00 a.m. – 12:30 p.m.</td>
<td>Open Time for Lunch</td>
</tr>
<tr>
<td>11:00 a.m. – 4:30 p.m.</td>
<td>Exhibits Open</td>
</tr>
<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>Meet-the-Expert Sessions (ticketed sessions)</td>
</tr>
<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>Trainee Simultaneous Didactic Sessions (open to trainees wearing a blue badge only)</td>
</tr>
<tr>
<td>12:30 p.m. – 1:30 p.m.</td>
<td>ASH/EHA Joint Symposium</td>
</tr>
<tr>
<td>1:30 p.m. – 2:00 p.m.</td>
<td>Announcement of Awards</td>
</tr>
<tr>
<td></td>
<td>• Mentor Award</td>
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<td></td>
<td>• Wallace H. Coulter Award for Lifetime Achievement in Hematology</td>
</tr>
<tr>
<td>2:00 p.m. – 4:00 p.m.</td>
<td>Plenary Scientific Session</td>
</tr>
<tr>
<td>4:00 p.m. – 4:30 p.m.</td>
<td>Coffee Break (exhibit hall)</td>
</tr>
<tr>
<td>4:30 p.m. – 6:00 p.m.</td>
<td>Simultaneous Sessions</td>
</tr>
<tr>
<td>4:30 p.m. – 6:00 p.m.</td>
<td>Education Spotlight Sessions (ticketed sessions)</td>
</tr>
<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td>Reception (poster hall)</td>
</tr>
<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td>Poster Session II – Presentations</td>
</tr>
<tr>
<td>6:15 p.m. – 7:15 p.m.</td>
<td>Blood and Beyond: Searching the Scientific Literature Online</td>
</tr>
<tr>
<td>6:30 p.m. – 8:00 p.m.</td>
<td>The HVO Volunteer Experience: Sharing Your Hematology Expertise Globally</td>
</tr>
</tbody>
</table>
### Monday, December 6

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>7:00 a.m. – 8:30 a.m.</td>
<td>Simultaneous Sessions</td>
</tr>
<tr>
<td>9:00 a.m. – 10:00 a.m.</td>
<td>E. Donnall Thomas Lecture and Prize</td>
</tr>
<tr>
<td>10:00 a.m. – 10:30 a.m.</td>
<td>Coffee Break (exhibit hall)</td>
</tr>
<tr>
<td>10:00 a.m. – 2:00 p.m.</td>
<td>Exhibits Open</td>
</tr>
<tr>
<td>10:00 a.m. – 8:00 p.m.</td>
<td>Poster Session III – Viewing</td>
</tr>
<tr>
<td>10:30 a.m. – 12:00 noon</td>
<td>Simultaneous Sessions</td>
</tr>
<tr>
<td>12:00 noon – 1:30 p.m.</td>
<td>Open Time for Lunch</td>
</tr>
<tr>
<td>12:15 p.m. – 1:15 p.m.</td>
<td>Trainee Simultaneous Didactic Sessions (open to trainees wearing a blue badge only)</td>
</tr>
<tr>
<td>1:30 p.m. – 2:30 p.m.</td>
<td>Ernest Beutler Lecture and Prize</td>
</tr>
<tr>
<td>2:30 p.m. – 2:45 p.m.</td>
<td>Coffee Break (poster hall)</td>
</tr>
<tr>
<td>2:45 p.m. – 4:15 p.m.</td>
<td>Simultaneous Sessions</td>
</tr>
<tr>
<td>2:45 p.m. – 4:15 p.m.</td>
<td>Education Spotlight Sessions (ticketed sessions)</td>
</tr>
<tr>
<td>NEW 4:30 p.m. – 6:00 p.m.</td>
<td>Special Symposium – 60th Anniversary of the National Institute of Diabetes and Digestive and Kidney Diseases</td>
</tr>
<tr>
<td>4:30 p.m. – 6:00 p.m.</td>
<td>Simultaneous Sessions</td>
</tr>
<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td>Poster Session III – Presentations</td>
</tr>
<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td>Reception (poster hall)</td>
</tr>
<tr>
<td>6:15 p.m. – 7:45 p.m.</td>
<td>Simultaneous Sessions</td>
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</table>

### Tuesday, December 7

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 a.m. – 1:30 p.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>7:30 a.m. – 9:00 a.m.</td>
<td>Simultaneous Sessions</td>
</tr>
<tr>
<td>7:30 a.m. – 9:00 a.m.</td>
<td>Late-Breaking Abstracts Session</td>
</tr>
<tr>
<td>7:30 a.m. – 9:00 a.m.</td>
<td>Special Symposium on the Basic Science of Hemostasis and Thrombosis (invited presentations)</td>
</tr>
<tr>
<td>9:30 a.m. – 9:45 a.m.</td>
<td>Announcement of the Dameshek Prize and the Stratton Medal</td>
</tr>
<tr>
<td>9:45 a.m. – 11:15 a.m.</td>
<td>Presidential Symposium</td>
</tr>
<tr>
<td>11:15 a.m. – 11:30 a.m.</td>
<td>Business Meeting</td>
</tr>
<tr>
<td>12:00 noon – 1:00 p.m.</td>
<td>Best of ASH</td>
</tr>
<tr>
<td>12:00 noon – 1:30 p.m.</td>
<td>Special Symposium on the Basic Science of Hemostasis and Thrombosis (simultaneous oral sessions)</td>
</tr>
</tbody>
</table>
SATURDAY

Ham-Wasserman Lecture

SATURDAY, DECEMBER 4, 12:30 P.M. – 1:30 P.M.

This lectureship is named in honor of two past Society presidents, 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 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.

TITLE:
The Brain-Bone-Blood Triad: Traffic Lights of Stem Cell Homing and Mobilization

SPEAKER:
Tsvee Lapidot, PhD, The Weizmann Institute, Rehovot, Israel

The hallmarks of blood-forming stem cells are their motility and developmental potential with overlapping regulators in order to produce mature blood cells on demand. In vivo migration is essential for successful clinical stem cell mobilization and transplantation protocols, and better control of stem cell navigation between the bone marrow and blood can improve clinical outcome. Stem cell homing to the bone marrow, steady state egress, stress-induced recruitment, and clinical mobilization to the circulation are complex, multi-step processes. These processes involve a tightly regulated interplay between cytokines, chemokines, proteolytic enzymes, adhesion molecules, stromal cells, and leukocytes. However, currently how (and why) hematopoietic stem cells migrate to and from the bone marrow as part of host defense and repair is not fully understood. Dr. Tsvee Lapidot will discuss regulation of human CD34+ stem and progenitor cell homing and mobilization in the functional, preclinical model of transplanted immune-deficient NOD/SCID mice. The multiple tasks of the chemokine SDF-1 (CXCL12) and its major receptor CXCR4, G-CSF, neurotransmitters, MT1-MMP, RECK, and CD44 in stem cell migration and development will be described. The relationship between stem cell mobilization and bone turnover via bone degrading osteoclasts and bone-forming stromal cells will be outlined. Dynamic interactions between the nervous and immune systems, with the microenvironment driven by circadian rhythms, all regulate stem cell homing and mobilization. The concept of stem cell regulation by the brain-bone-blood triad via stress signals that control the bone marrow reservoir of immature and maturing leukocytes will be presented.

SUNDAY

ASH/ASCO Joint Symposium

SUNDAY, DECEMBER 5, 9:30 A.M. – 11:00 A.M.

TITLE:
Clinical Oncology Update: Studies From the 2010 ASCO Annual Meeting

CO-CHAIRS:
Hal E. Broxmeyer, PhD, President, American Society of Hematology, Indiana University School of Medicine, Indianapolis, IN
George W. Sledge, MD, President, American Society of Clinical Oncology, Indiana University Melvin and Bren Simon Cancer Center, Indianapolis, IN

The ASH/ASCO Joint Symposium will review some of the best science from the 2010 ASCO Annual Meeting, and the presentations will be delivered by the investigators who contributed to these clinical research successes. Attendees who want an overview of the latest clinical oncology research to complement the research presented at the ASH annual meeting will find this session of value.

ASH/EHA Joint Symposium

SUNDAY, DECEMBER 5, 12:30 P.M. – 1:30 P.M.

TITLE:
To be announced.

CO-CHAIRS:
Hal E. Broxmeyer, PhD, President, American Society of Hematology, Indiana University School of Medicine, Indianapolis, IN
Robin Foà, MD, President, European Hematology Association, Sapienza University, Rome, Italy

This symposium is co-sponsored by ASH and the European Hematology Association (EHA). This year’s session will continue to focus on issues that ASH and EHA have identified as important to hematologists from countries around the world.
Mentor Award
In recognition of the value ASH places on mentorship, the Mentor Award was created to reward outstanding role models in the hematology community. Individuals from any country or branch of hematology who have had a sustained career commitment to mentoring, a significant positive impact on their mentees’ careers, and through their mentees have advanced research and patient care in the field of hematology are eligible for the award. The 2010 award winners will be announced at the meeting.

Wallace H. Coulter Award for Lifetime Achievement in Hematology
This award, named for Wallace Henry Coulter, a prolific inventor who made important contributions to hematology and to ASH, is bestowed on an individual who has demonstrated a lifetime commitment and made outstanding contributions to hematology, and who has made a significant impact on education, research, and/or practice.

The 2010 Wallace H. Coulter Award for Lifetime Achievement in Hematology will be presented to Volker Diehl, MD, of the University of Cologne in Cologne, Germany, for his pioneering research on Hodgkin lymphoma for more than 40 years. His scientific achievements include the discovery of the causative role of the Epstein-Barr virus in infectious mononucleosis and the study of its association with Hodgkin lymphoma. He also cultured the first notoriously fragile Hodgkin cell lines and led the development of BEACOPP, a chemotherapy regimen for the treatment of Hodgkin lymphoma. Dr. Diehl has received much recognition for his work, including the German Johann Georg Zimmermann Prize for Cancer Research, and is Honorary Chairman of the German Hodgkin Lymphoma Study Group, one of the largest Hodgkin studies in the world, which he founded in 1978. Dr. Diehl also founded the Competence Network Malignant Lymphomas in Germany, which has transformed the way patients with lymphoma are treated within the German health insurance system. Dr. Diehl has devoted his scientific life to the understanding and treatment of Hodgkin lymphoma, and his career is a great example of excellence in translational and clinical research.

E. Donnall Thomas Lecture and Prize
MONDAY, DECEMBER 6, 9:00 A.M. – 10:00 A.M.
This award and lectureship was created in 1992 and named after Nobel Prize laureate and past Society president E. Donnall Thomas, MD. The E. Donnall Thomas Lecture and Prize recognizes pioneering research achievements in hematology.

TITLE:
Blood Stem Cell Self-Renewal and Differentiation - Lessons From Embryonic Development

SPEAKER:
Leonard I. Zon, MD, Children’s Hospital and Dana-Farber Cancer Institute, Howard Hughes Medical Institute, Harvard Stem Cell Institute, Harvard Medical School, Boston, MA

Hematopoietic stem cells are derived during embryogenesis and can self-renew or differentiate into peripheral blood lineages. During development, tissues are induced to express hematopoietic transcription factors in specific regions of the embryo. Utilizing the zebrafish as a model system, signaling pathways have been found that are critical for blood stem cell formation, and these pathways are also used for stem cell self-renewal in adults. For instance, the wnt, notch, and cdx-hox pathways are required for blood development and also participate in adult stem cell response to injury and leukemia. PGE2 can stimulate hematopoietic stem cells in zebrafish embryos, mouse marrow transplantation, and human cord blood experiments. The interaction of the wnt and PGE2 pathways regulate stem cell self-renewal and homing. Studies of embryos have thus provided invaluable information on the pathways that regulate hematopoietic stem cells.
Ernest Beutler Lecture and Prize

MONDAY, DECEMBER 6, 1:30 P.M. – 2:30 P.M.

This award and lectureship is named for the late Ernest Beutler, MD, past president of ASH and physician-scientist for more than 50 years. It is presented to two individuals and is intended to recognize major advances related to a single topic. Together, the achievements of these individuals have enabled advances in basic science as well as in clinical science and translational applications.

**TITLE:**
From the Mechanism of Platelet Aggregation to the First Rationally Designed Antiplatelet Agent

**SPEAKERS:**
Barry S. Coller, MD, The Rockefeller University, New York, NY
Joel S. Bennett, MD, University of Pennsylvania, Philadelphia, PA

Platelet aggregation is responsible for primary hemostasis and arterial thrombosis. Studies designed to understand why fibrinogen is required for platelet aggregation led to the discovery of the platelet fibrinogen receptor, glycoprotein IIb/IIIa, later renamed αIIbβ3, which was subsequently found to be a member of the integrin family of adhesion receptors and the prototypic example of regulated integrin function. Studies of patients who lack the receptor on an inherited basis (Glanzmann thrombasthenia) and animal models of thrombosis led to the development of αIIbβ3 antagonists, the first rationally designed antiplatelet agents, to prevent and treat ischemic cardiovascular disease. Dr. Joel S. Bennett will discuss the discovery of the platelet fibrinogen receptor and subsequent elucidation of its structure and function. Dr. Barry S. Coller will discuss the development of αIIbβ3 antagonists.

TUESDAY

Announcement of the Dameshek Prize and the Stratton Medal

TUESDAY, DECEMBER 7, 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 a recent outstanding contribution to the field of hematology.

**Henry M. Stratton Medal**
The Stratton Medal, named for the late Henry M. Stratton, a co-founder of the publishing house of Grune and Stratton, honors an individual whose well-recognized contributions to hematology have taken place over a period of several years.

**The 2010 Dameshek Prize** will be awarded to David T. Scadden, MD, of the Massachusetts General Hospital and the Harvard Stem Cell Institute, Boston, MA, for his landmark contributions to stem cell biology. Dr. Scadden increased the fundamental understanding of the stem cell niche and how cells engage it. His laboratory was the first to show that modifying CXCR4 can lead to stem cell mobilization and more recently defined two new molecular regulators of stem cell homing and engraftment. These, combined with real-time imaging of individual stem cells engrafting in their niche, provide new opportunities for understanding and manipulating the processes critical for stem cell transplantation. His contributions have altered thinking in the field and given direction for interventions to improve transplantation.

**The 2010 Stratton Medal** goes to Sanford Shattil, MD, of the University of California – San Diego, San Diego, CA, for his remarkable achievements in the area of platelet cell biology and signal transduction. Dr. Shattil led the way in defining the roles of numerous kinases, scaffold proteins, small G-proteins, and exchange factors in outside-in integrin signaling platelets. He has often been the first to introduce cutting-edge approaches into the platelet field, including live cell imaging and pioneering the technique of deriving megakaryocytes from mouse bone marrow or human stem cells to use as a molecularly tractable model of platelet signaling. Dr. Shattil has also served as treasurer of ASH and as editor-in-chief of *Blood*, and continues to contribute to the Society through workshops aimed at young investigators to teach them how to prepare and submit manuscripts.
General Sessions

Presidential Symposium

TUESDAY, DECEMBER 7, 9:45 A.M. – 11:15 A.M.

TITLE:
Innovations and the Future of Umbilical Cord Blood Transplantation

CHAIR:
Hal E. Broxmeyer, PhD, President, American Society of Hematology, Indiana University School of Medicine, Indianapolis, IN

SPEAKERS:
Eliane Gluckman, MD, Hôpital St. Louis, Paris, France
Current Status of Cord Blood Transplantation and Future Needs and Assessment

John Wagner, MD, University of Minnesota, Minneapolis, MN
Improvement in Hematopoietic Engraftment and Immune Reconstitution With Cord Blood Transplantation

Joanne Kurtzberg, MD, Duke University Medical Center, Durham, NC
Treatment of Inherited Metabolic Diseases and Potential Use of Cord Blood for Tissue Repair and Regeneration

This session will focus on the current status of umbilical cord blood transplantation to treat malignant and non-malignant disorders through hematopoietic stem/progenitor cell transplantation. In addition, innovations currently being evaluated, as well as future prospects that will enhance the efficiency and efficacy, and possibly broaden the applicability, of cord blood cells for future health benefit will also be discussed. The presentations will be given by pioneers in the field of clinical cord blood transplantation.

Dr. Eliane Gluckman will review the current state of sibling and unrelated allogeneic cord blood transplantation, focusing on transplantation of single cord blood units. She will provide thoughts on where she envisions the field to be in five, 10, and 25 years. Dr. John Wagner will focus on potential strategies for improving hematopoietic engraftment and immune reconstitution. He will cover ex vivo expansion, homing, T regulatory cells, and T progenitors to optimize the “graft” in the setting of cord blood transplantation. He will show clinical and preclinical data in each of these areas with results in adult transplants and double unit cord blood transplants serving as his background. Dr. Joanne Kurtzberg will discuss the lessons learned from the use of cord blood transplantation in the treatment of inherited metabolic disease and extension of these observations into the use of cord blood in tissue repair and regeneration. She will place emphasis in this latter regard on the role of cord blood transplantation in genetic and acquired brain injuries.

The audience will learn from this symposium where the field of cord blood transplantation is now, where we might expect the field to be in the near and distant future, and what innovations will be necessary to take us there. Be prepared for realistic and potentially futuristic thoughts on this and for healthy disagreements among the speakers.

Business Meeting

TUESDAY, DECEMBER 7, 11:15 A.M. – 11:30 A.M.

At least one month prior to the annual meeting, reports on ASH’s financial status, Blood, and awards, and information about the Society’s leadership nominations are made available on the ASH website, www.hematology.org, for review by ASH members. The brief business meeting will offer a forum for members to raise issues of concern regarding the information presented in these documents. The business meeting will conclude with the traditional passing of the gavel to the new ASH President.

Best of ASH

TUESDAY, DECEMBER 7, 12:00 NOON – 1:00 P.M.

CO-CHAIRS:
Robert A. Hromas, MD, University of New Mexico, Albuquerque, NM
Joseph R. Mikhail, MD, Mayo Clinic Arizona, Scottsdale, AZ
David T. Scadden, MD, Massachusetts General Hospital and the Harvard Stem Cell Institute, Boston, MA
Bradford S. Schwartz, MD, University of Illinois College of Medicine at Urbana-Champaign, Urbana, IL

Before heading home on Tuesday, make time to attend “Best of ASH” to hear a distillation of “take-away” themes from the meeting. With more than 3,000 abstracts presented over four days, it is impossible to attend every session. During this one-hour session, 2010 Annual Meeting Program Co-Chairs will identify a few of the key themes of the 2010 meeting so that you know what’s “hot.” This is one session that should not be missed, so plan accordingly.
THURSDAY

Training Program Directors’ Workshop and Business Meeting

THURSDAY, DECEMBER 2, 1:00 P.M. – 8:00 P.M.

The Training Program Directors’ Workshop provides an interactive forum for directors of all hematology-related training programs to learn from the experts and from each other.

CHAIR:
Ann Zimrin, MD, University of Maryland, Baltimore, MD

Didactic Sessions

SPEAKERS:
Scott D. Gitlin, MD, University of Michigan, Ann Arbor, MI
Elaine A. Muchmore, MD, University of California – San Diego, San Diego, CA
Patrick Leavey, MD, University of Texas Southwestern Medical Center at Dallas, Dallas, TX

Changes in the RRC Requirements and Their Effect on Hematology Programs
Effective Interview Strategies: Separating the Wheat From the Chaff

Ann Zimrin, MD, University of Maryland, Baltimore, MD
Best Practices Survey

Breakout Sessions

SPEAKERS:
Alexandra Wolanskyj, MD, Mayo Clinic, Rochester, MN
Joanne Filicko-O’Hara, MD, Thomas Jefferson University, Philadelphia, PA
Christopher R. Cogle, MD, University of Florida, Gainesville, FL
Mark Heaney, MD, PhD, Memorial Sloan-Kettering Cancer Center, New York, NY
Paulette Mehta, MD, MPH, University of Arkansas, Little Rock, AR

Novel Teaching Methods and Innovative Fellow Evaluation Tools - Panel Discussion
Enhancing the Hematology Curriculum: Innovative Teaching Tools - Panel and Group Discussion

This program will provide training program directors outstanding opportunities to learn about and share best practices for critical issues facing training programs. Program directors that complete this program will be eligible for AMA PRA Category 1 Credit™.

Participants are asked to send examples of their relevant “best practices” and experiences related to the session presentation topics to training@hematology.org. These materials will be used to facilitate group interactions and discussions.

The workshop will conclude with a reception and a training program directors’ dinner during which the group’s annual business meeting will be held. Dinner will be provided. Please note the date and the combination of the Training Program Directors’ Workshop and Business Meeting, and make your travel plans accordingly.

SATURDAY

Practice Forum

SATURDAY, DECEMBER 4, 6:00 P.M. – 7:30 P.M.

Innovation and Best Practices for Survival of the Hematology Practice

CHAIR:
Lawrence A. Solberg Jr., MD, PhD, Chair, ASH Committee on Practice, Mayo Clinic, Jacksonville, FL

SPEAKERS:
William C. Rupp, MD, Mayo Clinic, Jacksonville, FL
Principles of Practice Innovation
Stuart P. Feldman, MD, WestMed Medical Group, White Plains, NY
Thomas Marsland, MD, Orange Park Cancer Center, Orange Park, FL
Practice Innovations for the Hematologist
Mila Becker, Esq., American Society of Hematology, Washington, DC
Ellen Riker, H & K Consultants, Washington, DC
Legislative and Regulatory Update

The 2010 Practice Forum will address best practices that will help hematology practices survive the extraordinary challenges facing the specialty. Such challenges include maintaining a workforce with the competencies to see the wide range of non-malignant and malignant conditions that present to hematologists, assuring the financial sustainability of a practice based largely on evaluation and management reimbursement, and developing approaches to insure that quality measures and maintenance of certification are efficiently embedded into the practice.
**Practice Forum Reception**

**SATURDAY, DECEMBER 4, 7:30 P.M. – 8:30 P.M.**

A special reception for practitioners will follow the Practice Forum. The reception provides an opportunity for attendees to network and talk directly with members of the ASH Committee on Practice to express issues of concern, learn more about the Society’s practice-related initiatives, and share personal experiences. Beverages and hors d’oeuvres will be provided.

**Promoting Minorities in Hematology Presentations and Reception**

**SATURDAY, DECEMBER 4, 6:30 P.M. – 9:00 P.M.**

ASH invites all interested meeting attendees to this event showcasing training and research opportunities for minorities underrepresented in hematology. The scientific presentations of ASH’s Minority Medical Student Award Program participants will be the highlight of the session. The reception will also include poster presentations by students participating in the National Heart, Lung, and Blood Institute’s Minority Research Supplement and 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 National Institutes of Health will also be in attendance to provide information about their training and research offerings. The event will conclude with a buffet dinner and networking session.

Please join us to hear the impressive research presentations and learn more about these exciting opportunities.

**Hematology Course Directors’ Workshop**

**SUNDAY, DECEMBER 5, 7:00 A.M. – 9:00 A.M.**

**TITLE:**
Improving Hematology Education for Second-Year Medical Students

**CHAIR:**
Marc Zumberg, MD, University of Florida, Gainesville, FL

**SPEAKERS:**
Scott D. Gitlin, MD, University of Michigan, Ann Arbor, MI
**How to Increase Medical Student Interest in Hematology**

Jennifer Kesselheim, MD, MEd, MBE, Dana-Farber Cancer Institute, Boston, MA
**Adult Learning Theory and How It Might Relate to Teaching Second-Year Hematology**

Elizabeth Bengtson, MD, Dartmouth-Hitchcock Medical Center, Lebanon, NH
**Discussion Concerning the Course Director Survey Including the Current Content, Support, Workforce, and Organization of Hematology Courses**

The aim of this annual breakfast session is to bring together second-year hematology course directors and educators with the goal of improving hematology training for second-year medical students. This session consists of didactic lectures but is designed to be interactive, with program directors sharing novel/successful aspects of their individual hematology courses.

**Blood and Beyond: Searching the Scientific Literature Online**

**SUNDAY, DECEMBER 5, 6:15 P.M. – 7:15 P.M.**

The explosion of information on the Internet has led to powerful new search technologies to help make it easier for users to find what they need. *Blood* has partnered with Stanford University’s HighWire Press to provide robust search capabilities within *Blood*’s online journal site. This session will describe the search and alert features available on *Blood* Online, including RSS feeds (online features that automatically deliver updated Web content directly to users) and electronic table-of-contents alerts, to mine the scientific literature. Participants will also be introduced to new search and automatic alert features available from the HighWire portal, which allows powerful searching and browsing of hundreds of online journals, Medline, and the other ASH publications it hosts.
The HVO Volunteer Experience: Sharing Your Hematology Expertise Globally

SUNDAY, DECEMBER 5, 6:15 P.M. – 7:45 P.M.

ASH and our partner organization Health Volunteers Overseas (HVO) are looking for hematologists with a passion for teaching and training who want to broaden their horizons through a short-term volunteer experience in a developing country. Gain insight into how volunteering with HVO can improve hematology care overseas and confront hematology health challenges globally. This one-hour session will feature several presentations from ASH members who serve as program directors and volunteers at various sites. You will learn more about the various sites, educational needs in both clinical and laboratory hematology, and your role as a volunteer. Following the presentations, a question-and-answer session will be held. Bring your sense of adventure and learn about how a brief visit can make a very big impact.

MONDAY

Special Symposium – 60th Anniversary of the National Institute of Diabetes and Digestive and Kidney Diseases

MONDAY, DECEMBER 6, 4:30 P.M. – 6:00 P.M.

CHAIR:
Griffin P. Rodgers, MD, Director, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD

SPEAKERS:
Kenneth Kaushansky, MD, Stony Brook University, Stony Brook, NY
Towards Understanding the Molecular Wiring of Hematopoietic Stem Cells

Alan N. Schechter, MD, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD
Discovering New Roles for Red Cells and Hemoglobin

Nancy C. Andrews, MD, PhD, Duke University School of Medicine, Durham, NC
A Golden Age in Iron Biology

This special symposium highlights seminal advances and future opportunities for progress in three key areas of hematology research supported by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) during its 60-year history – hematopoiesis, hemoglobin, and iron. Dr. Kenneth Kaushansky will present an overview of progress in understanding how hematopoietic cells are signaled to survive, cycle between quiescence and proliferation, and differentiate into mature blood cells. He will focus in particular on intracellular signaling pathways, central to the regulation of hematopoiesis, that are triggered when cell surface and nuclear receptors bind to ligands. He will also discuss novel systems approaches for completing a diagram of the signaling circuitry of hematopoietic cells. Dr. Schechter will review highlights of hemoglobin research over the past half-century and their contributions to the evolution of molecular medicine. He will then focus on recent studies demonstrating that erythrocytes, in addition to transporting oxygen, modulate local vascular tone and blood flow by deoxyhemoglobin-mediated reduction of nitrite ions to nitric oxide and through deoxygenation-dependent release of adenosine triphosphate. He will also discuss how these normal mechanisms, when subverted by hemolysis, may contribute to the pathophysiology of acute and chronic hemolytic disorders. Dr. Nancy Andrews will discuss the remarkable expansion of knowledge about the control of iron balance that has occurred during recent decades, and she will highlight specific advances that have elucidated the pathogenesis of genetic hemochromatosis, the anemia of inflammation and chronic disease, and iron deficiency. She will also discuss key research challenges and opportunities for answering important questions remaining in the field of iron biology.
Special Symposium on the Basic Science of Hemostasis and Thrombosis

PRESENTED BY THE SCIENTIFIC COMMITTEES ON HEMOSTASIS, VASCULAR BIOLOGY, AND PLATELETS

CO-CHAIRS:
Paul S. Frenette, MD, Albert Einstein College of Medicine, New York, NY
James H. Morrissey, PhD, University of Illinois College of Medicine, Urbana, IL
Leslie V. Parise, PhD, University of North Carolina, Chapel Hill, NC

SPEAKERS:
Charles T. Esmon, PhD, Howard Hughes Medical Institute, Oklahoma Medical Research Foundation, Oklahoma City, OK
Crosstalk Between Inflammation and Thrombosis: The Surprising Role of Extracellular Histones

Mark H. Ginsberg, MD, University of California – San Diego, La Jolla, CA
Structural Basis of Inside-Out Integrin Signaling

Katherine A. High, MD, Howard Hughes Medical Institute, The Children’s Hospital of Philadelphia, Philadelphia, PA
Advances in Gene Therapy for Hemophilia and Other Inherited Blood Disorders

Speaker to be determined
A presentation will be made by the 2010 recipient of the Mary Rodes Gibson Memorial Award in Hemostasis and Thrombosis, a trainee with the highest-scoring abstract at the ASH annual meeting in the field of hemostasis and thrombosis.

This special session is designed to expand the opportunity for exchange and communication among basic scientists in the field of hemostasis and thrombosis. It will highlight the most important basic science contributions made in 2010 in each of the three major areas of the field: thrombosis, blood coagulation and fibrinolysis, and platelet biology.

In addition to the invited speakers listed above, an afternoon session will include a number of oral presentations selected from hemostasis- and thrombosis-related abstracts submitted for the annual meeting. The abstracts will be available online in November.
Trainee Activities and Services

The ASH annual meeting provides hematology trainees with a variety of high-quality educational, career-development, and networking opportunities. To help trainees make the most of their meeting experience, we have listed below the activities and services most relevant to the unique interests of undergraduates, medical and graduate students, residents, and fellows.

These events are open only to Associate members and non-members in training wearing blue trainee meeting badges. To register for the meeting as a trainee, please see pages 43-44.

Trainee Day

FRIDAY, DECEMBER 3, 7:00 A.M. – 12:00 NOON

The 2010 Trainee Day will delve into the mechanics of research, both clinical and basic. This half-day workshop is designed to support and encourage trainees in the field of academic hematology and to enhance their career development. This program will offer didactic sessions on effective communication, job negotiation, and advocacy involvement. Breakout sessions will focus on career-development funding and laboratory challenges.

Didactic Sessions

Neal S. Young, MD, National Institutes of Health, Bethesda, MD
Learning to Give an Effective Oral Presentation - The Art of Verbal Communication
Barry S. Coller, MD, The Rockefeller University, New York, NY
Learning to Communicate Through the Media of Print
Kenneth Kaushansky, MD, Stony Brook University, Stony Brook, NY
Negotiating Your First Academic Job
Mila Becker, Esq., American Society of Hematology, Washington, DC
What You Need to Know About ASH Advocacy and How to Become Involved

Small-Group Breakout Sessions

Funding and Career-Development Awards

For Laboratory-Based Investigators: Katherine A. High, MD, Howard Hughes Medical Institute, The Children’s Hospital of Philadelphia, Philadelphia, PA

For the Clinician and Clinician-Investigator: Martin Tallman, MD, Memorial Sloan-Kettering Cancer Center, New York, NY

Opportunities and Challenges in Laboratory and Translational Research

Translational and Basic: Michelle M. Le Beau, PhD, University of Chicago, Chicago, IL

Clinical: Monica Bessler, MD, PhD, Washington University Medical School, St. Louis, MO

Trainee Welcome Reception and Meeting Overview

FRIDAY, DECEMBER 3, 4:30 P.M. – 6:00 P.M.

This informal social event provides an excellent opportunity for undergraduates, medical students, graduate students, residents, and fellows (MD and PhD) to gather with their colleagues. During the reception, there will be a brief presentation by members of the Executive Committee, Committee on Training Programs, and Trainee Council. ASH’s leadership will provide an overview of the annual meeting’s training events and sessions, highlighting various topics and speakers. Additionally, there will be a brief review of the Education and Scientific Programs, with an emphasis on those sessions most relevant to trainees. Trainees from around the world are encouraged to attend!

Trainee Simultaneous Didactic Sessions

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

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 persons will be allowed in the rooms once these sessions are filled.

SUNDAY, DECEMBER 5, 11:15 A.M. – 12:15 P.M.

Lillian Sung, MD, PhD, The Hospital for Sick Children, Toronto, ON, Canada
Practical Biostatistics – 101
John J. Strouse, MD, PhD, The Johns Hopkins University, Baltimore, MD
Jonathan D. Licht, MD, Robert H. Lurie Comprehensive Cancer Center, Chicago, IL
How to Transition From Trainee to Faculty

MONDAY, DECEMBER 6, 12:15 P.M. – 1:15 P.M.

Cynthia E. Dunbar, MD, Editor-in-Chief, Blood, Washington, DC
How to Write and Publish a Manuscript in a Peer-Reviewed Journal
Julie Hambleton, MD, Genentech, Inc., South San Francisco, CA
Thomas C. Abshire, MD, BloodCenter of Wisconsin, Milwaukee, WI
The Road Less Traveled - Careers in Hematology You May Not Have Known Existed
Career-Development Lunch Sessions

SATURDAY, DECEMBER 4, 11:15 A.M. – 12:15 P.M.

Trainee career-development lunch sessions will provide an intimate venue for trainees to meet with leaders in hematology to discuss professional development issues. ASH has invited a diverse group of more than 30 distinguished researchers and physicians representing the wide array of practice areas within hematology. Faculty will be available to discuss careers in clinical, translational, and basic research. There will also be representatives present to discuss careers in industry settings and in private and clinical practice. This event is open only to ASH Associate members and non-members in training wearing blue trainee meeting badges.

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 people will be allowed in the rooms once these sessions are filled.

Academic Programs in Hematology and Hematology/Oncology for Residents and Medical Students

Michael L. Linenberger, MD, University of Washington, Fred Hutchinson Cancer Research Center, Seattle, WA
Linda J. Burns, MD, University of Minnesota, Minneapolis, MN

Adult Hematology/Clinical Research

Elihu H. Estey, MD, University of Washington, Fred Hutchinson Cancer Research Center, Seattle, WA
Mary Cushman, MD, MSc, University of Vermont, Colchester, VT
Samuel Z. Goldhaber, MD, Brigham and Women’s Hospital, Boston, MA
Oliver W. Press, MD, PhD, Fred Hutchinson Cancer Research Center, Seattle, WA

PhD Careers

Vesna Najfeld, PhD, Mount Sinai School of Medicine, New York, NY
James D. Engel, PhD, University of Michigan, Ann Arbor, MI
John Shaughnessy Jr., PhD, University of Arkansas for Medical Sciences, Little Rock, AR
Amittha Wickrema, PhD, University of Chicago, Chicago, IL

Hematology - Laboratory & Translational

Janis L. Abkowitz, MD, University of Washington, Seattle, WA
John G. Gribben, DSc, Barts and the London School of Medicine, London, United Kingdom
Eva Hellström-Lindberg, MD, PhD, Karolinska Institutet, Stockholm, Sweden
Agnes Y. Lee, MD, MSc, University of British Columbia, Vancouver, BC, Canada

National Institutes of Health

Delia Tang, MD, National Institutes of Health, Bethesda, MD
Gregory J. Kato, MD, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD
Andre L. Kindzelski, MD, PhD, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD
Richard F. Little, MD, MPH, National Cancer Institute, National Institutes of Health, Bethesda, MD

Industry Careers

Allen J. Ebens, PhD, Genentech, Inc., San Carlos, CA
Nancy Valente, MD, Genentech, Inc., San Francisco, CA
James E. Wooldridge, MD, Eli Lilly and Company, Indianapolis, IN
Stephanie Valer Seremetis, MD, Novo Nordisk A/S, Soeborg, Denmark
Jonathan G. Drachman, MD, Seattle Genetics, Bothell, WA

Pediatric Hematology-Oncology

Janna M. Journeycake, MD, University of Texas Southwestern Medical Center at Dallas, Dallas, TX
Elliott Vichinsky, MD, Children’s Hospital and Research Center Oakland, Oakland, CA
Theodore B. Moore, MD, MS, University of California – Los Angeles, Los Angeles, CA

Clinical Pathology/Transfusion Medicine/Hematopathology

Edward L. Snyder, MD, Yale-New Haven Hospital, Yale Medical School, New Haven, CT
James P. Au Buchon, MD, Puget Sound Blood Center, Seattle, WA
Christopher D. Hillyer, MD, New York Blood Center, New York, NY
Visalam Chandrasekaran, MD, New York Blood Center, New York, NY

Private Practice Careers

Burton F. Alexander III, MD, Virginia Oncology Associates, Virginia Beach, VA
Jodi Mones, MD, Bronx River Medical Associates, Bronx, NY
Michael A. Thompson, MD, PhD, ProHealth Care Regional Cancer Center, Waukesha, WI

Are you a trainee, but not a member of ASH? Please visit www.hematology.org/membership for details about becoming an Associate member. If you reside in North America but are not yet enrolled in a hematology-related training program (and, therefore, do not yet meet the eligibility requirements for Associate membership), consider participating in ASH’s North American Student Benefit program, designed for trainees in the United States, Canada, and Mexico who are undergraduate or graduate students, residents (in post-graduate years 1-3 for Canadians), or PhD candidates. The benefit provides a complimentary online subscription to Blood, advance annual meeting notifications, and eligibility for reduced meeting registration at the non-member-in-training rate. For more information and to submit an application, visit www.hematology.org/NASB. If registering for the annual meeting as a non-member in training, see page 44 for special instructions.
Trainee Lounge

Trainees are invited to visit the Trainee Lounge located in the Orange County Convention Center (exact room location to be provided in the on-site materials). The lounge provides a relaxing place for trainees to meet with colleagues, access the Internet, and recharge with complimentary refreshments. The lounge will be open from 7:00 a.m. to 6:00 p.m. on Saturday, Sunday, and Monday, and from 7:00 a.m. to 12:00 noon on Tuesday.

Additional Opportunities and Resources of Interest to Trainees

- Promoting Minorities in Hematology Presentations and Reception 12
- Grassroots Network Breakfast 12
- Education Session - “Grant Writing for Junior Faculty” 29
- Education Session - “Junior-Faculty Development: The Economics of Academic Hematology” 29
- Practice Makes Perfect Sessions 37
- Education Spotlight Sessions 34
- Meet-the-Expert Sessions 38
- ASH Booth 41
- National Institutes of Health Booths 41
- ASH Job Bank 52
- Annual Meeting Sessions on DVD 53

Trainees are encouraged to visit the Training page of the ASH website at www.hematology.org/training for information about ASH’s career-development awards, research grants, educational programs and publications, and links to other valuable resources available to both domestic and international trainees. To receive quarterly updates by e-mail on these events and opportunities, contact training@hematology.org.

Are you a post-doctoral fellow residing outside North America? Consider participating in ASH’s new International Post-Doctoral Fellows (IPDF) program, which allows post-doctoral fellows who may find the cost of International membership prohibitive to access valuable ASH resources at no charge for up to four years. The program is open to post-doctoral fellows with an MD, or equivalent medical degree, who: reside outside Canada, Mexico, or the United States; register for the ASH annual meeting as a non-member in training; and are enrolled in an approved hematology or oncology training program. Benefits include a complimentary online subscription to Blood and online access to Hematology (the ASH Education Program Book) and The Hematologist. For more information and to submit an application, visit www.hematology.org/IPDF. If registering for the annual meeting as a non-member in training, see page 44 for special instructions.
Challenges in Acute Myeloid Leukemia

CHAIR:
Hugo F. Fernandez, MD, Moffitt Cancer Center, Tampa, FL

SPEAKERS:
James M. Foran, MD, University of Alabama at Birmingham, Birmingham, AL
New Prognostic Markers in Acute Myeloid Leukemia

Selina Luger, MD, Abramson Cancer Center, University of Pennsylvania, Philadelphia, PA
Treating the Elderly Patient With Acute Myeloid Leukemia

Hugo F. Fernandez, MD, Moffitt Cancer Center, Tampa, FL
New Trends in the Standard of Care for Initial Therapy of Acute Myeloid Leukemia

This session will focus on recent advances in the treatment of acute myeloid leukemia (AML) for younger and older adults. The session will cover genetic and molecular abnormalities that impact the disease in its initial response to chemotherapy, and leukemia-free and overall survival. The speakers will present recent findings in approaches to initial therapy for younger adults and for the appropriateness of therapy and the best approach for older adults with AML. Dr. James Foran will review new prognostic markers in AML, including refinements in cytogenetic classification as well as new molecular and flow-cytometric prognostic factors that can affect response and survival. He will discuss the impact of these markers in both younger and older patients, focusing on those with cytogenetically normal AML. He will also discuss the potential role of new prognostic markers in clinical management, including allogeneic transplantation. Dr. Selina Luger will discuss the treatment of the elderly AML patient, focusing on the prognostic scoring systems that are being used to predict survival, early death, and appropriateness for intensive therapy. She will summarize recent studies that have aggressively treated older patients and new chemotherapeutic combinations that have been designed for those considered unfit for intensive therapy. Dr. Hugo Fernandez will present recent approaches to induction chemotherapy for younger patients with AML. He will discuss the impact of anthracycline intensification and targeted therapy and compare and contrast the different anthracyclines in their ability to successfully achieve a complete remission.
Myelodysplastic Syndromes

**CHAIR:**
William Blum, MD, The Ohio State University, Columbus, OH

**SPEAKERS:**
Guillermo Garcia-Manero, MD, The University of Texas M. D. Anderson Cancer Center, Houston, TX
Corey Cutler, MD, MPH, Dana-Farber Cancer Institute, Boston, MA
William Blum, MD, The Ohio State University, Columbus, OH

This session will focus on recent advances in the care of patients with myelodysplastic syndromes (MDS) including prognosis in MDS, the use of allogeneic transplantation in MDS, and endpoints in the management of patients with MDS. Dr. Guillermo Garcia-Manero will review the state of the art in our understanding of prognosis for patients with MDS. He will describe the relationship of clinical and disease-specific factors in MDS to clinical outcomes and to the selection of appropriate therapies. Further, he will describe advances in molecular understanding of the disease as it relates to clinical outcome and response to treatment. Dr. Corey Cutler will review the role of allogeneic transplantation in the care of MDS patients. He will review evidence for the clinical benefit of this approach and discuss the selection of appropriate patients for transplantation. He will describe the timing of transplantation relative to clinical factors such as age and prognostic risk. Selection of optimal conditioning regimens will also be discussed. Dr. William Blum will describe patient-oriented endpoints in the care of patients with MDS. He will review current treatment options and discuss the goals of therapy with each of these various treatment approaches. He will discuss not only long-term goals of treatment but also short-term problems to provide guidance on decision making in the ongoing care of MDS patients. He will then briefly review the current understanding of molecular endpoints/targets in MDS therapy.

Acute Lymphoid Leukemia

**CHAIR:**
David I. Marks, MBBS, PhD, University Hospitals Bristol NHS Foundation Trust, Bristol, United Kingdom

**SPEAKERS:**
Wendy Stock, MD, University of Chicago, Chicago, IL
David I. Marks, MBBS, PhD, University Hospitals Bristol NHS Foundation Trust, Bristol, United Kingdom
Dario Campana, MD, PhD, St. Jude Children's Research Hospital, Memphis, TN

This session will focus on recent advances in the management of older and younger adults with ALL, in particular describing differences in biology, the results of recent trials, and registry-based studies. There will also be a detailed discussion of the methods of detection of minimal residual disease (MRD) and their value in determining therapeutic decisions. Dr. Wendy Stock will focus on the management of patients up to the age of 30 years focusing on current trials and questions about biological/sociological differences between young adults and younger children with ALL and older adults. Dr. David Marks will discuss prognostic factors and each phase of therapy including the role of allogeneic and autologous stem cell transplantation. There will be discussions about T-cell disease and relapse as well as a brief description of management in older patients and likely future advances. Dr. Dario Campana will discuss the rationale and methods for MRD monitoring, the clinical significance of MRD in adult and childhood ALL, and the relation between biologic and genetic features of leukemia with treatment response as measured by MRD assays.

Multiple Myeloma

**CHAIR:**
Sagar Lonial, MD, Emory University School of Medicine, Atlanta, GA

**SPEAKERS:**
Ola Landgren, MD, PhD, National Cancer Institute, National Institutes of Health, Bethesda, MD
Raymond L. Comenzo, MD, Tufts Medical Center, Boston, MA
Sagar Lonial, MD, Emory University School of Medicine, Atlanta, GA

This session will focus on recent advances in the basic science of plasma cell disorders focusing specifically on disease pathogenesis from the MGUS/smoldering state, the light chain deposition state of amyloidosis, and management and concepts for relapsed multiple myeloma. Dr. Ola Landgren will review new insights into the basic biology and pathophysiology of MGUS and smoldering myeloma, with specific emphasis on new epidemiological data tracking of the frequency of MGUS and risk factors for progression. He will review the genes and pathways involved in the transition from MGUS to myeloma, as well as genetic changes that are common to MGUS, smoldering myeloma, and symptomatic myeloma. Dr. Raymond Comenzo will review the diagnostic criteria for amyloidosis, as well as the many different presenting symptoms associated with the diagnosis of this challenging disease. He will also review new diagnostic tests that can be used to confirm the different types of amyloidosis. Finally, he will discuss standard and newer treatment approaches for amyloidosis that specifically target the etiology and pathology of the disease. Dr. Sagar Lonial will describe the myriad of new treatments and approaches for the management of relapsed disease, including single agent, combination new targets, and risk-based approaches for relapsed disease.
Supportive Care in Plasma Cell Dyscrasias

**CHAIR:**
Pieter Sonneveld, MD, PhD, Erasmus University Medical Center, Rotterdam, Netherlands

**SPEAKERS:**
Pieter Sonneveld, MD, PhD, Erasmus University Medical Center, Rotterdam, Netherlands

- Dealing With Neuropathy
  Meletios A. Dimopoulos, MD, University of Athens School of Medicine, Alexandra General Hospital, Athens, Greece
- Renal Insufficiency and Failure
  Sigurdur Y. Kristinsson, MD, PhD, Karolinska University Hospital and Karolinska Institutet, Stockholm, Sweden
- Thrombotic Issues in Myeloma
  This session reviews clinical aspects of plasma cell dyscrasias, concentrating on morbidity at presentation and treatment-related complications in multiple myeloma. Dr. Pieter Sonneveld will review the etiology and presenting symptoms of neuropathy in monoclonal plasma cell diseases. He will review predisposing factors and clinical characteristics of treatment-related neuropathy with a focus on bortezomib and thalidomide. Practical recommendations for prevention and treatment of treatment-associated neuropathy will be discussed. Dr. Meletios Dimopoulos will describe the pathogenesis and clinical presentation of renal insufficiency in multiple myeloma. He will then discuss various diagnostic and therapeutic approaches for the patient presenting with renal failure. Finally, he will review the treatment options with a focus on the use of novel agents, the preferred regimens, and the impact on prognosis in this group of patients. Dr. Sigurdur Kristinsson will discuss the mechanisms of thrombosis in multiple myeloma. He will describe epidemiological factors as well as disease-related activation of hemostasis. He will then review the incidence of thrombosis in myeloma and risk factors that are associated with specific treatment choices. Finally, recommendations for thrombosis prophylaxis will be discussed.

Lymphoma: Translating Basic Science Into Therapy

**CHAIR:**
Thomas E. Witzig, MD, Mayo Clinic, Rochester, MN

**SPEAKERS:**
Thomas E. Witzig, MD, Mayo Clinic, Rochester, MN
- Signal Transduction Pathway Therapy in Lymphoma
  Sandeep Dave, MD, Duke University, Durham, NC
- Host Factors for Risk and Survival in Lymphoma
  John P. Leonard, MD, Weill Cornell Medical College, New York, NY
- Novel Agents in Follicular Lymphoma
  Significant progress is being made in the understanding of the pathogenesis of non-Hodgkin lymphoma. New insights into the mechanisms of resistance of tumor cells to common agents and the role of tumor microenvironment have led to the development of new agents for the treatment of lymphoma. These treatments have moved from the laboratory through phase I and phase II and now are being applied up-front. Dr. Thomas Witzig will discuss the various signal transduction pathways involved in the growth and resistance of lymphoma cells and how these pathways are being targeted. He will also discuss some of the mechanisms of resistance that develop when these new agents are used. Dr. Sandeep Dave will describe the importance of host factors and the risk of lymphomagenesis and prognosis. These host factors and microenvironmental factors can play an important role in the development and maintenance of lymphoma. They also provide unique targets for therapy. Dr. John Leonard will describe how these novel agents have entered standard care for lymphoma patients. He will also discuss new agents being tested in clinical trials. This session will provide important information for the practicing hematologist/oncologist that can be readily applied to the care of patients. In addition, the session will provide information relevant to translational research scientists who are investigating new ways of targeting these pathways in lymphoma.

“ASH presents a wonderful meeting. The educational sessions, satellite symposia, and plenary sessions are consistently excellent. It is always an honor to attend the ASH meeting.”
- past attendee
Issues of Toxicity in Allogeneic Bone Marrow Transplantation

**Chair:**
Mohamad Mohty, MD, PhD, CHU de Nantes, Nantes, France

**Speakers:**
Mohamed L. Sorror, MD, MSc, University of Washington, Fred Hutchinson Cancer Research Center, Seattle, WA
*Predicting Toxicity Based on Patient Comorbidities*

Mohamad Mohty, MD, PhD, CHU de Nantes, Nantes, France
*Long-Term Physiological Side Effects After Allo-BMT*

Margaret F. Bevans, RN, PhD, National Institutes of Health, Bethesda, MD
*Quality of Life and Psychosocial Issues With Allogeneic BMT*

Several types of late sequelae from allogeneic bone marrow or hematopoietic stem cell transplantation (allo-BMT) have been noted, and awareness of these complications is important in minimizing late morbidity and mortality. This session will review different aspects related to the role of comorbidities in predicting toxicity after allo-BMT and features of long-term side effects, with a particular emphasis on quality-of-life and psychosocial issues. Dr. Mohamed Sorror will briefly review the initial steps of adopting systematic assessment of pre-BMT comorbidities in academic research and clinical practice, touching on the summation of multiple comorbidities into a single risk factor. He will then describe the vital role of comorbidities in predicting regimen-related morbidity and mortality after different settings of allogeneic and autologous BMT and across different institutions. Future incorporation of comorbidities and other traditional prognostic factors in redefining risk-benefit assessment for late BMT sequels will be discussed. Dr. Mohamad Mohty will review late effects after allo-BMT, a heterogeneous group of complications that can include toxicities from the preparative regimen that may cause organ damage with permanent sequel, infections from immunodeficiency, endocrine disturbances, secondary malignancies, and chronic graft-versus-host disease with its corollary of altered immune reconstitution. Dr. Margaret Bevans will describe common dimensions of health-related quality-of-life and psychosocial outcomes across the trajectory of allo-BMT. She will discuss key considerations when interpreting these findings and highlight the recipient and caregiver outcomes that are most amenable to clinical intervention. Gaps in the evidence will be briefly reviewed, and opportunities for future research will be identified.

Pediatric Malignancies

**Chair:**
Stella M. Davies, MBBS, PhD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

**Speakers:**
Mignon L. Loh, MD, University of California - San Francisco, San Francisco, CA
*Pediatric Myeloproliferative Disorders*

Meinolf Suttorp, MD, Universitätsklinikum Carl Gustav Carus, Dresden, Germany
*Treatment of Pediatric CML in 2010: Use of TKIs and BMT*

Stella M. Davies, MBBS, PhD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
*Pediatric Regimens for ALL*

Chemotherapy and transplantation are important modalities in the treatment and cure of pediatric hematologic malignancies. The appropriate selection of transplant- or non-transplant-based therapies for treatment depends on careful knowledge of the biology of the disorder and of expected outcomes of each therapy. In this session Dr. Mignon Loh will describe new developments in the biology of myeloproliferative disorders in children, with a particular focus on familial susceptibility. Dr. Meinolf Suttorp will then explore the applicability of transplantation in children with chronic myelogenous leukemia in the era of ever-improving tyrosine kinase inhibitors. Finally, Dr. Stella Davies will discuss the question of whether there is still a role for transplantation in children with acute lymphoblastic leukemia, as outcomes of chemotherapy improve and our understanding of biology and prognosis progresses.
**Chronic Lymphocytic Leukemia**

**Chair:**
Richard R. Furman, MD, Weill Medical College of Cornell University, New York, NY

**Speakers:**
Mark C. Lanasa, MD, PhD, Duke University Medical Center, Durham, NC
New Insights Into the Biology of CLL
Alessandra Ferrajoli, MD, The University of Texas M. D. Anderson Cancer Center Houston, TX
Treatment of Younger Patients With CLL
Richard R. Furman, MD, Weill Medical College of Cornell University, New York, NY
Prognostic Markers and Stratification of CLL

This session will focus on recent advances in chronic lymphocytic leukemia (CLL), including the biology of CLL, special considerations for the treatment of younger patients with CLL, and the application of prognostic markers to the clinical care of patients with CLL. Dr. Mark Lanasa will broadly review some of the recent advances in the understanding of the biology of CLL. The goal of this review is to provide a model of disease pathogenesis that integrates inherited, acquired, environmental, and immunologic factors. Topics to be covered will include: the contribution of genetic factors in CLL pathogenesis, the central role of the B-cell receptor and B-cell receptor signaling in CLL, and how interactions between CLL cells and the tumor microenvironment promote CLL cell survival and chemo-resistance. Dr. Alessandra Ferrajoli will discuss the issues that make the treatment of younger patients with CLL unique. She will focus on differences in the biology of their disease and the goals of therapy. Dr. Ferrajoli will then discuss treatment options, including allogeneic stem cell transplantation, and factors to consider in treatment planning. Dr. Richard Furman will briefly review the classic and novel prognostic markers and the biological basis for these prognostic markers. The talk will then focus on how these prognostic markers should be used to guide therapy for patients with CLL.

**Clinical Advances in Hodgkin Lymphoma**

**Chair:**
Nancy Bartlett, MD, Washington University School of Medicine, St. Louis, MO

**Speakers:**
Peter Borchmann, PhD, MD, University of Cologne, Cologne, Germany
The Past: What We Have Learned in the Last Decade
Nancy Bartlett, MD, Washington University School of Medicine, St. Louis, MO
The Present: Optimizing Therapy - Too Much or Too Little?
Kristie A. Blum, MD, The Ohio State University, Columbus, OH
The Future: Upcoming Diagnostic and Therapeutic Developments

Despite the overall favorable prognosis of Hodgkin lymphoma, efforts to improve therapy for high-risk patients and to decrease long-term toxicity for low-risk patients continue. New methods of risk stratification, including FDG-PET and molecular profiling, as well as new therapies with non-overlapping toxicity profiles, have made these goals a reality. Dr. Peter Borchmann will describe the results of several key randomized trials for Hodgkin lymphoma that have been published in the last decade. Large trials comparing standard therapies with more aggressive regimens for patients with an unfavorable prognosis and less intense treatments for patients with a favorable prognosis have shaped our current approaches to Hodgkin lymphoma. Dr. Nancy Bartlett will discuss practical approaches to choosing therapy for patients with Hodgkin lymphoma based on current available data, including how to utilize FDG-PET to guide therapy. Ongoing clinical trials aimed at optimizing therapy with the dual goal of maximal efficacy and minimal toxicity will also be summarized. Dr. Kristie Blum will summarize the encouraging preliminary results of several phase I and II trials of new agents for Hodgkin lymphoma, including second generation anti-CD30 antibodies, the CD30 targeted antibody drug conjugate brentuximab vedotin, lenalidomide, and MTOR and HDAC inhibitors. Ongoing efforts to incorporate these agents into earlier lines of therapy, either as single agents or in combination, will be described.
Clinical Impact of Targeted Therapies in Myeloproliferative Neoplasms

CHAIR:
Ruben A. Mesa, MD, Mayo Clinic, Scottsdale, AZ

SPEAKERS:
Jerald Radich, MD, Fred Hutchinson Cancer Research Center, Seattle, WA
CML 2010: Where Are We Now and Where Can We Go?
Claire N. Harrison, DM, Guy’s and St. Thomas NHS Foundation Trust, London, United Kingdom
ET/PV: Rethinking Disease Definitions and Therapeutic Strategies
Ruben A. Mesa, MD, Mayo Clinic, Scottsdale, AZ
Assessing New Therapies and Their Overall Impact in Myelofibrosis

A half-century has passed since the discovery of the Philadelphia chromosome in chronic myeloid leukemia (CML), and we are now five years after the discovery of JAK2 V617F in Philadelphia chromosome-negative myeloproliferative neoplasms (MPNs). What impact are those seminal discoveries having on the care of MPN patients in 2010? In CML, the BCR-ABL tyrosine kinase inhibitors led to hematologic and molecular response in most patients. In contrast, we are still in early phases of targeted therapy with BCR-ABL-negative MPNs (essential thrombocythemia [ET], polycythemia vera [PV], and myelofibrosis [MF]). Initial results with JAK2 inhibitors suggest some clinical benefits, but responses are incomplete. The parallel therapeutic developments in these two related groups of disorders highlight the opportunities and challenges of targeted therapies for hematologic neoplasms. Dr. Jerald Radich will discuss the optimization of tyrosine kinase inhibition in chronic-phase CML, what we should do for patients who need second-line therapy, and lastly, what the unanswered questions are in CML in 2010? In CML, the BCR-ABL tyrosine kinase inhibitors led to hematologic and molecular response in most patients. In contrast, we are still in early phases of targeted therapy with BCR-ABL-negative MPNs (essential thrombocythemia [ET], polycythemia vera [PV], and myelofibrosis [MF]). Initial results with JAK2 inhibitors suggest some clinical benefits, but responses are incomplete. The parallel therapeutic developments in these two related groups of disorders highlight the opportunities and challenges of targeted therapies for hematologic neoplasms. Dr. Jerald Radich will discuss the optimization of tyrosine kinase inhibition in chronic-phase CML, what we should do for patients who need second-line therapy, and lastly, what the unanswered questions are in CML in 2010? Dr. Claire Harrison will discuss the impact of molecular markers upon the current classification of ET and PV, the indications for cytoreduction, the potential role of interferon as a disease-modifying therapy, and what impact JAK2 inhibitors are currently having in these disorders. Dr. Ruben Mesa will discuss the modern assessment of prognosis in MF, the indications for allogeneic stem cell transplant and whether the JAK2 inhibitors affect this decision, and the impact of investigative therapies and how we can achieve complete remission in MF.

Understanding and Managing Ultra High-Risk Hematologic Malignancies

CHAIR:
Elihu H. Estey, MD, University of Washington, Fred Hutchinson Cancer Research Center, Seattle, WA

SPEAKERS:
Hervé Avet-Loiseau, MD, PhD, University Hospital of Nantes, Nantes, France
Ultra High-Risk Multiple Myeloma
Stephan Stilgenbauer, MD, University of Ulm, Ulm, Germany
Ultra High-Risk CLL
Elihu H. Estey, MD, University of Washington, Fred Hutchinson Cancer Research Center, Seattle, WA
High Cytogenetic/Molecular Genetic Risk AML

Dr. Hervé Avet-Loiseau will discuss identification of the 15-20 percent of myeloma patients who can be classified as ultra high-risk, based for example on high b2-microglobulin, renal insufficiency, proliferative disease, specific chromosomal changes such as t(4;14) and del(17p), and genomic aberrations. He will review recent data suggesting that specific management may at least improve progression-free survival. Dr. Stephan Stilgenbauer will review current data on molecular mechanisms underlying refractory chronic lymphocytic leukemia (CLL). He will discuss how to use our understanding of the biology of refractory CLL (e.g., with p53 defects) to develop targeted treatment options. Dr. Stilgenbauer will also address the practical problem of defining “ultra high-risk CLL” clinically, for example, based on response to therapy (including minimal residual disease) in the era of modern CLL treatment, including chemoimmunotherapy (e.g., FCR). Lastly, he will review practical aspects of management of these patients, focusing on novel biological agents and stem cell transplantation. Dr. Elihu Estey will discuss how cytogenetics (particularly the new category “monosomal karyotype”) and, with increasing frequency, various molecular genetic (e.g., FLT3, NPM1, CEBPA, WT1, miR-181a) or epigenetic markers interact with age to define ultra high-risk acute myelogenous leukemia. After reviewing the current role of allogeneic hematopoietic cell transplant (HCT) in ultra high-risk patients, he will discuss newer therapies that may modulate these markers, particularly when combined with chemotherapy or used to prevent relapse after HCT.
Parenteral Iron Therapy – Taking the Rust Off

**CHAIR:**
John W. Adamson, MD, University of California - San Diego, San Diego, CA

**SPEAKERS:**
Michael Auerbach, MD, Auerbach Hem-Onc. Associates, Inc., Baltimore, MD
*Preparations and Safety*

David H. Henry, MD, Pennsylvania Hospital, Philadelphia, PA
*Use in Cancer-Associated Anemia*

Jeffrey Carson, MD, University of Medicine and Dentistry of New Jersey's Robert Wood Johnson Medical School, Piscataway, NJ
*Role in Heart Failure*

Several new parenteral iron preparations have become available in the United States and Europe over the past few years, and others are being studied in clinical trials. This has provided clinicians with multiple options for treating iron deficiency or other disorders in which parenteral iron has been shown to be of benefit – including potential new indications that draw on properties of iron not yet fully understood. These developments have led to questions about the relative safety of the available products, how iron might best be used in combination with erythropoiesis-stimulating agents (ESAs) to possibly ameliorate the risks of ESA treatment, and novel clinical settings in which the effect of iron goes beyond hemoglobin production. This session will provide an update on available iron products and their application for both recognized and novel clinical indications. Dr. Michael Auerbach will discuss the formulations of the available iron products, their safety profiles, evolving patterns of their clinical use, and other products that are under development. Dr. David Henry will discuss the use of parenteral iron products in combination with ESAs and how this might affect the risk/benefit profile in patients with chemotherapy-induced anemia. Dr. Jeffrey Carson will discuss the recent use of parenteral iron in patients with iron deficiency and congestive heart failure and the possible broader applications of parenteral iron treatment.

Marrow Responses to Aging and Inflammation

**CHAIR:**
Nancy Berliner, MD, Brigham and Women’s Hospital, Boston, MA

**SPEAKERS:**
Cindy N. Roy, PhD, The Johns Hopkins School of Medicine, Baltimore, MD
*Anemia of Inflammation*

Nancy Berliner, MD, Brigham and Women’s Hospital, Boston, MA
*Anemia of Aging*

Eileen P. Smith, MD, City of Hope National Medical Center, Duarte, CA
*Hematologic Disorders After Solid Organ Transplantation*

This session will focus on new insights into the pathogenesis of hematologic abnormalities associated with aging and inflammation. Special emphasis will be placed on advances in our understanding of iron metabolism and its relationship to anemia in the settings of inflammatory disease and aging, as well as the impact of both inflammatory and non-inflammatory complications of organ transplantation on hematologic outcomes. Dr. Cindy Roy will review the role of hepcidin in the pathogenesis of the anemia of inflammation. Hepcidin is a peptide hormone produced by the liver that regulates iron absorption and utilization by restricting iron egress from enterocytes, macrophages, and hepatocytes. She will discuss how hepcidin is regulated in response to numerous physiologic factors, especially inflammation, and how this peptide is transforming our understanding of the anemia of inflammation. Dr. Nancy Berliner will review the epidemiologic features of anemia in the elderly. There is considerable evidence that aging is associated with increased pro-inflammatory cytokine expression and that genetic variation in the expression of these pro-inflammatory cytokines may influence many aspects of the aging process. The potential role of these pathways in unexplained anemia in the elderly will be discussed. Dr. Eileen Smith will discuss hematologic disorders that arise as a consequence of solid organ transplantation. Although there are a myriad of hematologic abnormalities and complications that can occur in the transplant setting, she will concentrate on the unique issues influencing anemia and other cytopenias, as well as some of the more common coagulation disorders that may complicate solid organ transplantation.
Consultative Hematology: Hemostasis and Thrombosis

**CHAIR:**
Agnes Y. Lee, MD, MSc, University of British Columbia, Vancouver, BC, Canada

**SPEAKERS:**
Andreas Greinacher, MD, Institute for Immunology & Transfusion, Greifswald, Germany

**Thrombocytopenia in the ICU**
Agnes Y. Lee, MD, MSc, University of British Columbia, Vancouver, BC, Canada

**Use of Factor VIIa**
Lawrence Goodnough, MD, Stanford University School of Medicine, Palo Alto, CA

This session will focus on three common challenges faced by the consultant hematologist: thrombocytopenia in the intensive care unit, thrombosis in cancer patients, and the use of factor VIIa. Practical and evidence-based approaches will be presented to highlight new evidence and controversies. Thrombocytopenia occurs in 35-45 percent of patients admitted to the intensive care unit, and the patient’s platelet count correlates inversely with the risk of adverse outcomes. The etiology ranges from sepsis, massive hemorrhage and transfusion, thrombotic thrombocytopenic purpura, and heparin-induced thrombocytopenia.

Dr. Andreas Greinacher will provide a framework – based on the dynamic changes in the platelet count – to address the major diagnostic and therapeutic challenges the hematology consultant faces in these patients. Venous thrombosis is associated with morbidity and increased mortality in patients with cancer. Recent research has focused on development of risk-assessment models to identify patients who may benefit from primary prophylaxis, treatment of recurrent thrombosis, and potential antineoplastic effects of anticoagulants. Dr. Agnes Lee will provide an update of the evidence and apply it to everyday clinical challenges. Recombinant factor VIIa (rFVIIa) is FDA-approved for use in the setting of hemorrhage associated with factor VIII or factor IX inhibitors in patients with congenital or acquired hemophilia. Prominent off-label indications include the management of patients experiencing massive and uncontrolled hemorrhage, non-traumatic intracranial hemorrhage, cardiothoracic surgery, organ transplantation, and general surgery. Dr. Lawrence Goodnough will review existing patterns of off-label rFVIIa use and address the evidence regarding the efficacy and safety of this important, but controversial, hemostatic agent.

Consultative Hematology: The Pregnant Patient

**CHAIR:**
Marc A. Rodger, MD, The Ottawa Hospital Research Institute, Ottawa, ON, Canada

**SPEAKERS:**
Marc A. Rodger, MD, The Ottawa Hospital Research Institute, Ottawa, ON, Canada

**Venous Thromboembolism**
Shannon M. Bates, MD, MSc, McMaster University, Hamilton, ON, Canada

**Recurrent Pregnancy Loss**
Gideon Koren, MD, University of Toronto, Toronto, ON, Canada

**Pregnancy and Commonly Used “Hematologic Drugs”**
Marc A. Rodger, MD, The Ottawa Hospital Research Institute, Ottawa, ON, Canada

This session will focus on recent advances in the area of consultative hematology of the pregnant patient. The level of consultative complexity is increased in pregnancy by evolving physiologic changes in expectant mothers, the effects of diagnostic and therapeutic management on the unborn child, and, often, a lack of validated management strategies in pregnancy. Dr. Marc Rodger will review developments in the pathophysiology, diagnosis, and treatment of venous thromboembolism (VTE) in pregnancy. He will highlight the poverty of research upon which to base clinical recommendations for this common problem in pregnancy, yet offer practical approaches to prevention, diagnosis, and therapeutic management of pregnancy-associated VTE. Dr. Shannon Bates will review the hematologist’s role in the etiologic and therapeutic management of pregnancy loss. She will delve into the controversial association between acquired and inherited thrombophilias and pregnancy loss. She will also review the evidence supporting or refuting the role of antithrombotics in the prevention of pregnancy loss. Dr. Gideon Koren will describe how the safety of medication used in pregnancy is assessed, reported, and used in clinical practice. He will specifically review commonly used hematologic medications and diagnostic and therapeutic radiation in women of childbearing potential and in pregnancy. He will focus on common hematologic scenarios in pregnancy and common medications used in these scenarios (e.g., antithrombotics, corticosteroids, hydroxyurea, analgesics, and antibiotics). He will touch on high-stakes, but thankfully rarely used, medications in pregnancy (e.g., chemotherapy, tyrosine kinase inhibitors).

“The ASH annual meeting is not just fine, it is exemplary. I have scarcely missed a meeting since 1963 and they just seem to maintain a high level of excellence. [...] I personally feel a debt of gratitude to the program organizers, the chairs, and the speakers for all the attention they pay to making this such a worthwhile conference.”

- past attendee
Sickle Cell

**CHAIR:**
Wally R. Smith, MD, Virginia Commonwealth University, Richmond, VA

**SPEAKERS:**
Nigel S. Key, MBChB, University of North Carolina, Chapel Hill, NC
Wally R. Smith, MD, Virginia Commonwealth University, Richmond, VA
Z. Jim Wang, PhD, University of Illinois at Chicago, Chicago, IL

**Topics:**
- Sickle Trait: Novel Clinical Significance
- Sickle Cell Pain: Current Therapy
- Novel Mechanisms of Sickle Cell Pain

This session will focus on recent advances in our understanding of the clinical manifestations of sickle cell trait and sickle cell disease, with a particular emphasis on new understandings of the significance of sickle cell trait and new clinical and basic science revelations about pain in sickle cell disease. Dr. Nigel Key will review the clinical and public health implications of complications of sickle cell trait prompted by a new assessment of these risks. Dr. Wally Smith will review important new epidemiologic data on the most important symptom of sickle cell disease, pain, taken from his and others’ studies, and discuss their implications for research, clinical care, and public health and public policy. Dr. Jim Wang will describe novel research showing mechanisms of pain that have not previously been seen as applicable to sickle cell patients, but which may be applicable.

Thalassemia

**CHAIR:**
Ellis J. Neufeld, MD, PhD, Children’s Hospital, Boston, MA

**SPEAKERS:**
Ellis J. Neufeld, MD, PhD, Children’s Hospital, Boston, MA
Emanuele Angelucci, MD, Ospedale Oncologico “Armando Businco,” Cagliari, Italy
Punam Malik, MD, Cincinnati Children’s Hospital, Cincinnati, OH

**Topics:**
- Iron Chelators
- Transplantation
- Gene Therapy

This session will focus on recent advances in clinical and experimental therapies in thalassemia. Details on current and future curative therapies, including hematopoietic stem cell transplant (HSCT) and gene therapy, will be featured, along with an update on iron chelation. Dr. Ellis Neufeld will provide an update on current use of the iron chelators deferoxamine, deferasirox, and deferiprone. Although several recent clinical trials further elucidate the potential strengths of these drugs, there remain major challenges to understanding optimal chelator usage. Iron-related end-organ damage and cardiac mortality remain major problems. Inadequate response to deferasirox is a common problem with a possible biological basis. After a brief review of the history of HSCT in thalassemia, Dr. Emanuele Angelucci will critically review recent results obtained by several groups worldwide, using both experimental approaches and current standard care models. Different preparative regimen strategies and outcomes will be described for the several different categories of eligible patients. Information derived from the HSCT experience will inform future gene therapy approaches. Finally, the role of HSCT in the era of oral chelators will be discussed with particular attention to different countries’ thalassemia epidemiology and resource availability. Dr. Punam Malik will review the development of additive genetic therapy approaches using lentivirus vectors, the research developments in laboratories that are close to translating the research into the clinic, the currently open clinical trial, and alternative approaches to achieving genetic correction, including homologous recombination with reprogramming to iPS cells and back.

Aplastic Anemia

**CHAIR:**
Neal S. Young, MD, National Institutes of Health, Bethesda, MD

**SPEAKERS:**
Neal S. Young, MD, National Institutes of Health, Bethesda, MD
Jakob R. Passweg, MD, MS, Hopitaux Universitaire de Genève, Geneva, Switzerland
Mary M. Horowitz, MD, MS, Center for International Blood and Marrow Transplant Research, Medical College of Wisconsin, Milwaukee, WI

**Topics:**
- Etiology
- Immunosuppression Versus Transplant
- Transplantation With Alternative Donors

Current concepts of pathophysiology and results of definitive therapies for aplastic anemia will be reviewed. For mechanisms, emphasis will be on the role of genetic defects in telomere maintenance and repair and the relationship of telomere attrition to immune-mediated hematopoietic cell destruction and to late clonal evolution. For treatments, recent results of clinical trials and retrospective series for various immunosuppressive regimens will be compared, as well as prognostic indicators related to outcomes. The current state of alternative donor sources for transplantation to cure aplastic anemia, with their promises and problems, will be critically assessed. Speakers will speculate on future directions in aplastic anemia research in the laboratory and clinic.
Issues in Thrombosis Management and Anticoagulation

**Chair:**
Kenneth A. Bauer, MD, Beth Israel Deaconess Medical Center, Boston, MA

**Speakers:**
Jack Ansell, MD, Lenox Hill Hospital, New York, NY
Warfarin Versus New Agents: Interpreting the Data
Susan Kahn, MD, MSc, Jewish General Hospital, Montreal, QC, Canada
Post-Thrombotic Syndrome
Kenneth A. Bauer, MD, Beth Israel Deaconess Medical Center, Boston, MA

**Duration of Anticoagulation**
The approval of new oral anticoagulants that do not require laboratory monitoring will open a new era in the prevention and treatment of venous thromboembolism (VTE) and stroke prevention in atrial fibrillation. Challenges will occur when recurrences or major bleeds occur on the new agents. The post-thrombotic syndrome (PTS) is a common, chronic, burdensome, and costly complication of deep-vein thrombosis (DVT). There remains a continuing controversy regarding the need for long-term anticoagulation for patients with a first episode of unprovoked VTE. Dr. Jack Ansell will provide an update on the most recent results of phase III studies with new oral anticoagulants. Their significance and potential impact compared with standard warfarin therapy will be discussed along with how these new agents will affect the everyday life of physicians and patients. Dr. Susan Kahn will discuss the relationship between DVT and PTS, highlighting recent work on its epidemiology, classification, prevention, and management. Ongoing trials and areas for future research will also be discussed. Dr. Kenneth Bauer will present data regarding the recurrence risk in patients with a first episode of VTE and the benefits/risks of long-term warfarin therapy. Data regarding the use of the laboratory to risk-stratify patients with respect to recurrence will be discussed along with the impact of residual thrombus on imaging studies or having a non-removable inferior vena cava filter.

Hemophilia

**Chair:**
Claire S. Philipp, MD, University of Medicine and Dentistry of New Jersey’s Robert Wood Johnson Medical School, New Brunswick, NJ

**Speakers:**
Claire S. Philipp, MD, University of Medicine and Dentistry of New Jersey’s Robert Wood Johnson Medical School, New Brunswick, NJ
Aging Hemophilia
Steven W. Pipe, MD, University of Michigan, Ann Arbor, MI
New Protein Therapeutics
Robert R. Montgomery, MD, Blood Research Institute, Medical College of Wisconsin, Milwaukee, WI
Gene Therapy

Advances in coagulation protein replacement therapy for people with congenital hemophilia A and B have led to progressive reductions in morbidity and increases in life expectancy. Recombinant and high purity plasma-derived factor products are currently safe and effective for the management of hemophilia. Modification of recombinant factors with enhanced biologic properties are being explored and show promise to improve hemophilia treatment. Gene therapy strategies to safely modify the hemophilia phenotype are in investigation and remain a long-term goal for clinical application. This session will focus on complications and comorbidities in the aging hemophilia patient, advances in coagulation protein therapies, and targeted gene therapy for hemophilia A and B. Dr. Claire Philipp will describe the changing demographics of hemophilia A and B and the impact of increased life expectancy on hemophilia-related complications and age-associated comorbidities. Challenges in hemophilia treatment and management of comorbidities in the older adult hemophilia patients will be discussed. Dr. Steven Pipe will provide an overview of new coagulation protein therapeutics bioengineered to increase circulating half-life, reduce immunogenicity, and improve the efficiency of biosynthesis, as well as other novel areas of investigation examining alternative therapeutic agents. Dr. Robert Montgomery will discuss recent data on targeted gene therapy of hemophilia A and B. Initial strategies focusing on the restoration of plasma factor VIII and factor IX and novel approaches targeting expression of factor VIII and factor IX in megakaryocytes and endothelial cells will be discussed. Studies in hemophilia mice demonstrating differences in clinical efficacy will be presented.
Platelet Disorders

**CHAIR:**
Douglas B. Cines, MD, Hospital of the University of Pennsylvania, Philadelphia, PA

**SPEAKERS:**
Douglas B. Cines, MD, Hospital of the University of Pennsylvania, Philadelphia, PA  
Keith R. McCrae, MD, Case Western Reserve University, Cleveland, OH  
ITP

**Platelets in Pregnancy – Numbers and Function**
Lawrence F. Brass, MD, PhD, University of Pennsylvania, Philadelphia, PA

**Platelet Function Disorders**
This session will focus on recent advances in the pathophysiology, assessment, and management of common disorders of platelet numbers and function, including immune thrombocytopenic purpura (ITP), thrombocytopenia during pregnancy, and qualitative platelet disorders. Dr. Douglas Cines will review recent developments in ITP, including changes in nomenclature and demographics, diversity in pathogenesis (including the role of infection, T-cells, and inhibition of platelet production), and recommendations from the International Consensus Report on diagnosis. He will review attempts to alter the natural history of ITP with new approaches to initial therapy, revisit splenectomy, and provide an update on the results of trials evaluating thrombopoietin receptor agonists. Dr. Keith McCrae will review the differential diagnosis of thrombocytopenia in pregnancy, including gestational thrombocytopenia, ITP, preeclampsia, HELLP syndrome, thrombotic microangiopathies, and less common disorders with a focus on recent developments in the pathogenesis of preeclampsia. Dr. Lawrence Brass will describe emerging ideas about platelet activation and thrombus formation at sites of vascular injury and disease. Focus will be on molecules on the platelet surface (some well known, others newly described) that regulate thrombus growth and stability. New ideas about the impact of antiplatelet agents will be discussed, as will congenital defects in platelet function and the evaluation of platelet function in the clinical setting.

Transfusion Medicine: Transfusion Support in Trauma – Military and Civilian Approaches

**THIS SESSION IS JOINTLY SPONSORED WITH AABB.**

**CHAIR:**
Thomas G. Deloughery, MD, Oregon Health and Science University, Portland, OR

**SPEAKERS:**
John B. Holcomb, MD, University of Texas Medical School at Houston, Houston, TX  
Transfusion in Polytrauma

Timothy Hannon, MD, MBA, St. Vincent Hospital, Indianapolis, IN  
Avoiding the Collateral Damage of Trauma Resuscitation Protocols

Thomas G. Deloughery, MD, Oregon Health and Science University, Portland, OR  
Transfusion Support for Trauma Services

Traditionally, the approach of the transfusion service in blood support of the massive transfusion trauma patient has been based on blood product selection dictated by laboratory testing. This method has been challenged in recent years by data suggesting that a “fixed-ratio” approach – for example, giving one unit of plasma for every unit of red cells – may result in improved outcomes. This session will attempt to summarize the latest thinking on transfusion support for trauma patients and provide guidance to hematologists who are assisting their institutions in starting/improving massive transfusion protocols. Dr. John Holcomb will review both military and trauma data and give evidence to support a more aggressive approach to plasma and platelet therapy in blood resuscitation of trauma patients. Dr. Timothy Hannon will supply evidence for a more cautious approach to transfusion therapy and review complications of transfusion such as transfusion-related lung injury and immune modulation. Dr. Thomas Deloughery will discuss the importance of every institution – large or small – having massive transfusion protocols, and how to provide laboratory and transfusion services to support the trauma patient.
Grant Writing for Junior Faculty

THIS SESSION IS ONLY OFFERED ONCE.

CHAIR:
David A. Williams, MD, Children’s Hospital Boston, Boston, MA

SPEAKERS:
David A. Williams, MD, Children’s Hospital Boston, Boston, MA
Grant Writing: General Programmatic Grants
Stephanie J. Lee, MD, MPH, Fred Hutchinson Cancer Research Center, Seattle, WA
Grant Writing: Clinical Applications
Jeffrey J. Molldrem, MD, The University of Texas M. D. Anderson Cancer Center, Houston, TX
Grant Writing: Basic/Translational Applications

This program will feature expert faculty presentations concerning optimal approaches to successful preparation of clinical, individual basic/translational research grants, and programmatic grants. The faculty will present short talks outlining their own successes in previous applications and noting the "new" National Institutes of Health format for grant applications. Representatives of the National Institutes of Health will be available to answer questions. Ample time for questions and answers will be provided.

Junior-Faculty Development: The Economics of Academic Hematology

THIS SESSION IS ONLY OFFERED ONCE.

CHAIR:
Navneet S. Majhail, MD, MS, University of Minnesota, Minneapolis, MN

SPEAKERS:
Ellis J. Neufeld, MD, PhD, Children’s Hospital, Boston, MA
The Costs and Benefits of Your Grant to Your Institution

Stephen Hunger, MD, University of Colorado College of Medicine, Aurora, CO
Show Me the Money: Negotiating Your Salary and Benefits

Robert F. Todd III, MD, PhD, Baylor College of Medicine, Houston, TX
Justifying Your Existence: It’s More Than Your Salary

In addition to excellence in clinical, research, and teaching pursuits, a good understanding of the economic aspect of academic medicine is necessary for personal satisfaction and a successful career in academic hematology. Dr. Ellis Neufeld will provide his perspective on the costs and benefits of grants to a grantee’s institution. He will review the streams of expenses and revenues associated with grants and the direct and indirect cost components of a grant budget. Dr. Stephen Hunger will review components of a start-up and compensation package for junior faculty hires and will discuss strategies to negotiate salary, benefits, and effort. Dr. Robert Todd will review various revenue streams for generating and maintaining salary support and will discuss other service and leadership roles that faculty may pursue to support their academic mission.
Scientific Program

Blood Disorders in Childhood

TURNING GENETIC DISCOVERIES INTO THERAPY

CHAIR:
Lillian Sung, MD, Hospital for Sick Children, Toronto, ON, Canada

SPEAKERS:
David T. Teachey, MD, Children's Hospital of Philadelphia and the University of Pennsylvania School of Medicine, Philadelphia, PA
Using the Genetics of the Autoimmune Lymphoproliferative Syndrome to Guide Therapy
Ronald W. Stam, PhD, Erasmus Medical Center - Sophia's Children's Hospital, Rotterdam, Netherlands
Mixed Lineage Leukemia Gene Rearrangements - Epigenetic Diseases Require Epigenetic Treatments
David Lillicrap, MD, Queen’s University, Kingston, ON, Canada
Genetic Characterization of Hemophilia and Implications for Novel Therapies

Hematology of Aging

THE BIOLOGY OF LONGEVITY

CHAIR:
Andrew Artz, MD, MS, University of Chicago Hospital, Chicago, IL

SPEAKERS:
Nir Barzilai, MD, Albert Einstein College of Medicine, New York, NY
Genetics and Epigenetics of Aging
Rafael de Cabo, PhD, National Institute on Aging, National Institutes of Health, Baltimore, MD
Calorie Restriction and Aging
David Sinclair, PhD, Harvard Medical School, Boston, MA
Sirtuins and Aging

The 2010 Scientific Committee Sessions will be held Saturday, December 4, and Sunday, December 5. Each session will be offered twice. Invited abstracts of these sessions will be published in the Program Book and the abstract issue of Blood (the Abstract Book). In addition, this information will be provided online through the ASH website in early November.
Hematopathology and Clinical Laboratory Hematology

GENOME-WIDE ASSOCIATION STUDIES IN HEMATOLOGY

CHAIR:
Mark D. Fleming, MD, DPhil, Children’s Hospital Boston, Harvard Medical School, Boston, MA

SPEAKERS:
Nicole Soranzo, PhD, Wellcome Trust Sanger Institute, Hinxton, United Kingdom
Genome-Wide Analysis Identifies Regulators of Hematologic Parameters
Mary V. Relling, PharmD, St. Jude Children’s Research Hospital, Memphis, TN
Genomic Variants Associated With Childhood Acute Lymphoblastic Leukemia
Steven M. Carroll, PhD, Massachusetts General Hospital, Boston, MA
Genome Variation and Donor-Recipient Compatibility in Graft-Versus-Host Disease

Hematopoietic Cytokines and Factors

WHO DIRECTS LINEAGE FATE?

CHAIR:
Anthony R. Green, PhD, Cambridge University and Addenbrooke’s Hospital, Cambridge, United Kingdom

SPEAKERS:
Timm Schroeder, PhD, Institute of Stem Cell Research, Helmholtz Zentrum Muenchen - German Research Center for Environmental Health, Munich/Neuherberg, Germany
Cytokines Instruct Hematopoietic Lineage Choice
Pier Paolo Pandolfi, MD, PhD, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA
Role of Pokemon/LRF in Lineage Fate Decisions
Michael H. Sieweke, PhD, Centre d’Immunologie de Marseille Luminy (CIML), Marseille, France
MafB Restricts M-CSF-Instructed Lineage Choice in HSC

Hemoglobin and Red Cell

GENOME-BASED TECHNOLOGY: APPLICATION TO HUMAN DISEASE

CHAIR:
Patrick G. Gallagher, MD, Yale University School of Medicine, New Haven, CT

SPEAKERS:
Eric D. Green, MD, PhD, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD
Genomics in 2010: Fulfilling the Promise of a Sequenced Human Genome
Stuart H. Orkin, MD, Children’s Hospital, Dana-Farber Cancer Institute, Boston, MA
New Strategies to Define Regulators of Fetal Hemoglobin
David Ginsburg, MD, Howard Hughes Medical Institute, University of Michigan Medical School, Ann Arbor, MI
The COPII Pathway and Hematologic Disease

Immunology and Host Defense

GENETIC AND EPIGENETIC REGULATION OF IMMUNE RESPONSES

CHAIR:
Eduardo M. Sotomayor, MD, H. Lee Moffitt Cancer Center and Research Institute at the University of South Florida, Tampa, FL

SPEAKERS:
Laurie H. Glimcher, MD, Harvard Medical School and Harvard School of Public Health, Boston, MA
Genetic Control of Th1/Th2 Cell Fate
Wayne W. Hancock, MD, PhD, The Children’s Hospital of Philadelphia, Philadelphia, PA
Epigenetic Regulation of Regulatory T-Cells: Impact on Autoimmunity and Graft Rejection
Pavan Reddy, MD, University of Michigan, Ann Arbor, MI
Translating Epigenetic Alterations Into Improvements in Patient Care

Hemostasis

THE CONTACT PATHWAY IN HEMOSTASIS, THROMBOSIS, AND INFLAMMATION

CHAIR:
James H. Morrissey, PhD, University of Illinois College of Medicine, Urbana, IL

SPEAKERS:
Thomas Renné, MD, PhD, Karolinska Institute, Stockholm, Sweden
In Vivo Roles for Factor XII
David Gailani, MD, Vanderbilt University School of Medicine, Nashville, TN
New Insights Into Factor XI Function: From Biochemistry to Animal Models
Uri Seligsohn, MD, Sheba Medical Center, Tel Aviv University, Ramat Gan, Israel
Factor XI in Clinical Bleeding and Thrombotic Disorders

Iron and Heme

ORGAN-SPECIFIC IRON LOADING AND TOXICITY

CHAIR:
Thomas Coates, Children’s Hospital Los Angeles, Los Angeles, CA

SPEAKERS:
Gregory M. Vercellotti, MD, University of Minnesota, Minneapolis, MN
Heme and the Vasculature: How the Endothelium Protects Itself Against Toxic Iron
Karl A. Nath, MBChB, Mayo Clinic College of Medicine, Rochester, MN
Iron Toxicity in the Kidney and Pancreas
Tracey Rouault, MD, National Institute of Child Health and Development, National Institutes of Health, Bethesda, MD
Brain Iron Metabolism and Toxicity
Scientific Program

Lymphoid Neoplasia

EPIGENETIC REGULATION IN LYMPHOID MALIGNANCIES

CHAIR:
Wyndham H. Wilson, MD, PhD, National Cancer Institute, National Institutes of Health, Bethesda, MD

SPEAKERS:
Stephen B. Baylin, MD, The Johns Hopkins University, Baltimore, MD
The Epigenetic Regulation of Gene Expression
Kapil N. Bhatia, MD, Medical College of Georgia, Augusta, GA
Epigenetic Dysregulation in Lymphoid Malignancies
Susan Bates, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD
Epigenetic Modulation and Therapy of Lymphoid Malignancies

Myeloid Neoplasia

MOLECULAR PATHOGENESIS AND TARGETED THERAPY IN MYELOPROLIFERATIVE NEOPLASIA

CHAIR:
Ayalew Tefferi, MD, Mayo Clinic Graduate School of Medicine, Rochester, MN

SPEAKERS:
William Vainchenker, MD, PhD, Institut Gustave Roussy, Villejuif, France
Novel Mutations: Dissecting Pathogenetic Contribution
Richard A. Van Etten, MD, PhD, Tufts Medical Center, Lexington, MA
Mouse Models of Myeloproliferative Disease and Their Use in Preclinical Drug Testing
Ayalew Tefferi, MD, Mayo Clinic Graduate School of Medicine, Rochester, MN
JAK2 Inhibitor Therapy and Mechanisms of Response

Platelets

SYSTEMS BIOLOGY OF PLATELETS

CHAIR:
Leslie V. Parise, PhD, University of North Carolina, Chapel Hill, NC

SPEAKERS:
Willem Hendrik Ouwehand, MD, PhD, University of Cambridge, Cambridge, United Kingdom
Functional Genomics Approaches to Platelet Signaling
Scott L. Diamond, PhD, University of Pennsylvania, Philadelphia, PA
Systems Biology to Predict Platelet Function
Paul F. Bray, MD, Jefferson Medical College, Philadelphia, PA
MicroRNA in Platelet Production and Activation

Myeloid Biology

MicroRNAs AND MYELOID DIFFERENTIATION AND FUNCTION

CHAIR:
Kathleen M. Sakamoto, MD, PhD, University of California – Los Angeles, Los Angeles, CA

SPEAKERS:
Dinesh S. Rao, MD, PhD, University of California – Los Angeles, Los Angeles, CA
MicroRNA Regulators of Immune Cell Function
Curt I. Cive, MD, University of Maryland School of Medicine, Baltimore, MD
MicroRNA Maestros of Hematopoiesis
Judy Lieberman, MD, PhD, Immune Disease Institute, Harvard Medical School, Boston, MA
Targeting MicroRNA for Cancer Therapy

Plasma Cell Biology

THERAPEUTIC TARGETING OF THE MYELOMA STEM CELL

CHAIR:
Raymond Powles, MD, Parkside Oncology Clinic, Wimbledon, United Kingdom

SPEAKERS:
William Matsui, MD, Sidney Kimmel Comprehensive Cancer Center, The Johns Hopkins University School of Medicine, Baltimore, MD
Origin of the Myeloma Stem Cell
Alberto Orfao, MD, PhD, Universidad de Salamanca, Salamanca, Spain
Immunophenotypic Analysis of Myeloma Precursors: Antigens for Therapeutic Targeting
Constantine S. Mitsiades, MD, PhD, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA
How to Overcome Myeloma Stem Cell Resistance to Therapy - Targeting the Stem Cell Niche

Stem Cells

LIFE CYCLE OF THE HEMATOPOIETIC STEM CELL

CHAIR:
Guy Sauvageau, MD, PhD, Institute for Research in Immunology and Cancer and Maisonneuve-Rosemont Hospital, University of Montreal, Montreal, QC, Canada

SPEAKERS:
Hanna Mikkola, MD, PhD, Broad Stem Cell Research Center at University of California – Los Angeles, Los Angeles, CA
Origin of Hematopoietic Stem Cells
Douglas J. Hilton, PhD, Walter and Eliza Hall Institute, Parkville, Victoria, Australia
Regulating Lineage Commitment in Adult Hematopoietic Stem Cells
Norman N. Iscove, MD, PhD, The Ontario Cancer Institute, University Health Network, Toronto, ON, Canada
Stability of Self-Renewal in Hematopoietic Stem Cells
Thrombosis and Vascular Biology

NOVEL ASPECTS OF VASCULAR WALL BIOLOGY

CHAIR:
Paul S. Frenette, MD, Albert Einstein College of Medicine, New York, NY

SPEAKERS:
Didier Stainier, PhD, University of California – San Francisco, San Francisco, CA
Angioblast Behavior in Arterial-Venous Segregation

Nancy A. Speck, PhD, Abramson Family Cancer Research Institute, University of Pennsylvania, Philadelphia, PA
Hemogenic Endothelium

Shahin Rafii, MD, Howard Hughes Medical Institute and Genetic Medicine, Weill Cornell Medical College, New York, NY
Hematopoietic Support by Endothelium

Transfusion Medicine

MAKING BLOOD FROM PROGENITORS EX Vivo

CHAIR:
Kathryn E. Webert, MD, McMaster University, Hamilton, ON, Canada

SPEAKERS:
Anna Rita Migliaccio, PhD, Mount Sinai School of Medicine, New York, NY
Expansion of Red Blood Cells for Transfusion

Mortimer Poncz, MD, The Children’s Hospital of Philadelphia, Philadelphia, PA
Expansion of Platelets for Transfusion

Helen E. Heslop, MD, Center for Cell and Gene Therapy, Baylor College of Medicine, Houston, TX
Expansion of Lymphocytes for Cell-Based Therapeutics

Transplantation Biology

NOVEL CELLULAR THERAPIES

CHAIR:
James L.M. Ferrara, MD, DSc, University of Michigan, Ann Arbor, MI

SPEAKERS:
Nicholas P. Restifo, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD
T-Cell Memory

Catherine M. Bollard, MBChB, MD, Center for Cell and Gene Therapy, Baylor College of Medicine, Houston, TX
Anti-Viral Cytotoxic T-Lymphocyte Therapy

Cameron J. Turtle, MBBS, PhD, Fred Hutchinson Cancer Research Center, Seattle, WA
Chemotherapy-Resistant T Cells

“[The ASH annual meeting is] one of the best scientific meetings I have attended in the past 12 years, across many specialties. Extremely informative...”

-past attendee
Education Spotlight Sessions

For this year’s Education Spotlight Program, ASH will offer six exciting topics. Each 90-minute session will be presented once on either Sunday or Monday, in a small-venue format for approximately 100 ticketed attendees. Speakers will discuss the topic with ample time reserved for audience questions and participation. The talks will facilitate discussions of evidence-based practice, decision making, and controversies in diagnosis and management. The scientific lectures will address the current state of knowledge, translational and clinical applications, and future directions. Audio recordings and slides from the Education Spotlight Sessions will be available on the Complete Annual Meeting DVD (see page 53).

Ticket Prices (per session)
Member: $25
Non-Member in Training: $25
Non-Member: $40

The Education Spotlight Sessions are restricted to medical professionals only; no businesspersons or media will be admitted. Individuals are limited to one ticket per session. Tickets may be purchased during the online registration process.

Attention Trainees!
A number of tickets for the Education Spotlight Sessions will be reserved especially for trainees. Proof of status as a trainee will be required to purchase a ticket at the discounted non-member-in-training rate.

The Cost of Survival in Hematology: A Practical Approach to Pharmaco-Economics for the Hematologist

SUNDAY, DECEMBER 5, 4:30 P.M. – 6:00 P.M.

CO-CHAIRS:
Joseph R. Mikhael, MD, Mayo Clinic Arizona, Scottsdale, AZ
Paul Cornes, MD, Bristol Haematology and Oncology Centre, Bristol, United Kingdom
Kevin R. Imrie, MD, Sunnybrook Health Sciences Centre, Toronto, ON, Canada

The cost of health care is increasing dramatically, most notably the cost of medications. These increases are evident in the practice of hematology, particularly in cancer therapies. Historically physicians have paid little attention to the costs of care, opting to focus on clinical effectiveness in making treatment decisions. However, it has become apparent that costs factor greatly in our practices and are often mandated by governments, insurance companies, HMOs, or others, and that the current rate of growth is unsustainable. It is no longer sufficient to demonstrate that a new drug or therapy is safe and effective to have it available for clinical use—it now must demonstrate “cost effectiveness.” This spotlight session is designed to provide insight into the often complex world of pharmaco-economics for practicing hematologists and help them appreciate its importance in hematology. The intent is to both educate and empower attendees as their involvement in this issue is inevitable in the years to come, especially with escalating drug costs and limited budgets. Drs. Mikhael, Imrie, and Cornes will provide an overview of the field, review major clinical trials in hematology in which health economics has been prominent, and discuss its relevance to clinical practice and research. Unique national perspectives will be given for the United States, Canada, and the United Kingdom.
Prospects in Regenerative Medicine in Hematology

SUNDAY, DECEMBER 5, 4:30 P.M. – 6:00 P.M.

CO-CHAIRS:
Willem E. Fibbe, MD, PhD, Leiden University Medical Center, Leiden, Netherlands
Lee L. Rubin, MD, Harvard Stem Cell Institute, Harvard University, Cambridge, MA

Regenerative medicine is an emerging interdisciplinary field of research, and clinical applications have focused on the repair, replacement, or regeneration of cells, tissues, or organs. It uses a combination of approaches including soluble molecules, gene therapy, stem cell transplantation, tissue engineering, and the reprogramming of cell and tissue types. In this session, two novel approaches will be discussed. Dr. Willem Fibbe will review the biology and potential clinical applications of mesenchymal stromal cells, highlighting their immunomodulatory, reparative, and anti-inflammatory properties. Dr. Lee Rubin will discuss adult cell reprogramming and advances in regulating cell differentiation and specification. In particular, the application of stem cell technology to understanding human disease mechanisms and to finding safer and more effective drugs will be highlighted.

Personalized Medicine for the Practicing Physician

MONDAY, DECEMBER 6, 10:30 A.M. – 12:00 NOON

CO-CHAIRS:
David Ginsburg, MD, Howard Hughes Medical Institute, University of Michigan Medical School, Ann Arbor, MI
David Garcia, MD, University of New Mexico, Albuquerque, NM

This session will address “personalized medicine” with a focus on genetic information. The recent explosion in genomic technologies now permits patients and physicians to routinely obtain testing for panels of a million or more common DNA sequence variations (SNPs). These results may be associated with increased or decreased risk for a number of common diseases (or a variable response to selected medications), which has generally led to many more questions than answers. This rapidly changing landscape will present major challenges for the practicing physician. The presenters will provide an overview of how this technology has developed and what the future might look like from the perspectives of stakeholders such as biotech companies, basic scientists, clinicians, and patients. Using specific examples relevant to hematology, an evidence-based approach to the incorporation of currently available genetic testing into clinical practice will be proposed. Emphasis will be placed on how genetic information fits in with other important “bedside” characteristics in the ultimate management of an individual patient.

Interrupting Anticoagulant or Antiplatelet Therapy: Is Bridging Treatment Needed?

MONDAY, DECEMBER 6, 10:30 A.M. – 12:00 NOON

CO-CHAIRS:
Peter B. Berger, MD, Geisinger Clinic, Danville, PA
David M. Keeling, MD, Oxford Haemophilia and Thrombosis Centre, Oxford, United Kingdom

Patients are usually taking anticoagulants to prevent stroke in atrial fibrillation, stroke or valve thrombosis in patients with mechanical heart valves, or recurrent venous thromboembolism in patients with a previous deep-vein thrombosis or pulmonary embolism. Anticoagulation vitamin K antagonists may need to be temporarily withdrawn so that surgery or an invasive procedure can take place. Whether perioperative full-therapeutic dose heparin (bridging therapy) needs to be given when the international normalized ratio is sub-therapeutic is controversial. This depends on the risk of bleeding due to the nature of the invasive procedure and on the risk of thrombosis off anticoagulation. These risks will be assessed and practical advice given as to how to manage these patients in the perioperative period. Also, many patients require unanticipated invasive procedures in the months after receiving coronary stents. Many require cessation of aspirin, clopidogrel, or both; yet both are required to prevent stent thrombosis. When stent thrombosis occurs, about 40 percent of patients die; the remainder suffer a large myocardial infarction. The risk of delaying surgery, or bleeding if surgery is performed on antiplatelet therapy, must be balanced against the risk of stent thrombosis if surgery is performed and antiplatelet therapy is interrupted. We will review the period of risk after bare and drug-eluting stents and the data regarding bridging therapy. We will also review the risk of bleeding if surgery is performed on antiplatelet therapy and how the risk of post-operative thrombosis can be reduced when surgery does require cessation of antiplatelet therapy.
DNA-Repair Pathways: Cancer Syndromes to Novel Therapies

MONDAY, DECEMBER 6, 2:45 P.M. – 4:15 P.M.

CO-CHAIRS:
Alan D. D’Andrea, MD, Dana-Farber Cancer Institute, Boston, MA
Michael B. Kastan, MD, PhD, St. Jude Children’s Research Hospital, Memphis, TN

Conventional anticancer therapy (chemotherapy and radiation) kills tumor cells by causing DNA damage. Tumors differ in their response to these agents, at least in part, through their variable levels of DNA-repair activity. Human tumor cells have six independent DNA-repair pathways, including base-excision repair (BER), nucleotide-excision repair (NER), homologous recombination (HR), mismatch repair (MMR), non-homologous endjoining (NHEJ), and translesion DNA synthesis (TLS). Here, we will discuss the six major DNA-repair pathways found in human tumors, the relevant inherited cancer syndromes, the available biomarkers for assessing these pathways, and the emerging class of drugs referred to as DNA-repair inhibitors. These inhibitors, including those that target PARP or the ATM protein kinase, block DNA-repair pathways and can enhance the sensitivity of tumor cells to conventional therapy. Dr. Alan D’Andrea will discuss the Fanconi anemia/BRCA pathway and its synthetic lethal relationship with other DNA-repair mechanisms. Pharmacologic modulation of this pathway has led to novel therapies for cancer and for bone marrow failure. Dr. Michael Kastan will review another critical DNA-damage-response pathway, the ATM-p53 pathway. This pathway presents opportunities for development of novel anticancer agents, including potential approaches for both radiosensitization and radiation- or chemo-protection. As with the Fanconi anemia/BRCA pathway, the concept of “synthetic lethality” may also apply to this signaling pathway – thus, targeting these pathways could lead to preferential killing of tumor cells based on the genetic or microenvironmental abnormalities in the tumors.

Ongoing Challenges in Imaging in Lymphoma

MONDAY, DECEMBER 6, 2:45 P.M. – 4:15 P.M.

CO-CHAIRS:
Bruce D. Cheson, MD, Georgetown University Hospital, Lombardi Comprehensive Cancer Center, Washington, DC
Sigrid Stroobants, MD, PhD, Katholieke Universiteit Leuven, Leuven, Belgium

The Role of PET Imaging in Lymphoma

Too Much or Too Little: Follow-Up of Lymphoma and the Risk of CT-Induced Cancers

Despite hundreds of publications, the role of FDG-PET in the management of patients with lymphoma remains to be defined. Because PET is more sensitive and specific than other imaging modalities, it has been proposed to complement or even replace current staging. However, several histologic subtypes are not routinely FDG avid; stage is changed in fewer than 30 percent of patients, with therapy altered in a smaller fraction. Numerous papers suggest that PET scan during or following therapy predicts outcome and can be used to alter treatment. A number of risk-adapted protocols are actively accruing patients in which treatment is altered after one or more cycles of therapy based on PET results to augment treatment in PET-positive patients while limiting therapy in those likely to have a favorable outcome. Until the results of trials are available, routine use of PET imaging during treatment outside the context of a trial cannot be recommended. Finally, PET is often used as surveillance during patient follow-up, with no indication that it identifies relapse earlier than other measures. However, PET is valuable in distinguishing fibrosis from active lymphoma and, thus, has been incorporated into the revised response criteria. It is the technique of choice for restaging curable lymphomas, sparing patients unnecessary expense and radiation. The increasing use of serial PET/CT scans in the management of malignancy scanning is accompanied by substantial radiation dose and associated cancer risk, especially in younger patients. Risk-benefit ratios should be carefully weighed prior to every study, especially when clinical utility is less well established. Furthermore, PET/CT scanning protocols should be optimized to minimize dose while maintaining diagnostic utility.
**Practice Makes Perfect Sessions**

**SATURDAY, DECEMBER 4, 11:15 A.M. – 12:15 P.M.**

This year for the first time, ASH will offer three ticketed sessions geared toward the practicing hematologist. Each session will be presented once on Saturday, in a small-venue format for approximately 25 ticketed attendees. Two speakers will discuss the topic with ample time reserved for questions and participation. A boxed lunch will be provided.

**Ticket Prices (per session)**
- Member: $25
- Non-Member in Training: $25
- Non-Member: $40

The Practice Makes Perfect Sessions are restricted to medical professionals or their office staff only; no businesspersons or media will be admitted. Individuals are limited to one ticket per session. Tickets are limited and only available on site on a first-come, first-served basis. Tickets can be purchased at the Meet-the-Expert counters in the registration area of the Orange County Convention Center beginning Thursday, December 2, during registration hours until all tickets are sold. The room assignment will be indicated on the ticket. Please check your ticket carefully to ensure proper date, time, location, and session choice.

**Attention Trainees!**
A number of tickets for the Practice Makes Perfect Sessions will be reserved especially for trainees. Proof of status as a trainee will be required to purchase a ticket at the discounted non-member-in-training rate.

**Pay for Performance and the Physician Quality Reporting Initiative (PQRI)**

**SPEAKERS:**
- Elaine G. Chottiner, MD, Ann Arbor Hematology Oncology Associates, Ypsilanti, MI
- Steven L. Allen, MD, Monter Cancer Center, Lake Success, NY

**New Models for Payment: Pathways and Insurers**

**SPEAKERS:**
- Thomas Marsland, MD, Orange Park Cancer Center, Orange Park, FL
- Gerald J. Robbins, MD, Florida Cancer Institute, New Port Richey, FL

**Maintenance of Certification: What Is It Like to Go Through the Maintenance of Certification?**

**SPEAKERS:**
- Candido E. Rivera, MD, Mayo Clinic, Jacksonville, FL
- Thomas P. Bradley, MD, North Shore University Hospital, Lake Success, NY
Meet-the-Expert Sessions

SATURDAY, DECEMBER 4, AND SUNDAY, DECEMBER 5
11:15 A.M. – 12:15 P.M.

The Meet-the-Expert sessions are designed to provide an opportunity for a small number of attendees to meet with an expert in a setting that fosters interaction. This year, ASH has invited experts from all over the world to facilitate informal discussions allowing participants to present their questions and gain new perspectives. A boxed lunch will be provided.

Ticket Prices (per session)
Member: $25
Non-Member in Training: $25
Non-Member: $40

The Meet-the-Expert Sessions are restricted to medical professionals only; no businesspersons or media will be admitted. Tickets are limited and only available on site on a first-come, first-served basis. Only one ticket per person is allowed. These tickets can be purchased at the Meet-the-Expert counter in the registration area of the Orange County Convention Center beginning Thursday, December 2, during registration hours until all tickets are sold. The room assignment will be indicated on the ticket. Please check your ticket carefully to ensure proper date, time, location, and session choice.

Attention Trainees!
A number of tickets for the Meet-the-Expert Sessions will be reserved especially for trainees. Proof of status as an Associate member or non-member in training will be required to purchase a ticket. Please show your name badge to the staff at the Meet-the-Expert ticket counter.

Schedule Subject to Change
Please note that the Meet-the-Expert Session schedule included here is not final. Please check the ASH website (www.hematology.org) in late September to view the schedule.

Saturday

John W. Adamson, MD, University of California - San Diego, San Diego, CA
**Erythropoietin Therapy: Minimizing Risk and Maximizing Benefit**

Stephen M. Ansell, MD, PhD, Mayo Clinic, Rochester, MN
**Hodgkin Lymphoma**

Juliet Barker, MBBS, Memorial Sloan-Kettering Cancer Center, New York, NY
**Cord Blood Transplantation**

Marc Carrier, MD, MSc, University of Ottawa, Ottawa, ON, Canada
**Venous Thromboembolism and Cancer: Prevention and Treatment**

Christine Chen, MD, Princess Margaret Hospital, Toronto, ON, Canada
**IMiDs and Chronic Lymphocytic Leukemia**

Jorge Di Paola, MD, University of Colorado - Denver, School of Medicine, Aurora, CO
**Von Willebrand Disease**

Cynthia E. Dunbar, MD, Editor-in-Chief, Blood, Washington, DC
**Publishing Laboratory and Clinical Studies**

Christopher Flowers, MD, MSc, Winship Cancer Institute, Atlanta, GA
**Survivorship in Lymphoma**

André Goy, MD, John Theurer Cancer Center, Hackensack, NJ
**Mantle Cell Lymphoma**

Andreas Greinacher, MD, Institute for Immunology and Transfusion, Greifswald, Germany
**Thrombocytopenia: From Hemolytic Uremia Syndrome to Heparin-Induced Thrombocytopenia**

Ronald Hoffman, MD, Mount Sinai School of Medicine, New York, NY
**Myeloproliferative Diseases**

Jonathan D. Licht, MD, Robert H. Lurie Comprehensive Cancer Center, Chicago, IL
**Entering miRNA Research: Principles, Technologies, Promise, and Pitfalls**

Francesco Lo-Coco, MD, University Tor Vergata, Rome, Italy
**Using Molecular Diagnostics to Guide Management of Acute Leukemia**

Guido Marcucci, MD, The Ohio State University, Columbus, OH
**Prognostic Markers in Acute Myelocytic Leukemia**

Jeffrey S. Miller, MD, University of Minnesota, Minneapolis, MN
**NK Cells and Bone Marrow Transplant**

Margaret V. Ragni, MD, University of Pittsburgh and Hemophilia Center of Western Pennsylvania, Pittsburgh, PA
**Liver Disease in Hemophilia**

Alan G. Rosmarin, MD, UMass Memorial Medical School, Worcester, MA
**Developmental Transcription Factors Gone Wild: Dissecting the Origins of Leukemia**

Rita Selby, MBBS, MSc, Sunnybrook HSC and University Health Network, Toronto, ON, Canada
**The Laboratory and Venous Thromboembolism**

Ayalew Teferi, MD, Mayo Clinic Graduate School of Medicine, Rochester, MN
**Polycythemia Rubra Vera**

John Tisdale, MD, Maternal and Child Health Bureau, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD
**Sickle Cell Disease and Transplant**

Donna Weber, MD, The University of Texas M. D. Anderson Cancer Center, Houston, TX
**Future Therapies for Myeloma**

Daniel J. Weisdorf, MD, University of Minnesota, Minneapolis, MN
**Acute Graft-Versus-Host Disease**

Jeffrey L. Weitz, MD, Thrombosis and Atherosclerosis Research Institute, Hamilton, ON, Canada
**Emerging Role for New Oral Anticoagulants**

David A. Williams, MD, Children’s Hospital Boston, Boston, MA
**What Future for Gene Therapy?**

Sunday

P. Leif Bergsagel, MD, Mayo Clinic, Scottsdale, AZ
**Signaling in Multiple Myeloma: From Prognosis to Therapy**

Martin Carroll, MD, University of Pennsylvania, Philadelphia, PA
**Acute Myeloid Leukemia**

Joel Anne Chasis, MD, Lawrence Berkeley Laboratory, Berkeley, CA
**Erythropoiesis Island Niche and Anemias**
Linzha0 Cheng, PhD, The Johns Hopkins University School of Medicine, Baltimore, MD

How to Get Started With iPS Cells in Your Lab

John F. Di Persio, MD, PhD, Washington University School of Medicine, St. Louis, MO

Strategies for Stem Cell Mobilization

Angela Dispenzieri, MD, Mayo Clinic, Rochester, MN

Polyneuropathy, Organomegaly, Endocrinopathy, Monoclonal Gammapathy, and Skin Changes (POEMS) Syndrome and Amyloidosis

Benjamin L. Ebert, MD, DPhil, Brigham and Women’s Hospital, Boston, MA

5q- Syndrome

Elizabeth A. Eklund, MD, Northwestern University Feinberg School of Medicine and Jesse Brown VA Medical Center, Chicago, IL

DNA-Repair Defects in Acute Leukemias: Can They Be Exploited?

A. Victor Hoffbrand, DM, DSc, Royal Free Hospital, London, England

Megaloblastic Anemias

Shaji K. Kumar, MD, Mayo Clinic, Rochester, MN

Initial Therapy of Myeloma

Paul Monagle, MBBS, MD, MSc, The University of Melbourne, Parkville, Victoria, Australia

Pediatric Anticoagulation

Elaine A. Muchmore, MD, University of California - San Diego, San Diego, CA

Fellowship Training and Hematology

Steven Z. Pavletic, MD, National Cancer Institute, National Institutes of Health, Bethesda, MD

Chronic Graft-Versus-Host Disease

Azra Raza, MD, St. Vincent’s Comprehensive Cancer Center, New York, NY

Myelodysplastic Syndromes

Miguel A. Sanz, MD, PhD, University Hospital La Fe, Valencia, Spain

Acute Promyelocytic Leukemia

Seema Singhal, MD, Northwestern University Feinberg School of Medicine, Chicago, IL

Stem Cell Transplant and Myeloma

Donald Small, MD, PhD, The Johns Hopkins University School of Medicine, Baltimore, MD

Flt3 Inhibitors: Ready for Prime Time?

Louis M. Staudt, MD, PhD, National Cancer Institute, National Institutes of Health, Bethesda, MD

Aggressive Lymphomas

Kimberly Stegmaier, MD, Dana-Farber Cancer Institute and The Broad Institute of Harvard University and Massachusetts Institute of Technology, Boston, MA

Identifying and Therapeutically Exploiting Molecular Vulnerabilities in Leukemia: New Drug Development

Rainer F. Storb, MD, University of Washington, Fred Hutchinson Cancer Research Center, Seattle, WA

Issues in Stem Cell Transplantation

Deborah A. Thomas, MD, The University of Texas M. D. Anderson Cancer Center, Houston, TX

Acute Lymphoblastic Leukemia

Steven P. Treon, MD, PhD, Dana-Farber Cancer Institute, Boston, MA

Waldenström Macroglobulinemia

Amy J. Wagers, PhD, Joslin Diabetes Center, Boston, MA

Stem Cell Aging

Michael E. Williams, MD, University of Virginia, Charlottesville, VA

Immunotherapy for Lymphoma

Neal S. Young, MD, National Institutes of Health, Bethesda, MD

Aplastic Anemia
Oral and Poster Sessions

Abstracts selected for oral and poster presentations feature the latest research in the field and are considered the best of the thousands submitted for the 2010 ASH Annual Meeting. To help accommodate the increasing volume of research presented at the meeting, additional time for oral presentations has been added to the schedule. Be sure not to miss the Simultaneous Sessions taking place on Monday evening, December 6, from 6:15 p.m. - 7:45 p.m.

The Late-Breaking Abstracts Session will take place on Tuesday, December 7, from 7:30 a.m. to 9:00 a.m. and will feature the six ground-breaking abstracts that were selected. These abstracts will only be published online and will not be part of the special issue of Blood.

Posters will be available for viewing in Hall A3–A4 of the Orange County Convention Center at the times listed below. Meeting attendees will also have the opportunity to meet the abstract authors to discuss their research and ask questions during the presentation times listed.

A detailed schedule listing individual oral and poster abstract presentations and the full abstracts will be included on the abstracts on CD-ROM and will be mailed in mid-November to all registrants who register for the meeting by November 4. In addition, this information will be provided online in early November and accessible from the ASH website at www.hematology.org.

Poster Session Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saturday, December 4</strong></td>
<td></td>
<td></td>
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<tr>
<td>9:00 a.m. – 7:30 p.m.</td>
<td>Poster Session I – Viewing</td>
<td>Hall A3–A4</td>
<td></td>
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<tr>
<td>5:30 p.m. – 7:30 p.m.</td>
<td>Poster Session I – Presentations</td>
<td>Hall A3–A4</td>
<td></td>
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<tr>
<td><strong>Sunday, December 5</strong></td>
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<td></td>
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<tr>
<td>9:00 a.m. – 8:00 p.m.</td>
<td>Poster Session II – Viewing</td>
<td>Hall A3–A4</td>
<td></td>
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<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td>Poster Session II – Presentations</td>
<td>Hall A3–A4</td>
<td></td>
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<tr>
<td><strong>Monday, December 6</strong></td>
<td></td>
<td></td>
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<tr>
<td>10:00 a.m. – 8:00 p.m.</td>
<td>Poster Session III – Viewing</td>
<td>Hall A3–A4</td>
<td></td>
</tr>
<tr>
<td>6:00 p.m. – 8:00 p.m.</td>
<td>Poster Session III – Presentations</td>
<td>Hall A3–A4</td>
<td></td>
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</tbody>
</table>

Social Events

Welcome Reception

**SATURDAY, DECEMBER 4, 5:30 P.M. – 7:30 P.M.**

All meeting attendees are invited to attend this kick-off event. Enjoy a relaxing evening with your friends and colleagues and meet this year’s exhibitors. Complimentary hors d’oeuvres and drinks will be served. This event will take place in the poster hall of the Orange County Convention Center.

Poster Hall Receptions

**SUNDAY, DECEMBER 5, 6:00 P.M. – 8:00 P.M.**
**MONDAY, DECEMBER 6, 6:00 P.M. – 8:00 P.M.**

ASH invites meeting attendees to take advantage of these receptions to meet abstract authors, discuss their research, and ask questions. Light snacks and beverages will be provided. (Please note that photography, videotaping, and audio recording are not permitted in the poster hall.)
This year, nearly 300 pharmaceutical companies, medical suppliers, clinical diagnostic and research-based companies, publishers, and nonprofit organizations will be participating in the 2010 ASH Annual Meeting and Exposition. The state-of-the-art exhibit hall will feature the latest technology and research as well as a wide range of products and services.

The exposition will be held in Hall B of the Orange County Convention Center, and badges will be required for entrance. Children under 12 years of age will not be allowed in the exhibit hall. (Please refer to page 52 for information on the child-care program.)

**Exhibit Hours**

Saturday, December 4  
11:00 a.m. – 4:00 p.m.

Sunday, December 5  
11:00 a.m. – 4:30 p.m.

Monday, December 6  
10:00 a.m. – 2:00 p.m.

Please note that photography, videotaping, and audio recording are not permitted in the exhibit hall. Violation of this rule will result in the offender being escorted and barred from the exhibit hall. Repeat offenders will have their meeting badges revoked and will not be allowed to continue to attend the meeting.

**ASH Booth – Your Gateway to All ASH Has to Offer**

Visit the ASH Booth and discover all that ASH has to offer. Of course you know the annual meeting, but do you know all the resources ASH provides? ASH members and attendees have access to a range of award programs, publications, small meetings, and free educational resources.

ASH serves all professionals in hematology, including hematologists, oncologists, hematopathologists, and allied health professionals. Whether you’re a student, fellow, clinician, or researcher, ASH can help you further your career.

While you’re there, check out recent issues of *Blood*, try out the ASH Image Bank (www.ashimagebank.org) and Teaching Cases, get information on the fourth edition of the *American Society of Hematology Self-Assessment Program* (www.ash-sap.org), and learn about all of ASH’s award and grant opportunities, including the Clinical Research Training Institute, ASH Scholar Awards, Research Training Award for Fellows, Mentor Award, and many more.

Consider this an open invitation to visit the booth on Saturday, Sunday, and Monday to explore all areas of ASH!

**National Institutes of Health (NIH) Booths**

Each of the following branches of the NIH will have a booth in the exhibit hall that will offer opportunities to discuss many areas of hematology, research grants that are available, career-development programs, and NIH policies:

- National Heart, Lung, and Blood Institute (NHLBI)
- National Cancer Institute (NCI)
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- National Institute on Aging (NIA)
- National Center for Research Resources (NCRR)
Registration

How to Register

Online:  www.hematology.org
Fax: 888-273-5706 – U.S. and Canada (toll free)
703-631-6288 – International
Mail: ASH Registration Center
c/o J. Spargo and Associates
11208 Waples Mill Road, Suite 112
Fairfax, VA 22030

On Site: Registration will be located in the West Building of the Orange County Convention Center, Hall C, beginning Thursday, December 2, at 3:00 p.m.

Questions? Contact the ASH Registration Center

Phone: 888-273-5704 – U.S. and Canada (toll free)
703-449-6418 – International
E-Mail: ashregistration@jspargo.com

Agents are available to help you from 8:30 a.m. to 5:00 p.m. (Eastern Time), Monday through Friday. The ASH Registration Center will be closed on weekends and holidays (prior to the meeting).

Early-Bird Registration

JULY 20 – AUGUST 2
• FOR ASH MEMBERS ONLY
• ONLINE ONLY

ASH members who have paid their dues for 2010 are eligible for early-bird registration. Early-bird registration is only available online; registration forms cannot be faxed or mailed. Members can register and make hotel reservations at www.hematology.org by clicking on the annual meeting link. You must register before making a hotel reservation.

The deadline for online early-bird registration is August 2. Please be sure to enter your member ID number and type your name as it appears in ASH’s online membership directory. Beginning August 3, both members and non-members can register for the annual meeting and make hotel reservations online, by fax, or by mail.

Advance Registration

AUGUST 3 – NOVEMBER 4

ASH encourages meeting attendees to register online by visiting the ASH website at www.hematology.org and clicking on the annual meeting link.

Advance registration can also be made by faxing a completed registration form with your credit card information to 888-273-5706 (U.S. and Canada toll free) or 703-631-6288 (international). The registration form may also be mailed along with payment to the ASH Registration Center. Wire transfers will not be accepted. Registration forms can be downloaded from the ASH website or requested by contacting meetings@hematology.org or 202-776-0544.

To qualify for the advance registration rates, registration forms and full payment must be received by November 4. Attendees whose registration forms are received after November 4 will be charged the on-site registration rates.

All registrants will receive a confirmation either by fax, mail, or e-mail within 72 hours of receipt. Meeting badges will be mailed to all early-bird and advance registrants in mid-November. North American (United States, Canada, and Mexico) registrants will receive the Abstract Book by mail in mid-November. **Registrants who live outside of North America will not receive the book by mail but may pick up a copy on site.**

On-Site Registration

AFTER NOVEMBER 4

Registrants whose forms are received after November 4 will be charged on-site registration fees. On-site registration will begin on Thursday, December 2, at 3:00 p.m. in the Orange County Convention Center, Hall C.

Registration Hours

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
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<tbody>
<tr>
<td>Thursday, December 2</td>
<td>3:00 p.m. – 7:00 p.m.</td>
</tr>
<tr>
<td>Friday, December 3</td>
<td>7:00 a.m. – 6:00 p.m.</td>
</tr>
<tr>
<td>Saturday, December 4</td>
<td>7:00 a.m. – 5:00 p.m.</td>
</tr>
<tr>
<td>Sunday, December 5</td>
<td>7:00 a.m. – 5:00 p.m.</td>
</tr>
<tr>
<td>Monday, December 6</td>
<td>7:00 a.m. – 5:00 p.m.</td>
</tr>
<tr>
<td>Tuesday, December 7</td>
<td>7:00 a.m. – 1:30 p.m.</td>
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</tbody>
</table>

To avoid long lines at the on-site registration counters, ASH encourages you to register for the meeting in advance.

Registration Fees

<table>
<thead>
<tr>
<th>Registration Categories</th>
<th>Advance</th>
<th>On-Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member (Active and International)</td>
<td>$395</td>
<td>$450</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$775</td>
<td>$850</td>
</tr>
<tr>
<td>Associate Member</td>
<td>$95</td>
<td>$95</td>
</tr>
<tr>
<td>Non-Member in Training</td>
<td>$195</td>
<td>N/A</td>
</tr>
<tr>
<td>Allied Health Professional</td>
<td>$395</td>
<td>$450</td>
</tr>
<tr>
<td>Spouse/Guest</td>
<td>$90</td>
<td>$90</td>
</tr>
<tr>
<td>Honorary/Emeritus Member</td>
<td>No Charge</td>
<td>No Charge</td>
</tr>
</tbody>
</table>

Registration fees can be paid by credit card or by check.

What is included in the registration fee?

• Abstract Book**
• Abstracts on CD-ROM
• Hematology 2010 (Education Program Book)
• Program Book
• Admission to the General, Special-Interest, Education, Scientific, Oral, and Poster Sessions
• Admission to the exhibit hall*
• Admission to receptions in the poster hall*
• Daily coffee breaks*

*Spouse/guest registrants will receive only the items marked with an asterisk.

**The Abstract Book does not contain the annual meeting schedule or final program details. This information will be available online in early November, and attendees are encouraged to use the online program planner.
Meeting Cancellation Policy
The American Society of Hematology reserves the right to modify or cancel any or all activities associated with this meeting due to unforeseen circumstances. In the event that we have to unexpectedly cancel this annual meeting, the full registration fee, less a processing charge, will be returned to each registrant.

Registration Cancellation Policy
Registration cancellations must be submitted to the ASH Registration Center in writing by November 24 to receive a refund, less a $50 processing fee (see page 43 for contact information). Refunds will not be granted after November 24.

Registration Badges
Badges will be mailed to online early-bird and advance registrants beginning the week of November 8. If you do not receive your badge by the last week of November, please go to the registration area in the Orange County Convention Center, Hall C, to pick up your badge and meeting materials.

Meeting Materials
The Abstract Book will be mailed to all North American (United States, Canada, and Mexico) early-bird and advance registrants in mid-November. Please bring your Abstract Book to the annual meeting. Registrants who live outside of North America will not receive the book by mail but may pick up a copy on site. Additional copies of the Abstract Book will be available for purchase on site at a cost of $65 for members and $95 for non-members.

Group Registration
If you are planning to register a group of 12 or more attendees, please contact the ASH Registration Center at ashregistration@jspargo.com.

Registration Categories
Applications for Active and International membership are considered by the Executive Committee twice per year; applications received between now and the annual meeting will not be processed in time for applicants to register as an ASH member for the 2010 annual meeting. Please consider applying by March 1, 2011, to become a member in time for the 2011 annual meeting.

Associate membership applications, which are reviewed on a rolling basis, must be received by November 4, 2010, in order to be eligible for reduced member meeting registration rates. Applicants who are accepted will be billed for their 2010 membership dues immediately upon approval. Dues must be paid in full in order to qualify for the Associate member meeting registration rate.

Membership applications will not be processed at the on-site Membership Desk during the annual meeting.

Non-Member In Training
Advance registration only!
Any resident or post-doctoral fellow with an MD or PhD in a recognized hematology or oncology training program, or undergraduate, graduate, or medical student, may register as a non-member in training. Advance registration opens August 3. To receive the non-member-in-training advance registration rate of $195, you must register online at www.hematology.org or complete the Attendee Advance Registration Form by November 4. Non-members in training who register after the advance registration deadline of November 4 will be charged the non-member rate of $850.

Residents and post-doctoral fellows:
During the online registration process, you will need to provide:
• Program director’s name and contact information
• Name of the program that you are enrolled in
• Length (in years) of the program
• Program start date (month and year)
• Expected program completion date (month and year)

Undergraduate, graduate, and medical students:
During the online registration process, you will need to provide:
• Name of your university/institution
• Name and contact information for your school counselor
• Field of study
• Start date and expected month and year of graduation

A verification letter (on official letterhead confirming that the registrant is a trainee) is required. If registering by mail, the verification letter must be included with the registration form. For those who register online, an e-mail notification will automatically be sent to your program director or school counselor requesting a signed letter of verification.

Individuals who registered in the non-member-in-training category last year and are still enrolled in their training programs will not need to send a letter verifying their enrollment status.

A verification letter (on official letterhead confirming that the registrant is a trainee) is required. If registering by mail, the verification letter must be included with the registration form. For those who register online, an e-mail notification will automatically be sent to your program director or school counselor requesting a signed letter of verification.

Individuals who registered in the non-member-in-training category last year and are still enrolled in their training programs will not need to send a letter verifying their enrollment status.
Allied Health Professional

Individuals who qualify for this category include:

- Registered nurses
- Pharmacists
- Physician assistants
- Health-care technicians
- Other health-care professionals

Individuals with an MD or PhD degree generally will not qualify for this category. To register for this category, an individual will need to provide evidence of status as an allied health professional.

Verification of one’s status as an allied health professional must be submitted prior to the meeting to receive meeting materials in advance. ASH strongly encourages registrants to send their verification by e-mail in PDF format to alliedhealth@hematology.org, but verification may also be sent by mail to the address below. Fax copies will not be accepted.

American Society of Hematology
Attn: Meetings Department/Allied Health Professional
2021 L Street, NW, Suite 900
Washington, DC 20036

If registering by mail, your completed registration form with verification letter and payment should also be sent to the address above.

Individuals will be officially registered for the meeting once ASH confirms their training status. For those who register by mail, please allow two weeks (three weeks for international registrants) to receive a registration confirmation letter from ASH.

The North American Student Benefit is designed for U.S., Canadian, and Mexican students (undergraduate, graduate, medical, or osteopathic), residents (in post-graduate years 1-3 for Canadians), and PhD candidates who have an interest in hematology but are not yet enrolled in a hematology-related training program. The benefit provides:

- A complimentary online subscription to Blood
- Advance annual meeting notifications
- Eligibility for reduced meeting registration at the non-member-in-training rate

Those registering online for the ASH annual meeting as non-members in training will be invited to apply. For more information and to submit an application, visit www.hematology.org/NASB.

As part of our continuous effort to provide valuable opportunities to international hematologists, ASH has established the International Post-Doctoral Fellows (IPDF) Program, which allows post-doctoral fellows who may find the cost of international membership prohibitive to access valuable ASH resources at no charge for up to four years. The program is open to post-doctoral fellows with an MD, or equivalent medical degree, who reside outside Canada, Mexico, or the United States; register for the ASH annual meeting as a non-member in training; and are enrolled in an approved hematology or oncology training program. Benefits include:

- A complimentary online subscription to Blood
- Online access to Hematology (the ASH Education Program Book) and The Hematologist

Those registering online for the ASH annual meeting as non-members in training will be invited to apply. For more information and to submit an application, visit www.hematology.org/IPDF.

The Spouse/Guest

Spouses and guests are welcome to register for the ASH annual meeting. Spouses and guests will receive a badge that will allow them access to the exhibit hall and all ASH-sponsored social events. This registration rate does not include entrance to the Education and Scientific Program sessions, and registrants will not receive the Abstract Book or the Education Program Book.
Hotel Accommodations

Hotel rooms have been reserved throughout the city of Orlando for meeting attendees. On page 48 of this brochure, you will find a map of the Orlando area with the hotel locations marked, as well as a list of participating hotels and their room rates. ASH will provide complimentary shuttle service between these hotels and the Orange County Convention Center. For more information on this service, see page 51.

Headquarters Hotels

The Peabody Orlando and the Rosen Centre are the official co-headquarters hotels for the 2010 ASH Annual Meeting and are designated for ASH members only. Non-members, international tour groups, and exhibitors will not be able to reserve rooms in the co-headquarters hotels.

Members-Only Hotels

The Peabody Orlando, the Rosen Centre, and the Rosen Plaza are designated for members only. Non-members, international tour groups, and exhibitors will not be able to reserve rooms in these member-designated hotels.

Hotel Reservations

You must register for the meeting before you make your hotel reservation. Hotel reservations must be made directly with the ASH Housing Center no later than Thursday, November 4, using any of the methods listed below. Online reservation is strongly encouraged, though hotel reservation forms can also be downloaded from the ASH website or requested by contacting meetings@hematology.org or 202-776-0544.

Online: www.hematology.org
Phone: 888-273-5704 – U.S. and Canada (toll free)
703-449-6418 – International
Fax: 888-273-5706 – U.S. and Canada (toll free)
703-631-6288 – International
Mail: ASH Housing Center
c/o J. Spargo and Associates
11208 Waples Mill Road, Suite 112
Fairfax, VA 22030

For additional information regarding hotel reservations, please contact the ASH Housing Center at the phone numbers listed above. Agents are available to answer questions from 8:30 a.m. to 5:00 p.m. (Eastern Time), Monday through Friday. Please note that the ASH Housing Center is closed on weekends and holidays. Questions may also be e-mailed to the ASH Housing Center at ashhousing@jspargo.com.

Continuing Medical Education (CME) Credits

Accreditation

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

This program has been approved for AMA PRA Category 1 Credits™. Physicians not licensed in the United States who participate in this CME activity are also eligible for AMA PRA Category 1 Credits™.

Educational Objectives

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

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

How to Obtain a CME Certificate

A processing fee of $25 will be charged for CME certificates. If you plan to claim CME credit for attending the meeting, you must indicate this by checking the appropriate box during online registration or on the meeting registration form. Attendees may complete the process to claim their CME credits and print their CME certificates on site through the e-mail stations available at the convention center by selecting “CME program,” or through the ASH website (www.hematology.org) by clicking the CME link on the homepage. The online process for claiming CME credits and printing a CME certificate for the 52nd ASH Annual Meeting must be completed no later than March 31, 2011.

Certificate of Attendance

Physicians who do not require AMA PRA Category 1 Credits™ and other health-care professionals attending the meeting can request a Certificate of Attendance on site at the ASH CME desk. There is no charge to meeting registrants for this service.

European Hematology Association CME

ASH is applying for CME accreditation with the European Hematology Association (EHA). For information about claiming EHA CME, please stop by the ASH CME desk, or e-mail cme@hematology.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. All ASH meeting session co-chairs and speakers are required to disclose any conflicts they may have in writing and orally prior to their presentations. If bias, actual or perceived, occurs during the presentations, session attendees are encouraged to address such bias during the question-and-answer periods following the presentations.
Hotel Confirmations/Deposits

All hotel reservations must be guaranteed by a major credit card or by check made payable to the hotel. A deposit amount of two nights’ room rate (plus tax) will be charged to your credit card if you do not cancel at least five days prior to your arrival date.

If you plan to guarantee your hotel reservation by check, please be sure to indicate this on your Hotel Reservation Form. The check must be made payable to the hotel and received by the ASH Housing Center by November 4. If the ASH Housing Center does not receive the check by November 4, your hotel reservation will be cancelled.

The ASH Housing Center will mail, fax, or e-mail a confirmation in response to every reservation requested. If you make a hotel reservation online, you will receive a confirmation instantly, and if you make a hotel reservation by fax or mail, a written confirmation will be sent to you by mail, fax, or e-mail within five business days of receipt. If you do not receive your confirmation, please call the ASH Housing Center to verify that your request has been received.

ASH Cancellation/Change Policy

You may cancel or make changes to your hotel reservation either in writing or online until 11:59 p.m. (EST) Wednesday, November 10, 2010. Written requests should be sent to the ASH Housing Center and will be acknowledged with a confirmation as soon as possible or within five business days. After this date, all changes to accommodations must be made directly through your hotel.

Between November 11 and November 19, housing records will be transferred from the ASH Housing Center to the individual hotels; therefore, attendees are strongly encouraged to wait until after November 19 to contact their hotels to make changes or cancellations.

To cancel or change a hotel reservation online, you will need your confirmation number and the e-mail address you used to make your reservation. Online requests are acknowledged with an immediate e-mail confirmation.

A cancellation must be made at least five days prior to your scheduled arrival date or you will be assessed a cancellation fee equivalent to two nights’ room rate (plus tax). The hotel will not hold your room if you do not arrive on the first night of your reservation, and you will lose your deposit.

This hotel cancellation policy will be strictly enforced. Please retain the cancellation confirmation from the ASH Housing Center or the cancellation number provided to you by the hotel, as this proof of cancellation will be required to resolve any credit card disputes.

Group Room Reservations

- A group room reservation is defined as 12 rooms or more.
- All requests for group room blocks must be received at the ASH Housing Center by September 17.
- The ASH Housing Center will provide a website for all groups to manage their own room blocks and rooming lists online. A Group Booking Agreement, which includes a password, will be sent to each group contact after the group room reservations are approved by ASH.
- After October 5, the ASH Housing Center will cancel any group room reservations for which it has not received a rooming list and full payment. Any rooms not accounted for on the rooming list will automatically be released.
- Cancellations must also be made by October 5. Any cancellations after October 5 will result in forfeiture of the entire payment.
- The rules and regulations governing group room reservations are explicitly detailed on the Group Room Reservation Form. Please contact the ASH Housing Center at 888-273-5704 (U.S. and Canada toll-free) or 703-449-6418 (international) for additional instructions on how to obtain a group room block.
The hotels listed here have been reserved for annual meeting attendees. The room rates listed are for single/double accommodations per night in U.S. dollars. ASH will provide complimentary shuttle service between these hotels and the Orange County Convention Center; for more information on this service, please see page 51.

1. Baymont Inn and Suites
   7331 Canada Avenue
   407-226-9887; $85

2. Buena Vista Palace Hotel and Spa
   1900 Buena Vista Drive
   407-827-3591; $199

3. Courtyard by Marriott International Drive
   8600 Austrian Court
   407-351-2244; $159

4. Crowne Plaza Orlando Universal
   7800 Universal Boulevard
   407-355-0550; $196

5. Doubletree Castle Hotel
   8629 International Drive
   407-354-1182; $137

6. Doubletree at Entrance to Universal
   5780 Major Boulevard
   407-351-1000; $159

7. Doubletree Guest Suites WDW
   2365 Hotel Plaza Boulevard
   407-345-1511; $179

8. Doubletree Resort Orlando
   10100 International Drive
   407-352-1100; $149

9. Embassy Suites International Drive
   8978 International Drive
   407-352-1400; $99/209

10. Embassy Suites Jamaican Court
    8250 Jamaican Court
    407-345-8250; $119

11. Extended Stay Deluxe Pointe Orlando
    8750 Universal Boulevard
    407-903-1500; $119

12. Extended Stay Deluxe Westwood Boulevard
    6443 Westwood Boulevard
    407-357-1982; $109

13. Fairfield Inn & Suites Orlando Near Universal
    5614 Vineland Road
    407-581-5600; $129

14. Fairfield Inn & Suites at SeaWorld
    10815 International Drive
    407-354-1182; $137

15. Floridays Resort Orlando
    12550 Floridays Resort Drive
    866-994-6308; $159

16. Four Points by Sheraton Orlando Studio City
    5905 International Drive
    407-351-2100; $122

17. Hampton Inn & Drive Convention Center
    8900 Universal Boulevard
    407-354-4447; $119

18. Hampton Inn South of Universal Studios
    7110 South Kirkman Road
    407-345-1112; $119

19. Hard Rock Hotel
    3800 Universal Boulevard
    407-254-3000; $220

20. Hawthorn Suites Orlando Convention Center
    6435 Westwood Boulevard
    407-351-6600; $129

21. Hawthorn Suites Universal
    7601 Avenue
    407-581-2151; $145

22. Hilton Garden Inn SeaWorld International
    6850 Westwood Boulevard
    407-354-1500; $129

23. Hilton Garden Inn Orlando International Drive North
    5877 American Way
    407-363-9332; $129

24. Hilton Grand Vacation Club on International Drive
    8122 Arroyo Way
    407-465-2600; $149 Studio

25. Hilton Grand Vacation Club at SeaWorld
    6924 Grand Vacations Way
    407-239-0100; $149

26. Hilton in the Walt Disney World Resort
    1751 Hotel Plaza Boulevard
    407-827-4000; $209

27. Hilton Orlando
    6001 Destination Parkway
    407-313-3600; $157

28. Holiday Inn Express & Suites International Drive
    7276 International Drive
    407-351-3333; $121

29. Homewood Suites by Hilton International Drive
    8745 International Drive
    407-248-2232; $129

30. Hyatt Place Orlando/Universal
    5895 Caravan Court
    407-351-0627; $139

31. Hyatt Regency Grand Cypress
    One Grand Cypress Boulevard
    407-239-1234; $289

32. JW Marriott Orlando Grande Lakes
    4040 Central Florida Parkway
    407-206-2400; $299

33. La Quinta Inn & Suites - Convention Center
    8504 Universal Boulevard
    407-345-1965; $120

34. Loews Portofino Bay Hotel
    5601 Universal Boulevard
    407-503-3300; $237

35. Loews Royal Pacific Resort
    6300 Hollywood Way
    407-503-3000; $199

36. Point Orlando Resort
    7389 Universal Boulevard
    407-956-2000; $159

37. Ramada Inn Convention Center I-Drive
    8542 Jamaican Court
    407-363-1944; $99

38. Renaissance Orlando Resort at SeaWorld
    6671 Sea Harbor Drive
    407-351-655; $190

39. Residence Inn by Marriott Convention Center
    8800 Universal Boulevard
    407-226-0288; $149

40. Residence Inn Orlando International Drive
    11000 Westwood Boulevard
    407-313-9300; $157

41. Residence Inn SeaWorld I-Drive
    8900 Universal Boulevard
    407-996-9840; $239

42. Ritz Carlton Orlando Grande Lakes
    4012 Central Florida Parkway
    407-206-2400; $329

43. Rosen Centre Hotel
    9700 International Drive
    407-996-9700; $225

44. Rosen Plaza Hotel
    9924 Universal Boulevard
    407-996-9339; $249

45. Rosen Shingle Creek Hotel
    9399 Universal Boulevard
    407-996-9840; $239

46. Springhill Suites Orlando Convention Center
    8840 Universal Drive
    407-345-9073; $129

47. Springhill Suites Orlando at SeaWorld
    10801 International Drive
    407-351-1176; $147

48. Staybridge Suites Orlando I-Drive
    4080 International Drive
    407-352-2400; $112/$172

49. The Peabody Orlando CO-HEADQUARTERS/OHIO MEMBERS ONLY
    9981 International Drive
    407-352-4000; $244

50. Vista Cay
    9924 Universal Boulevard
    407-997-0733; $215

51. Westin Imagine
    4012 Central Florida Parkway
    407-206-2400; $299

52. Wingate by Wyndham Universal Studios
    5661 Windhover Drive
    407-226-0900; $99
Travel Information

Meeting Location

The Orange County Convention Center is located at 9800 International Drive in the heart of the area’s tourism district. Key meeting areas will be located in the West Building of the convention center:

- Registration - Level II
- General Session room - Level II
- Exhibit Hall - Level II
- Other session rooms - Levels II and III

Orlando offers many attractions for tourists visiting the area, such as Universal Studios, Disney World, the CityWalk, and Cirque Du Soleil shows. For more information about Orlando’s theme parks and popular events, visit www.orlandoinfo.com/attractions.

Visitor Safety

To stay safe during your visit to Orlando, please follow the tips provided below:

- Always lock your front and/or patio doors. Use the safety chain/lock for security.
- Never open your room door unless you know who is there. If you did not call for the hotel service offered by the person at the door, call hotel security or the front desk to see if they have sent someone to your room.
- Place valuables in a safety deposit box in your room or at the hotel office. Do not leave valuables in your car.
- When checking into a hotel, consult the floor plan on the back of your room door to familiarize yourself with fire and emergency exits.
- When driving, keep all car doors locked.

Weather

Orlando has relatively mild winters. Temperatures in December typically range from 50° to 70° F (10° to 21° C), so attendees should bring a light jacket.

Air Travel

EWA Travel, Inc., has been selected as the official travel agency for the 2010 ASH Annual Meeting in Orlando. To make your travel arrangements, please contact:

EWA Travel, Inc.
Phone: 800-705-8580 U.S. and Canada (toll free)
520-797-0291 international
E-Mail: marika@ewatravel.com

Agents are available for reservations from 9:00 a.m. to 5:30 p.m. (Eastern Time), Monday through Friday.

Visa Application Process for International Travelers

If you would like to request an invitation letter from the American Society of Hematology for your visa application, you must first register for the meeting. This meeting is intended for hematologists and other physicians, allied health professionals, and scientists with an interest in hematologic research. Early-bird registration opens for ASH members on July 20, and advance registration for non-members opens August 3. Visit www.hematology.org for information about the meeting and to register online. Once you register, you will receive a registration confirmation number. Please e-mail this registration number, your full name, institution/company name, and mailing address to meetings@hematology.org to request your invitation letter.

ASH encourages you to start your visa application process as soon as possible. Because of new U.S. State Department regulations, U.S. embassies and consulates may require a face-to-face interview for most non-immigrant visa applications. You should apply for your visa at least three to four months before the annual meeting. To schedule an interview for the visa application process, please contact the nearest U.S. embassy or consulate. For more information, please visit http://travel.state.gov/travel/travel_1744.html.

Public Transportation

Taxis are available at designated areas of the airport; just look for one of the many taxi location signs posted throughout the airport. Taxis are allowed to carry up to nine passengers, and the metered rate does not change based on the number of passengers. Expect to pay $12 from the airport to an airport hotel, $35 to downtown Orlando, $50 to $60 to Kissimmee, and $60 to Walt Disney World. Limousines normally have fixed rates, so be sure to agree on the fare before you set off.

Shuttle vans operate from the airport to downtown Orlando and all the main tourist destinations. They are a little cheaper than taxis, and it is cheaper to buy a roundtrip ticket. Expect to pay about $10 per person one way from the airport to airport hotels and $15 for a roundtrip ticket; $15 one way to International Drive and downtown and $25 for roundtrip; and $23 one way to Kissimmee and $41 for roundtrip.

Lynx Orlando Transit Authority provides bus service from the airport to downtown Orlando. Buses are available on Level 1 of the airport’s main terminal on the B Side at commercial lane spaces B12-14. Expect your ride to downtown Orlando to take 40 minutes and your ride to International Drive to be about 60 minutes. The fare is $1.50 per person.
Travel Information

Car Rental
This year, Hertz is offering ASH meeting attendees special rental car rates, which include unlimited mileage. Reservations can be made from all Orlando Hertz locations, online at www.hertz.com, or by calling 800-654-2240 (in the U.S.) or 405-749-4434 (international and Canada). Be sure to mention CV# 02S70010 when booking your rental.

Parking
The fee for parking at the Orange County Convention Center is $11 per car, per entry and $22 for oversized vehicles (i.e., buses) per entry. After 5:00 p.m., the charge is $8 per car, per entry and $11 per oversized vehicle per entry. The convention center accepts cash, traveler's checks, American Express, MasterCard, and Visa.

Shuttle Bus Service
ASH will provide complimentary shuttle service between the hotels in ASH’s housing block (see page 48) and the Orange County Convention Center. Shuttle buses will run approximately every 10-20 minutes during the periods listed below. Look for detailed shuttle bus schedules in your hotel lobby.

<table>
<thead>
<tr>
<th>Car Class</th>
<th>Daily (per day)</th>
<th>Weekend (per day)</th>
<th>Weekly (5-7 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – Economy 2 DR</td>
<td>$39</td>
<td>$35</td>
<td>$149</td>
</tr>
<tr>
<td>B – Compact 4 DR</td>
<td>$42</td>
<td>$36</td>
<td>$158</td>
</tr>
<tr>
<td>C – Midsize 2/4 DR</td>
<td>$43</td>
<td>$39</td>
<td>$177</td>
</tr>
<tr>
<td>D – Standard</td>
<td>$45</td>
<td>$38</td>
<td>$181</td>
</tr>
<tr>
<td>F – Full-size 4 DR</td>
<td>$48</td>
<td>$42</td>
<td>$200</td>
</tr>
<tr>
<td>G – Premium</td>
<td>$54</td>
<td>$57</td>
<td>$234</td>
</tr>
<tr>
<td>I – Luxury</td>
<td>$71</td>
<td>$69</td>
<td>$328</td>
</tr>
<tr>
<td>L – 4WD/AWD Standard SUV</td>
<td>$63</td>
<td>$57</td>
<td>$275</td>
</tr>
<tr>
<td>R – Minivan</td>
<td>$54</td>
<td>$62</td>
<td>$275</td>
</tr>
<tr>
<td>U – Convertible</td>
<td>$63</td>
<td>$57</td>
<td>$275</td>
</tr>
</tbody>
</table>
Attendee Services

ASH Job Bank
The ASH Job Bank connects you to open hematology jobs throughout the world. The Job Bank allows you to review the latest job openings in the field of hematology, in both research and practice, and discover new and exciting opportunities.

Available year-round on the ASH website, the Job Bank is always free for job seekers. We make it easy to find your next position. Look for the Job Bank computers at the ASH annual meeting or visit today at www.hematology.org/jobbank.

Need to fill a position? Don’t miss out on the increased traffic to the ASH website during the annual meeting. E-mail jobbank@hematology.org for more information.

ASH Store
ASH offers a wide variety of products to aid hematologists in their professional development. The ASH Store in the convention center will have many items available for purchase, including:

- Annual meeting publications such as the Abstract Book and Hematology 2010
- Highlights of ASH® Program Books and DVDs
- State-of-the-Art Symposium Program Books and DVDs
- The fourth edition of the American Society of Hematology Self-Assessment Program (ASH®-SAP)

These items are also available for purchase in the online ASH Store at www.hematology.org/store.

Child Care
For safety reasons, children under the age of 12 (including infants in carriers and strollers, or hand-carried infants and toddlers) are not permitted in the exhibit hall and poster sessions. Additionally, ASH prohibits children and infants in the sessions as they may distract the speakers and other attendees.

ASH has made arrangements with KiddieCorp to provide subsidized child-care services at the meeting beginning on Saturday, December 4, and ending on Monday, December 6. KiddieCorp staff members are bonded and trained child-care specialists.

The cost for child-care service is subsidized by ASH. The cost to parents is $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. Pre-registration is recommended to ensure participation. Space is limited, so please register your child by November 4.

For additional program information and registration material, please contact KiddieCorp’s ASH Program Manager by phone at 858-455-1718, by fax at 858-455-5841, by e-mail at ashkids@kiddiecorp.com, or via the company’s website at www.kiddiecorp.com/ashkids.htm.

The child-care room will be located in the Orange County Convention Center, and child-care hours will be listed on the ASH website, www.hematology.org, in the near future.

ASH Publications and Meeting Materials

Abstract Book
Prior to the annual meeting, the Abstract Book will be mailed only to the following people who live in North America (United States, Canada, and Mexico):

- Members
- Non-member Blood subscribers
- Early-bird registrants
- Advance registrants

Meeting attendees who live outside of North America may pick up their copies on site. Members and Blood subscribers who are not attending the annual meeting will receive their copies in the mail in mid-November.

Extra copies of the Abstract Book may be ordered during the online registration process or purchased on site for $65 per copy for members and $95 per copy for non-members. (ASH will not be responsible for shipping books purchased on site.) Please note that the final program is no longer printed in the Abstract Book. The final program will be available online in early November, and attendees are encouraged to use the online program planner.

Abstracts on CD-ROM
This CD-ROM includes the full text of all annual meeting abstracts and has a search capability allowing users to find and mark presentations of interest. A copy of the Annual Meeting Abstracts on CD-ROM will be mailed to all advance meeting registrants with their meeting badges in mid-November.

Abstracts Online/Program Planner
Check the ASH website (www.hematology.org) in early November for the full text of the annual meeting abstracts. The online system will allow you to search the full and up-to-date annual meeting program and generate your own personal annual meeting schedule, which can be printed or downloaded to your portable device.
Hematology 2010

Hematology 2010, the ASH Education Program Book, provides an updated and comprehensive review of each of the topics covered in the annual meeting education sessions. The manuscripts are written by the Education Program speakers and peer-reviewed by Executive Editor Alan Gewirtz, MD, and the co-chairs of the Education Program, as well as by outside reviewers. A chapter on the Ham-Wasserman Lecture, as well as evidence-based mini-reviews related to the topics covered in this year’s Education Program, will also be included. Hematology 2010 will be distributed on site to registrants. Extra copies can be purchased on site for $75 per copy for members and $125 per copy for non-members. (ASH will not be responsible for shipping books purchased on site.)

Program Book

This book contains the master schedule and complete annual meeting program (as of the mid-October print date), including detailed information for the general and special-interest sessions, trainee activities, education and scientific program, oral and poster sessions, and ticketed events. A listing of exhibitors and Friday Satellite Symposia are also included. Please note that the Abstract Book will not contain program information for the meeting; therefore, the Program Book will be necessary for navigating your way through the meeting. For the most up-to-date program information, you are encouraged to use the online program planner at www.hematology.org (available in early November).

Annual Meeting Sessions on DVD

ASH will offer several sessions from the annual meeting on DVD, which will provide audio recordings and color reproductions of PowerPoint® slides from presentations. Two versions of the DVD will be available, which will include the sessions listed below.

Education Program DVD

These DVDs will be available for pick-up beginning Monday, December 6, during the evening poster session, and on Tuesday, December 7, during registration hours at the ASH Store. Name badges will be required to purchase DVDs on site. The Education Program DVD will include:

- All Education Program Sessions, including “How to Write a Grant” and “Junior-Faculty Development: Economics of Academic Hematology”

Complete Annual Meeting DVD

These DVDs can be purchased on site at a lower rate than after the annual meeting, but Complete DVDs must be shipped to the attendee and cannot be picked up on site. The Complete Annual Meeting DVD will include:

- All Education Program Sessions, including “How to Write a Grant” and “Junior-Faculty Development: Economics of Academic Hematology”

DVD Pricing

Both versions of the DVD may be purchased in advance during the online registration process or on site at the prices listed below (which include shipping and handling). ASH members are limited to only one copy at the deeply discounted member rate. The Complete Annual Meeting DVD will also be available for purchase after the meeting through the online ASH Store at www.hematology.org/store. The DVD prices will increase after the end of the 2010 ASH Annual Meeting, so order yours early!

<table>
<thead>
<tr>
<th></th>
<th>EDUCATION PROGRAM DVD</th>
<th>COMPLETE ANNUAL MEETING DVD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members (Active and International)</td>
<td>$30</td>
<td>$40</td>
</tr>
<tr>
<td>Associate Members</td>
<td>$10</td>
<td>$20</td>
</tr>
<tr>
<td>Non-Members</td>
<td>$150</td>
<td>$175</td>
</tr>
<tr>
<td>Non-Members in Training</td>
<td>$75</td>
<td>$125</td>
</tr>
</tbody>
</table>

On-Demand Webcasts

On-demand webcasts of several of this year’s annual meeting sessions will be available on the ASH website (www.hematology.org) after the meeting. Users will be able to hear audio recordings of the presentations while viewing associated color slides. Sessions that will be captured for the Web are as follows:

- Presidential Symposium
- Ham-Wasserman Lecture
- E. Donnall Thomas Lecture
- Ernest Beutler Lecture
- ASH/EHA Joint Symposium
- Trainee Simultaneous Didactic Sessions
- Special Symposium – 60th Anniversary of the National Institute of Diabetes and Digestive and Kidney Diseases
Photography

Cameras may not be used in any poster session or session room except by registered members of the media wearing orange badges. This includes digital, film, and cell phone cameras. No one is allowed to take photographs in the exhibit hall except the official ASH photographer. Photography is strictly prohibited and violators will be promptly escorted and barred from the room if found attempting to take photographs. Repeat offenders will have their meeting badges revoked and not be allowed to continue to attend the meeting.

Disclaimer
ASH will have professional photographers present at the annual meeting; therefore, please note that any photographs taken at the meeting may be used in future ASH publications, on the ASH website, or in other Society materials. Attendance or participation in the meeting constitutes an agreement with ASH by the registrant for the Society to use and distribute the registrant’s image or voice in photographs, videotapes, audiotapes, or other electronic media pertaining to annual meeting events and activities.

Videotaping

Videotaping in any poster session or session room, or in the exhibit hall, is strictly prohibited. Violators will be escorted and barred from the room if found violating this rule. Repeat offenders will have their meeting badges revoked and not be allowed to continue to attend the meeting.

Audio Recording

Audiotaping in any poster session or session room is strictly prohibited, except by registered members of the media wearing orange badges. Absolutely no recording of any kind by anyone is ever permissible in the exhibit hall. Violators will be escorted out and barred from returning. Repeat offenders will have their meeting badges revoked and not be allowed to continue to attend the meeting.

No Smoking

Smoking will not be permitted in any of the hallways, lobbies, meeting rooms, exhibits, or poster sessions at the convention center. Please refrain from smoking unless you are outside the building.

Prohibited Session Room Behavior

In crowded sessions, please honor the instructions provided by ASH staff. You may be told not to stand against the walls in these rooms or not to block the aisles. As ASH must obey the guidelines established by the Fire Marshall in Orlando, please note that if the room reaches full capacity, you may be denied entry.

Participation of Financial Professionals

The ASH annual meeting is a public forum; therefore, financial professionals and other individuals whose principal reason for attending the annual meeting is to seek business opportunities or obtain information affecting investment positions are welcome to register. However, the educational and scientific aspects of the annual meeting are always top priority. It is important that financial professionals identify themselves when speaking with presenters, particularly when asking questions for which the answers may have implications for corporate valuation or positions in equity markets. Speakers and moderators are also asked to give preference to questioners with scientific or clinical inquiries.

Children Under 12

For safety reasons, children under the age of 12 (including infants in carriers and strollers, or hand-carried infants and toddlers) are not permitted in the exhibit hall and poster sessions. Additionally, ASH prohibits children and infants in the sessions, as they may distract the speakers and disrupt other attendees. (See page 52 for child-care services provided at the meeting.)
Upcoming ASH Meetings

2010
State-of-the-Art Symposium

Don’t want to wait until December to update your education? Attend the 2010 State-of-the-Art Symposium: Recent Advances in Hematologic Malignancies and Thrombotic Disorders, which will be held at the Palmer House Hilton in Chicago, IL, September 24-25, 2010. This symposium will feature leading hematology experts exploring the latest research and treatment options for hematologic malignancies and thrombotic disorders. Session topics include leukemia, lymphoma, myeloma, idiopathic thrombocytopenia, heparin-induced thrombocytopenia, and thrombotic thrombocytopenic purpura. Advance registration is now open. Visit www.hematology.org/sas for more information.

2011
Highlights of ASH®

Held a few weeks after the annual meeting, these smaller, clinically focused meetings provide another opportunity to hear leading experts discuss the most practice-changing scientific findings and the latest treatment options that were presented during the annual meeting, but in a more intimate setting.

The 2011 Highlights of ASH in North America meetings will be held in six locations:

Dallas, TX, and Vancouver, Canada
January 21-22
San Francisco, CA, and Washington, DC
January 28-29
New York, NY, and Phoenix, AZ
February 4-5

For more information, please visit the ASH website at www.hematology.org/highlights.

53rd ASH Annual Meeting and Exposition

SAN DIEGO CONVENTION CENTER
SAN DIEGO, CA

Meeting: December 10-13, 2011
Exposition: December 10-12, 2011

Plan Ahead for Next Year

ASH members receive special advantages for ASH annual meetings, including advance copies of the Preliminary Program, the ability to reserve rooms in the prime hotels reserved exclusively for ASH members, and reduced registration rates that are significantly less than those for non-members.

If you are interested in becoming a member of the Society, you may submit an application online at www.hematology.org/Membership. If you have questions about eligibility or benefits, please contact ASH Headquarters at membership@hematology.org or 202-776-0544.

Applications for Active and International membership must be received by March 1 in order to take advantage of these benefits in time for the annual meeting in December. Don’t miss out on these special opportunities for the 2011 ASH Annual Meeting!
The ASH leadership would like to acknowledge the many individuals involved in the program planning process. In addition to the invited speakers and abstract presenters, the 2010 ASH Annual Meeting would not be possible without the creativity and hard work of the following members who have generously volunteered their time to put together this outstanding program.

Special thanks are due to:

Joseph R. Mikhael, MD
2010 Education Program Co-Chair and Program Committee Member

Bradford S. Schwartz, MD
2010 Education Program Co-Chair and Program Committee Member

Robert A. Hromas, MD
2010 Scientific Program Co-Chair and Program Committee Member

David T. Scadden, MD
2010 Scientific Program Co-Chair and Program Committee Member

Charles Abrams, MD
Secretary, Abstract Review Coordinator, and Program Committee Member

Additional Program Committee Members

Monica Bessler, MD, PhD
2011 Education Program Co-Chair

Joseph M. Connors, MD
Liaison, Chair, Committee on Educational Affairs

Mary C. Dinauer, MD, PhD
2011 Scientific Program Co-Chair

Cynthia E. Dunbar, MD
Liaison, Editor-in-Chief, Blood

Peter D. Emanuel, MD
Liaison, Chair, Committee on Communications

Arnold Ganser, MD, PhD
Liaison, Chair, International Members Committee

Alan M. Gewirtz, MD
Liaison, Executive Editor, Hematology 2010

Scott D. Gitlin, MD
Liaison, Chair, Committee on Training Programs

Ellis J. Neufeld, MD, PhD
2011 Education Program Co-Chair

Roy L. Silverstein, MD
Liaison, Editor-in-Chief, The Hematologist

Lawrence A. Solberg Jr., MD, PhD
Liaison, Chair, Committee on Practice

Nancy A. Speck, PhD
2011 Scientific Program Co-Chair
Hematologists and others working in hematology-related fields need to stay current with the latest advances in the rapidly evolving disciplines of adult and pediatric hematology. The American Society of Hematology Self-Assessment Program (ASH-SAP) is the only complete, comprehensive, educational resource available that fulfills this need, while also providing thorough board and recertification preparation, as well as AMA PRA Category 1 Credits™.

The ASH-SAP website contains the full contents of the book, presented in a searchable format with interactive multiple-choice questions and hyperlinks to other educational resources, including Hematology, the Society’s annual meeting Education Program Book, and the ASH Image Bank. Access to the electronic version is included with the purchase price of the print version.

The fourth edition of the ASH-SAP offers two versions available for purchase: one offering AMA PRA Category 1 Credits™ and the other offering both AMA PRA Category 1 Credits™ and American Board of Internal Medicine (ABIM) Maintenance of Certification Credits. Both versions are available as a print and online package or as online-only versions.

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