

Hematology

1. Rotation Name

CLINICAL - Hematology

2. Educational Purpose of the Rotation

Exposure to patient with hematological conditions with the goal of learning about both the clinical and basic science aspects of hematologic disease. The goal of the clinical rotation is to allow the sub-specialty residents (SSR) to become familiar with a broad range of hematologic problems. Emphasis is placed on diagnostic accuracy as well as appropriate utilization of radiographic and laboratory testing. Communication skills are stressed to allow the SSR to clearly and concisely report their diagnostic findings. Additional goals include pathophysiology, therapeutics, prevention, epidemiology, humanistic moral and ethical aspects of medicine as they relate to the hematologic patient.

3. Staffing of the Rotation

Attending faculty members include Drs. Schwartz, Conley, Tamkus, Al-Janadi and Aung. Rotations at McLaren Regional Medical Center in Flint are staffed by Dr. Arora. In addition the Division is currently recruiting for additional faculty.

4. Resources

Outpatient clinic rotations are housed in the MSU Clinical Center and Ingham Regional Medical Center. Inpatient rotations occur in Lansing at Ingham Medical Center and McLaren Regional Medical Center in Flint. Additional clinical experiences are obtained during the required elective rotations and may include any or all of the following: Wayne State University, University of Washington and University of Michigan.

5. Patients

Ultimate and primary patient responsibility rests upon the attending physician. As the residents' understanding and competencies increase, their role in patient decision making is increased. Residents are exposed to a wide variety of hematologic problems. These include anemias, leukopenias, thrombocytopenias, pancytopenias, coagulation disorders as well as hematopoietic premalignancies, myelodysplastic disorders, myeloproliferative syndromes, myelomas, lymphomas and leukemias.

6. Responsibilities

Goal: The hematology resident will gain exposure to a wide range of patients with both acute and chronic hematologic related problems by participating in admissions, planning diagnostic and therapeutic procedures and daily patient management and discharge. This includes evaluating the patient for hematologic treatment with medication, chemotherapy or other anticancer therapies.

- Duties: The hematology resident is expected to:
1. Care for patients including a complete work-up with a history and physical examination in both inpatient and outpatient settings.
 2. Be responsible for daily patient follow up including appropriate medical record documentation.
 3. Be prepared to discuss all aspects of a patients' illness as it relates to significant findings, progress and treatment plans.
 4. Attend inpatient rounds with the attending physician on weekdays and assigned weekends.
 5. To present significant patient related events that occur during nighttime hours to ensure information transfer and continuity of care.
 6. Prepare case presentations for conferences that include tumor board, Hematology/Oncology Conference and other patient related conferences.
 7. Participate in other hematology related conferences.
 8. Participate in out patient clinics and patient management of hematologic conditions under the supervision of an attending physician.
 9. Read and be prepared to discuss key literature.

7. Instructional Methods

Faculty members teaching the hematology resident are responsible for:

1. Supervision of the resident in accordance with the supervision policy.
2. Respond promptly to the resident's questions/concerns.
3. Organize and conduct four hours of formal teaching/week, utilizing appropriate lectures, teaching material and literature.
4. Provide the resident with ongoing performance feedback and skill progression.
5. Increase the level of responsibility as the individual skill level progresses.

8. Evaluation

6. At the conclusion of each rotation faculty members will summarize and accurately describe the resident's performance on the provided form, discuss this evaluation with the resident and return the form to the residency director.
7. The resident will summarize and accurately describe faculty performance and return it to the program office for inclusion in a computer-generated report to insure resident anonymity.
8. Twice per year the resident will be evaluated by the program director in a formal, written evaluation session. These evaluations will be transcribed and signed by both the residency program director and the resident.

Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	7:30 am Journal Club Research Conf – 1st Inpatient care*	Inpatient care* 12:15 Medicine Grand Rounds	7:00 am Tumor Board Sparrow Inpatient care*	7:00 am IRMC Tumor Board Inpatient care*	7:30 Hem/Onc Core Conference Inpatient care*
PM	Inpatient care*	Inpatient care*	Inpatient care*	Inpatient care*	Inpatient care*

All activities in bold are required activities for all sub-specialty residents.

* Inpatient care occurs at Ingham Medical Center and McLaren Regional Medical Center

Note: During the week the sub-specialty resident attends at least two sessions of outpatient clinics at the Hematology/Oncology Clinic at the Ingham Regional Medical Center. The times for this clinic vary from resident to resident and as such have not been including in this table.

Note: Didactic sessions for blood and bone marrow morphology are taught by Dr. Hamdan when the resident is assigned to the “clinic” rotation. This is facilitated by a new double-headed light microscopy that is also connected to a T.V. monitor and can capture images via a digital format.

9. Clinical Hematology - Rotation Competency Objectives

1. Patient Care

- a) All residents will be able to demonstrate the ability to complete an efficient hematologic work up inclusive of history and physical, diagnostic procedures, problem list, working diagnosis and treatment plan.
- b) The Hematology/Oncology Resident will be able to perform the above skills and be able to independently generate an appropriate management plan.
- c) The resident will be able to demonstrate the ability to respond appropriately to abnormal test results.
- d) The resident will be able to follow assigned patients appropriately adjusting treatment plans as additional information or changes in the physical examination becomes evident.

2. Medical Knowledge

- a) All residents will be evaluated by the supervising faculty for appropriate analytic approach to hematologic conditions. These include immune and non-immune cytopenias including aplastic anemia, myelodysplasias, thrombophilia's hereditary and acquired as well as bleeding disorders including hemophilia and hematopoietic malignancies such as lymphomas and leukemias. Residents will be evaluated for satisfactory basic and clinical knowledge of medical aspects of hematology.
- b) All residents will demonstrate a sound knowledge base pertinent to the broad range of illnesses common to the practice of hematology.

3. Interpersonal and Communication Skills

- a) Residents are expected to demonstrate professional communication skills throughout their interactions with oncology patients. In addition, residents will be assessed for appropriate communication with MSU's office staff, including setting clear expectations for work hours and outpatient/inpatient duties. Residents will be expected to act as a constructive and proactive member of the practice.
- b) Residents will be able to demonstrate the ability to work effectively with other members of the health care team including other residents, attending physicians and health care providers.

4. Professionalism
 - a) Throughout the rotation, residents are expected to exhibit reliability in their clinical duties, as well as integrity and respect in their interactions with patients and colleagues.
 - b) Residents will be able to demonstrate appropriate consultative principles of communication and responsiveness to professional consultative requests.
5. Practice Based Learning and Improvement
 - a) Rotating residents will demonstrate self-initiative in the use of information technology available via the MSU electronic library and computer terminals located in the residents' offices and throughout the clinic.
 - b) Rotating residents will be expected to show progressive learning throughout the rotation, with emphasis on learning from any cognitive or procedural errors. They are also expected to facilitate any quality improvement initiatives in place at MSU's clinical office practice.
6. Systems Based Practice
 - a) All residents will demonstrate conscientious awareness of the impact of their professional activities at the MSU office practice site, and will conscientiously avoid inappropriate use of the practice resources.
 - b) Residents must demonstrate understanding of cost-effectiveness of care incorporating cost-effectiveness into their development of diagnosis and treatment plans.
 - c) Residents will work effectively with Internal Medicine Residents as well as residents from other sub-specialties to coordinate patient care including development of a comprehensive treatment plan.