

# LEARNING OBJECTIVES AND EXPECTATIONS

## Zale Bone Marrow Transplant Service

The Zale Bone Marrow Transplant Service provides opportunities for gaining competence in the evaluation and management of patients with hematologic disorders requiring bone marrow or peripheral stem cell transplantation. During this rotation the fellow will have the opportunity to gain expertise in the following areas. You should review these goals and objectives with your attending at the beginning of this rotation:

Bone marrow aspiration and biopsy, including preparation,  
Use of chemotherapeutic agents and biological response modifiers in the transplant setting  
Correlation of clinical information with cytology, histology and immunodiagnostic imaging techniques

Your clinical experience and outside study should be addressed to the following so that you feel you are gaining substantial knowledge in these areas:

- 1) Clinical experience in bone marrow/peripheral stem cell harvest for transplantation
- 2) Clinical experience in allogeneic and autologous bone marrow/peripheral stem cell transplantation
- 3) Nature and management of posttransplant complications
- 4) Morphology, physiology, and biochemistry of blood, marrow, lymphatic tissue and spleen
- 5) Chemotherapeutic drugs, biologic products, growth factors used in transplantation and their mechanisms of action, clinical indication, and limitations, including their effects, toxicity and interactions
- 6) Management and care of indwelling venous catheters
- 7) Management of neutropenia and immunocompromised patients
- 8) Pain management, rehabilitation and psychosocial management of transplant patients
- 9) Personal development, attitudes and coping skills of physicians and other health-care professionals in a multidisciplinary transplant setting

Plans to meet these goals and objectives:

**1. Patient care.** You will be caring for patients in the transplant unit of Zale-Lipshy university hospital. Detailed information concerning this rotation is available from the transplant unit director.

**2. Medical knowledge.** Medical knowledge concerning bone marrow transplantation will be obtained through directed reading and interactions with attendings during attending rounds.

**Reading list: available on CD-ROM from Dr. Collins**

Required conferences:

Hematology/Hematopathology Rounds, Hematology/Oncology Teaching Lunch, Combined Modality Conference

Suggested conferences:

Multidisciplinary Breast Conference, GI Malignancy Conference, Head and Neck Tumor Board, Gynecologic Tumor Board, Thoracic Malignancy Conference, Internal Medicine Grand Rounds

### **3. Practice-based learning and improvement**

As with other clinical rotations, fellows will have the opportunity to apply medical literature, research and statistical methods, and data management technology for self-evaluation and improvement on this rotation. Clinical questions will be formulated and researched through clinical databases pertinent to patient care as they arise. Cases may be selected for in depth research and discussion and presentation at either the Hematopathology or Combined Modality conferences as appropriate.

### **4. Interpersonal and communication skills**

The fellow will develop and demonstrate competence in effective and efficient communication with patients, physicians colleagues and physicians from other services, nursing and support staff. The patients on this rotation tend to be much better educated and demand more in the way of alternative treatments as compared to patients on other rotations.

### **5. Professionalism**

Fellows will have the opportunity to develop and demonstrates an increasing commitment to carrying out professional responsibilities and adherence to ethical principles. Effective therapeutic relationship with patients and families will be demonstrated through through listening, narrative and nonverbal skills; excellent education and counseling of patients, families, and colleagues in the transplant setting.

### **6. Systems-based practice**

Fellows will develop an understanding of how the consult team operates within the larger context of a private university practice hospital. Issues of hospital reimbursement for expensive procedures such as allogeneic and autologous bone marrow transplantation will be discussed.

**Evaluation:** You will be evaluated by your attending faculty on six general competencies (see above) through your interactions during attending rounds and during the course of patient diagnosis and management. Competencies in procedures will be evaluated through direct supervision by an attending or other qualified physician and must be recorded through the case-log system ([www.myevaluations.com](http://www.myevaluations.com)) so that they are

available for review by outside accrediting agencies (i.e. future employers). A multiple choice in-service exam is given in May of each year to help you gauge your progress in medical knowledge. Questions include those related to bone marrow transplantation and are similar to those posed on hematology board exams.