

**Name of rotation:** Hematology **Division:** Hematology/Oncology

**Course Director:** Ann Zimrin, M.D. **Site(s):** UMMC

**Duration of rotation:**  one month only  
 2 weeks possible

**General description of the rotation including educational purpose, rationale or value:**

The hematology service provides immediate consultations to internal medicine, surgical, and ob/gyn services as well as to the Maryland Institute for Emergency Medical Services. Consultations involve a wide range of both benign and malignant hematologic illnesses involving white cells, red cells, and platelets. A significant number of coagulation disorders are seen as well. At the completion of this rotation, residents are expected to be more facile and competent in the management of the more common hematologic problems which complicate both medical and surgical practice. It is not the intent of this rotation to provide a comprehensive review of hematologic disorders, but rather to provide a framework in which a resident addresses differential diagnosis and patient management on a case-by-case basis. Cases are sufficiently varied such that residents gain widespread exposure to many different hematologic problems.

**Resident responsibilities, including interns and residents:**

Residents will be expected to see all new consults promptly after their having been received in the hematology office. All new cases will be presented on a daily basis to the attending during formal consult rounds (Monday through Friday). Important physical findings will be reviewed at the patient's bedside along with the attending physician. Appropriate discussion will then follow regarding the differential diagnosis and appropriate management of the patient. The residents will also be responsible for recording a comprehensive (although succinct) consult note which will be reviewed with the attending before posting on the chart. All consults are to be recorded on the pre-printed Comprehensive Form for consultations provided by the Department of Medicine.

**Educational Objectives:** An expanded version of the competencies is listed under Core Competencies in Internal Medicine. Those listed here are specific to this rotation. Since residents may choose this elective during any year of training, PGY-1 goals and objectives are distinct for those for upper level residents, and PGY-2 and 3 goals and objectives are similar.

**During this rotation, the PGY-1 resident will:**

**Patient Care**

1. Understand the diagnosis and management of common hematologic disorders complicating internal medicine and surgical practice.
2. Learn management of both acute and chronic coagulation problems.

**Medical Knowledge**

1. Learn the proper indications and potential complications of transfusion of RBC's, platelet and plasma products.
2. Become familiar with the use of flow cytometry in hematologic diagnosis.

**Practice-Based Learning - See Core Competencies**

**Interpersonal and Communication Skills – See Core Competencies**

**Professionalism – See Core Competencies**

**System-Based Practice – See Core Competencies**

**During this rotation, the PGY-2 or 3 resident will:**

**Patient Care**

1. Evaluate and initiate management of common hematologic disorders complicating internal medicine and surgical practice.
2. Evaluate and initiate management of both acute and chronic coagulation problems.

**Medical Knowledge**

1. Describe the proper indications and potential complications of transfusion of RBC's, platelet and plasma products.
2. Become familiar with the use of flow cytometry in hematologic diagnosis.

**Practice-Based Learning - See Core Competencies**

**Interpersonal and Communication Skills – See Core Competencies**

**Professionalism** – See Core Competencies

**System-Based Practice** – See Core Competencies

**Check all principle teaching methods used during this rotation:**

<input checked="" type="checkbox"/>	Attending teaching rounds	<input type="checkbox"/>	Interdisciplinary rounds
<input checked="" type="checkbox"/>	Patient management discussions	<input checked="" type="checkbox"/>	Small group discussions
<input checked="" type="checkbox"/>	Conferences specific to rotation	<input checked="" type="checkbox"/>	Bedside clinical rounds
<input checked="" type="checkbox"/>	Individual instruction of procedures	<input checked="" type="checkbox"/>	Review of diagnostic studies, including radiology
<input checked="" type="checkbox"/>	Other: Review of bone marrows and peripheral smears		

**Describe the most important educational content, including the mix of diseases, patient characteristics, types of clinical encounters, procedures and services:**

Residents can expect to consult on medical and surgical patients with complicating anemias, leukopenia or thrombocytopenias. Many of these patients will reside in the various intensive care units. Many of these patients have been admitted via the emergency room, while many have been under the care of various subspecialists for extended periods. AIDS related hematologic complications also make up a significant proportion of hematologic problems seen by the resident. Pre-operative and peri-operative disturbances of the coagulation system will also be frequently encountered during the residents rotation. Bone marrows are prepared by Cancer Center technical staff and are reviewed on a daily basis by the attending physician. During the rotation, it is expected that the resident will become thoroughly familiar with the acute and chronic management of sickle cell anemia and other hemoglobinopathies and will learn the appropriate indications for red blood cell exchange in sickle cell disease. Hematologic neoplastic problems such as lymphoma, multiple myeloma, acute and chronic leukemias will often be encountered during a resident's rotation.

**Check the principal ancillary education materials used:**

<input type="checkbox"/>	Reading lists	<input checked="" type="checkbox"/>	Pathologic material
<input checked="" type="checkbox"/>	Radiologic studies	<input type="checkbox"/>	Other noninvasive studies
<input checked="" type="checkbox"/>	Handouts on relevant topics	<input checked="" type="checkbox"/>	Articles from the literature
<input checked="" type="checkbox"/>	Other: Textbook reading	<input type="checkbox"/>	Case studies

**Methods used to evaluate the resident and the rotation:**

<input checked="" type="checkbox"/>	Evaluation of residency performance and professionalism
<input checked="" type="checkbox"/>	Evaluation of attending teaching skills and other attributes
<input checked="" type="checkbox"/>	Rotation assessment by resident
<input checked="" type="checkbox"/>	Observation of resident's clinical competency
<input type="checkbox"/>	Observation of resident's leadership and teaching skills
<input checked="" type="checkbox"/>	Review of the resident's history/physical exam, progress notes and documentation of procedures in the chart
<input checked="" type="checkbox"/>	Resident's attendance of rounds and conferences monitored
<input type="checkbox"/>	Other: _____

**Identify strengths and limitations specific to the resources of the sponsoring institution:**

The division of hematology/medical oncology provides a number of specialized resources including an active cell component laboratory, pheresis capability, immunophenotyping of white cells for differential diagnosis of leukemia and lymphoma, as well as bone marrow aspirate preparation and interpretation. The division is a member of the Cancer and Acute Leukemia Group B, and enters many patients onto group protocols. A number of institutional trials are being conducted as well.

**Conferences or Attending/Patient Care Rounds:** (Journal club, division rounds, etc.)

<u>Name</u>	<u>Location</u>	<u>Day</u>	<u>Time</u>
Hematology/Oncology Grand Rounds	GCC	Monday	12:00 noon
Leukemia Clinical Management Conference	GCC	Thursday	12:00 noon
Lymphoma Conference	GCC	Wednesday	4:00 pm
(3pm when on line interactive conference with NIH, Georgetown & Washing Hosp Ctr)			

**Clinics:**

<b><u>Name</u></b>	<b><u>Location</u></b>	<b><u>Day</u></b>	<b><u>Time</u></b>
Outpatient Clinic	GCC	Variable	By appt

**Other information:** Hematology attending physicians rotate on a monthly basis. In all instances, a GCC fellow will also rotate with and help supervise the resident.

*The resident and faculty members of the Postgraduate Education Committee reviewed and edited the content of this curriculum at its meeting on 7/18/07.*