

## *MEDICAL KNOWLEDGE*

### **A. Objectives**

#### **1. What is the medical knowledge base the resident is expected to attain while on this rotation?**

##### **a. Level I**

1. Understand the basic knowledge of common neoplastic and non-neoplastic hematopoietic and lymphoid diseases
2. Be able to interpret the output of a CBC analysis, including indices, differentials, and system flags, and be able to correlate these results with other clinical and laboratory data.
3. Understand principles of hemoglobin electrophoresis, isoelectric focusing, and HPLC techniques.
4. Be able to evaluate and interpret peripheral blood, bone marrow, and body fluid smears and biopsies of bone marrow, lymph node, and other tissues. This should include the ability to generate a differential diagnosis based on the morphologic findings and clinical history, and to suggest appropriate follow-up laboratory tests. The fellow resident should be able to identify cases in which further consultation is indicated.
5. Understand the indications and uses of bone marrow evaluation.
6. Know the basic immunophenotype of common hematolymphoid neoplasms.
7. Understand the basic structure and essential elements of a hematopathology report.
8. Take the initiative to know and research the answers to unknown posed hematopathology questions.
9. Prepare and be knowledgeable about cases presented at Clinical Pathology rounds and resident case presentation conference.

##### **b. Level II**

1. Demonstrate mastery of all of the objectives from the Level I rotation.

2. Understand the purpose, use, and limitations in hematopathology of ancillary diagnostic tools including immunohistochemistry, flow cytometry, cytogenetics, and molecular diagnosis.
3. Be able to effectively synthesize bone marrow and other laboratory results into a cohesive written report that provides all necessary information for the clinic to be able to effectively treat his/her patient.
4. Prepare and be knowledgeable about cases presented at adult and pediatric multidisciplinary conferences.

## **B. Plan**

### **1. How is medical knowledge attained?**

#### **a. Level I**

1. Medical knowledge will be acquired through ongoing exposure to case material, attendance at daily sign-out, attendance at various conferences as mentioned below, presentation at Clinical Pathology Rounds and resident case conference, and ongoing reading of textbooks and journals.

#### **b. Level II**

1. Senior residents, when possible, are expected to attend a morning consult sign out where cases are often more complicated and discussions proceed with a more advanced audience in mind.
2. Medical knowledge will be acquired additionally through preparation and presentation of cases at the Heme/Oncology Rounds, Pediatric Leukemia conference, and participation in clinicopathology studies or projects under the supervision of faculty.

## **C. Supervision/Assessment**

### **1. How is the fellow's medical knowledge assessed and by whom?**

#### **a. Level I**

1. Medical knowledge will be assessed through direct observation by hematopathology faculty and fellows, oral quizzes during daily sign-out and unknown conference. Medical knowledge will be assessed based on the quality of case presentations.

2. The rotation director will discuss verbal and written assessments provided by faculty, fellows, supporting staff, and clinicians at both the midpoint and endpoint of the rotation.

**b. Level II**

1. Medical knowledge will be assessed through direct observation by hematopathology faculty and fellows, oral quizzes during daily sign-out and unknown conference. Medical knowledge will be assessed based on the quality of case presentations.
2. The rotation director will discuss verbal and written assessments provided by faculty, fellows, supporting staff, and clinicians at both the midpoint and endpoint of the rotation.