Neuroscience Core Clerkship
2014-2015 Academic Year

Essential Information for Residents Who Teach Medical Students at UWSMPH

- Structure
- Goals/Objectives
- Requirements/Schedules/Activities
- Policies
- Evaluation
Structure
Primary contacts

Clerkship Director/Neurology: Marcus Chacon, MD

Clerkship Coordinator: Mary Beth Dunning (m.dunning@neurosurgery.wisc.edu, 265-9627 H4/334 CSC)

Neurosurgery: Nathaniel Brooks, MD n.brooks@neurosurgery.wisc.edu

Neuroradiology: Tabby Kennedy, MD t kennedy@uwhealth.org

Neuro-rehabilitation: Michael Ward, MD ward@rehab.wisc.edu
Key elements of the clerkship

- Learning to use history and the physical exam to determine an anatomical localization of disease and arrive at a diagnosis
- Developing physical exam skills through regular contact with patients
- Case based discussion (didactics) with faculty
- Regular feedback and conversation with the faculty and residents
- A multi-disciplinary view of neurological disease with experiences in rehabilitation medicine, neuroradiology, and neurosurgery
Logistics

- Required course for all medical students
- Typically taken during the 3rd year
- 12 rotations per academic year, 4 weeks in length
- 2 weeks inpatient/2 weeks outpatient
- Maximum of Madison-based 14-16 students
- WARM students in Green Bay, Marshfield & La Crosse
- Follows UWSMPH holiday schedule for clinical yrs
Clinical Settings

- **Inpatient settings:**
  - Inpatient stroke
  - Inpatient pediatric neurology
  - General neurology ward team
  - General neurology consult team

- **The primary point of contact will be the resident on the inpatient team**

- **Outpatient settings are:**
  - CSC, AFCH & east neurology clinics
  - CSC & Research Park neurosurgery clinics
  - Middleton rehabilitation medicine clinics
  - 20 S. Park neurology clinics
  - VAH

- **Students working in the outpatient setting will see follow-up patients and see new outpatient consultations. The primary point of contact will be the clinic staff and faculty physician.**
Clinical Settings

Rotation Chart for the 00/00/14 Neuroscience Core Clerkship

<table>
<thead>
<tr>
<th>Student</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neurology-Consults</td>
<td></td>
<td>Outpatient-265 Park Neurology</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Outpatient-Neurology UWHC</td>
<td></td>
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<tr>
<td>3</td>
<td>Neurology-Inpatient Stroke</td>
<td>Outpatient-Neurology UWHC</td>
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<tr>
<td>4</td>
<td>Neurology-Pediatric</td>
<td>Outpatient-Neurology UWHC</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td></td>
<td>Outpatient-Neurology UWHC</td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>Neurology-Inpatient General</td>
<td>Outpatient-Neurosurgery</td>
<td></td>
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<tr>
<td>7</td>
<td></td>
<td>Outpatient-Neurosurgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Outpatient-265 Park Neurology</td>
<td>Neurology-Consults</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>Outpatient-Neurology UWHC</td>
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<tr>
<td>10</td>
<td>Outpatient-Neurology UWHC</td>
<td></td>
<td></td>
<td>Neurology-Inpatient Stroke</td>
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<tr>
<td>11</td>
<td>Outpatient-Neurology UWHC</td>
<td></td>
<td></td>
<td>Neurology-Pediatric</td>
</tr>
<tr>
<td>12</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>13</td>
<td>Outpatient-Neurosurgery</td>
<td></td>
<td></td>
<td>Neurology-Inpatient General</td>
</tr>
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<td>14</td>
<td>Outpatient-Neurosurgery</td>
<td></td>
<td>Neurology-Inpatient General</td>
<td></td>
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</table>
Goals/Objectives
Overarching Goals

- Patient Care (Problem solving and Clinical Skills)
  1. Participate in the care of a patient with the following:
     1. Paroxysmal neurological disorder
     2. Neurodegenerative condition
     3. Peripheral nerve condition
  2. Learn to conduct an interview and obtain a history of a patient with a neurological condition
  3. Know elements of the neurological exam and demonstrate the ability to perform this exam
Overarching Goals (cont’d)

- Patient Care (Problem solving and Clinical Skills) (cont’d)
  4. Appreciate findings for the history and exam to formulate an anatomical localization to explain patient symptoms
  5. Construct a differential diagnosis based on localization and temporal course of disease.
  6. Be aware of the appropriate use of neuro-diagnostic tests
  7. Understand the management plans for different neurological conditions
Overarching Goals (cont’d)

- **Medical Knowledge**
  1. Develop an understanding for the neuroanatomical basis for symptom complexes
  2. Recognize 10 specific neurological emergencies: increased intracranial pressure, delirium/encephalopathy, intracranial hemorrhage, meningitis, seizure/status epilepticus, stroke, spinal cord compression, concussion, neuromuscular respiratory failure
  3. Recognize 12 specific diagnoses: stroke, seizure, dementia, movement disorder (Parkinsons), headache/migraine, tremor, multiple sclerosis, Bell's palsy, carpal tunnel syndrome, polyneuropathy, radiculopathy, and brain death
Overarching Goals (cont’d)

- **Practice Based Learning and Improvement**
  1. Develop clinical questions regarding care of the patient with a neurologic condition
  2. Be able to cite published guidelines for a neurological condition
  3. Use self-assessment to identify limitations in medical knowledge in field of neurology.

- **Systems Based Practice**
  1. Understand patient social and community factors that impact rehabilitation
  2. Appreciate the economic impact of a particular neurological condition
  3. Discuss barriers that patients have for adherence to care plan
  4. Recognize the roles of the interprofessional team members involved in caring for patients with neurological conditions.
Overarching Goals (cont’d)

- **Interpersonal and Communication Skills**
  1. Demonstrate interpersonal and communication skills needed to interact with patients, medical staff, the treatment team, and peers
  2. Document medical information in a manner that provides an accurate record regarding the patient condition
  3. Perform organized and concise written and oral presentations with reliable information.

- **Professionalism**
  1. Become self-aware of the meaning of professional conduct
  2. Seek feedback from faculty, staff, and patients
  3. Adhere to institutional and clerkship policies
  4. Maintain patient confidentiality
  5. Exhibit respect for the patient with a neurological disability.
Clerkship Objectives

- **Bedside teaching w/ neurology resident (Tues)**
  - Perform a neurological exam
  - Explain physical exam findings
  - Obtain feedback on neurological exam skills.

- **Neurology Grand Rounds**
  - Explain the role of Grand Rounds in the professional development of faculty and residents
  - Identify the gaps in knowledge and practice addressed during Grand Rounds.
Clerkship Objectives

- **Neurology Morning Report**
  - Describe the neurological condition presented and the pertinent clinical questions that arose.

- **Short Call w/ Neurology resident**
  - Conduct a history and physical exam on a new patient in a consult/acute care situation
  - Discuss the patient finding’s with a resident or faculty physician
  - Develop a localization and differential diagnoses of the patient
  - Complete an initial work up for the patient
  - Describe the initial treatment and management plan
  - Explain the admission process of a patient with a neurological condition seen in an acute care setting
  - Describe the role of the neurologist in a consult/acute care situation.
Clerkship Objectives
Clinical experience-Outpatient

– Learn about patients with a wide variety of neurological conditions

– Describe the wide variety of adult and pediatric neurological conditions encountered in an ambulatory setting

– Discuss the history, examination findings, differential diagnosis of a patient with a paroxysmal neurological disorder (examples include: vascular, seizure, dizziness)

– Discuss the history, examination findings, differential diagnosis of a patient with a neurodegenerative condition (examples include: dementia, multiple sclerosis, Parkinson’s disease)
Clerkship Objectives
Clinical experience-Outpatient

- Perform an observed mental status examination
- Perform an observed cranial nerve examination
- Perform an observed motor function examination
- Perform an observed reflexes examination
- Perform an observed sensation examination
- Perform an observed screening neurological examination
- Communicate in a concise manner with faculty and with patient and family in an outpatient setting.
NEW PATIENT

- Recognize neurologic emergencies and be able to provide initial management and triage.
- Obtain a history and conduct a physical examination of an acute new patient.
- Present a well-organized history, neurological examination, lab results and imaging findings for a new patient.
- Develop a localization and differential diagnoses of the patient.
- Develop a localization and differential diagnoses of the patient.
Clerkship Objectives
Clinical experience-Inpatient

- **FOLLOW-UP OR DAILY PATIENT**
  - Independently perform an interval history and neurological examination on a daily basis.
  - Report diagnostic test findings for follow-up patients to the team in a timely and reliable fashion.
  - Identify complications that may occur in patients that are followed.
  - Monitor and adapt treatment plan accordingly.
FOLLOW-UP OR DAILY PATIENT (cont’d)

- Discuss the history, examination findings, differential diagnosis of a patient with a paroxysmal neurological disorder (examples include: vascular, seizure, dizziness)

- Discuss the history, examination findings, differential diagnosis of a patient with a neurodegenerative condition (examples include: dementia, multiple sclerosis, Parkinson’s disease)

- Discuss the history, examination findings, differential diagnosis of a patient with a peripheral nerve condition
Clerkship Objectives
Clinical experience-Inpatient

- Perform an observed mental status examination
- Perform an observed cranial nerve examination
- Perform an observed motor function examination
- Perform an observed reflexes examination
- Perform an observed sensation examination
- Perform an observed screening neurological examination
- Describe the different roles in the inpatient treatment team, including social workers, case managers, physical therapy, occupational therapy, speech therapy, pharmacists, and nursing.
- Communicate effectively with the medical team, the patient and patient’s family
Requirements/Schedules/Activities
Core/ED2 Experiences

(Students required to complete by end of clerkship and document on OASIS)

- Discuss (history, examination findings, differential diagnosis) with the faculty a patient with a paroxysmal neurological disorder (examples include: vascular, seizure, dizziness)
- Discuss (history, examination findings, differential diagnosis) with the faculty a patient with a neurodegenerative condition (examples include: dementia, multiple sclerosis, Parkinson’s disease)
- Discuss (history, examination findings, differential diagnosis) with the faculty a patient with a peripheral nerve condition
Core/ED2 Experiences

(Students required to complete by end of clerkship and document on OASIS)

- Perform an observed mental status examination
- Perform an observed cranial nerve examination
- Perform an observed motor function examination
- Perform an observed reflexes examination
- Perform an observed sensation examination
- Perform an observed screening neurological examination
Core Experience Requirements

- Purpose of LCME’s ED-2 is to have students gain clinical skills related to core conditions specific to the clerkship experience. Not a check-off exercise required for passing.
- Clerkship faculty, residents and administration, along with the students, must work together as partners to complete each required experience.
- Students should be active participants in their education and seek out core clinical cases.
Core Experience Requirements

- Recognizing & beginning to master these skills will better prepare students for high stakes exams like YEP SA & STEP 2, and help them prepare for residency.
- Students may ask you to help them find opportunities to satisfy requirements (e.g., being notified about an emergent procedure or newly-admitted patient exam).
- .
Documentation of Requirements

- **Rotation Checklist (Green Card)**
  - Faculty/resident signatures for most activities
- **Discuss 3 patient conditions**
- **2 short calls (4-8pm)**
  - Faculty/resident feedback on H&P
- **1 weekend day rounds**
- **Feedback on H&P or SOAP note**
  - Generally typed up piece of paper, submitted to Attending or resident for review
- **Opportunities for you to offer feedback and for students to ask for feedback**

*These are the minimum requirements*
## Sample Daily Schedule/ Monday-Friday

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>7:00 – 8:00 AM</td>
<td>Pre-round (inpatient)</td>
</tr>
<tr>
<td>8:00 – 9:00 AM</td>
<td>Morning Report or resident conference (when on inpatient)</td>
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<tr>
<td>9:00 -12:00</td>
<td>Rounds with inpatient team or assigned outpatient clinic</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lecture-Monday/Wednesday/Friday; Student case conference with faculty - Tuesday/Thursday</td>
</tr>
<tr>
<td>1:00 – 5:00 PM*</td>
<td>Inpatient care/ consults. Assigned outpatient clinic. Beside teaching-Tues; Neuroradiology Case Conference – Thurs; Neurehab Case Conf-TBD</td>
</tr>
</tbody>
</table>

*Short Call 4-8PM when scheduled; Neuroradiology case conference, Thursday afternoons, for all students*
Lectures/Conferences Students are Expected to Attend during Clerkship

- Most weekdays, noon-1pm
- Didactics (neurology & neurosurgery topics)
  - Mon/Wed/Fri
  - Occasional late afternoon lectures, 4-5pm
- Student case presentations
  - Tuesday/Thursday
  - Facilitated by Inpt General Attending
- All students are expected to attend these sessions unless involved in patient care

- Textbooks:
  - Case Files Neurology
  - Introduction to Clinical Neurology (Gelb)
Conferences students attend when on inpatient part of clerkship

- **Required**
  - Tuesday Morning Report; Friday Night Float Morning Report
  - 8:00 resident didactics

- **Optional attendance unless required by resident**
  - Neuropathology/Brain Cutting
  - Wednesday Morning Conferences
    - Neuroradiology: 2nd Wed of month
    - Neuropathology: 1st, 3rd, 5th
Academic Misconduct & Plagiarism

- The clerkship adheres to the Med School’s policies:
  http://www.med.wisc.edu/education/md/curriculum/clerkship-plagiarism-policy/1227
Student Professionalism

- Ethical responsibilities:
  - **Honesty** e.g., on medical school examinations, in patient write-ups and when reporting research
  - **Respect** for the people around them: patients, colleagues, staff and faculty
  - **Reliability and selflessness** e.g., when attending to the needs of patients and working with colleagues

- Report violations of honesty and of patient confidentiality to Dr. Chacon
Appropriate Attire

- Medical students are expected to dress in a professional manner
  - White coats
  - Open-toed shoes are not appropriate
  - For men: a collared shirt and tie
  - For women: if skirts are worn, length should be to knees or below, and tops should be modest
Attendance Policy

- Absence requests
  - If a student asks you for time off, refer the student to the clerkship coordinator
  - Absences are approved by the clerkship director, not by Attendings or residents

- The medical school’s and clerkship’s attendance policies for students can be found at http://www.med.wisc.edu/education/md/curriculum/clinical-years-attendance-policy/1225
Use of Mobile Device Policy

- The Neuroscience Clerkship adheres to the UWSMPH policy on the use of mobile devices.
- Students must act appropriately and professionally on each clinical rotation regarding use of mobile devices. Respecting peers, faculty, staff and patients in lecture, conference settings, on the hospital wards, and in the clinics, students should:
  - Turn cell phone to vibrate
  - Refrain from text messaging, checking email, or talking on the phone while engaged in patient care and educational activities
  - Use iPads or other digital/electronic notepads exclusively for educational purposes or relevant patient care
  - Ask permission of faculty, Attendings, residents and/or patients if he/she may use the digital device for referencing or note taking while working with them
Clinical Work Hours

- The Neuroscience Clerkship adheres to the UWSMPH work hours policy for 3rd & 4th year medical students
  - http://www.med.wisc.edu/education/md/curriculum/clinical-work-hours-policy/1228

- Work hours policy
  - Defined as direct patient care (ward & clinic), conferences & call
  - Not to exceed 80 hrs, averaged over 4 weeks
  - Work hours do not include reading & prep time spent away from duty site, completion of written assignments, prep time for multi-d case presentation, clerkship lecture
  - Avg. work week: 46.5 hours
  - If a student can tell that he & she will be working over 80 hrs in any given week, to be reported to clerkship coordinator immediately
Mid-rotation Feedback

- Required exercise by med school & accreditation organization
- Student initiated; if asked, expectation is that you will make time to complete and discuss with student at mutually convenient time
- Confirm what doing well
- Make suggestions for improvement
- Student expected to incorporate your feedback
- Red flags for clerkship director to address
- Not used for formal evaluation
Evaluation
Evaluation
How final grade is calculated

- Final Exam/Neurology shelf exam
  - Last Friday of clerkship, non-clinical day

- Final Grade composed of:
  - Clinical (60%)
  - Exam (40%)
  - EBM project (5%)
  - Professionalism (5%)
Clinical Performance Evaluation
Form used by all clerkships/ access through auto-email sent by OASIS

- Evaluation based on overall interest and initiative, team player, clinical knowledge/skills
- Asked to complete for students you worked with on inpatient service
- Written comments required & most meaningful to student & to Dr Chacon when he is calculating clinical grade; comments put in MSPE [“Dean’s Letter”]
- Expected to complete in timely manner
- Valued input—you spend the most clinical time with the students

Please evaluate the performance of the student in the following competencies using the anchors described below:

**Advanced:** Highly commendable performance, top 5-10% of students evaluated

**Competent:** Capable; at expected performance for level

**Needs Improvement:** Demonstrates initial growth; opportunity for improvement

**Unacceptable:** Needs Attention

<table>
<thead>
<tr>
<th>Patient Care</th>
<th>Advanced</th>
<th>Competent</th>
<th>Needs Improvement</th>
<th>Unacceptable</th>
<th>Not Evaluated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Takes an effective history</strong></td>
<td>Advanced: Highly commendable performance, top 5-10% of students evaluated</td>
<td>Competent: Capable; at expected performance for level</td>
<td>Needs Improvement: Demonstrates initial growth; opportunity for improvement</td>
<td>Unacceptable: Needs Attention</td>
<td>Not Evaluated</td>
</tr>
<tr>
<td><strong>2. Performs appropriate physical exam</strong></td>
<td>Advanced: Highly commendable performance, top 5-10% of students evaluated</td>
<td>Competent: Capable; at expected performance for level</td>
<td>Needs Improvement: Demonstrates initial growth; opportunity for improvement</td>
<td>Unacceptable: Needs Attention</td>
<td>Not Evaluated</td>
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<tr>
<td><strong>3. Generates differential diagnosis</strong></td>
<td>Advanced: Highly commendable performance, top 5-10% of students evaluated</td>
<td>Competent: Capable; at expected performance for level</td>
<td>Needs Improvement: Demonstrates initial growth; opportunity for improvement</td>
<td>Unacceptable: Needs Attention</td>
<td>Not Evaluated</td>
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<tr>
<td><strong>4. Generates and manages treatment plan</strong></td>
<td>Advanced: Highly commendable performance, top 5-10% of students evaluated</td>
<td>Competent: Capable; at expected performance for level</td>
<td>Needs Improvement: Demonstrates initial growth; opportunity for improvement</td>
<td>Unacceptable: Needs Attention</td>
<td>Not Evaluated</td>
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<tr>
<td><strong>Medical Knowledge</strong></td>
<td>Advanced: Highly commendable performance, top 5-10% of students evaluated</td>
<td>Competent: Capable; at expected performance for level</td>
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Students are expected to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.