Course: Neuroradiology Course Number: RAD 2104

Department: Radiology

Faculty Coordinator: Carlos Perez, MD

Hospital: Parkland Health and Hospital Systems; Meadows Clinic; Anderson Clinic

Periods Offered: All

Length: 4 weeks

Max # of Students: 2

First Day Contact: Alejandro Calderon Lopez

First Contact Time: 8:00 a.m.

First Day Location: Assigned clinical site

Prerequisites: *Completion of a neurology rotation*

I. **Course Description**

Goals	Objectives	Assessment methods
Patient Care: Students are expected to: 1. Determine appropriateness of requested Neuroradiology CT and MRI exams for given clinical situations. 2. Determine any prerequisite laboratory values prior to study, such as recent serum creatinine/eGFR. 3. Understand how to recognize contrast reactions and know their appropriate therapy.	After the rotation, students will: 1. Know indications and contraindications (by daily instruction) for and methods of performing neuroradiology CT and MRI studies. 2. Recognize contrast reactions through observation and be familiar with potential treatments.	Observations of faculty and staff
Medical knowledge: Students will be knowledgeable in: 1. Normal CT and MRI anatomy of the brain, spine, and neck. 2. The general range of pathological conditions of the central nervous system demonstrable by CT and MRI. 3. The sequences employed in Neuro MRI imaging.	After the rotation, students will: 1. Become familiar with Neuroanatomy and wide range of associated pathology through daily readouts. 2. Become familiar with the myriad MRI sequences used in Neuroimaging through direct observation.	Observations of faculty and staff

Interpersonal and communication skills: Students will understand: 1. The importance of effective communication with physicians, other health professionals, and health related agencies.	Students will: 1. Observe residents, fellows and faculty dictate, edit, and approve radiology reports in a timely fashion, and communicate unexpected or significant findings to referring clinicians in a timely manner in person, by phone, or via Vocada pager alert activation system.	Observations of faculty and staff
Practice Based learning and Improvement: Students will: 1. Demonstrate the ability to assimilate scientific evidence and improve patient care practices.	Students will: 1. Investigate and evaluate the care of patients by using information technology (EPIC, journal reviews).	Observations of faculty and staff
Professionalism: Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate: 1. Respect for patient privacy and autonomy 2. Accountability to patients, society, and the profession	Students will: 1. Maintain a professional relationship with patients, radiology faculty, radiology technicians, and referring clinicians. 2. Keep patient's identifying information confidential. 3. Dress appropriately and have adequate hygiene.	Observations of faculty and staff
Systems based practice: Students will: 1. Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.	Students will: 1. Observe residents, fellows and faculty discuss with referring clinicians the objectives of Neuro CT and MRI exams and optimal imaging protocol and/or modality when the exam request provides little or no clinical information or if a distinctly different imaging exam/modality would better serve the interests of the patient.	Observations of faculty and staff

II. **Methods of Instruction:**

A. Didactic (Block 1-4 and 7-10 Only):

1. Monday – Friday: 1:00-3:00 PM Diagnostic Radiology Medical Student Conferences
2. Optional:
    i. Wednesday 7 a.m. - ENT Skull-base Malignancy Conference and ENT Tumor Conference (CS0.106)
    ii. Friday 12:00 p.m. - Resident Neuroradiology Conference (CS0.106)
    iii. Friday 12:30 p.m. - Brain Tumor Conference (Zale Doctor's Conference Room)

B. Clinical: Faculty teaching will be performed throughout the day during regular image interpretation read-out sessions and during procedures.

1. Schedule:
    i. Week 1 & 2: Students report to Parkland Neuroradiology Reading Room by 8:30 a.m. (First 2 weeks of block, under direction of Dr. Richard Suss).
    ii. Week 3 & 4: Students report to Neuroradiology Reading Room, Meadows MRI by 8:30 a.m. (Second 2 weeks of block, under direction of Dr. Carlos Perez).

IV. **Overview of student responsibilities**

The student is expected to participate in image interpretation sessions with clinical data and follow-up of patient outcome.

A. Attendance:

Per UTSW requirements for attendance for MS-4 clinical electives, the student may not miss more than ***4 days of excused absences***. Missing more than 4 days will result in an Incomplete grade. Due to limits on departmental resources and full monthly course enrollments, "make-up days" will not be permitted. Only four (4) total days of excused absences are permitted to still pass the course, with documentation of an appropriate reason provided to the Clerkship Coordinator.

Examples of appropriate reasons for excused absences include residency interviews or illness. Students should contact the Clerkship Coordinator, or the Radiology Education Office (RADEducation@UTSouthwestern.edu), with expected dates of excused absences at least one (2) weeks prior to the start of the course. In the event of illness or an unexpected absence (or missed lecture) arises, promptly contact the Clerkship Coordinator or the Radiology Education Office.

Students must attend daily conferences (a sign-in sheet will be posted at the front of the lecture hall). A conference is considered "missed" after the first 10 minutes. Any missed conferences (excluding those from pre-approved/excused absences) are required to be made up by attending the next available Resident Conference(s). Failure to make up missed lectures could result in unexcused absences. There is a limit of two (2) make-ups for missed lectures. Each additional missed lecture thereafter would result in an unexcused absence.

Please note that a Professionalism Form may be filled out when an unexcused absence occurs, and this becomes a part of the student's record in the student deans' office.

IV. **Method of evaluation of students and requirements:** Evaluation based on assessment methods listed above, grade is Pass/Fail

A. This course is graded on a “Pass” or “Fail” basis. To receive a “Pass” grade, you must:
    1. Meet the attendance requirements assessed by Conference attendance and faculty signatures on the Clinical Site Attendance logs.
    2. Complete evaluations of the faculty and the overall course by Sunday following the last day of the block:
        - 2 Medhub conferences per day x 1 evaluation per lecturer = 2 Conference evaluations per day
        - 1 Medhub evaluation (overall course evaluation)

All evaluations must be completed prior to the first lecture on the final day of the block. Students will not receive a Pass grade until all evaluations are completed and all other requirements have been met.

PLEASE LEAVE COMMENTS! We do rely on student feedback to make improvements to the course.