



# ASBMT Pharmacy Special Interest Group (SIG) Newsletter

## Message from the Chair

Tracey Walsh-Chocolaad, PharmD, BCOP  
Chair, ASBMT Pharmacy SIG

### The National Marrow Donor Program System Capacity Initiative Workforce Summit IV

On November 18-19, 2013, a group of approximately 80 hematopoietic (stem) cell transplantation (HCT) professionals from throughout the US convened in Bloomington, Minnesota for Year IV of the National Marrow Donor Program (NMDP)/Be The Match System Capacity Initiative (SCI) Workforce Summit. As in years past, several physicians, administrative directors, nurses, nurse practitioners, physician assistants and pharmacists were in attendance. This year, the Social Work Workforce Group was formed and joined us at the Summit, another key player in a successful HCT program (Figure 1).

Figure 1. Selected Key Players on the HCT Team



HCT=hematopoietic (stem) cell transplantation; MD=physician; NP=nurse practitioner; PA=physician assistant; PharmD=pharmacist; RN=nurse; SW=social worker

## Inside this Issue

- 5 ASBMT Pharmacy SIG Working Committee Updates
- 7 Literature Updates
- 9 Resident and Student Questions for an HCT Pharmacist

The ASBMT Pharmacy SIG now has a web page  
Please visit us at <http://www.asbmt.org/?PharmacySIG>

Summit attendees were slightly different than in years past, as several initiatives have transitioned from NMDP SCI Workforce Groups to American Society for Blood and Marrow Transplantation (ASBMT) Special Interest Groups (SIGs).

Dr. Jeffrey Chell, Chief Executive Officer of NMDP/Be The Match, started off the program by highlighting that we have performed 3,500 more HCTs this year compared with four years ago, and we did this without a significant increase in staffing or capacity. This indicates that more is being accomplished, but with an increased risk of burnout. Yet, despite the increase in HCTs performed, we are actually only meeting about 40% of the domestic need and 5% of the international need for HCT. To learn more about the genesis of the SCI and the work done in the previous years, visit: <https://Network.BeTheMatchClinical.org/SCI>.

### Transplant is a “Team” Sport

Dr. Fred LeMaistre, current ASBMT President, used sports as an analogy to the HCT team, and challenged us to ask the question “How do we win with the players on the court?” He eloquently explained that the success of a winning team is really not about each individual player’s talent, but how the team performs as a cohesive group, and asked us to consider this as we discussed the “ideal” HCT team model and the contribution of each player.

### Pharmacist Attendees

Critical to the success of this year’s Summit was the attendance of 13 pharmacist representatives from the NMDP/Be The Match SCI Pharmacy Workforce Group and the ASBMT Pharmacy SIG (Figure 2).

### Summit Attendees Put Their Thinking Caps On

Summit participants began the morning at pre-assigned multidisciplinary workforce roundtables where several key questions were addressed:

- Describe key elements for a cohesive, cross-functional, and efficient patient care team.
- What changes will foster the ability for staff to work at the top of their licensure or skill set with scarce resources?
- Describe strategies for growing a diverse workforce.
- Describe successful models for workforce recruitment, retention, work/life balance.

Outcomes from the roundtables were varied, but some of the recurring themes included:

- Care transitions are critical. There is a need for a dedicated person on staff to ensure smooth care transitions as patients navigate through the system.
- The increasing clerical burden felt by all HCT team players needs to be addressed; add clerical staff to assist if possible.
- All HCT team members are critical and need to be recognized for their role on the HCT patient care team.

## Important Dates and Deadlines



### 2014 BMT Tandem Meetings

The Fundamentals of HCT Training Course will be held  
February 26-27, 2014

The BMT Pharmacists Conference will be held  
February 28 - March 1, 2014

### 2015 BMT Tandem Meetings

February 11-15, 2015  
San Diego, CA

### 2016 BMT Tandem Meetings

February 18-22, 2016  
Honolulu, HI

Figure 2. NMDP SCI Pharmacy Workforce Group &amp; ASBMT Pharmacy SIG Attendees



From left: Jamie Shapiro, Kathy Hogan Edwards, Steve Stricker, Amber Lawson, Tippu Khan, Amber Bradley Clemmons, Michael Westmoreland, Tracey Walsh-Chocolaad, William O'Hara, Angela Hsieh, Susannah Koontz Webb, Connie Sizemore, Ashley Morris Engemann.

- There needs to be flexibility in some of the roles between team members so that they can cover for each other, allowing for seamless day-to-day operations.
- Each team member needs to understand each other's roles.
- We need to do more to help hospital administration understand and be knowledgeable about what the HCT patient care team does and needs in order to function successfully.
- Standardized care is a must to improve consistency across physicians and other staff, and accountability is critical. Standardization will lend itself to improved patient care.

Each Workforce Group was given the opportunity during the Summit to give an overview of all of their initiatives, including any metrics and a succession plan if necessary. Acting as the representative for the NMDP/Be The Match Pharmacy Workforce Group and ASBMT Pharmacy SIG, I outlined all of the sizeable "old" and "new" initiatives that we have accomplished or are ongoing. I will be giving a similar update at the BMT Pharmacists Conference in Grapevine, Texas on

February 28, 2014 so that the HCT pharmacy community can see what we are doing in hopes to move our profession forward. I encourage you to attend or become involved in our SIG to keep the momentum going.

After all of the SIGs and Workforce Groups had a chance to present their initiatives, each discipline was tasked with identifying three priorities for the next year within our NMDP Working Group/ASBMT SIG, for the HCT team and outside of the workforce. As always, the pharmacy attendees had a lot to say and came up with several excellent ideas (Table 1).

The ASBMT Pharmacy SIG will address those ideas and work as the catalyst to begin creating new initiatives or refining some of the ongoing ones. It is even more critical that the HCT pharmacy community take these ideas back to their respective workplaces and begin a dialogue with their HCT patient care team members so that we can reach a wider audience.

In summary, I believe the NMDP/Be The Match SCI Workforce Summit IV was a success. There is much more work to be done, however, and both NMDP and ASBMT are discussing a plan moving forward. In the

Table 1. Priorities Identified by Pharmacy Representatives at the NMDP Summit IV

NMDP Workforce/ASBMT Pharmacy SIG	HCT Patient Care Team	Outside Pharmacy Workforce
<ul style="list-style-type: none"> <li>• Create more awareness about CPAs                             <ul style="list-style-type: none"> <li>○ Presentation to hospital administrators &amp; physicians</li> <li>○ Provide hard copies of CPA publication at the ASBMT booth (at HOPA)</li> <li>○ Develop portal for identifying &amp; cataloging CPAs by state</li> </ul> </li> <li>• Focus on advocacy and legislation                             <ul style="list-style-type: none"> <li>○ Needed to advance practice rights</li> <li>○ Develop 1-page handout about the role of the HCT pharmacist to disseminate to schools and other organizations</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Introduce the idea of CPAs and advocate to formally develop them at institutions</li> <li>• Work smarter, not harder                             <ul style="list-style-type: none"> <li>○ Address work flow as a multidisciplinary team</li> <li>○ Know the roles of each team player to avoid overlap &amp; inefficiency</li> <li>○ Address the core functions of the team, not just the players involved</li> </ul> </li> <li>• Consider writing a white paper on the multidisciplinary HCT patient care team                             <ul style="list-style-type: none"> <li>○ Core functions of each player plus functions with some flexibility</li> <li>○ Define the best model or best practices</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Institutions must consistently submit pharmaceutical test claims                             <ul style="list-style-type: none"> <li>○ These are a multidisciplinary effort, but critical to include pre-HCT</li> </ul> </li> <li>• Refine technology and improve how it fits into the HCT practice</li> <li>• Elevate the quality of our research studies                             <ul style="list-style-type: none"> <li>○ Available research dollars are being depleted; we need to be able to continually compete for less money</li> </ul> </li> </ul>

ASBMT=American Society for Blood and Marrow Transplantation; CPAs=collaborative practice agreements; HCT=hematopoietic (stem) cell transplantation; HOPA=Hematology/Oncology Pharmacy Association; NMDP=National Marrow Donor Program.

meantime, ASBMT is considering options on how they can continue to shift their society’s model into a more multidisciplinary capacity, including all HCT patient care team members in the process. Stay tuned, as there will be much more information to follow about this effort.

My days are numbered as the ASBMT Pharmacy SIG Chair, but I am 100% confident that the SIG will continue to grow and thrive under Jamie Shapiro’s leadership, our incoming SIG Chair. I’d like to take this opportunity to thank all of my committee members once again for all of their commitment and dedication this year. We have come a long way because of the unique contributions of every player on our court.

See you in Grapevine!

Tracey Walsh-Chocolaad, PharmD, BCOP  
Chair, ASBMT Pharmacy SIG  
[tracey.walshchocolaad@gmail.com](mailto:tracey.walshchocolaad@gmail.com)



## ASBMT Pharmacy SIG Working Committee Updates

### Advocacy & Policy Working Committee

The Advocacy & Policy Working Committee continues to make progress on initiatives related to promoting the value of HCT pharmacists and developing policies to optimize medication therapy outcomes in HCT patients, with a focus on the former. We have developed a working definition of an HCT pharmacist and are close to finalizing a document detailing professional skills that support the valuable role pharmacists have in the care of HCT patients. Additional accomplishments relating to advocacy that are near completion include:

- 1) Creation of an advocacy directory containing contact information for several groups and organizations of interest.
- 2) Drafting an introductory guide to becoming involved in advocacy efforts.
- 3) Identification of both ASBMT members' experience in advocacy areas and legislative issues of interest to HCT pharmacists.

Taken together we feel these initial steps will provide Pharmacy SIG members necessary resources to demonstrate the value of our profession while increasing our visibility within the HCT field.

Work is underway to collaborate with other colleagues and professionals in coordinating activities related to caring for patients, educating practitioners, and supporting pharmacists in professional development activities. Initial contacts with pharmacy as well as both internal and external nursing groups have been made to gauge interest on potential collaborations. We look to continue these conversations throughout 2014 regarding promising opportunities for joint programs and activities.

### Communications Working Committee

The Communications Working Committee distributed the first newsletter for the ASBMT Pharmacy SIG in September 2013. Thanks to all the Pharmacy SIG members that contributed content and participated in the reviewing process. We plan to publish the newsletter on a quarterly basis, and appreciate any content suggestions from the Pharmacy SIG membership. As a reminder, subsequent newsletters will only be available to members of the Pharmacy SIG (rather than distributed to members of the Pharmacy SIG and members of the Google Groups BMT Listserv).

We continue to work with other ASBMT Pharmacy SIG Working Committees to support refinement of the new ASBMT Pharmacy SIG web page, and to develop processes related to the ASBMT Listserv content.

### Education Working Committee

The Education Working Committee has been working on developing content for the new ASBMT Pharmacy SIG web page, although we have been focusing efforts towards development and preparation for the Fundamentals of HCT Training Course. The course will be held February 26 -27, 2014 at the Gaylord Texan Resort and Convention Center in conjunction with the BMT Tandem Meetings in Grapevine, Texas. We encourage all practitioners new to the field of HCT to register, including pharmacists, registered nurses, advanced practice professionals, and hematology/oncology fellows. Register at: <https://www.cvent.com/events/fundamentals-of-hct-training-course/registration-905fb0d816f444daabe1fb63cdacb7c2.aspx>.

**Interested in serving on an ASBMT Pharmacy SIG Working Committee?  
Applications are now being accepted.**

For additional information, stop by the Pharmacy SIG Committee Recruitment Table during the Fundamentals of HCT Course and the BMT Pharmacists Conference or visit the Pharmacy SIG web page at <http://www.asbmt.org/?PharmacySIG>

Please submit your application by **March 14, 2014**

### Membership Working Committee

The Membership Working Committee continues to work towards our goal of developing a database of current members. We have completed the initial collection of membership information and are continuing to acquire information from new members as they join. Additionally, we are developing a plan for using the new Pharmacy SIG web page for keeping member information up to date.

“In-Training” Pharmacy Membership status is now approved by ASBMT and current residents may join at a discounted rate. Please let your PGY1 and PGY2 oncology pharmacy residents know about this opportunity. The ASBMT Pharmacy SIG Listserv has also been approved and activated by the ASBMT Board of Directors. We encourage all members to utilize this resource.

To subscribe to the listserv, please visit:  
[http://list.asbmt.org/mailman/listinfo/pharmacy\\_list.asbmt.org](http://list.asbmt.org/mailman/listinfo/pharmacy_list.asbmt.org)

The Membership Working Committee continues to work on recruitment materials for pharmacists, pharmacy residents, and pharmacy students. Please encourage your colleagues to join. Collaborations with HOPA are also underway.

### Program Planning Working Committee

The Program Planning Committee has been working diligently to assemble a two-day Pharmacists Conference during the BMT Tandem Meetings in Grapevine, Texas. During this conference, multiple leaders within the field of HCT will provide expert perspective into the management of this complex patient population using an evidence-based approach.

The BMT Pharmacists Conference will be held on Friday, February 28<sup>th</sup> and Saturday March 1<sup>st</sup>, 2014

To see the conference agenda, please go to:  
<https://bmt.confex.com/tandem/2014/webprogram/PHARMACISTS.html>.

### Research Working Committee

The Research Working Committee has chosen the first ASBMT Pharmacy SIG study, which has been forwarded to the ASBMT Executive Committee for review.

The Research Committee was charged with reviewing all research abstracts submitted in the Pharmacy category for the 2014 BMT Tandem Meetings. There were 24 abstracts submitted, and 23 were accepted (4 for oral presentation and 19 for poster presentation). Investigators whose abstracts were selected for oral presentation will compete for the “Best Pharmacy Abstract” awards during the BMT Pharmacists Conference. We are also working on a plan to eventually post pharmacy abstracts from prior conferences to the research section of the ASBMT Pharmacy SIG web page.

Lastly, we will begin assisting with Blood and Marrow Transplant Clinical Trials Network (BMT CTN) trials by standardizing the pharmaceutical information of conditioning regimens contained within BMT CTN protocols.

### Website Working Committee

The Website Working Committee developed a new ASBMT Pharmacy SIG web page, which went live on January 15, 2014. Please visit our new page at <http://www.asbmt.org/?PharmacySIG>.

Several Working Committees now have e-mail addresses:

General SIG - [ASBMTPharmacySIG@gmail.com](mailto:ASBMTPharmacySIG@gmail.com)

Education and Program Planning - [PharmacySIGEducation@gmail.com](mailto:PharmacySIGEducation@gmail.com)

Communications - [PharmacySIGCommunications@gmail.com](mailto:PharmacySIGCommunications@gmail.com)

## Literature Updates

### Hematopoietic (Stem) Cell Transplant

Bayraktar UD, Shpall EJ, Liu P, et al. Hematopoietic cell transplantation-specific comorbidity index predicts inpatient mortality and survival in patients who received allogeneic transplantation admitted to the intensive care unit. *J Clin Oncol*. 2013;31:4207-4214.

- This study investigated the prognostic value of the HCT-CI in patients that were admitted to the ICU during their transplant admission

Smith SM, Burns LJ, van Besien K, et al. Hematopoietic cell transplantation for systemic mature T-cell non-Hodgkin lymphoma. *J Clin Oncol*. 2013;31:3100-3109.

- Efficacy of autologous and allogeneic HCT were analyzed in patients with T-cell lymphoma (including anaplastic large-cell, peripheral T-cell and angioimmunoblastic T-cell lymphoma)

Christopeit M, Kuss O, Finke J, et al. Second allograft for hematologic relapse of acute leukemia after first allogeneic stem-cell transplantation from related and unrelated donors: The role of donor change. *J Clin Oncol*. 2013;31:3259-3271.

- This retrospective German registry analysis included 179 patients who received second allo HCT (HCT2) for relapsed acute leukemia after first allo HCT (HCT1)

Nagler A, Rocha V, Labopin M, et al. Allogeneic hematopoietic stem-cell transplantation for acute myeloid leukemia in remission: Comparison of IV busulfan plus cyclophosphamide (Cy) versus total-body irradiation plus Cy as conditioning regimen—A report from the acute leukemia working party of the European group for blood and marrow transplantation. *J Clin Oncol*. 2013;31:3549-3556.

- This was a retrospective review in patients with AML undergoing allogeneic sibling donor HCT comparing the conditioning regimens Bu/Cy and Cy/TBI with respect to engraftment rates, incidence of acute and chronic GVHD, 2-year non-relapse mortality, and leukemia-free survival

Kharfan-Dabaja MA, Nishihori T, Otrrock ZK, et al. Monoclonal antibodies in conditioning regimens for hematopoietic cell transplantation. *Biol Blood Marrow Transplant*. 2013;19:1288-1300.

- This article reviews the data available on the use of monoclonal antibodies (mAbs) in disease control as well as prevention of graft-versus-host-disease and graft rejection
- Also discussed are the limitations and knowledge gap that require future prospective trials to determine the effective and safe use of mAbs as part of HCT conditioning regimens

Kornblit B, Maloney DG, Storb R, et al. Fludarabine and 2-Gy TBI is superior to 2 Gy TBI as conditioning for HLA-matched related hematopoietic cell transplantation: a phase III randomized trial. *Biol Blood Marrow Transplant*. 2013;19:1340-1347.

- This study examined overall survival, relapse/progression rate, graft-versus-host disease rate, relapse related mortality and non-relapse mortality in patients who were randomized to receive either 2-Gy TBI alone or in combination with fludarabine followed by HLA-matched related HCT

Locatelli F, Kabbara N, Ruggeri A, et al. Outcome of patients with hemoglobinopathies given either cord blood or bone marrow transplantation from an HLA-identical sibling. *Blood*. 2013;122:1072-1078.

- This retrospective registry analysis assessed the outcomes of 485 patients with thalassemia major (TM) or sickle cell disease (SCD) who received an HLA-identical sibling cord blood transplantation (CBT, n = 96) or bone marrow transplantation (BMT, n = 389)

Schlenk RF, Taskesen E, van Norden Y, et al. The value of allogeneic and autologous hematopoietic stem cell transplantation in prognostically favorable acute myeloid leukemia with double mutant CEBPA. *Blood*. 2013;122:1576-1582.

- This study assessed the clinical impact of allo HCT and auto HCT versus chemotherapy in patients with AML with double mutant CEBPA AML who were in CR1

Gonsalves WI, Gertz MA, Dispenzieri A, et al. Implications of continued response after autologous stem cell transplantation for multiple myeloma. *Blood*. 2013;122:1746-1749.

- Multiple myeloma patients (n = 430) who underwent ASCT within 12 months of their diagnosis and had not achieved a complete remission at day 100 were included in this analysis
- Comparisons of progression-free survival, time to next therapy, and overall survival were compared in patients that continued to respond after Day +100 vs. those patients that did not continue to respond after Day +100

Walter RB, Buckley SA, Pagel JM, et al. Significance of minimal residual disease before myeloablative allogeneic hematopoietic cell transplantation for AML in first and second complete remission. *Blood*. 2013;122:1813-1821.

- Patients (n = 253) who received myeloablative stem cell transplant for AML in complete remission (CR)1 (n = 183) or CR2 (n = 70) who had pre-HCT marrow aspirates were evaluated to assess the impact of minimal residual disease (MRD) on outcomes

Saber W, Cutler CS, Nakamura R, et al. Impact of donor source on hematopoietic cell transplantation outcomes for patients with myelodysplastic syndromes (MDS). *Blood*. 2013;122:1974-1982.

- Adult patients with myelodysplastic syndrome (MDS) who underwent stem cell transplant were analyzed for clinical outcomes to compare matched related donor (MRD, n = 176) to matched unrelated donor (MUD, n = 413 for 8 of 8 allele matched, n = 112 for 7 of 8 allele matched) transplants

Zou S, Glynn S, Kuritzkes D, et al. Hematopoietic cell transplantation and HIV cure: where we are and what next? *Blood*. 2013;122:3111-3115.

- This article reviews the available evidence on stem cell transplantation and the potential for HIV cure

Furst D, Muller C, Vucinic V, et al. High-resolution HLA matching in hematopoietic stem cell transplantation: a retrospective collaborative analysis. *Blood*. 2013;122:3220-3229.

- A retrospective analysis was performed to evaluate the impact of HLA mismatching on overall survival in 2646 transplantations performed for hematologic malignancies in 28 German transplant centers

Stiff PJ, Unger JM, Cook JR, et al. Autologous transplantation as consolidation for aggressive Non-Hodgkin's Lymphoma. *N Engl J Med*. 2013;369:1681-1690.

- This randomized intergroup trial (Southwest Oncology Group [SWOG] trial 9704) treated 370 patients who had an age-adjusted classification of high risk or high-intermediate risk non-Hodgkin's lymphoma with five cycles of CHOP or R-CHOP
- Patients demonstrating a response were randomly assigned to receive 3 additional cycles of induction chemotherapy (control group, n = 128) or one more cycle of induction therapy followed by autologous stem-cell transplantation (transplantation group, n = 125)

## Treatment Guidelines and Recommendations

Baccarani M, Deininger MW, Rosti G, et al. European LeukemiaNet recommendations for the management of chronic myeloid leukemia: 2013. *Blood*. 2013;122:872-884.

- A European LeukemiaNet expert panel reviewed prior and new studies to modify recommendations from 2009
- The article provides definitions of the three phases of CML, role of allogeneic transplant in CML, significance of BCR-ABL1 mutations, treatment recommendations for all stages of CML, response criteria definitions, monitoring time points for response, adverse effects associated with TKI therapy and issues surrounding TKI discontinuation

Malcovati L, Hellstrom-Lindberg E, Bowen D, et al. Diagnosis and treatment of primary myelodysplastic syndromes in adults: recommendations from the European LeukemiaNet. *Blood*. 2013;122:2943-2964.

- An expert panel reviewed the literature available on myelodysplastic syndrome to formulate recommendations on diagnosis, classification, risk-assessment, monitoring, and treatment options

Lee AYY, Peterson EA. Treatment of cancer-associated thrombosis. *Blood*. 2013;122:2310-2317.

- This article reviews the treatment options for the management of venous thromboembolism (VTE) in cancer patients
- The optimal duration of therapy, treatment of recurrent VTE, and the treatment of patients with concurrent bleeding or those at high risk of bleeding are discussed
- It also highlights the limited information on utilizing the novel oral anticoagulants in this patient population

**Not yet a member of ASBMT? Join today!**

Pharmacy Residents are now eligible to join ASBMT for an In-Training Member Rate of \$75/year.

Visit [asbmt.org - membership](http://asbmt.org - membership) for more information.

When completing the application, be sure to check the box to join the Pharmacy Special Interest Group.

## Resident and Student Questions for an HCT Pharmacist

**Question:** What resources do you use on a regular basis to provide patient care?

**Answer:**

Angela Hsieh, PharmD, BCOP  
Seattle Cancer Care Alliance/ University of  
Washington Medicine

The most common source of information I use on a daily basis is our standard practice guidelines that have been compiled, reviewed and revised by the thought leaders in the area of HCT. I also utilize study protocol documents to review appropriate treatment, supportive care, and monitoring parameters for patients undergoing transplant.

By participating in the development process for our standard practice guidelines and implementing new clinical trials and protocols, I have had the responsibility of reviewing the latest literature in HCT and making recommendations based on economical and clinical outcome analyses.

When providing care to patients, I maintain close communication with the HCT team as well as patients to provide an up-to-date medication calendar, counseling, and drug information. When answering drug information questions from providers and patients, I commonly use tertiary references, such as *Micromedex*. Frequently, primary literature searches and inquiries to drug manufacturers are necessary in order to provide comprehensive answers.

**Question:** How have various pharmacy organizations been important in your professional development?

**Answer:**

Angela Hsieh, PharmD, BCOP  
Seattle Cancer Care Alliance/ University of  
Washington Medicine

While I completed the majority of my oncology training at large transplant centers, I have had the opportunity to acquire knowledge and clinical experiences by

working closely with providers, pharmacists and nursing staff that have practiced in the area of HCT for many years. Based on this experience, I understand the importance of collaborative efforts to improve research and education in HCT. The development of the ASBMT Pharmacy SIG group has offered me opportunities to network with HCT clinical pharmacists from various backgrounds and practices. Through pharmacy programs offered at the annual BMT Tandem Meetings, newsletters, pharmacy group listserv, and subscription to *Biology of Blood and Marrow Transplantation*, I am able to follow the latest research interests and gain clinical experiences and expertise from other centers. The National Marrow Donor Program (NMDP) and Hematology/Oncology Pharmacy Association (HOPA) are both aware of the rapid increase in the use of blood and marrow transplant to treat various hematological and autoimmune diseases. The need for more trained practitioners in HCT has been described and the development of strategies to meet the growing need have been undertaken. Both NMDP and HOPA provide training and continuing education courses for those who are interested in entering the field of HCT or expanding their oncology knowledge. I have found that being involved in the development process of course materials is immensely helpful in strengthening my knowledge in HCT beyond my clinical practice.

Dr. Hsieh is a Clinical Assistant Professor at the University of Washington School of Pharmacy and a Clinical Oncology Pharmacist at the Blood and Marrow Transplant clinic at Seattle Cancer Care Alliance. Seattle Cancer Care Alliance is a joint effort of Fred Hutchinson Cancer Research Center, University of Washington Medicine and Seattle Children's Hospital in providing cancer treatment, conducting cancer clinical research and education and performing approximately 500 autologous/allogeneic transplants per year.

### Attending HOPA? Stop by the ASBMT Booth!

Venue: 10th Annual Hematology/Oncology Pharmacy Association Conference  
Conference Location: Hilton New Orleans Riverside, New Orleans, LA  
Booth location: Exhibit Hall, Booth #308    Exhibit dates: March 26-28, 2014

Do you know a pharmacy resident or student with questions for an HCT pharmacist? We'd like to answer them! Please email any questions you would like to see answered to the ASBMT Pharmacy SIG Communications Working Committee: [PharmacySIGCommunications@gmail.com](mailto:PharmacySIGCommunications@gmail.com)

**Question:** What do you recommend a pharmacy student or resident do to prepare or transition into a career as an HCT pharmacist? What educational steps did you take to get to where you are today?

**Answer**

Ashley Newland, PharmD, BCOP  
Virginia Commonwealth University Medical Center

HCT is a very specialized field, and many pharmacy students or residents may have limited exposure to the practice. A career as an HCT pharmacist is a very rewarding one, and with the appropriate training and motivation, you can become a successful HCT pharmacist.

Prior to beginning my postgraduate training, I started off with a strong interest in acute care oncology as a student. If there is a bone marrow transplant center near you, take the opportunity to shadow an HCT pharmacist to see if this is a career path you would want to consider. I completed a PGY1 followed by a PGY2 specializing in oncology. In addition to PGY2 oncology specialty residencies, there are also oncology fellowships as well as combined oncology residency and PhD programs. Any of these options should provide excellent training on a path towards becoming a clinical oncology pharmacist, depending on your specific interests and goals for your career. Not all postgraduate training sites have a bone marrow

transplant program at their institution. If you are interested in HCT, I encourage you to make sure that you will have the opportunity as a resident to care for HCT patients.

Additionally, there are many educational opportunities available from a variety of sources. The ASBMT Pharmacy SIG offers a Fundamentals of HCT Training Course, which is geared towards newer practitioners in the field of HCT, including pharmacists and pharmacy residents. Continuing education is vital as the fields of oncology and HCT continue to evolve. Opportunities for continuing education specific to HCT can be found through many professional organizations, including ASBMT, HOPA, ACCP, and ASHP. Becoming an active member of professional organizations and obtaining board certification in oncology pharmacy have also helped me to develop into a better clinician. It is also important to identify a mentor, who can help you learn and grow throughout your career.

Dr. Newland is a Clinical Assistant Professor at the Virginia Commonwealth University (VCU) School of Pharmacy and a Clinical Oncology Specialist at VCU Medical Center's Massey Cancer Center. VCU Medical Center is located in Richmond, VA, and performs approximately 50 allogeneic and 110 autologous transplants per year.

## First Annual ASBMT Pharmacy SIG Awards

Recipients of the Lifetime Achievement Award and the New Practitioner Award will be announced at the BMT Pharmacists Conference on February 28, 2014 in Grapevine, TX.