

Phase 2/3 Elective Description

Campus: Southeast (Fargo)

Elective/Experience Title: Pathology

Location of Elective: Sanford Health System - Fargo, ND

Department: Pathology

Course Number: PATH 9203

Preceptor(s): Angela J. Wood, MD (Department Chair) and all Pathologist staff

Period(s) Offered: January-April and September-November **Course Prerequisites:** none

Number of students per period: No limit (prefer multiple students at once) **Revised Curriculum Phase(s):** 3

Purpose: To provide education and experience in anatomic and clinical pathology, including the various subspecialty areas of pathology.

Objectives: Following successful completion of this elective, the student will be able to:

1. Summarize the role of surgical pathology in the diagnosis and management of patients (Competency 3.2, 3.3).
2. Identify basic and common surgical pathology tissue specimens received in a tertiary care subspecialty laboratory setting and relate the findings to pathophysiological processes (Competency 2.1, 2.2, 2.5, 3.3).
3. State the appropriate use, clinical utility, and limitations of frozen sections and other laboratory tests (Competency 3.2).
4. State the role of the subsections of the clinical laboratory, including basic instrumentation and methodologies for each area (competency 2.5)
5. Summarize how the medical team uses lab services including chemistry, transfusion, stem cell, infectious disease, hematology, cytology, and HLA tissue typing (Competency 7.3).
6. Summarize the impact of medical informatics, computers, and information systems in the modern clinical laboratory (Competency 1.1, 2.6).
7. Generate an interesting case presentation which is presented to faculty, staff and students (competency 1.8, 4.5)
8. Choose to complete the elective in a professional manner including professionalism, punctuality, and timely completion of tasks (competency 3.5, 5.7)

Instructional Activities: During this elective, the student will be involved in/experience:

1. Examining tissue specimens and histologic diagnosis of fixed and frozen tissue with pathologists and pathologist assistants.
2. Instructional sessions with fellowship-trained subspecialty pathologists in hematopathology, cytopathology, dermatopathology, GI/pancreas/liver pathology, genitourinary pathology, GYN pathology, and breast pathology.
3. Additional exposure to surgical pathology encompassing all remaining organ systems, including bone, soft tissue, endocrine, head & neck, thorax, and neuropathology.
4. Virtually attending multiple subspecialty tumor conferences with the presenting pathologists.

5. Observing laboratory technicians and identifying and interpreting abnormal laboratory tests in the infectious disease, transfusion, stem cell, chemistry, hematology, cytology, and histology laboratories.
6. Reviewing continuing education questions using established programs such as CheckPath.
7. Studying assigned “unknown” surgical pathology cases and discussing these cases with a preceptor.
8. Completing any readings assigned, designed to enhance and reinforce various topics relevant to pathology and the individual student’s experiences and interests.
9. Presenting an interesting pathology case to staff and students.

Criteria for Grading: During and following this elective, the preceptor will:

1. Utilize the standardized UNDSMHS senior elective evaluation form.
2. Evaluate by direct observation the student’s ability to recognize basic histology and provide interpretation of gross and microscopic surgical pathology specimens (objective 2).
3. Evaluate by direct observation the student’s ability to relate pathophysiological processes with laboratory abnormalities and to discuss appropriateness of laboratory tests and their interpretation (objective 2,3).
4. Evaluate the quality of the student’s Interesting Case presentation (objective 7)
5. Evaluate the engagement of the student in the entire elective as demonstrated by professional interactions, attendance, punctuality, active listening and questioning, completion of assigned readings, and ability to describe the types of services, methodologies, computerized enhancements, and limitations of the various subsections of a modern clinical laboratory (objective 1, 3, 4, 5, 6, 8)