

Elective Rotation for Medical Students and Residents in Blood and Marrow Transplantation

In 2010 the National Marrow Donor Program (NMDP)/Be The Match organized the System Capacity Initiative (SCI) to develop strategies and methodologies to increase the capability of performing more blood and marrow transplants (BMT) in the United States. This was done in order to address the unmet need for additional transplants as it is estimated that only half of patients who need a BMT currently receive one in the United States. As part of the SCI, various working groups were established to address the initiative. The Physician Working Group (PWG) was formed to address the need to recruit and retain additional BMT physicians. As part of this effort, a Physician Curriculum Subgroup was formed to develop a curriculum for an elective rotation in BMT for medical students and adult and pediatric medicine residents that could be readily adapted for use at BMT programs across the country.

This elective rotation is designed to give medical students and residents exposure to the exciting biology and clinical practice of BMT. The rotation will be a minimum of two and ideally up to four weeks in duration. The participant will obtain exposure to both the inpatient and outpatient practice of BMT as well as exposure to the integral laboratories that are part of the practice. If possible, brief exposure to some of the research aspects of BMT is encouraged.

The specific objectives of the rotation include:

- Know the history and evolution of BMT as a therapeutic modality
- Review the basic biology and immunology of BMT
- Understand the indications, evaluation, management, and outcomes for the diseases treated with BMT
- Gain knowledge regarding the indications for autologous, allogeneic related and unrelated BMT and the differences in patient management, complications, and outcomes between these different approaches
- Review the appropriate evaluation of the BMT recipient and donor
- Understand the early and late complications of BMT including appropriate monitoring, diagnosis, and management

The rotation can potentially combine rounds on the inpatient BMT service, evaluation of outpatients pre- and post-transplant, participation in didactic teaching sessions, and rotation through the various clinical laboratories related to BMT including the HLA laboratory, the apheresis unit and the hematopoietic cell cryopreservation laboratory. A series of didactic lectures by experts in the field covering the fundamentals of adult and pediatric BMT have been recorded and are available for viewing on the NMDP website at BeTheMatchClinical.org/bmt-curriculum. There will be an opportunity to view online video presentations highlighting the experience and passions of clinicians and investigators in the field of BMT.

At the conclusion of the rotation, the participant will have gained an increased appreciation for the scientific and clinical underpinnings for the field of BMT and have an increased appreciation of the excitement of studying and working in this field. Pre- and post-rotation evaluation surveys are incorporated into the rotation.