CLINICAL NEUROSCIENCE CLERKSHIP
COURSE SYLLABUS
JULY 2004 – JUNE 2005

STAFF:

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COURSE DESCRIPTION:

The Clinical Neuroscience Clerkship is part of the combined Neuroscience-Psychiatry/8-week block in the third year. One month each are spent on neurology and psychiatry with a shared series of Wednesday afternoon didactics.

The Clinical Neuroscience Clerkship at a Glance (4 weeks)
Students are assigned to one of the following locations for their primary clinical experience:

OSU Neurology Ward service
OSU Neurology Consult service
OSU Neurosurgery service
OSU East Neurology service
RMH Neurology Service
RMH Neurosurgery service
Mt Carmel Neurology service
Columbus Children’s Hospital Neurology service
Columbus Children’s Hospital Neurosurgery service

Additional sites may be added in the near future.

Case-Based Didactics
On Wednesday afternoons throughout the 8-week Neuroscience-Psychiatry block, students attend presentations delivered by an interdisciplinary group of faculty. Attendance at weekly didactic sessions is mandatory.
Clerkship Requirements and Performance Evaluations

Students must complete all clerkship requirements to receive a grade of SATISFACTORY. A grade of INCOMPLETE or UNSATISFACTORY will be given to students who fail to achieve any of these requirements. Students with an INCOMPLETE must meet with Dr. Lynn to discuss what remediation must be done. Students with an INCOMPLETE or UNSATISFACTORY grade or with problems with professional behavior will be referred to the Med 3/4 Student Review Subcommittee for resolution. Students who receive an UNSATISFACTORY must repeat the clerkship.

Grading: The clerkship grade is based 60% on the evaluation of the clinical staff and 40% on the written examination. The attending staff evaluation is given more weight than the resident staff but both are considered very carefully. The clerkship director reserves the right to provide input into the grade based on personal impressions of the student’s effort, attitude, and professionalism.

Required Reading: Cecil’s Essentials of Medicine: the section on Neurologic Disease as well as the chapter on Infections of the Nervous System. Other excellent texts are recommended elsewhere in this handout. Students have access to the materials in the Neurology Department library.

Brust JCM. The Practice of Neural Science, McGraw Hill, 2000 has been required reading for several years for the med 1-2 IP students and is a casebook of approximately 100 cases of neurology problems. This is a very helpful book for the transition into clinical neurology.

Clinical Work-ups: All students in the July/August rotation must write one History and Physical Examination during the clerkship rotation to turn in for formal evaluation. The completed H&P is turned in to one of the senior neurology residents or a faculty member for feedback, and then to the Dr. Lynn for evaluation by the beginning of the third week of the rotation. This includes students working in an external office. Even students in a shadowing role in an office, are expected to turn in an H&P that is as thorough as possible.

Attendance at all lecture/tutorials is mandatory and formal attendance will be taken. Students are to contact the clerkship education coordinator in advance if they cannot attend to explain why a session or a day of the rotation will be missed. Prompt daily attendance and professional behavior are expected. Students should become familiar with the College’s Med 3/4 attendance policy that is found in the Med 3-4 policies handbook: http://medicine.osu.edu/currentstudents/handbooks/med3_4/Policies_Procedures_amb.pdf. Unexcused absences may result in a grade of INCOMPLETE or UNSATISFACTORY.
Night Call: Each student will be assigned 2 nights of call during this rotation: one with the neurology resident and one with the neurosurgery resident. These nights will be at OSU with the exception of students who are on the RMH Neurology or Neurosurgery rotations (they will take their Neurology night at OSU and their Neurosurgery night at RMH). These nights will start at 5:30 pm and students should page the neurology or neurosurgery resident on call for the night through the hospital operator. Students with career interests in an area such as Neurosurgery are encouraged to make your interest known and take more frequent call voluntarily.

Outpatient clinic: Some students will be assigned to a half-day outpatient clinic if exposure to outpatient neurology or at least outpatient neurologic problems is not an integral part of your rotation. This schedule will be passed out at the beginning of the rotation with the call schedule.

Written Examination: A short multiple choice written examination will be administered at the end of the 2-month Neuroscience-Psychiatry block. The neuroscience portion of this test is 50 questions – many of which are written as short patient scenarios. A score of 65% or greater is required to pass. Additional quizzes during the month of the rotation may be added at the discretion of the clerkship director.

Student Evaluation of the Clerkship:

Students are required to evaluate the clerkship at the end of the rotation. The clerkship coordinator will provide the forms. The clerkship seeks constructive input to help improve in any way possible. Student evaluations will remain anonymous and confidential.

TEXTBOOKS:

Dr. Lynn’s Pick:

Comprehensive Texts:

Easy-to-carry Paperbacks:
Samuels MA. Manual of Neurologic Therapeutics. 7th ed. Lippincott Williams and Wilkins, 2004
Weiner HL, Levitt LP, Rae-Grant A. Neurology (House Officer Series), Lippincott, Williams & Wilkins.
Devinsky O, et al. The Resident’s Neurology Book. FA Davis, 1997. (an inexpensive paperback that is quite readable)

**For those who wish to prepare for Emergencies:**

Please do not overlook the excellent neurology section in Harrison’s Principles of Internal Medicine.


These books are worth seeking out to flesh out one’s knowledge of neurology with personal accounts of neurologic disease:


M. Albom. Tuesdays with Morrie (an ALS patient is interviewed throughout the course of his illness)


Christopher Reeve, Still Me – autobiography of actor paralyzed by C1-C2 injury (see particularly pp 1-53 and 94-145 for his description of his disability and daily routine, and his emotional response).

The Diving Bell and the Butterfly by Jean-Dominique Bauby – (French journalist with “locked-in syndrome”)

Waist High in the World by Nancy Mairs, a young woman wheelchair bound by MS

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**GOALS AND OBJECTIVES:**

Goals and Objectives for the Neurology Clerkship mirror those developed for the 2006 Curriculum Initiative as well as the recommended Neurology Clerkship Core Curriculum of the American Academy of Neurology. Independent reading will be essential for students to meet course objectives.

**Neurology Core Curriculum**

*(adapted from statement of Consortium of Neurology Clerkship Directors and the American Academy of Neurology)*

**Introduction**

Up to 10% of patients seen by family practitioners present with neurologic symptoms and pose neurologic questions to their physicians. Only 16% of the 45 million Americans who visit a physician for a chief complaint referable to the nervous system are ever
evaluated by a neurologist. It is essential that every physician have a firm understanding of the general principles of clinical neurology.

Goals and Objectives of the Clinical Neurology

Goal
To teach the principles and skills underlying the recognition and management of the neurologic diseases a general medical practitioner is most likely to encounter in practice.

Objectives
To teach or reinforce the following PROCEDURAL SKILLS:

- the ability to obtain a complete and reliable history
- the ability to perform a complete and reliable neurologic examination
- the ability to deliver a clear, concise, and thorough oral presentation of a patient’s history and examination
- the ability to prepare a clear, concise, and thorough written presentation of a patient’s history and examination
- (Ideally) the ability to perform a lumbar puncture

To teach the following ANALYTICAL SKILLS:

- the ability to recognize symptoms that may signify neurologic disease (including disturbances of consciousness, cognition, language, vision, hearing, equilibrium, motor function, somatic sensation, and autonomic function)
- the ability to localize the likely site or sites in the nervous system where a lesion could produce a patient’s symptoms and signs
- the ability to formulate a differential diagnosis based on lesion localization, time course, and relevant historical and demographic features
- an awareness of how to use and interpret common tests used in diagnosing neurologic disease
- an awareness of the principles underlying a systematic approach to the management of common neurologic diseases (including the recognition and management of situations that are potential emergencies)

Content of subjects to be taught:

The Neurologic Examination (as an integral component of the general medical examination)

- how to perform a complete neurologic examination
- how to perform a screening neurologic examination
- how to recognize and interpret abnormal findings on the neurologic examination
Localization – general principles differentiating lesions at the following levels:
Cerebral hemisphere
Posterior fossa
Spinal cord
Nerve root/Plexus
Peripheral nerve (mononeuropathy, polyneuropathy, and mononeuropathy multiplex)
Neuromuscular junction
Muscle

Disease Management – general principles governing urgent and non-urgent evaluation of management of:
Acute mental status changes
Strokes
Seizures
Chronic mental status changes
Headaches and facial pain
Low back pain
Neck pain
Peripheral neuropathies
Cranial neuropathies (notably Bell’s palsy, third nerve palsy)
Common movement disorders (notably Parkinson’s disease, essential tremor, tardive dyskinesia)
Meningitis and encephalitis
Multiple sclerosis
Myasthenia gravis
Polymyositis
Primary and metastatic CNS tumors
Sleep disorders (notably obstructive sleep apnea, narcolepsy)
Developmental delay and developmental regression

Neurology curriculum references


Note to Students: The American Academy of Neurology is encouraging lay people to discuss with their physicians the following twelve neurological symptoms. Every doctor should know the serious implications of these symptoms. Do you? No matter what type doctor you become, family members and patients will confront you with these symptoms, and now is the time to prepare yourselves to help. As you read about neurology, this list may also help you to prepare for caring for people with neurologic problems.

Dizziness
Headache
Numbness/Tingling
Memory/Concentration Loss
Blackouts/Seizures
Muscle Weakness/Pain
Unsteadiness
Tremors/Twitches
Head Injury
Sleep Problems
Sudden Vision Change
Slurred Speech