

**University of Minnesota  
Laboratory Medicine and Pathology**

**Lymph Node Rotation**

<b><u>Location:</u></b>	D219 Mayo
<b><u>Duration:</u></b>	One month
<b><u>Rotation Director:</u></b>	Michael Linden, MD, PhD      Phone: 612-273-5629 Pager: 899-8102
<b><u>Other Faculty:</u></b>	Sophia. Yohe, MD, Elizabeth Courville, MD, Bartosz Grzywacz, MD, Sarah Williams, MD, Pawel Mroz, MD, PhD, Robert McKenna, MD, Vanessa Dayton, MD

**General Description:**

The rotation will include formal lectures, participation in daily intradepartmental hematopathology conferences and sign-out with the attending pathologists, participation in the hematopathology - specific work up of lymph nodes and related specimens in the grossing room. There is also time for directed reading, review of archival cases /training sets and discussion. Small, focused projects may be identified for trainees indicating an interest. The rotation is a one-month required rotation. This rotation within the Division of Hematopathology builds upon the introduction that is received in the three-month rotation introductory rotation.

**Goals and Objectives:**

Upon completion of this rotation, the resident will be able to:

- Know the grossing room procedure for handling lymph nodes and other specimens submitted for lymphoma work-up. This includes responding immediately to the lymphoma pager during service hours: Monday -Friday 8 AM-5PM and taking a leadership role in lymphoma workups. Polite and efficient cooperation with surgical pathology team is an important part of this task.
- Gain proficiency in performing lymphoma work-ups in consultation with Hematopathology Fellow and supervising attending on service
- Be familiar with the general principles of immunohistochemistry and the sets of markers routinely stained for in the workup of small cell B cell lymphomas, as well as large B cell lymphomas non-Hodgkin lymphoma and Hodgkin lymphoma
- Know the normal histology of lymphoid organs: lymph nodes, spleen, tonsil
- Be familiar with common reactive lymphadenopathy patterns
- Be familiar with pathologic, clinical and molecular features of the four most common small B cell NHL lymphoma categories
- Be familiar with pathologic, clinical and molecular features of Diffuse Large B cell Lymphoma and its subtypes
- Be familiar with pathologic, clinical and molecular features of Hodgkin Lymphoma
- Be familiar with pathologic, clinical and molecular features of T cell lymphoma categories
- Be familiar with pathologic, clinical and molecular features of post-transplant lymphoproliferative disorder
- Gain proficiency at describing microscopic features of lymphoproliferative disease
- Be familiar with- and participate in ordering ancillary molecular and cytogenetic studies in the course of lymphoma work-up
- Gain the ability to interpret results of flow cytometry, cytogenetics, molecular studies in evaluation of suspected lymphoproliferative disease, review the status and results of these ancillary studies before case sign-out
- Review medical history, laboratory data and imaging and other clinical information before sign-out

The learning objectives below reference the corresponding ACGME core competencies: Patient Care (PC), Medical Knowledge (MK), Professionalism (Prof), Communication Skills (CS), Practice Based Learning and Improvement (PBLI), and Systems-Based Practice (SBP). (8-10 objectives)

## General

- Timely attendance is expected at all conferences; we expect that planned and unplanned absences arise, but it is essential to communicate with the fellows and staff (Prof)
- Attendance and participation at the daily Hematopathology Consensus Conference at 9 AM in the multi-headed scope room (Prof, MK, CS)
- Attendance, and possible presentation, at Adult Hematology Malignancy Conferences (Prof, MK, CS, PC) – these occur two times per month.
- Attendance and participation at the monthly Pediatric Hematopathology Conference (Prof, MK, CS, PC).
- Attendance and presentation at the weekly Clinical Pathology (CP) conference at 12:00 on Tuesdays (Prof, MK, CS, PC).
- Attendance and participation/preparation/previewing unknowns during the Tuesday and Thursday Hematopathology didactic lectures and unknown sessions (Prof, MK, CS, PC).
- Demonstration of respect for fellow trainees and Hematopathology technicians and staff (Prof, CS).

## Lymph node service (one month)

The goal of this rotation is for the resident to become comfortable in recognizing abnormal patterns in lymph node pathology, more specifically the resident is expected to:

- Gain the ability to raise relevant differential diagnosis based on Hematoxylin - Eosin stained sections. (PC, MK, PBLI)
- Be able to order the relevant set of stains and ancillary studies for that differential diagnosis (PC, MK, Prof, SBP)
- Be able to interpret stains and ancillary studies (PC, Prof, CS, PBLI)
- Be able to communicate the findings to other pathologists and other members of clinical care team (Prof, CS, SBP)
- Be able to cooperate with surgical pathology and cytopathology services on shared / common cases (PC, Prof, CS, SBP)

## Assigned Reading:

- WHO classification of the tumors of hematopoietic system

## Optional Reading:

- Chosen hematopathology textbook, preferred are by the following (main) authors :
- 1) Hematopathology, (current 2<sup>nd</sup> edition) by Elaine Sarkin Jaffe, MD, Daniel A. Arber, MD, Elias Campo, MD , Nancy Lee Harris, MD and Leticia Quintanilla-Fend, MD
- 3) Joachim's Lymph Node Pathology by H.L. Joachim and L.J. Medeiros
- 4) Hematopathology by Eric D. Hsi , in the series "Foundations in Diagnostic Pathology"
- 5) Knowles' Neoplastic Hematopathology by Orazi, Weiss, Foucar and Knowles

**Call Duties:** Residents are not required to take call after office hours for this rotation.

## During the rotation, the trainee is expected to join the following conferences:

- Clinical Pathology Conference: Tues 12:00-1:00 PM (weekly) – Mayo D175
- Resident Didactic Series: Wed 7:00-8:00 AM & 9:15-10:15 AM (weekly) – Mayo D175
- Lab Medicine/Pathology Grand Rounds: Wed 8:00-9:00 AM (weekly) – 450 MCRB
- Immunohematology Conference: Wed 3:00-4:00 PM (bi-monthly) -
- Hematopathology Consensus Conference: Daily 9:00 AM – Multi-headed scope room
- Adult and/or Pediatric Hematology Malignancy Conference – 2 times per month each
- Pediatric Hematopathology Conference: 7:30AM first Friday of the month
- Morbidity & Mortality Conference: Friday 12:00-1:00 PM – Moos 2-620

**Other Requirements:**

- CP case logs should be emailed to the rotation director throughout the rotation to meet program requirements. Resident is responsible to upload to the case log repository (available through the resident intranet).

**Assessment methods:**

Resident performance on this rotation will be assessed by:

- Formative feedback provided by attending physician(s)
- Performance evaluation completed by attending physicians at the end of the rotation