

Phase 2/3 Elective Description

Campus: Southeast (Fargo)

Elective/Experience Title: Radiation Oncology

Location of Elective: Sanford Health-Roger Maris Cancer Center

Department: Radiology

Course Number: 9204

Preceptor(s): Sommer Nurkic, M.D. Ash Jensen, MD. Ethan Foster MD, Elliott Lawrence MD

Course Prerequisites:

Period(s) Offered: All

Revised Curriculum Phase(s): 2 & 3

Number of students per period: 1

Purpose: To gain education and clinical experience in the care of patients requiring radiation oncology services.

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

1. Execute evaluation of patients with malignant or benign disease with indications for radiation therapy. (Competency 3.1)
2. Generate and execute management for common complaints of radiation injury and side effects, both acute and late, in the course of treatment. (Competency 3.4)
3. Summarize the basic evaluation and management of the cancer patients, including problem-focused interview and physical examination. (Competency 3.1, 3.2, 3.3, 3.4)
4. Execute interpretation of basic imaging studies related to cancer staging and radiation treatment planning. (Competency 3.3)
5. Generate a differential diagnosis on a cancer patient and describe the appropriate pathway to diagnosis and staging evaluation. (Competency 3.2, 3.3, 3.4)
6. State basic knowledge of cancer biology, radiobiology, radiation physics, and radiation dosimetry for treatment planning. (Competency 2.1, 2.2, 2.5, 2.6, 2.7)
7. Generate appropriate documentation (via computer note or dictated note) interactions with the patients during consultation, follow-up, or on treatment visits. (Competency 3.7)
8. Summarize the different radiation treatment modalities, including external beam radiation therapy (linear accelerators), high dose rate brachytherapy. (Competency 2.5, 2.6)
9. Choose to participate as a member of an interprofessional team including effective teamwork, communication and patient interactions. (Competency 7.2, 7.3, 7.4, 7.5)

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

1. Reading of standard radiation oncology textbooks and primary literature to support and expand clinical knowledge and didactic teaching.
2. Assisting the preceptor with radiation implantation procedures, such as breast, gynecologic, or prostate brachytherapy when the opportunity arises.
3. Developing patient treatment plans, computer plan designs and block fabrications under the direction of the preceptor.
4. Assisting the preceptor in the outpatient and inpatient management of malignant diagnoses.
5. Participating in weekly Tumor Board meetings, including case presentations.

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

1. Utilize the standardized UNDSMHS senior elective form.
2. Judge by direct observation and review of the patient medical record documentation, the student's ability to perform an efficient history and physical exam on a cancer patient and interpretation of imaging studies. Students will be graded on consultation, follow up and progress notes. (Objective 1, 3, 4, 5, 7)

3. Evaluate by direct observation and review of the patient medical records the student's ability to use cancer staging tools. Grading will involve the student's ability to report appropriate staging studies related to evidence-based guidelines. (Objective 5)
4. Judge by directly observing the student's level of proficiency in evidence-based treatment suggestions for malignant diseases. (Objective 2, 3, 6, 8)
5. Judge by directly observing the student's ability to work as member of an integrated healthcare team, including teamwork, communication skills, and bedside manner. (Objective 9)
6. Judge by directly observing the student's ability to efficiently present cases and integrate, assess and learn new information in the clinical setting and during Tumor Board meetings. (Objective 3, 5, 6, 8)