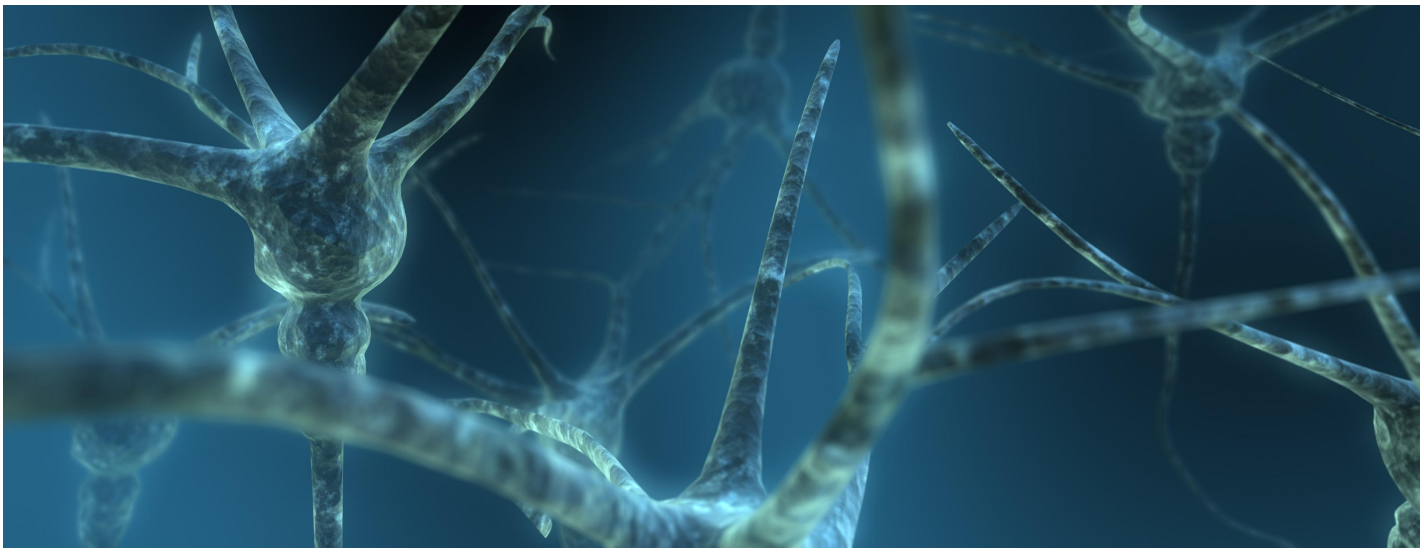
UMC Neurology Program
Residency Handbook
Year 2018-2019



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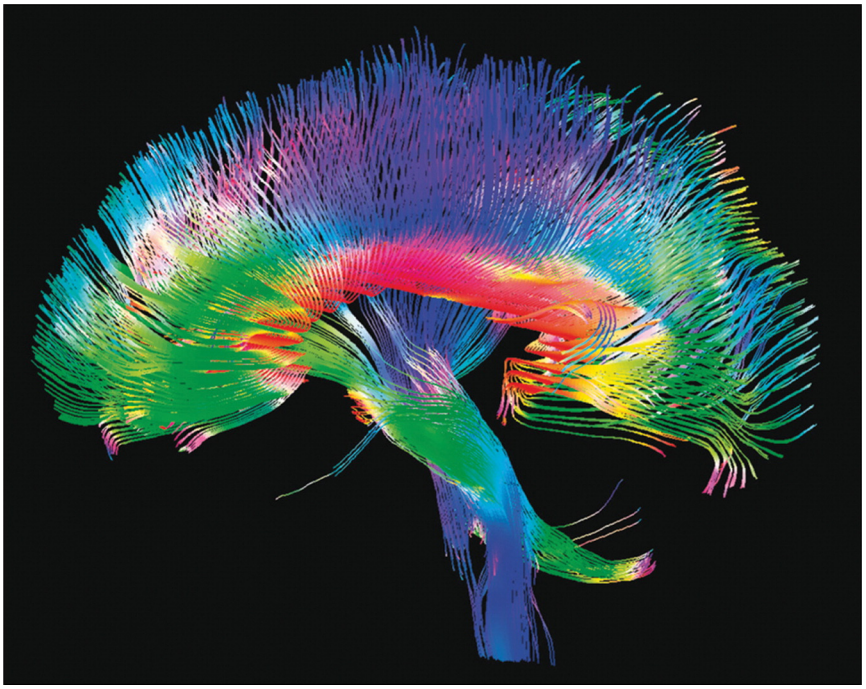
Part 1

Introduction



Vision statement

Abbreviations

Register

The University Of Mississippi Medical Center
Neurology Residency Program
Vision Statement

This program is open to all qualified students from the US and abroad. We promote an open atmosphere of equality and equal opportunity. We welcome applicants from all cultural, ethnic and religious backgrounds.

The faculty body of our residency strives to achieve excellence in patient care, teaching and shaping the characters of our residents to become capable physicians in whatever future career they may choose. We are committed to Medical Student education as part of our teaching efforts through the School of Medicine and partner with the School of Nursing for scheduled lectures as well.

We achieve these goals by adhering to guidelines and regulations set forth by the American Board of Psychiatry and Neurology (ABPN) and the Accreditation Counsel of Graduate Medical Education (ACGME) and provide a competency-based education.

Since we are an academic institution, we are committed to basic and clinical research and offer our residents opportunities to participate in various settings. We practice evidence-based medicine and teach its principles through lectures, journal clubs and conferences to whom we invite leaders of their field as guest speakers. Additionally, we provide opportunities for residents to participate in national conferences. All residents become members of the American Academy of Neurology

Most of the patient contacts and teaching takes place in two facilities: The University Hospital & Clinics and the VA-Medical Center. Those two facilities are in close physical proximity, making long travel unnecessary.

It is our goal to educate and train competent Neurologist for the State of Mississippi and the Southeast region, both as general Neurologists as well as subspecialists. To that extend, we currently provide the opportunity for fellowship education directly through the department:

1. A combined, 1 year Neurophysiology fellowhip
2. A clinical, 1 year neuromuscular fellowhip
3. A neurovascular fellowship (starting in 07/2013)
4. A neurocritical care fellowship (starting in 07/2013)

Additionally, through partnerships with other departments, neurology residents have transitioned into sleep and pain medicine fellowships in this institution.

We welcome the new interns to our categorical four-year program.

Definitions & Abbreviations

Definitions:

PGY I through V	Intern/Resident in postgraduate year I through V
Chief Resident	PGY IV resident appointed by Residency director and Chairman as a spokesperson/liaison between residents and faculty.
Attending	Faculty member with supervisory and teaching responsibilities for residents.
Rotator	Non – Neurology Resident or Intern taking a Neurology Rotation
Observer	Person who participates in didactics and **observes** clinical services, but is neither resident nor student, per application only. Participates in clinical activities under supervision only.
Bruce	Your man for all questions residency related, his word is the law!

Abbreviations:

UMC	University Hospitals & Clinics
VAMC	Sonny V. Montgomery Veterans Administration Medical Center
Wiser	Wiser Hospital for Women and Children
ER/AO	Adult Emergency room UMC/VA respectively
4S	4 South – main floor for Neurology patients
4N	4 North – location of VEEG unit, neurology patients
VEEG	Video EEG monitoring unit
Lab	Neurophysiology lab on 4 East of the old hospital
NSICU	Neuroscience ICU– fourth floor ICU tower

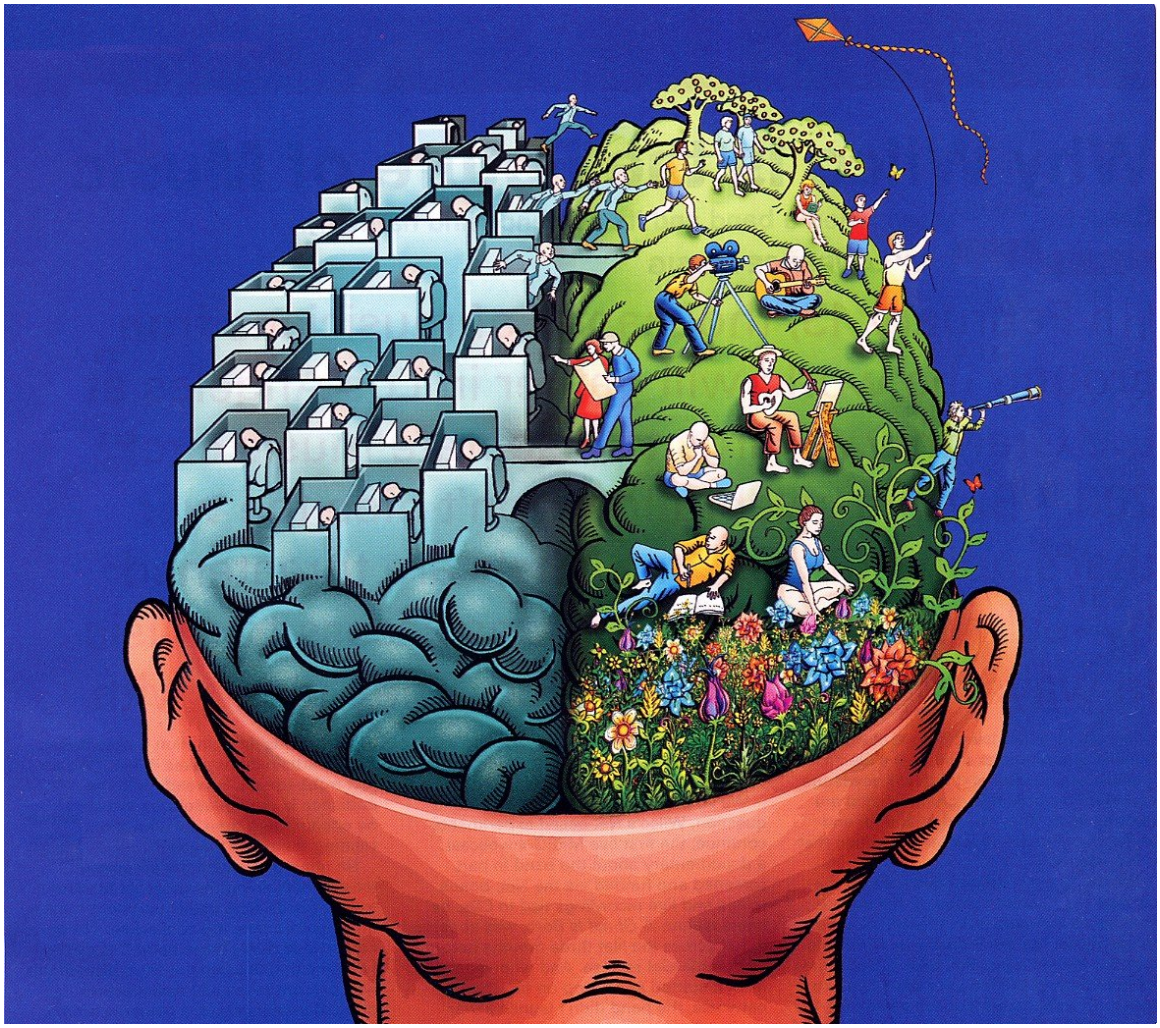
Room locations:

L-413	UMC conference room, 4th floor Clinical Science Building
L-405	Chairmans & Vice's office, 4th floor Clinical Science Building
L-407	Kitchen– your mailboxes, 4th floor Clinical Science Blding
2K	Neurology office and neurophys. Lab, 2nd floor VAMC Main
2A	Floor for Neuro patients at VAMC, 2nd floor VAMC Conference
K-206	Room, 2nd floor VAMC

Index:

Part 2

Policies and procedures



Sign-in and Sign-out procedures

1. All Residents are to be present at sign-in rounds at 7:00 AM Monday through Friday (with the exception of residents on pediatric, NSICU and off campus rotations).
    a. Principally, Sign-in rounds take place at UMC from 7:00 AM in L413 on Monday through Friday. Formal Sign-in however may not take place every day in lieu of a lecture occupying the 7:00 AM slot instead. Admissions/consults from the previous night are to be discussed in a "handover*" procedure with the day-consult team and the appropriate staff.
    b. Sign-out rounds are at UMC WC 472 (4 South work room, Vaughn Stroke Lounge) at 4:00 PM to be attended by the designated UMC consult and ward residents/VA resident and the on call resident. Here a formal "handover*" takes place as well. Residents from auxiliary services are encouraged to attend if they are free from duties specific to their respective service.
    c. Weekend handovers will occur at 7 AM at UMC WC 472 (Vaughn Stroke Lounge). The resident rounding for the weekend will apprise the on call resident of any changes before leaving for the day.
2. The inpatient teams are expected to maintain a complete and up-to-date list of patients currently on the respective neurology services. This list should be available at all times. The on call resident must update the list with the names/problems of any patient admitted or expected to be followed by the daytime team.
3. Each individual resident on the sign-in/out sheets kept in the conference room will document attendance. Attendance will be monitored on a quarterly basis.
    a. Un-excused/-avoidable absence from conferences: The only acceptable reason for an un-excused absence is a patient or family emergency. What constitutes an emergency for the purpose of this document is defined as follows:
        1. Patient in acute distress or coding. Family member with sickness requiring assistance at home/hospital.
        2. Family member involved in a disaster.
        3. Any other absences are not acceptable.
    b. 80% presence in sign-in is mandatory for the PGY II level residents and will be part of there requirement to progress to the PGY III year
    c. Because of more frequent outside rotations, PGY III and PGY IV year residents are only required to be present 70% of the time but with the same consequences if the 70% mark is not met.

*The "handover" procedure consists of the following:

1. A written patient log is used that is updated periodically and real time prior to the handover process. Each patient will be signed out with potential acute treatment needs as well as the CODE status (DNR, DNI, full code).
2. Any pending procedures or procedures that were performed, but have not been reviewed yet, need to be mentioned in the handover process. If the outcome of the procedure has the potential to change the patient management, they need to be pointed out specifically

Neurology program on call policies:

1. General Principles:

There is a single neurology call pager: 601-929-3292

The on Night call period begins at 4.00 PM and ends 7:00 AM from Sunday PM through Saturday AM. Saturday and Sunday calls start at 7:00 AM and ends 7:00 AM the next day.

a. Residents on call cover UMC, NSICU, URC, ASCU (Acute Stroke Care Unit), Wiser, VA, and MMRC:
    1. UMC Emergency Department (ED) and Wiser Labor and Delivery (L&D) patients are to be prioritized and seen as promptly as possible. Check in with the ER clerk when you arrive to the ER so they can update their tracking system. We maintain an excellent record with the ER and ER consults as a robust and timely service, and let us please keep it that way. Always sign out your recommendations for work up and treatment to the physician who called in the consult.
    2. VA AO patients are to be seen as promptly as possible, but **must** be seen within one hour, unless other arrangements are made between the on call/VA consult neurologist and the AO physician. If you foresee that it will be impossible to see your patient in time or other arrangements are not possible, call in your backup.
    3. Inpatients from UMC, URC, Wiser, MMRC and VA inpatient consults from other services should be triaged by the on call/consult resident as urgent or routine. Urgent consults need to be answered as quickly as possible. Unless the consulting service specifically indicates that this is a routine request and can wait until the next day, make every effort to see the patient. All consults seen by the on call resident must be signed out to the senior-most day consult resident at sign in rounds every day.
    4. NSICU patients with core neurology problems are to be treated at night by the neurology on call resident if the need arises.
    5. Code Gray patients are first priority and are treated as immediate emergencies until proven otherwise. Acute stroke patients receiving tPA will be discussed with the Stroke attending to determine whether they will be admitted to the NSICU or ASCU for further stabilization and work up.
b. Each night of the year, there is a resident on first and second call, multiple UMC staff on call and back-up call, and a VA staff on call. If a resident is unable to reach the appropriate staff for the case, please contact an alternative staff based on the escalation policy outlined in "Escalation policy for attending on call".
c. The call schedule is determined by the Chief Resident and will be posted by the 10th of the preceding month. All requests for call dates should be made prior to the 10th of the preceding month **by email**. Feasible requests will be honored on a first-come-first-served basis.

d. When on call, each Neurology resident must maintain his or her Patient & Procedure Database in an editable electronic format and be synchronized with the ACGME website.

2. Scheduling issues:
   a. A resident is responsible for the calls for which he or she is scheduled.
      1. For acute problems (sickness etc.), the **Chief resident is the first contact person that needs to be informed**. If for some reason, the Chief cannot be reached or is unable to solve the issue, the next contact is the Residency Director, Dr. Uschmann. Every effort should be made to solve such issues on a resident level.
      2. **If a resident has to switch call after the call schedule has been published, that resident is responsible for finding a replacement. If there is no replacement found, the resident on the call schedule is obligated to that call, only with the exception of #1.**
      3. Only in the case of an emergency should the Chief resident or program director be asked to make an executive decision and change the schedule for you.

3. On call etiquette:
   a. Discussion with the appropriate Neurology attending is mandatory for every Neurology consultation or admission. With significant change in patient status, the neurology resident will evaluate the patient and notify staff. ED consults must be discussed with staff prior to admission or discharge. A designated faculty is available at all times if you require assistance. (Please review policy on "lines of supervision" and "mandatory call to attending", found elsewhere in your manual).
   b. All patients seen by a neurology resident as a new consult/admission should have a fully **dictated Neurology H&P** on file. All dictations should be completed within 24 hours of seeing the patient.
   c. All residents are obligated to look at imaging studies themselves or with the on-call radiology resident or with the appropriate Neurology attending! No exceptions!
   d. All laboratories, X-rays, CT scans, and MRI scans done on weekends, holidays, or weekday evenings must be reviewed on the day they are performed. Therefore, appropriate hand-over has to occur every time the team changes.
   e. On-call telephone orders must be signed within 24 hours. This is a joint commission requirement and is still true after implanting and EMR.
   f. When there is a CODE BLUE on a Neurology patient, the Neurology resident must be present. The attending is to be informed as soon as possible. The CODE BLUE TEAM will respond to the CODE BLUE, but the Neurology resident is to provide rapid and accurate information regarding the patient's condition, treatment to the point of the CODE, and DNR status.
   g. All Residents at UMC are to undergo ACLS certification.
   h. When a Neurology patient expires during call hours, the first-call resident should notify the staff on call and the patient's family. He or she should request a postmortem examination from the family, write a death note stating the time of

death and details surrounding it, and fill out the death certificate. An expiration summary must be dictated as soon as possible by the resident who was primarily responsible for the decedent. All deaths are discussed in monthly Morbidity and Mortality (M & M) Rounds.

i. Residents should request consultations for all inpatients on the neurology service that develop a serious problem beyond their level of expertise. Consultations should be officially ordered in the chart, and the neurology resident should call the resident being consulted with detailed information regarding the need for consultation and expected results. Stat consults should be addressed as such to the consulted service.

j. No resident may refuse to see a consult.

4. First call policy:

a. Night call (first call) is a requirement set forth by the ACGME and is an important learning tool. It also helps residents to gain independence. Additionally, the time spent in the ED is required to fulfill training requirements in neurological emergencies. PGY II residents take the majority of first calls. The frequency of first call for PGY II residents and rotators may vary, but will always be in alignment with ACGME requirements.

b. A resident on first call must spend the entire night on call in the hospital (either UMC or VA). To leave your designated post is considered patient abandonment. You will be held accountable for any adverse event. You may be dismissed.

c. Secure call rooms are available at both UMC and VA for the on call resident(s).

d. PGY III and IV residents are available for emergencies, and will provide in-house back up coverage for rotating interns or residents in addition to providing in-house coverage for the PGY II residents in July and August of each year. This is considered a first call.

e. The PGY II residents will average between 5-7 calls per month. The remaining calls not covered by the PGY II residents will be divided between the PGY III and PGY IV residents. PGY III residents will average 2-3 calls per month, and the PGY IV residents will average 1-2 calls per month.

f. To enhance learning and retention of clinical knowledge, on-call residents should make every effort to read about each new patient's clinical findings, problems, and management either while on call or the day following the patient encounter. On Call Neurology should be the initial reading assignment for the incoming PGY II residents during July and August. Additional reading for the purpose of "reading up" on a patient , among others, should include NICP (Bradley, http://www.nicp.com, and then use your password to log in), Localization… (Brazis), and eMedicine (http://www.emedicine.com/) and UpToDateOnline.com.

5. Second call:

a. Second-call residents supervise and back up the first-call residents, and serve as liaison between the Department of Neurology and other consulting physicians during call hours.

b. Second-call residents may take calls from home starting in September.

c. PGY III and PGY IV residents take second call.

d. During approximately the first two month of the academic year, the second-call resident must see every on call patient and write a note on every on-call consult/admission and discuss the case with the first-call resident and the appropriate attending.
e. If the performance of PGY II residents permits, this time frame may be shortened on an individual basis.
f. The second-call resident must see and write a note on all on-call consults seen by a rotator, and discuss the case with the rotator and the appropriate attending.

6. Direct Admissions:
   a. Patients that come in for a scheduled admission or someone that was accepted in transfer to our service earlier in the day should be seen as soon as the floor informs you about the patient's arrival.
   b. The first-call resident must dictate a detailed H&P assigned to the appropriate staff. The first-call resident must also write a brief resident admit note on the chart. Document code status on all patients admitted to the service.

7. Calls from outside physicians/transfer requests:
   a. If paged by the operator, the on-call resident will politely inform the other physician that, per our institutional policies, resident physicians no longer take calls from outside physicians and will ask the other physcian to utilize the Access center by calling (601) FOR DOCS. This streamlines the process of having a decision making attending talk to a requesting physician directly, shortens the time it takes to make arrangements for transfer, as the Access center is already involved, and protects the resident physician from a potentially confrontational conversation.

8. Miscellaneous:
   a. When students are rotating on Neurology, both first-call and second-call residents should take the time to teach students and encourage their participation as part of the Neurology team.
   b. Second call residents who see a patient with a first call resident or rotator have an obligation to teach the neuro-exam and explain exam and imaging findings to their junior colleagues.

Morning report format

"**Morning Report**" is a didactic session that takes place multiple times of the week at 0700hrs. It consumes approximately 40 to 45 minutes of the one hour allotted to the morning meeting to allow time for sign-over from the previous night.

In order for **Morning Report** to be an effective teaching tool that has value to all attendees (not just the junior residents) it must be done in a standardized fashion. The following format should be adhered to any time **Morning Report** is carried out:

1. Presentation of a real patient or patient Vignette
    - A junior resident presents a ward patient or reads a patient vignette, prepared by an attending staff or senior resident
    - This presentation should include the complaint, a neuro inquiry, the PMHx, pertinent surgical, family and social history and pertinent ROS
2. Brief group discussion:
    - Localization attempt
    - Inquiry about additional findings if present
    - Highlights of the neuro exam that should be focused on based on the given history
3. Presentation of the exam (constitutional, pertinent general exam findings, complete neuro exam, or in some patient, focused neuro exam)
    - Localize the lesion
    - Generate DDx
    - Discuss proposed w/u
    - Look at labs/imaging *(don't make this the focus of the discussion!)*
    - Reveal diagnosis if applicable
    - Discuss treatment options

This exercise should be carried out in a formal fashion every time. The discussion is lead by either a senior resident with attending back up or by an attending.
During the localization exercise, the discussion should focus on the anatomical substrate that allows us to localize the lesion based on signs/symptoms. We should make it clear to medical students and junior residents why we arrive at a specific localization.

It is important for the senior residents to lead this discussion and be active in the preparation of the case vignette. It would be useful to stick with a certain theme for a week or two that mirrors what is taught in didactics to reinforce that particular topic. It will be the responsibility of program director together with the chief resident to coordinate this.

Adherence to RRC workweek time regulations

The purpose of this policy is to keep residents and the program as a whole in compliance with duty hour regulations set forth by the ACGME/Neurology RRC.

1. Residents are responsible for adhering to the 80-hour workweek limit and must not exceed those 80 hours per week, averaged over any four-week period. This includes all in-house activities related to patient care and academics. Residents must never work more then 28 hours consecutively and cannot take on new patient responsibilities after completing a 24-hour call period. Residents must take one 24-hour period off within a 7-day work period (averaged over four weeks) and should have a period of 10 hours (must have 8) rest between duty periods. The exact language on duty hours is available at the ACGME website in the common program requirements, 2011 edition, starting at VI.G.
2. Interns may only work 16 hours at any given time. If interns are assigned to cover night call, they must leave the next day before their 16 hour period expires.
3. Residents are responsible for tracking their hours spent working or performing work/education related activities and must advise their attending of impending time violations **before** they occur. Additionally, they should inform the program director of such violation, in particular if this failure to comply with duty hour regulations appears to be by design of the rotation the resident is performing (in other words, is caused by a systems error).
4. Once notified, it is the responsibility of the attending to relieve the resident of its duty as soon as safely possible.

Residents will log their duty-hours via E*Value no later than the 5th of the following month starting in July of 2010. This report is reviewed on a quarterly basis.

Fatigued Resident Policy

The purpose of this policy is to outline a procedure to be utilized in the event that a resident is unable to work or must leave work due to excessive fatigue or physical illness.

1. If the resident feels that he/she is not able to start or complete an assigned work period, he/she must notify the Chief Resident AND the attending/supervisory faculty the resident is working with immediately. The Program director should be notified as well at the earliest convenience.
2. Arrangements will be made for the fatigued resident to either go home or be sent to the call room for a sufficient time period of rest.
3. The fatigued resident will be charged personal leave hours (in accordance with UMMC Human Resources Policy on first 8 hours of illness) for the time he/she was scheduled to work but was unable to do so.
4. If another resident had to be called in to take call/duty for the fatigued resident then the fatigued resident may take a future call for the resident who was called in to replace him/her, on a case – by – case basis. This assignment will be made by the Program Director.

Intern duty hours and on call schedule template for NSICU rotation

With new duty hour regulations, Interns can no longer take 24hour night call. Duty hour regulations for interns read as follows:
(excerpt from the "ACGME Common Program Requirements, effective 07/01/2011)

(All residents)

- **VI.G.3:** Mandatory Time Free of Duty

Residents must be scheduled for a minimum of one day free of duty every week (when averaged over four weeks). At-home call cannot be assigned on these free days.

(Interns only)

- **VI.G.4:** Maximum Duty Period Length

Duty periods of PGY-1 residents must not exceed 16 hours in duration.

- **VI.G.5:** Minimum Time Off between Scheduled Duty Periods

PGY-1 residents should have 10 hours, and must have eight hours, free of duty between scheduled duty periods.

With these regulations in mind, the following schedule for interns will be the default scheduling scheme, to be altered only with my approval in special circumstances:

- All Interns will round daily and are on daytime duty to maximize exposure to teaching rounds, procedural competency and patient care Monday through Thursday. They will leave the ICU after 17:00 , but before 21:00 in order to remain compliant with VI.G.4 and VI.G.5. This variability is necessary to accommodate different rounding schedules, which are attending specific.
- No intern is permitted to exceed the 16-hour duty length period, except in extenuating circumstances when a patient is severely ill and no other physician is available. To minimize this situation from occurring, *it will be the interns responsibility to hand over his/her service to the primary Neurology or Neurosurgery Resident on call well in advance (but at least one hour) before his/her 16 hour duty period expires.*
- One Intern weekly (the "on call" intern for the week) will leave early on Thursday (after 15:00, but before 16:30) and come in on Friday at 17:00, short-round with the attending to receive a handover and take night call until Saturday morning, 09:00. This will allow the intern to experience night call, which is an important facet of the learning experience. He/she will hand over the patients to the oncoming Sunday morning duty resident/intern/attending to maintain continuity. The intern on night call cannot take on any new responsibilities after 07:00 on Saturday morning. This regulation will satisfy VI.G.3.
- One intern weekly (but not the intern taking night call from Friday to Saturday) will come in at 07:00 on Saturday morning; receive hand over from the night call intern and then round with the team. This intern will leave the ICU no later then 21:00 on Saturday evening to remain compliant with VI.G.5.
- The same intern taking night call on Friday night will return to the ICU on Sunday morning at 07:00, round with the team and leave no later then 21:00 Sunday night to satisfy VI.G.5.

- The weekend coverage will be distributed on a rolling fashion, making sure that each intern will have at least one completely free weekend per month.

Below is an example of a schedule visualizing the above rules.

Intern A, Intern B and Intern C are assigned to the ICU for this month.

Day/ Week	Mon	Tues	Wed	Thurs	Friday	Sat	Sun
1	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00 C leaves 16:00	A,B 06:00-21:00, C 17:00-09:00	C leaves 09:00 B 07:00-21:00	C 07:00-21:00
2	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00 B leaves 16:00	A,C 06:00-21:00 B 17:00-09:00	B leaves 09:00 A 07:00-21:00	B 07:00-21:00
3	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00 A leaves 16:00	B,C 06:00-21:00 A 17:00-09:00	A leaves 09:00 C 07:00-21:00	A 07:00-21:00
4	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00	A,B,C 06:00-21:00 C leaves 16:00	A,B 06:00-21:00, C 17:00-09:00	C leaves 09:00 B 07:00-21:00	A 07:00-21:00

Summary:

- Week 1: A has the weekend off, C has a 24H period off Thursday to Friday, B has a 24H period off Saturday through Monday.
- Week 2: C has the weekend off, B has a 24H period off Thursday to Friday, A has a 24H period off Saturday through Monday.
- Week 3: B has the weekend off, A has a 24H period off Thursday to Friday, C has a 24H period off Saturday through Monday.
- Week 4: A has a 24H period off Friday through Sunday, B has a 24H period off Saturday through Monday, C has a 24H period off Saturday through Monday.

There may have to be adjustments for 5-weekend months, but this scheme will be adhered to as the default rule.

Hartmut Uschmann, MD
Director NSICU

University of Mississippi Medical Center
Department of Neurology Residents' Leave Policy
Part 1 informational

The residents' vacation and "leave of absence" policy in the Department of Neurology complies with the UMC policy as well as the policies of the American Board of Psychiatry & Neurology (ABPN) and the ACGME. Highlights of these leave requirements are outlined below. Please note that extended leaves of absence (i.e. beyond the stipulated 3 weeks per year) may prolong the total training time needed to accomplish all requirements for board certification. In as much as the department seeks to accommodate the personal needs of its trainees, the professional standards and educational requirements expected for board eligibility (*sine qua non for graduation from the program*) are paramount.

ACGME "Leave of Absence" statement:
There must be a written institutional policy on leave (with or without pay) for residents that complies with applicable laws. The institution must provide residents with a written policy concerning the effect of leaves of absence, for any reason, on **satisfying the criteria for completion of a residency program.**

American Board of Psychiatry and Neurology Leave statement:
Training programs may develop individual leave or vacation time for residents in accordance with the overall institutional policy. **Leave or vacation time may NOT be used to reduce the total amount of required residency training or to make up deficiencies in training.**

UMC Personal and Medical Leave statements:
Personal leave is provided for vacation and personal business and should be scheduled within the department. Personal leave also must be used for illnesses of the employee requiring absence of one (1) day or less.
Employees earn personal leave credit for each month of service. (During the PGY 1-3 years, 18 days of personal leave are accrued each year; during the PGY 4 year, 21 days leave are accumulated). **Vacation schedules are arranged within the department to cover the demand for work and to make sure that sufficient staff is available at all times**. The department head schedules and approves all requests for vacation.
The UMC major medical leave policy provides salary protection during times of genuine disability due to accident, illness or pregnancy. Employees earn major medical leave credit for each month of service. (During the PGY 1-3 years, 12 days of medical leave is accrued yearly; during the PGY 4 year, 10.5 days is accumulated yearly). Employees do not earn major medical leave while on leave of absence, unpaid temporary disability leave or unpaid family and medical leave.
(For full details of UMC leave policy please see Employee Handbook)

University of Mississippi Medical Center
Department of Neurology Resident's Leave policy
Part 2 practical

Residents are permitted 3 weeks of vacation per year. The Chief Resident will assign the dates at the beginning of the academic year, preferably in consultation with requesting residents. It is important that leave requests for the following academic year are forwarded to the chief resident by the end of May of the current academic year in order to be considered, as the annual rotation schedule will be finalized at that time. **Once finalized, all vacations must be taken on the assigned dates.** Residents must cancel their COC Clinic and notify the UMC and VA Neurology offices of their vacation a minimum of 30 days in advance. Leave slips must be filled out and approved by the program director or his designee. In addition, this leave policy also applies to short term leave for interviews etc.

There are four objectives that need consideration when approving leave requests:
1. The need for personal leave in order to prevent burnout and allow for personal recreational time.
2. The need for assuring that patient services are covered at all times.
3. The need not to unduly overburden colleagues with additional work while others are on leave.
4. Any time prolonged leave is taken for whatever reason, it may result in (1) not passing a given rotation and (2) prolongation of the residency as a whole.

To this end, the following policy will be enforced, in part beginning April 2013 and in full with the beginning of the academic year 2013/2014:

All vacation requests **MUST** be received by the end of May (May 31) of the current year. For any given resident who has not requested three weeks of vacation time for the following academic year, assignments for the missing weeks will be made by the chief resident in accordance with availability based on the annual rotation schedule. There will be no exceptions from this rule.

Vacation can be taken any month of the year except the following:
- July and August
- Second half of December and second half of June.

All vacation requests need to be submitted AND approved prior to the start of your absence. Please submit requests to Bruce 30 days in advance. Residents fail to do this and cannot be reached are may be considered AWOL, which may have disciplinary consequences.

Vacation can only be taken on the following rotations (*this has changed from the previous version*):
1. Any elective
2. EEG rotation if enough residents on the inpatient services are available to cover

the week or if a fellow is present during that month
3. EMG/neuromuscular rotation

Vacation will be taken in the following manner:
1. Five workdays should be requested with the adjacent weekends for a total of 9 days off.
2. Vacation should never be requested for consecutive months except in special circumstances (such as going oversees and needing more then 9 days to accomplish a certain task). This is to allow for a more evened out recovery from work throughout the year and prevent burnout. This is especially true for any PGY II resident.
3. Vacation will be approved prior to the beginning of the new academic year as outlined above. Consideration to requests will be given on a first come, first serve basis, following these rules:
    1. When requesting leave during the Epilepsy rotation, if a fellow is available to cover the service for the week in question, leave will be granted. If no fellow is available, in order for the service to function, a resident from the ward/consult team will need to be reassigned for one week. Again, in that circumstance, leave will only be granted if 4 residents remain on that service.
    2. Leave requests during elective months will usually be granted without problems.
    3. In very special circumstances a resident may request leave during an inpatient month. This request, by default, will be denied. However, on a case – by – case basis, some requests may be given consideration through review by the program director. In that case, the following rules also need to be fulfilled:
        a. Vacation will only be approved for 7 total days (5 work days and one weekend)
        b. UMC ward/Inpatient Consults: 4 residents remain on duty
        c. NSICU: 3 residents and one NP remain on duty
        d. VA: 2 residents remain on duty

Additionally, and this is mentioned elsewhere, as a courtesy to our more junior residents, senior residents going on interviews, conferences or other, short term leave (oh, it's just going to be two days….) must find coverage from peers in the same year or the year below (PGY III year). Attempts to hijack junior residents for this purpose by pulling rank will be punished with extra call days. My promise!

Interview leave policy

As everybody is already aware, as a general rule, absence during inpatient months should be avoided by anybody. There are rules in place as to how many residents need to "stay behind" for given inpatient rotations (see "practical leave policy")

We understand that job (and fellowship) interviews are an important part of your career development and want to be supportive of you, however, patient care and seamless coverage of patient care obligations are paramount. It would be no different if you were in practice and tried to change jobs. Switching your call alone is not sufficient. It is the obligation of the interviewee to arrange for coverage for the service duty he or she is not present to fulfill for the **entire** period of absence, not just the call night. It is **not** the obligation of the chief resident to arrange for such coverage or fill the gap herself/himself. *Additionally, to remain fair, seniors are to arrange for coverage through peers of the same level or a midlevel resident, never a junior resident (PGY I or II). If such practice is uncovered, the senior resident will not be allowed leave AND will perform extra call duty.*

Any interview days for **job interviews** are to be requested as personal leave time if they occur during workdays. If personal leave days are not available, uncompensated leave is to be requested.
Any interview days for **fellowship interviews** can be requested as administrative leave for up to four (4) days annually. Once the allotted administrative leave is exhausted, personal leave time must be requested. If personal leave days are not available, uncompensated leave is to be requested.
Even if you travel on the weekend, you should still fill out a leave form for two reasons: (1) so we know were you are and (2) so that you can receive disability and medical coverage under workman's compensation guidelines (for your protection).

We set forth the following general rules:

1. Any request for interviews (this includes job or fellowship or any other interview for personal development after completion of residency) during inpatient months (ward or consult) will only be considered once the requesting resident submits proof of having arranged for coverage for the entire time period he/she is absent AND the "stay behind" numbers are fulfilled.
2. The resident may only go on two (2) such interviews per month. Every effort should be made to interview during non-inpatient months. If you exhausted your interview time during one inpatient month, you will not be allowed to be absent again in an immediate subsequent month if this is another inpatient month for you.
3. If the resident is planning on attending a conference in the same month as the planned interview, only one additional interview is permissible. Rule # (1) still applies.
4. If more then one resident is interviewing during an inpatient month, only one resident is permitted to be absent at a time. Requests will be honored on a first come, first serve basis.

Minimal didactic and rotational requirements for Neurology residents to successfully graduate from the adult neurology residency (ACGME based)

Participation in didactic sessions:

1. Residents must attend required seminars, conferences, and journal clubs.
2. Residents must demonstrate increasing responsibility for the planning and supervision of the conferences.

Direct patient care responsibilities based on rotations (minimal requirements for the 48 month program implemented at UMMC):

1. Residents must have one year of broad clinical experience in general internal medicine. This year must include at least one of the following:
    a. Eight months in internal medicine with primary responsibility inpatient care, or
    b. Six months in internal medicine with primary responsibility in patient care and a period of at least two months time comprising one or more months of pediatrics, emergency medicine, internal medicine, or family medicine.
2. Residents must not spend more than two months in Neurology during their first year of education (internship).
3. During the remaining 36 months of adult neurology residency, residents must have:
    a. A minimum of 18 months (full-time equivalent (FTE)) of clinical adult neurology.
        i. At least six months of inpatient experience in adult neurology.
        ii. At least six months (FTE) of outpatient experience in clinical adult neurology (this must include a longitudinal/COC clinic). All other outpatient experience is counted based on its full-time equivalent.
    b. A minimum of three months of elective time.
    c. A minimum of three months FTE in clinical Child neurology with management responsibility under the supervision of a child neurologist with ABPN certification or suitable equivalent qualifications.
    d. At least one month FTE experience in clinical psychiatry, including cognition and behavior under the supervision of a psychiatrist with ABPN certification or suitable equivalent qualifications.
    e. Exposure to and understanding of evaluation and management of patients with acute neurological problems in an intensive care unit setting and an emergency department setting and for patients requiring acute neurosurgical management.
    f. Experience in neuroimaging, including but not limited to MRI, CT and neurosonology.
4. All adult neurology residents must complete a total of five observed clinical examinations (NEX II), one each of a critically ill patient, a neuromuscular, a neurodegenerative, a child neurology and an ambulatory patient in the outpatient setting.

Lines of Supervision for Residents

All residents are supervised by an attending for direct patient care related tasks.
Additionally, residents have to have adequate supervision in other areas, such as resident-to-resident teaching, resident-to-student teaching, family education, research etc.

Levels of supervision are as follows:

1. Direct real time supervision with attending on site.
2. Direct real time supervision with attending off site (telephone).
3. Indirect real time supervision via a practitioner.
4. Indirect retrospect supervision (e.g. chart review, staff review of electronic d/c summary).
5. Indirect retrospect supervision via verbal or written report.

For specific tasks, the levels of supervision are maintained in the following manner (please also observe the goals and objectives for the respective task/setting):

1. Inpatient ward service: Level (1), (2) and (4)
2. Consult service: Level (1), (2) and (4)
3. Night call: Level (2) and (4) for the Neurology service, level (1), (2) and (4) for the NSICU service
4. Specialty rotations:
    a. Neurophysiology: level (1) and (4)
    b. Neuropathology: level (1) and (5)
    c. NSICU (see above)
    d. Psychiatry: level (1) and (4)
    e. Clinics: Level (1), (2) (3) and (4)
5. Research: Level (1) for bench research carried out in the neurology lab and level (5) for all other research activities
6. Resident teaching activities: level (1) for some activities directly observed during rounds, for all others level (5) via verbal feedback from students and residents and evaluation forms.

For specific activities, such as patient and family conferences, direct level (1) supervision is to be maintained for rotating and PGY I and most PGY II year residents. For more senior residents with more experience, usually level (5) is appropriate.

Policy for mandatory call to attending/supervisor

On teaching services, the resident is the primary caregiver for the patient, and important events, such as changes in status or location and important information about the patient will be brought to the attention of the resident more or less by default. The resident however is not the caregiver that is ultimately responsible for the patient's care and outcome, both from a medical as well as from a legal standpoint. It is therefore imperative that the attending of record remains appraised of all acute issues that could influence decision making on the patient or change outcomes.

The goal of this policy is to:

1. Maintain appropriate lines of supervision at all times for the house staff (see "Lines of Supervision" for definitions)
2. Improve communication between house staff and attending staff to optimize patient care
3. Avoid adverse events/sentinel events to the patient
4. The core competencies applicable to this policy are:
    a. Patient care
    b. Professionalism
    c. Communication skills

The resident will notify the attending of record of the following circumstances directly and immediately:

1. Patient coding/has coded
2. Patient demise (expected or unexpected)
3. Patient has to be moved to higher level of care due to worsening in clinical status
4. Critical test results that could lead to change in management or that cannot be handled by the resident alone
5. Any other event that could lead to a change in management or could otherwise affect the patient's hospital course negatively

The resident will notify either the attending of record or the immediate supervisor of the following at the first convenient time:

1. Patient had to be moved to a different location, but not due to change in level of care
2. Routine test results that are important for decision making or part of the patient's workup
3. Family issues that the attending needs to be aware of prior to initiating conversations with the patient or family of the patient (social issues, complex family situations etc.)
4. Any other issue that in the judgment of the resident should not be left to chance for the attending to discover.

Algorithm for alternative attending backup

Due to technical or otherwise unforeseeable reasons, it may be impossible for a resident to reach the appropriate attending for the service in question in a timely manner. In such case, the following rules come into effect:

1. If attending does not respond to the first page, wait 3 to 5 minutes, then page again
2. If no response to the second page in another 2 to 3 minutes, utilize alternative means of reaching attending available on call schedule (cell phone, home phone etc.)
3. If unable to reach attending by alternative means, call second attending on inpatient service (e.g. the stroke service resident calls the consult attending or vice versa or call the NSICU attending)

If unable to reach the alternative attending, immediately call the Chairman or his designee, usually the Vice Chairman (an email is sent to the whole department every time the Chair is out of town, specifying an acting chair)

Moonlighting Policy

Department of Neurology

For the purpose of this policy, moonlighting is any activity of working outside the ramification of the training program, salaried or not. This activity is not necessarily tied to working as a health care professional, but rather includes any and all activities that are not recreational or family related.

In order for a resident of our department to be eligible for moonlighting, he or she must fulfill certain conditions. Also, the permission to moonlight may be revoked by the program director or chairman any time if deemed necessary.

As a prerequisite to apply for moonlighting in this department, all institutional requirements for this activity must be fulfilled. This includes, but is not limited to, an unrestricted medical license for the state of Mississippi and proof of malpractice insurance. The institutional policy is available on the Intranet or from Bruce and is attached to this policy as well.

Before any moonlighting activity can start, the trainee must first complete all necessary paperwork through Human Resources (HR). A copy of the HR forms, filled out and with all necessary signatures must be on file in your departmental record at all times.

Specific departmental requirements are as follows:

1. Resident must be a PGY III or above and must have a written permission from the program director to moonlight, in addition to the above outlined HR forms.
2. Resident must be in good standing. This is determined by the program director and/or chairman and may be grounds for discussion in faculty meeting before permission is given.
3. Resident must not moonlight more then one weekend per month.
4. Moonlighting activity must never lead to any violation of RRC/ACGME rules and regulations in regards to duty hours and must never interfere with educational and patient care responsibilities. Duty hour regulations are well known to all residents and fellows and are available at the ACGME website: (http://www.acgme.org/acWebsite/dutyHours/dh_Lang703.pdf)
5. If moonlighting, the resident submits itself by default to a more focused review to evaluate fatigue, performance and any sign of duty hour violations.

As outlined above, the permission to moonlight may be revoked without advanced notice if any violation of above requirements becomes apparent.

Version 3, modified April 2, 2013

Name of Observer:

Policy for Observership

Department of Neurology

Performing a clinical observership can be the first step or an assertion for a post-graduate student into any field of further study. The department of Neurology is committed to providing this opportunity. Due to limitations in capacity however, we feel it is necessary to regulate and potentially restrict this activity. The following policy is therefore adapted effective August 1, 2009:

1. All applicants must be screened and interviewed by the Program Director (PD). No exceptions! All applicants must provide credentials on request. The interview may be carried out over the phone.
2. After being admitted into the observership, they will work closely with the Residency Program Coordinator (RPC) to accomplish their goals.
3. In order to obtain a valid UMC badge, all applicants must either register with Volunteer services or Human Resources as instructed by the RPC. All applicable fees are the responsibility of the applicant.
4. As confidential patient information will be discussed during observership activities, all enrollees must pledge to abide by HIPPAA rules. Any indication that this requirement is violated will be grounds for immediate termination of the observership and notification to the office of compliance.
5. Enrollees are expected to produce a written curriculum prior to starting that outlines what they intent to accomplish while in the observership, including time commitment and activities they intent to attend. To facilitate this, the following options are available:
    a. Morning report
    b. Grand rounds
    c. Ward/consult rounds
    d. ICU rounds
    e. Clinic
    f. Night call
6. Time commitment can be as little as one morning report per week or as much as a full workday, several times per week. The observership should be at least one month in duration, but will be limited to 2 months total duration. It can be interrupted.
7. If an observer intents to use this activity to gain a recommendation letter from any attending of this department, the observer should make this clear in the beginning of his/her observership or at least well in advance to the termination of the rotation in order to allow any attending to get to know the observer better and therefore improve his/her ability to formulate the letter based on specific observations or experiences.
8. The number of observers in the department will be limited to four at any given time. Exceptions may be made on a case-by-case basis.

9. While we can allow up to four observers to participate in conferences and didactic sessions, the number of observers rotating clinically (ward, consult or clinic) will be limited to one at a time per service in order to preserve teaching and learning opportunities for scheduled rotators, students and our own residents.
10. The RPC will oversee all observers actively participating in clinical or didactic activities and keep track of their numbers. No personal arrangements with any neurology attending will overrule this oversight. The RPC has the authority to limit observers from participating in activities if deemed necessary to maintain the overall integrity of the training environment.
11. This is an observership, not a mini-residency. Patient contact will be limited to *observing* or *limited, supervised hands on demonstration of exam findings*. No chart documentation is allowed and observers are not allowed to conduct independent patient exams. Interviews are permissible with the consent of the senior resident or the attending.
12. Observers that display disruptive behavior may be dismissed or restricted at the discretion of the PD or RPC.

I, the observer, have read this policy and agree with the terms set forth therein:

_____ Date: _____

Signature of Program Coordinator or Program Director (circle one):

PC
PD _____ Date:_____

Recommended Procedure For Application For An Off Campus Rotation

Purpose: Residents have the opportunity for outside rotations, both in – state and out of state. Rotations out of state require a longer time to prepare. This outline explains what steps need to be taken, who has what responsibilities during that process and what some of the usual time frames are that one can expect. This outline may not be all-inclusive.

Application time lines:
All rotations have to be secured with a contract between UMC and the sponsoring institution. There has to be a contact person at the sponsoring institution. All contracts are renewable annually and have to be signed by the chairman of our program, the DIO of our GME office and the GME office of the sponsoring institution.

Several contracts with outside sponsors are already in place and are renewed by default annually. This list currently includes MMRC for general neurology consults and Dr. Arturo Leis for Neurophysiology, the Mississippi State Hospital for an Epilepsy/general Neurology rotation with Dr. Tiffany Scarff and Dr. Ruth Fredericks for Neuro-oncology/general Neurology at St. Dominique hospital.

Contracts with institutions within the state take approximately 6 to 8 weeks to prepare.

Contracts with out of state institutions take up to 6 months to complete.

Process and Responsibilities:
The **resident** identifies a contact person (usually the physician he or she would like to rotate with) in the sponsoring institution. This may be done by personally contacting that person or by involving a staff member from our department or institution to help "break the ice". The contact person has to accept the responsibility of being the supervisor for the resident for the duration of the rotation in writing. This is done in the form of an acceptance letter that should be mailed directly to the chairman, program director, assistant program director or program coordinator.

Once we receive the letter, our **program coordinator** initiates a contract, which is approved by the chairman and forwarded to the GME office. The GME office then negotiates the contract with the sponsoring institution.

Once the contract is approved by the chair and our GME office, the **resident** can start to apply for a state medical license in case of an out of state rotation (unless the resident already possesses such license for the given state). This license may be limited or unrestricted, depending on the situation. **This must be done by the resident wishing to rotate and cannot be done by the department.**

For in state rotations, no other action is necessary, unless the resident does not possess an unrestricted medical license. In that case, please come to the program coordinator or residency director to discuss your options.

Other Things To Consider:
Choose your outside rotations wisely and think about taking one with plenty of time to spare. You will have extra expenses and will use up one of your electives in the process. Try to pick a rotation that will give the maximum time with your mentor. Busy fellowship operations may not be the place to go, as you will not have much contact time with your mentor and, in the case of procedure heavy rotations, may not get to do much yourself. Speak to colleagues who have done outside rotations over the last year or two.

Prepare yourself for the rotation with some extra reading. Consider doing the rotation in a program where you consider applying for a fellowship, but remember that you are there to learn and gather impressions, not to impress the fellowship director.

Who get's to do this?
Outside rotations are for PGY III and IV residents only. Sorry, PGY II residents need not apply. You are still in boot camp and need to get your basic education before this becomes an option.

Good luck. We encourage outside rotations.

Institutional Grievance Policy

Department heads and the director of human resources are happy to counsel any employee on the types of study here or elsewhere which will help in the climb to better paying positions carrying higher responsibilities. The employee's relationship with others is most important. Few qualities are more noticed and appreciated than the ability to get along with one's fellow workers.

PROBLEMS, QUESTIONS AND GRIEVANCES

Problems or questions about an individual's employment should be taken up freely with the employee's supervisor. The supervisor will welcome the opportunity to help. Dissatisfaction should be expressed immediately so problems may be settled, rather than permitted to grow.

If a problem becomes so great that it cannot be worked out informally, the employee has recourse through an established grievance procedure. It provides a systematic and orderly method of adjusting complaints and differences of opinion between an employee and the Medical Center. The procedure offers a way to settle disputes while safeguarding the rights of both the employee and the employer. Certain steps are followed:

1. **Supervisor** – A short, friendly talk with the supervisor can take care of the majority of job-related problems. All supervisors are interested in the welfare of their personnel and welcome the opportunity to help. The employee may take a co-worker from the same division with him or her when talking with the supervisor.
2. **Department Head** – If for some reason the employee with a problem fails to get satisfaction from the supervisor, he or she may take the matter to the department head who will try to resolve the matter. **However, it is not mandatory that an employee meet with his/her supervisor or department head before the Department of Human Resources is contacted.**
3. **Director of Human Resources** – If a talk with the department head does not solve the problem, it may be presented to the director of human resources or his designee in writing on a grievance report form kept in department offices and Human Resources. The written grievance must be submitted within three working days after the occurrence of the act causing the grievance – or when the facts pertaining thereto become available to the employee. If the employee wishes, the Director of Human Resources or his designee will review the matter with the supervisor and the department head.
4. **Grievance Committee** – If all steps taken thus far have not led to a satisfactory settlement of a problem, the director of human resources will place it before a Medical Center Grievance Committee. for non-contractual employees. The committee includes a chairman appointed by the Vice Chancellor and fellow employees selected from throughout the Medical Center. The committee's purpose is to review the problem thoroughly and determine if the offense was committed.
5. **Vice Chancellor** – The vice chancellor for health affairs makes the final decision considering the entire situation.

Issues that are grievable:

- Disciplinary actions, including dismissals, demotions and suspensions;
- Applications, personnel policies, procedures, rules and regulations, ordinances and statutes;
- Acts of reprisal against employees using the grievance procedure;
- Complaints of discrimination on the basis of race, color, creed, political affiliation, religion, age, disability, national origin, sex, or veteran status; and
- Any matter of concern or dissatisfaction to an employee if the matter is subject to the control of institutional management.

Issues that are nongrievable:

- Scheduling and staffing requirements;
- Issues which are pending or have been concluded by direct appeal through an administrative or judicial procedure;
- Temporary work assignments which do not exceed 90 calendar days;
- Budget and organizational structure, including the number or assignment of employees or positions in any organizational unit;
- The measurement and assessment of work through performance appraisal, except where the employee can show that the evaluation was discriminatory, capricious, or not job related;
- The selection of an individual by a department head or designee to fill a position through promotion, transfer, demotion, or appointment unless it is violation of UMC or Board of Trustees policy;
- Internal security practices established by the institution, department head or designee;
- Termination or layoff from duties because of lack of work, reduction of the work force, or job elimination;
- Any matter not within jurisdiction or control of the institution;
- Content of published UMC policies or procedures;
- An action by the institution pursuant to federal or state law or directions from the Board of Trustees of State Institutions of Higher Learning; or
- Establishment and revision of wages and salaries, position classifications, and general benefits.
- The failure to hire an applicant.

RESIGNATION

Employees who intend to resign are expected to discuss their plans with their department heads as far in advance of the date of leaving as possible. Resignations must be in writing. Forms for this are available in each department or in Human Resources.

UMC expects hourly paid employees to give at least two weeks' notice and monthly paid employees are expected to give at least a month's notice.

REDUCTION IN WORK FORCE (OR LAY-OFF)

When it becomes necessary to terminate noncontractual staff because of a curtailment in operations or lack of funds, the selection of individual employees to be retained or terminated will be determined within each department. Reasonable consideration will be made to place affected employees employees in another position in the institution.

Based on departmental needs, the selection of the individual employee/employees to be retained or terminated shall take into consideration their performance, skill, efficiency, length of service, operational needs, and the ability to do the work remaining in the department.

A reduction in work force may be administered by job class, by program or department, by location, or institution wide. The institution may exempt a program area or a certain number of positions in a program area from a reduction in work force when such an exemption is required by federal law or grant requirement.

EXIT INTERVIEW

All personnel leaving the employment of the Medical Center must have an exit interview with Human Resources on their last regular working day before the final pay check is issued. All employees are required to clear through the following departments and be given a release

slip to be submitted at their exit interview: Rowland Medical Library, Bookstore, Giftshop, Credit Union, Physical Facilities and Patient Financial Services. Nursing Service personnel must also clear through the Nursing Service office. Medical staff also must clear through Incomplete Medical Records. The identification badge and parking card will be collected by Physical Facilities.

At the time of the exit interview, an employee may complete a request for a refund of retirement contributions. An employee leaving employment of the Medical Center who requests a refund of his or her contributions to the Public Employees' Retirement System will not be eligible to be rehired until he/she has satisfied a 45-day break in service. State retirement refunds will be paid within 90 days from receipt of a refund request, but not before 45 calendar days. An employee must wait 45 days from the first of the month following the month they retire to become eligible for rehire. An employee who terminates and leaves his or her contributions with PERS is eligible for immediate reemployment. The final interview will protect the employee's benefits, provide an accurate forwarding address for references, reemployment, retirement refund, and tax purposes, and give the Medical Center useful comments and suggestions on the work experience here.

RULES AND REGULATIONS

All employees are expected to conduct themselves in a manner which reflects a high standard of performance and conforms to basic standards of conduct.

The Medical Center reserves the right to discipline, suspend or terminate an employee with or without cause. Employees should be counseled regarding any problems or deficiencies in their performance. However, serious misconduct or problems in performance can result in disciplinary action, including termination, without prior counseling. Below are examples of misconduct which will subject an employee to disciplinary action. This is not intended to be a complete list but to be a guide of conduct which will result in disciplinary action, up to and including discharge:

1. excessive absenteeism (numerous, happening at short intervals, often or constantly repeated), or unexcused absenteeism;
2. failure to report to work or notify department, late arrival at place of work, leaving work early or leaving the job during working hours without authorization;
3. walking off the job;
4. failure to record work time accurately;
5. misuse of major medical leave privileges and benefits;
6. failure to submit leave forms according to Medical Center policy as well as departmental policies;
7. violation of department work rules or procedures;
8. inefficiency, negligence in the performance of duty or lack of attention to work;
9. incompetence, inefficiency, or conduct detrimental to patient care or general safety;
10. refusal to perform duties as required by supervisors, insubordination, neglect of or inattention to duty;
11. sleeping or leaving your assigned work area during work hours without permission of your supervisor;
12. poor management practices;
13. loitering or loafing during working hours;
14. disclosing confidential information concerning patients, employees or the institution;

15. failure to disclose a conflict of interest or failure to eliminate a conflict of interest when so directed;
16. failure to maintain satisfactory interpersonal relationships with co-workers and supervisors;
17. inappropriate behavior toward, or discourteous treatment of patients, students, visitors, or co-workers including the use of profanity and other harassing statements;
18. falsification of institutional records, such as employment applications, medical/health records, expense vouchers, time records and pay records;
19. failure to disclose to Employee/Student Health Services any existing illnesses or conditions that may be aggravated by job activities;
20. failure to attend orientation of policies, procedures and risk management rules regulations and principles;
21. failure to wear name badge in clearly visible manner while on duty;
22. violation of dress policy;
23. the sale, possession, transfer or purchase of illegal drugs, controlled substances or alcohol on Medical Center property;
24. unauthorized possession or drinking of any alcoholic beverages or unauthorized use or possession of narcotics, barbiturates, hallucinogenics, amphetamines, marijuana, or other illegal substances on Medical Center property;
25. reporting to work when suffering from alcoholic or drug-related hangover or being under the influence of intoxicants or illegal drugs while on duty;
26. possession of weapons of any kind unless authorized by the Medical Center vice chancellor;
27. gambling or being present where gambling is in process or being in possession of gambling devices or equipment on Medical Center premises;
28. being engaged in inappropriate or indecent conduct on the Medical Center premises;
29. sexual harassment or harassment based on another protected basis;
30. fighting, creating a disturbance or engaging in other acts constituting disorderly conduct;
31. taking property of any person or of the Medical Center without authorization;
32. refusal of a request by security personnel to open all packages, purses, luggage, brief cases and/or any other form of container in their possession while on or upon leaving the Medical Center premises;
33. failure to cooperate in an investigation or give false information in an official investigation;
34. carelessness, negligence or unauthorized use of property belonging to the Medical Center or fellow workers resulting in the damage or destruction of the property;
35. violating Medical Center parking rules and regulations;
36. smoking in unauthorized areas;
37. failure to comply with safety and fire prevention rules;
38. soliciting contributions of any kind unless authorized by the UMC Medical Center vice chancellor;
39. soliciting loans from patients, visitors or employees;
40. distributing written or printed matter of any kind, posting or delivering notices, signs or writing in any form on the premises without permission of the UMC vice chancellor for health affairs;
41. unauthorized access to computer files.

42. violation of Information Systems Security Acknowledgement and Nondisclosure Agreement;
43. violation of provisions of Compliance Program failure to attend mandated compliance training; and
44. Unauthorized use of long distance and fraudulent calls or use of Medical Center funds for personal long distance calls.

SUSPENSION, PENDING INVESTIGATION

When the infraction is of such serious nature (e.g., theft, willful damage to property or persons) that it may warrant discharge pending review of the facts, an employee may be suspended without pay. Suspension should not be used to resolve routine disciplinary problems.

HARASSMENT POLICY

It is the policy of the Medical Center to foster an environment of respect for the dignity and worth of all members of the UMC community. The Medical Center is committed to maintaining a work and/or learning environment free from any type of harassment. UMC will not tolerate offensive or inappropriate sexual behavior and requires that all persons avoid any action or conduct which could be viewed as sexual harassment.

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when: 1) submission to such conduct is made either explicitly or implicitly as a term or condition of an individual's employment or academic standing; or 2) submission to or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting such individual; or 3) such conduct has the purpose or effect of interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive work or learning environment severe or pervasive enough to alter the terms or conditions of an individual's employment or academic endeavors and create an abusive work or learning environment.

Examples of prohibited conduct include, but are not limited to: lewd or sexually-suggestive comments; off-color language or jokes of a sexual nature; slurs and other verbal, graphic or physical conduct relating to an individual's gender; or display of sexually-explicit pictures, greeting cards, articles, books, magazines, photos or cartoons.

It is your responsibility to report any incident believed to be sexual harassment immediately. Even if you believe the act of harassment to be isolated or infrequent, you must report it so the Medical Center will have the opportunity to investigate, and, if appropriate, take action to ensure that the conduct does not continue or rise to the level of sexual harassment. Do not wait to determine whether the conduct will continue. Follow the procedure below, and report the conduct immediately.

It is important for you to understand that no division/department head, dean, manager, faculty member or supervisor has the authority to condition the terms and conditions of your employment (pay raises, promotions, demotions, undesirable assignments, disciplinary action or termination, etc.) or academic standing (grade assignments, progress, performance, etc.) on the receipt of sexual favors. If any person has in any way suggested that you or anyone else should provide sexual favors in exchange for a job or academic benefit, or to avoid an unfavorable employment or academic action, you must report this immediately. Do not wait to determine whether a favorable or unfavorable act actually occurs before reporting the conduct. Follow the procedure below and report the conduct immediately.

THE UNIVERSITY OF MISSISSIPPI
MEDICAL CENTER

Education Office
Department of Neurology
2500 North State Street
Jackson, Mississippi 39216-4505
Phone (601) 984-5514
Fax (601) 984-5503
http://neurology.umc.edu

Allowances/Expenses/ Reimbursements/ Travel (July 1 - June 30 - Academic Year)

- **$1,000.00 annually to attend conferences (Resident does not have to be presenting; Can be used for travel expense, hotel, conference fees, meals, on-line conferences or training, etc.) Travel requests must be completed and submitted 4-6 weeks prior to travel using travel request form in Lawson. Reimbursement form in Lawson and receipts must be submitted to Education office immediately upon return from your travel.**
- **$500.00 annually for textbooks, Neurology related magazine subscriptions and organizational membership fees, small equipment, etc. Submit receipts to the education office and you will be reimbursed by the Department. Electronic equipment cannot be reimbursed by this fund. (phones, IPads, notebooks, ophthalmoscopes, etc.)**
- **Allowances do not carry over from year to year. If the funds are not used by June 30th, your balance starts over ($1,000.00/$500.00) Receipts for expenditures must be submitted in the academic year of which they were made.**
- **The Neurology Department will pay for up to 3 lab coats per year as needed**
- **Business Cards are provided by the Department**
- **Pager and service are provided by the Department**
- **Recertification of ACLS is paid by the Department**
- **Annual RITE In service required exam is paid for by the Department**
- **Renewal of Temporary Medical license required annually nor the fee for a permanent medical license cannot be reimbursed by the Department**
- **Membership to the American Academy of Neurology is paid by the Department**
- **Reimbursement requests for items not specifically listed should be addressed to the Education Administrator and Residency Program Director before the purchase is made.**

Bruce L. Hennington
Educational Program Administrator
blhennington@umc.edu

Part 3

Educational Content

Goals and Objectives

Procedures

Quarterly evaluation sheet

Goals and Objectives for a Neurology Inpatient Rotation (applies to general ward, stroke service and consult service)

Accomplishments by year level are considered additive. Skills achieved at a lower PGY level are considered present and are not mentioned again for the following year.

Level of Training	Competency: Patient care
PGY II	**Goal**: Mastery of the physical exam and medical interview
	Objective: Competently and independently performs a complete neurological assessment buy taking a complete history, ROS and performing a complete neurological exam
	Assessment: assessed by a board certified neurologist and documented on the NEX II form for an adult inpatient, feedback
	Goal: Mastery of common procedures and pre-procedural consenting
	Objective: performs a lumbar puncture by following the LP protocol, obtains consent, documents both appropriately
	Assessment: direct supervision of several instances by either faculty or senior resident for all aspects of the procedure, mentoring and feedback
	Goal: Basic understanding and management of common Neurological emergencies
	Objective: Understands the basics and is able to manage common neurological emergencies *with supervision* in the ER setting or on neurology inpatients
	Assessment: direct supervision of several instances by either faculty or senior resident for all aspects of the encounter, mentoring and feedback
	Goal: Basic proficiency in patient management
	Objective: shows the ability to appropriately triage and carry out patient care tasks such as note writing, list updating, order writing, retrieval and upkeep with test data and discharge planning on a daily basis *with guidance* from a senior resident or the faculty member assigned to the service for up to 10 uncomplicated inpatients on a ward service.
	Assessment: direct supervision of multiple instances by either faculty or senior resident for all aspects of the service, mentoring and feedback
	Goal: Acquire the ability to appropriately present a patient in various situations (new patient admission, follow up patient encounter, ED patient encounter during night call, etc.)
	Objectives: Presents new and follow-up patients to the attending in a comprehensive but concise manner (based on the level of acuity, triages what information should be conveyed first), knows the pertinent details of the history, ROS and exam of the patient being presented (without

	Objectives: Presents new and follow-up patients to the attending in a comprehensive but concise manner (based on the level of acuity, triages what information should be conveyed first), knows the pertinent details of the history, ROS and exam of the patient being presented (without significant help from written notes or others) and is able to formulate a basic treatment plan after discussing the patient with the attending. Performs supervised hand offs.
	Assessment: face to face assessment of ALL presentations regarding inpatient encounters by faculty and indirect faculty presence (telephone) or direct face to face (via senior resident) assessment for ALL ED encounters, mentoring and feedback, senior resident supervision for hand offs.
PGY III	**Goal**: Advanced understanding and management of all Neurological emergencies
	Objective: Shows full understanding of and is able to manage all neurological emergencies without *direct* supervision, but may seek additional help from seniors or faculty utilizing it's own treatment plan
	Assessment: direct supervision of several instances by either faculty or senior resident for all aspects of the encounter, mentoring and feedback
	Goal: Advanced proficiency in patient management for all inpatients
	Objective: Demonstrates the ability to generate appropriate differential diagnoses and treatment plans for newly admitted inpatients and to appropriately triage and carry out patient care tasks such as note writing, list updating, order writing, retrieval and upkeep with test data and discharge planning on a daily basis *without needing continuous supervision* from a senior resident or the faculty member assigned to the service for up to 10 complicated inpatients on a ward service. Additionally, shows basic leadership qualities in maintaining supervision of patients not directly assigned but present on the service. Performs and supervises adequate hand offs.
	Assessment: direct supervision of multiple instances by either faculty or senior resident for all aspects of the service, mentoring and feedback
	Goal: Basic Consultation skills
	Objective: Functions as a consultant for other specialties with supervision, but is able to give a preliminary opinion/recommendation independently for more common problems, e.g. during emergencies and night call
	Assessment: direct supervision of multiple instances by either faculty or senior resident for all aspects of the service, mentoring and feedback
IV	**Goal**: Proficiency in all aspects of patient care for neurological patients
	Objectives: Demonstrates independence in the assessment, diagnosis and management of neurological patients in various settings, including all neurological emergencies and functions as a consultant in various

	Assessment: direct and indirect supervision of multiple instances by faculty and assessment of encounters, mentoring and feedback
	Medical Knowledge
PGY II	**Goal**: Acquire a solid fund of knowledge in the basic and clinical neurosciences as applicable to a junior resident, mainly through text books, practice based learning and lectures
	Objective: Demonstrates basic understanding of the etiology and pathophysiology of neurological emergencies and common neurological conditions by the end of the first semester and basic management abilities by the end of the year. Knows pharmacological treatments with dosages that are considered standard of care for the emergency conditions, is familiar with routinely used pharmacotherapy for common, non-emergent conditions. Is familiar with applicable guidelines. Is capable of localizing a lesion based on a working knowledge of anatomy. Is familiar with basic principles of neurophysiology, pharmacochemistry, -kinetics and -dynamics
	Assessment: direct observation, test taking and inservice examination
	Goal: Acquire a working knowledge of neuroradiology
	Objective: Demonstrates familiarity with terminology used for all routine neurological imaging studies. Is able to recognize basic CT findings, such as hemorrhage and subacute ischemic stroke, but will confer with his/her attending before making treatment decisions based on imaging findings. Is able to recognize abnormalities and distinguish them from normal findings/artifacts on basic MRI sequences (T1, T2, FLAIR, DWI, ADC)
	Assessment: direct observation, test taking and inservice examination
	Goal: Extensive knowledge of and proficiency in neurological interview and examination techniques as well as interpretation of neurological signs and symptoms.
	Objectives: Demonstrates familiarity with exam techniques, establishes a basic repertoire of questions pertinent to several scenarios, is capable of performing a basic interview and exam under time restraints by way of establishing a personalized and organized approach to the patient. Is capable of interpreting certain pathological findings and exam, knows the meaning of them and adapts the interview/exam accordingly by considering those findings.
	Assessment: direct observations, performs NEX II exams in a satisfactory manner with minimal redirection, chart review,
PGY III	**Goal**: Consolidates and further expands an extensive fund of knowledge in the basic and clinical neurosciences as applicable to a mid-level resident, mainly through reading of journal articles, study of guidelines, practice based learning, lectures and conferences

	Objectives: Demonstrates good understanding of the etiology and pathophysiology of all neurological emergencies and most neurological conditions and is capable of managing them by the end of the year. Is familiar with applicable guidelines and is starting to incorporate them actively into daily practice Lesion localization based on extensive anatomical knowledge has become second nature. Demonstrates solid knowledge of neurophysiological principles and applies them in the neurophysiology lab. Demonstrates very good knowledge of clinical pharmacology and basic knowledge of phsychopharmacology.
	Assessment: direct observation, test taking and inservice examination
	Goal: Consolidate working knowledge of neuroradiology, become familiar with special imaging procedures and their interpretation
	Objectives: Recognizes common MRI and CT findings pertinent to the central nervous system and routinely uses them in the decision-making process. Is familiar with basic vascular anatomy on CTA, MRA and conventional angiography and capable of basic interpretation of pathological findings and their implications for patient management. Is familiar with functional imaging studies (MRS, fMRI, CT scintigraphy etc.)
	Assessment: direct observation, test taking and inservice examination
PGY IV	**Goal**: Continue to expand knowledge base through self study and participation in research and national conferences.
	Objective: Demonstrates expert knowledge in the field of neurology and the ability to translate this knowledge into independent practice. Takes a lead in educating junior residents and students on the same team, supports educational efforts for the department and institution for peers, colleagues, staff as well as patients, families and the community. Is able to explain physical/laboratory/imaging findings based on anatomical, physiological, pathophysiological, biochemical and pathobiochemical principles through thorough understanding of the basic sciences. Is able to modify and individualize treatment plans while at the same time using the evidence-based method as a guide through knowledge of the recent literature. Is completely at ease with diagnostic and therapeutic procedures as well as devices used in the field of neurology, but may require further subspecialty training (fellowship) to independently interpret or operate such procedures or devices, respectively.
	Assessment: direct observation, test taking and inservice examination

	Practice based learning and Improvement
PGY II	**Goal**: high level participation in Morning Report
	Objective Resident is present at least 75% of scheduled morning reports.
	Assessment: sign-in log sheets
	Goal: Incorporate "patient based learning" into daily practice
	Objective: Resident takes individual cases as learning opportunities and performs literature searches based on the present disease process. Demonstrates active participation in daily rounds, but is primarily a "listener" and "reporter" who assimilates information related to patient histories, exams, studies etc. and documents them in a more and more organized and efficient fashion. Acquires the ability to distill the pertinent positive and negative findings in a given patient through frequently presenting patients in morning report and during rounds and through incremental improvements in daily documentation.
	Assessment: direct observation, quizzing (use of "Socratic questioning", mentoring and feedback, test taking.
PGY III	**Goal**: Improve patient/service management skills through practice
	Objective: Demonstrates the ability to interpret data, formulate more concise treatment plans and starts to function as the group leader by appropriately allocating resources, but without "pulling rank". Documents efficiently and accurately, even on a busy service. Is constantly aware of and self monitors time restraints and complies with duty hour restrictions most of the time. Leads and performs adequate hand offs. Seeks out learning opportunities and performs literature searches based on complex cases seen on various rotations, advances his knowledge due to regular and self-directed reading of journal articles and other reference resources. Assimilates the acquired new knowledge into daily practice. Seeks the opportunity to disseminate newly gained insights into a disease process through teaching of others in case-based conferences.
	Assessment: direct observations, quarterly and semi-annual evaluations through questioning, 360º evaluations
PGY IV	**Goal**: Independent practitioner, self-driven learner, Physician with high moral standards.

	Objectives: Has further advanced to a "manager" of data and "teacher of knowledge", functions in a supervisory role for more junior residents in various settings. Continuing education through self-study is second nature, attends conferences out of interest on the subject matter. Self monitors and corrects bedside behavior, professionalism and personal appearance as part of his/her personality. Has personal goals for professional development (career) and pursues those goals independently, but seeks appropriate help from faculty to help guide the process.
	Assessment: direct observations, quarterly and semi-annual evaluations through questioning, 360º evaluations, mentoring and feedback, Socratic questioning.
	Interpersonal and communication skills
PG Y II	**Goal**: Become capable to effectively communicate with patients and families for the purpose of taking histories and to convey important messages about their health status
	Objectives: Takes in information from patients and families and incrementally learns to explain uncomplicated case scenarios to the family or patient, but does not engage in explicit discussions about end-of-life decisions, other then obtaining resuscitation status/information on living will etc. Documents appropriately for the level of care in a given inpatient. Performs all necessary and level appropriate documentation in a legible and timely manner, signs written orders immediately or phone orders within 36 hours of issue.
	Assessment: direct observation, chart review, evaluating presentations, talking (listening) to families (resident evaluations by patients/families)
	Goal: Become familiar with technical language and acquire basic abilities to summarize cases for the purpose of presentation and documentation.
	Objectives: Is capable of formulating a case summary for newly seen patients and can communicate that summary to other professionals in a concise manner. Presents new and follow-up patients to the attending in a comprehensive but concise manner and is able to formulate a basic treatment plan.
	Assessment: direct observations
	Goal: Communicate effectively with peers, attending and other personal, become a team member

	Objective: Maintains a professional relationship with team members, peers and allied health professionals, does not lash out at others or makes derogatory comments about other providers, services or institutions. Appropriately utilizes resources to take care of a patient, calls backup or attending appropriately, recognizes own boundaries/limits of performance.
	Assessment: direct observations, 360º evaluations, chart review
PGY III	**Goal**: Become actively engaged in more complex discussions with patients and families about all aspects of their care, is capable of giving comprehensive case presentations.
	Objective: Is capable of judging complex patient/family related situations, intervenes with counseling and holds discussions about end of life issues after discussing the issues with the attending first. Avoids giving "mixed messages" to patients and families. Presents new patients during rounds or case conferences in a complete manner, including a discussion of differential diagnosis and basic treatment plan. Communicates with outside providers and referring physicians if such situation arises in a professional manner, refers transfer decisions, treatment plans and other long-term recommendations to the attending of record.
	Assessment: direct observation, chart review, evaluating presentations, talking (listening) to families (resident evaluations by patients/families)
	Goal: develop leadership abilities
	Objective: Is starting to function as a team leader by appropriately utilizing resources available in the multi-disciplinary team through effective and clear communication about the roles of team members. Active in teaching junior residents and students.
	Assessment: direct observation, peer to peer evaluations, student evaluations of resident
PGY IV	**Goal**: Masters all aspects of communication, fully integrated team member and beginning team leader
	Objectives: Is capable of solving complex patient/family situations through counseling. Uses clear, evidence based language, but with wording appropriate for the patient of family, including discussions about end of life issues. Rounds as a team leader, leads conferences in an independent manner. Presents cases in a comprehensive manner, communicates succinctly using clear and correct technical language. Discusses treatment plans and long-term follow up issues with outside providers and referring physicians in a professional and helpful manner.

	Assessment: direct observation, 360º evaluation forms, feedback from other professionals
	Professionalism
PGY II	**Goal**: Acquires essential skills to be considered a "Professional"
	Objective: Maintains a respectful relationship with team members, peers and allied health professionals, does not lash out at others or makes derogatory comments about other providers, services or institutions. Is timely for conferences, scheduled lectures and rounds, answers pages in a timely manner. Utilizes backup coverage in an appropriate manner to minimize wait for patients and other services. Respects patient privacy during rounds and during the examination. Clearly states to the patient the necessity of certain portions of the exam. Narrates certain exam portions to put the patient at ease. Maintains a respectful and patient attitude towards the sick individual, even if patient cooperation is less then optimal.
	Assessment: direct observations, 360º evalution forms, feedback from patients
PGY III	**Goal**: Advances to recognize the nuances of professionalism and increasingly recognizes the role of the physician in the health care team
	Objectives: Is starting to function as a team leader by appropriately utilizing resources available in the multi-disciplinary team through effective and clear communication about the roles of team members. From a behavioral standpoint, reveals accountability for actions without unnecessary self-blame. Remains humble. Appreciates different patient preferences and believes based on cultural and religious believes.
	Assessment: direct observations, 360º evalution forms, mentoring and feedback
PGY IV	**Goal**: to develop into a professional who is capable of handling all aspects of independent practice in regards to behavior and interactions with patients, peers and allied health care providers
	Objectives: Functions as a team leader most of the time or when called upon. Distributes tasks based on a critical needs assessment. Maintains a self-critical attitude and professional behavior towards junior colleagues, peers and allied health professionals, does not "pull rank" to "delegate" unwanted work to junior team members. Clearly understands the different needs of patients based on cultural or religious preferences and takes these differences into account when counseling patients and families. Shows respect for different believes, even if they substantially differ from own believes. Remains neutral in its judgment towards patients and families and concentrates on evidence-based treatment, education and counseling.

	Assessment: direct observations, 360º evalution forms, mentoring and feedback, patient evaluation of resident, semi-annual evaluation
	Systems based practice
PGY II	**Goal**: to become familiar with the systemic nature of health care
	Objective: Learns and experiences the role of the individual provider within the healthcare system. Shows understanding the role of the individual provider as a member of a multidisciplinary team. Integrates into the team and makes contributions to the team effort based on the specific task or situation (e.g. the role of a junior resident in the ER on night call differs from the one in clinic, but in both places there is a need for team integration). Learns about the various cost/benefit ratios of commonly ordered tests and therapies to more effectively utilize available resources.
	Assessment: Mentoring and feedback, discussions
PGY III	**Goal**: to become an active member of the health care system
	Objectives: Starts to function as a team leader by appropriately utilizing resources available in the multi-disciplinary team based on the health care delivery setting. Has a good grasp on cost awareness in various healthcare settings and uses this knowledge for decision-making in the best interest of the patient. Recognizes the importance of clinical documentation to convey information to other health care providers about a patient's health issues, documents goal directed, succinctly and accurately.
	Assessment: Mentoring and feedback, discussions
PGY IV	**Goal**: to become a leader in the health care system
	Manages system resources for the benefit of the patient, keeps in mind futility of care issues and counsels families and patients appropriately. Is the designated team leader most of the time, but continues to integrated into the health care team as a member. Functions as a teacher to junior team members for administrative tasks. Streamlines patient care and its own time management by drawing on system resources for immediate patient management on one hand and referring patients for other portions of the health care continuum as necessary to allow for optimal utilization of resources in the appropriate health care setting. Recognizes systems errors, attempts to correct them as part of a utilization review process or as part of real time safety monitoring. Participates in committees and shows "citizenship".
	Assessment: Mentoring and feedback, discussions,

Goals and Objectives for outpatient based rotations

Accomplishments by year level are considered additive. Skills achieved at a lower PGY level are considered present and are not mentioned again for the following year.

Level of Training	Competency: Patient care
PGY II	**Goal**: Mastery of the physical exam and medical interview
	Objective: Competently and independently performs a complete neurological assessment buy taking a complete history, ROS and performing a complete neurological exam
	Assessment: assessed by a board certified neurologist and documented on the NEX II form for adult outpatients, feedback
	Goal: Mastery of common procedures and pre-procedural consenting
	Objective: performs clinic specific procesures, obtains consent, documents both appropriately
	Assessment: direct supervision of several instances by either faculty or senior resident for all aspects of the procedure, mentoring and feedback
	Goal: Acquire the ability to appropriately present a patient in various situations (new patient encounter, follow up patient encounter, clinic specific situation, etc.)
	Objectives: Presents new and follow-up patients to the attending in a comprehensive but concise manner (based on the level of acuity, triages what information should be conveyed first), knows the pertinent details of the history, ROS and exam of the patient being presented (without significant help from written notes or others) and is able to formulate a basic treatment plan after discussing the patient with the attending.
	Assessment: Face-to-face assessment of ALL presentations regarding new and f/u encounters by faculty or physician extender, infrequently indirect supervision via telephone conversation.
PGY III	**Goal**: Advanced proficiency in patient management for ambulatory patients
	Objective: Demonstrates the ability to generate appropriate differential diagnoses and treatment plans for newly encountered patients. Demonstrates the ability to manage follow-up outpatients with common neurological disorders without attending intervention. Demonstrates the ability to manage patients in respective specialty clinics by adhering to standards of care through knowledge of guidelines. Is familiar with applicable standards on follow up, tests, pharmacotherapy or procedures in regards to cost effective long term follow up and health maintenance (disease prevention). Counsels patients appropriately. Shows basic leadership qualities in maintaining supervision of junior

	Objective: Demonstrates the ability to generate appropriate differential diagnoses and treatment plans for newly encountered patients. Demonstrates the ability to manage follow-up outpatients with common neurological disorders without attending intervention. Demonstrates the ability to manage patients in respective specialty clinics by adhering to standards of care through knowledge of guidelines. Is familiar with applicable standards on follow up, tests, pharmacotherapy or procedures in regards to cost effective long term follow up and health maintenance (disease prevention). Counsels patients appropriately. Shows basic leadership qualities in maintaining supervision of junior residents assigned to same outpatient area.
	Assessment: direct supervision by either faculty, physician extender and, infrequently, senior resident, mentoring and feedback
PGY IV	**Goal**: Proficiency in all aspects of patient care for neurological patients
	Objectives: Demonstrates independence in the assessment, diagnosis and management of neurological patients in various settings, including all neurological emergencies and functions as a consultant in various emergency and routine settings in an independent manner, discusses diagnostic procedures, expected outcomes and treatment recommendations with consulting services. Appropriately involves attending for decision-making after formulation of treatment plan.
	Assessment: direct and indirect supervision of multiple instances by faculty and assessment of encounters, mentoring and feedback
	Medical Knowledge
PGY II	**Goal**: Acquire a solid fund of knowledge in the basic and clinical neurosciences as applicable to ambulatory care
	Objective: Demonstrates basic understanding of the etiology and pathophysiology of common neurological conditions by the end of the first semester and basic management abilities by the end of the year. Knows pharmacological treatments with dosages that are considered standard of care for commonly encountered outpatient conditions. Is familiar with some applicable guidelines. Is capable of localizing a lesion based on a working knowledge of anatomy. Is familiar with basic principles of neurophysiology, pharmacochemistry, -kinetics and -dynamics
	Assessment: direct observation, test taking and inservice examination
	Goal: Extensive knowledge of and proficiency in neurological interview and examination techniques as well as interpretation of neurological signs and symptoms.
	Objectives: Demonstrates familiarity with exam techniques, establishes a basic repertoire of questions pertinent to several scenarios, is capable of performing a basic interview and exam under

	Objectives: Demonstrates good understanding of the etiology and pathophysiology of most neurological conditions encountered in the outpatient arena, and is capable of managing them by the end of the year. Is familiar with applicable guidelines and is starting to incorporate them actively into daily practice. Lesion localization based on extensive anatomical knowledge has become second nature. Demonstrates solid knowledge of neurophysiological principles and applies them in the neurophysiology lab. Demonstrates very good knowledge of clinical pharmacology and basic knowledge of phsychopharmacology.
	Assessment: direct observation, test taking and inservice examination
PGY IV	**Goal**: Continue to expand knowledge base through self study and participation in research and national conferences.
	Objective: Demonstrates expert knowledge in the field of neurology and the ability to translate this knowledge into independent practice. Takes a lead in educating junior residents and students on the same team, educates patients and families in a comprehensive manner. Is able to explain physical/laboratory/imaging findings based on anatomical, physiological, pathophysiological, biochemical and pathobiochemical principles through thorough understanding of the basic sciences. Is able to modify and individualize treatment plans while at the same time using the evidence-based method as a guide through knowledge of the recent literature. Is completely at ease with diagnostic and therapeutic procedures as well as devices commonly used in the outpatient setting, but may require further subspecialty training (fellowship) to independently interpret or operate such procedures or devices, respectively.
	Assessment: direct observation, test taking and inservice examination
	Practice based learning and Improvement
PGY II	**Goal**: Incorporate "patient based learning" into daily practice
	Objective: Resident takes individual cases as learning opportunities and performs literature searches based on the present disease process. Demonstrates high level of "ownership for his/her clinic patients, but is primarily a "listener" and "reporter" who assimilates information related to patient histories, exams, studies etc. and documents them in a more and more organized and efficient fashion. Acquires the ability to distill the pertinent positive and negative findings in a given patient through frequently presenting patients in clinic or the lab and through incremental improvements in daily documentation.
	Assessment: direct observation, quizzing (use of "Socratic questioning", mentoring and feedback, test taking.

PGY III	**Goal**: Improve patient management skills through practice
	Objective: Demonstrates the ability to interpret data, formulate more concise treatment plans and starts to function as the group leader by appropriately allocating resources, but without "pulling rank". Documents efficiently and accurately, even in a busy outpatient clinic. Seeks out learning opportunities and performs literature searches based on complex cases seen in various outpatient settings, advances his knowledge due to regular and self-directed reading of journal articles and other reference resources. Assimilates the acquired new knowledge into daily practice. Seeks the opportunity to disseminate newly gained insights into a disease process through teaching of others in case-based conferences.
	Assessment: direct observations, quarterly and semi-annual evaluations through questioning, 360º evaluations
PGY IV	**Goal**: Independent practitioner, self-driven learner, Physician with high moral standards.
	Objectives: Has further advanced to a "manager" of data and "teacher of knowledge", functions in a supervisory role for more junior residents in various settings. Continuing education through self-study is second nature, attends conferences out of interest on the subject matter. Self monitors and corrects bedside behavior, professionalism and personal appearance as part of his/her personality. Has personal goals for professional development (career) and pursues those goals independently, but seeks appropriate help from faculty to help guide the process.
	Assessment: direct observations, quarterly and semi-annual evaluations through questioning, 360º evaluations, mentoring and feedback, Socratic questioning.
	Interpersonal and communication skills
PG Y II	**Goal**: Become capable to effectively communicate with patients and families for the purpose of taking histories and to convey important messages about their health status
	Objectives: Takes in information from patients and families and incrementally learns to explain uncomplicated case scenarios to the family or patient, but does not independently engage in explicit discussions about futility (example: newly diagnosed patient with ALS.} Documents appropriately for the level of care in a given patient. Performs all necessary and level-appropriate documentation in a legible and timely manner.
	Assessment: direct observation, chart review, evaluating presentations, talking (listening) to families (resident evaluations by patients/families)

	Goal: Become familiar with technical language and acquire basic abilities to summarize cases for the purpose of presentation and documentation.
	Objectives: Is capable of formulating a case summary for newly seen patients and can communicate that summary to other professionals in a concise manner. Presents new and follow-up patients to the attending in a comprehensive but concise manner and is able to formulate a basic treatment plan.
	Assessment: direct observations
	Goal: Communicate effectively with peers, attending and other personal, become a team member
	Objective: Maintains a professional relationship with team members, peers and allied health professionals, does not lash out at others or makes derogatory comments about other providers, services or institutions. Appropriately utilizes resources to take care of a patient, discusses patient with attending, follows instructions, recognizes own boundaries/limits of performance.
	Assessment: direct observations, 360º evaluations, chart review
PGY III	**Goal**: Become actively engaged in more complex discussions with patients and families about all aspects of their care, is capable of giving comprehensive case presentations.
	Objective: Is capable of judging complex patient/family related situations, intervenes with counseling and holds discussions about chronic, untreatable conditions after discussing with the attending first. Avoids giving "mixed messages" to patients and families. Presents new patients in a complete manner, including a discussion of differential diagnosis and basic treatment plan. Communicates with outside providers and referring physicians if such situation arises in a professional manner, but refers transfer decisions, treatment plans and other long-term recommendations to the appropriate attending.
	Assessment: direct observation, chart review, evaluating presentations, talking (listening) to families (resident evaluations by patients/families)

PGY IV	**Goal**: Masters all aspects of communication, fully integrated team member and team leader
	Objectives: Is capable of solving complex patient/family situations through counseling. Uses clear, evidence based language, but with wording appropriate for the patient of family, including discussions about end of life issues. Rounds as a team leader, leads conferences in an independent manner. Presents cases in a comprehensive manner, communicates succinctly using clear and correct technical language. Discusses treatment plans and long-term follow up issues with outside providers and referring physicians in a professional and helpful manner.
	Assessment: direct observation, 360º evaluation forms, feedback from other professional.
	Professionalism
PGY II	**Goal**: Acquires essential skills to be considered a "Professional"
	Objective: Maintains a respectful relationship with team members, peers and allied health professionals, does not lash out at others or makes derogatory comments about other providers, services or institutions. Is timely for clinic/lab, answers pages in a timely manner, completes assignments in a timely manner. Respects patient privacy during during the examination and while presenting. Clearly states to the patient the necessity of certain portions of the exam. Narrates certain exam portions to put the patient at ease. Maintains a respectful and patient attitude towards the sick individual, even if patient cooperation is less then optimal.
	Assessment: direct observations, 360º evalution forms, feedback from patients
PGY III	**Goal**: Advances to recognize the nuances of professionalism and increasingly recognizes the role of the physician in the health care team
	Objectives: Maintains self discipline, is well dressed and groomed, and has a positive attitude. Adheres to policies and regulations, HIPPA rules. From a behavioral standpoint, reveals accountability for actions without unnecessary self-blame. Remains humble. Appreciates different patient preferences and believes based on cultural and religious believes.
	Assessment: direct observations, 360º evaluation forms, mentoring and feedback

PGY IV	**Goal**: to develop into a professional who is capable of handling all aspects of independent practice in regards to behavior and interactions with patients, peers and allied health care providers
	Objectives: Functions as a team leader most of the time or when called upon. Distributes tasks based on a critical needs assessment. Maintains a self-critical attitude and exemplary behavior towards junior colleagues, peers and allied health professionals, does not "pull rank" to "delegate" unwanted work to junior team members. Clearly understands the different needs of patients based on cultural or religious preferences and takes these differences into account when counseling patients and families. Shows respect for different believes, even if they substantially differ from own believes. Remains neutral in its judgment towards patients and families and concentrates on evidence-based treatment, education and counseling.
	Assessment: direct observations, 360º evalution forms, mentoring and feedback, patient evaluation of resident, semi-annual evaluation
	Systems based practice
PGY II	**Goal**: to become familiar with the systemic nature of health care
	Objective: Learns and experiences the role of the individual provider in the ambulatory setting. Shows understanding of the role of the individual provider as a member of a multidisciplinary team (eg. MDA or epilepsy clinic). Integrates into the team and makes contributions to the team effort based on the specific task or situation (e.g. the role of a junior resident in the ER on night call differs from the one in clinic, but in both places there is a need for team integration). Learns about the various cost/benefit ratios of commonly ordered tests and therapies to more effectively utilize available resources.
	Assessment: Mentoring and feedback, discussions
PGY III	**Goal**: to become an active member of the health care system
	Objectives: Starts to function as a team leader by appropriately utilizing resources available in the multi-disciplinary team based on the health care delivery setting. Has a good grasp on cost awareness in various healthcare settings and uses this knowledge for decision-making in the best interest of the patient. Recognizes the importance of clinical documentation to convey information to other health care providers about a patient's health issues, documents goal directed, succinctly and accurately.
	Assessment: Mentoring and feedback, discussions

PGY IV	**Goal**: to become a leader in the health care system
	Manages system resources for the benefit of the patient, keeps in mind futility of care issues and counsels families and patients appropriately. Is the designated team leader most of the time, but continues to integrated into the health care team as a member. Functions as a teacher to junior team members for administrative tasks. Streamlines patient care and its own time management by drawing on system resources for immediate patient management on one hand and referring patients for other portions of the health care continuum as necessary to allow for optimal utilization of resources in the appropriate health care setting. Recognizes systems errors, attempts to correct them as part of a utilization review process or as part of real time safety monitoring. Participates in committees and shows "citizenship".
	Assessment: Mentoring and feedback, discussions,

Goals and Objectives for adult Neurology residents rotating in Pediatric Neurology (applies to inpatient and outpatient setting)

The pediatric Neurology rotation takes place in the PGY III and IV year, but varies amongst residents, therefore a separation of skill sets by year level is not possible or necessary.
Accomplishments by year level are considered additive. Skills achieved at a lower PGY level are considered present and are not mentioned again for the following year.

Level of Training	Competency **Patient care**
PGY III /IV	**Goal**: Proficiency in performing and interpreting the screening neurologic examination in infants and children
	Objective: Competently and independently perform the following components: Mental status, Developmental progress, Cranial nerves, Muscle strength and tone, Deep tendon reflexes and other reflexes, Coordination
	Assessment: assessed by a board certified pediatric neurologist and documented on the NEX II form for a pediatric inpatient, feedback
	Goal: Basic understanding and management of common Pediatric Neurology emergencies
	Objective: Demonstrate the ability to recognize and manage common pediatric neurological emergencies: Statue epilepticus, neuro-muscular failure, acute headache
	Assessment: direct supervision of several instances by faculty or fellows for all aspects of the encounter, mentoring and feedback
	Goal: Proficiency in recognition and management of epilepsy syndromes in infants and children
	Objective: shows the ability to appropriately recognize (diagnose) and carry out patient care tasks and management of the following in both the inpatient and outpatient setting: a. Febrile seizures b. Symptomatic seizures c. Partial epilepsies: symptomatic, benign d. Juvenile absence epilepsy e. Infantile spasms f. Lennox-Gastaut syndrome g. Juvenile myoclonic epilepsy h. Generalized motor epilepsy Additionally, is familiar with general epilepsy features, as they also apply to children: (1) Generalized seizures: motor, absence, minor motor, (2) Partial seizures: simple, complex, secondarily generalized
	Assessment: direct supervision of multiple instances by faculty or fellows for all aspects of the service, mentoring and feedback

	Goal: Proficiency in recognition and management of Neuromuscular diseases in infants and children
	Objective: Demonstrates the ability to recognize signs and symptoms of neuromuscular diseases in infants and children and basic management skills in both the inpatient and outpatient setting: a. Motor neuron disease b. Polyneuropathies, Guillain-Barre syndrome c. Myasthenia, botulism, tick paralysis d. Muscular dystrophy, inflammatory myopathies
	Assessment: direct supervision of multiple instances by faculty of fellows for all aspects of the service, mentoring and feedback
	Goal: Proficiency in recognition and management of various syndromes presenting with headache in infants and children
	Objective: Demonstrates the ability to recognize signs and symptoms of increased intracranial pressure and traction headaches. Demonstrates the ability to recognize the atypical presentation of Migraine in children, is familiar with the abortive and prophylactic treatment of it.
	Assessment: direct supervision of multiple instances by faculty of fellows for all aspects of the service, mentoring and feedback
	Goal: Acquire the ability to appropriately present a patient in various situations (new patient admission, follow up patient encounter, ED patient encounter during night call, etc.)
	Objectives: Presents new and follow-up patients to the attending in a comprehensive but concise manner (based on the level of acuity, triages what information should be conveyed first), knows the pertinent details of the history, ROS and exam of the patient being presented (without significant help from written notes or others) and is able to formulate a basic treatment plan after discussing the patient with the attending. Performs supervised hand offs.
	Assessment: face to face assessment of ALL presentations regarding inpatient encounters by faculty and indirect faculty presence (telephone) or direct face to face (via senior resident) assessment for ALL ED encounters, mentoring and feedback, senior resident supervision for hand offs.
	Medical Knowledge
PGY III/IV	**Goal**: Acquire a solid fund of knowledge in pediatric neurology, mainly through text books, practice based learning and lectures
	Objective: Demonstrates basic understanding of the etiology and pathophysiology of common neurological emergencies and common neurological conditions in infants and children, in particular, is familiar with the following: a. Use and abuse of EEG b. Indications and selection of neuroimaging studies

	Objective: Demonstrates basic understanding of the etiology and pathophysiology of common neurological emergencies and common neurological conditions in infants and children, in particular, is familiar with the following: a. Use and abuse of EEG b. Indications and selection of neuroimaging studies c. Differential diagnosis of "spells" in children d. Lifestyle and safety issues for epilepsy e. Diagnosis of tic's and Tourette syndrome f. Diagnosis of metabolic encephalopathies (imaging, labs etc.) g. can correlate imaging findings with clinical presentation: • Gray matter: dementia, seizures, blindness • White matter: ataxia, spasticity, blindness Knows pharmacological treatments with dosages that are considered standard of care for the emergency conditions, is familiar with routinely used pharmacotherapy for common, non-emergent conditions, in particular: Use of common anti-epileptic drugs: • Phenobarbital • Phenytoin • Valproate • Carbamazepine • Ethosuxamide • Topiramate
	Assessment: direct observation, test taking and inservice examination
	Goal: Acquire a working knowledge of neuroradiology
	Objective: Demonstrates familiarity with terminology used for all routine neurological imaging studies. Is familiar with the changing MRI appearance of infants and young children based on age and myelination of the white matter.
	Assessment: direct observation, test taking and inservice examination
	Goal: Extensive knowledge of and proficiency in neurological interview and examination techniques as well as interpretation of neurological signs and symptoms.
	Objectives: Demonstrates familiarity with exam techniques, establishes a basic repertoire of questions pertinent to several scenarios, is capable of performing a basic interview and exam under time restraints by way of establishing a personalized and organized approach to the patient. Is capable of interpreting certain pathological findings and exam, knows the meaning of them and adapts the interview/exam accordingly by considering those findings.
	Assessment: direct observations, performs NEX II exams in a satisfactory manner with minimal redirection, chart review,
	Practice based learning and Improvement

	Goal: Improve patient/service management skills through practice
	Objective: Demonstrates the ability to interpret data and to formulate more concise treatment plans. Documents efficiently and accurately, even on a busy service. Is constantly aware of and self monitors time restraints and complies with duty hour restrictions most of the time. Leads and performs adequate hand offs. Seeks out learning opportunities and performs literature searches based on complex cases, advances his knowledge due to regular and self-directed reading of journal articles and other reference resources. Assimilates the acquired new knowledge into daily practice. Seeks the opportunity to disseminate newly gained insights into a disease process through teaching of others in case-based conferences.
	Assessment: direct observations, quarterly and semi-annual evaluations through questioning, 360º evaluations
	Interpersonal and communication skills
PG Y III/IV	**Goal**: Become capable to effectively communicate with patients and families for the purpose of taking histories and to convey important messages about their health status
	Objectives: Takes in information from patients and families and incrementally learns to explain various case scenarios to the family or patient. Documents appropriately for the level of care in a given inpatient. Performs all necessary and level appropriate documentation in a legible and timely manner, signs written orders immediately or phone orders within 36 hours of issue.
	Assessment: direct observation, chart review, evaluating presentations, talking (listening) to families (resident evaluations by patients/families)
	Goal: Become familiar with technical language and acquire basic abilities to summarize cases for the purpose of presentation and documentation.
	Objectives: Is capable of formulating a case summary for newly seen patients and can communicate that summary to other professionals in a concise manner. Presents new and follow-up patients to the attending in a comprehensive but concise manner and is able to formulate a basic treatment plan.
	Assessment: direct observations
	Goal: Communicate effectively with peers, attending and other personnel, become a team member

	Objective: Maintains a professional relationship with team members, peers and allied health professionals, does not lash out at others or makes derogatory comments about other providers, services or institutions. Appropriately utilizes resources to take care of a patient, calls backup or attending appropriately, recognizes own boundaries/limits of performance.
	Assessment: direct observations, 360º evaluations, chart review
	Professionalism
PGY III/IV	**Goal**: Acquires essential skills to be considered a "Professional"
	Objective: Maintains a respectful relationship with team members, peers and allied health professionals, does not lash out at others or makes derogatory comments about other providers, services or institutions. Is timely for conferences, scheduled lectures and rounds, answers pages in a timely manner. Respects patient privacy during rounds and during the examination, respects the need for a heightened sense of sensitivity during the examination of children. Clearly states to the patient the necessity of certain portions of the exam. Narrates certain exam portions to put the patient/parents at ease. Maintains a respectful and patient attitude towards the sick individual, even if patient cooperation is less then optimal.
	Assessment: direct observations, 360º evalution forms, feedback from patients
	Systems based practice
PGY III/IV	**Goal**: to become familiar with the systemic nature of health care
	Objective: Learns and experiences the role of the individual provider within the healthcare system. Shows understanding the role of the individual provider as a member of a multidisciplinary team. Integrates into the team and makes contributions to the team effort based on the specific task or situation (e.g. the role of a junior resident in the ER on night call differs from the one in clinic, but in both places there is a need for team integration). Learns about the various cost/benefit ratios of commonly ordered tests and therapies to more effectively utilize available resources.
	Assessment: Mentoring and feedback, discussions

Goals and Objectives for the Neuroscience Intensive Care Unit (NSICU) Rotation

This rotation takes place in the PGY II and III years only, residents may elect another rotation in the PGY IV year as an elective or mini fellowship.

Accomplishments by year level are considered additive. Skills achieved at a lower PGY level are considered present and are not mentioned again for the following year.

Goals and Objectives

The NSICU rotation is an integral part of our Neurology residency. The acuity of patients seen in the inpatient setting is now higher then ever and in many practice settings Neurologists and Neurosurgeons work to together closely in taking care of critically ill patients, in essence creating a neuroscience environment.

Mandatory NSICU rotations take place in the PGY II and III years. Residents are expected to adhere to the rounding schedule mandated by the critical care setting. All residents prepare at least one formal presentation on topics of interest to them, but related to the critical care setting, during their month in the NSICU.

Residents will be assessed with formative written evaluations and graded on attendance, clinical performance and their presentation on a critical care topic. All residents must also perform one NEX II exam per year, which is graded separately.

While all competencies apply, special emphasis is on the following:

1. Patient care:
    a. **Goals:**
        i. (PGY II): develop basic management skills for the treatment and diagnosis of critically ill patients
        ii. (PGY III): develop moderately advanced management skills
    b. **Objectives:**
        i. Learn the comprehensive, systems based approach used for daily patient assessment in the ICU, including writing ICU notes, evaluating laboratory data and integrating these data with the clinical picture
        ii. Become familiar with extubation criteria, assessment of respiratory and ventilatory failure and options for intervention
        iii. Become familiar with criteria for elective intubation in patients with acute neurogenic ventilatory failure (ANVF)
        iv. Perfect your skills in the examination of comatose patients, be able to determine brain death
        v. Become familiar with the commonly used clinical scales and indices in the neurocritical care setting, in particular:
            1. GCS
            2. Hunt and Hess
            3. Fisher CT grading scale
            4. NIHSS
            5. FENA
            6. RSBI
            7. CPP

vi. Participate in family discussions and learn how to provide appropriate information to families. Participate in discussions on end of life issues as well as how to break bad developments to families.
vii. Become proficient and perform the following procedures or assist in their performance:
    1. Lumbar puncture, with or without lumbar drain placement
    2. Central line placement (internal jugular, subclavian and femoral approach).
    3. Arterial line placement (radial and femoral approach).
    4. Endotracheal intubation.
    5. Percutaneous tracheotomy.
    6. Chest tube or thoracic vent placement.
    7. Apnea test.

2. Knowledge base:
    a. **Goals:**
        i. (PGY II): consolidate your general medical knowledge and specific neuroscience knowledge as it applies to common acute neurological problems
        ii. (PGY III): further advance your knowledge of acute neurological and neurosurgical problems commonly encountered in the ICU and ER setting
        iii. All: develop a clear understanding of the neuroanatomical and neurophysiological basis as they relate to acute neurological diseases
    b. **Objectives:**
        i. Become familiar with different modes of ventilation, their usefulness in different situations as well as pitfalls. Learn how to troubleshoot the ventilator.
        ii. Become familiar with common neurological diseases that frequently lead to ANVF, in particular Myastenia Gravis, AIDP, ALS and acute MS exacerbation.
        iii. Expand your repertoire of sedatives and be familiar with methods to cope with agitation in patients with metabolic and organic encephalopathy
        iv. Expand your knowledge of commonly used medications in neurological, neurosurgical and general ICU patients and pay special attention to drug interactions
        v. Be familiar with several, well described vascular brainstem syndromes:
            1. Weber
            2. Claude
            3. Benedict
            4. Foville
            5. Wallenberg
        vi. Become familiar with basic physiologic principles of ICP regulation, monitoring equipment used to measure ICP, and modalities used to treat elevated ICP
        vii. Expand your knowledge of the different types of intracranial hemorrhages. Understand the different mechanisms that cause these hemorrhages, be

able to recognize or suspect them on clinical grounds and know treatment modalities.

viii. Understand and be able to interpret commonly seen findings on imaging and neuro-imaging, in particular CXR, chest CT, CT head, CTA head and neck, MRI brain, MRA head and neck, MRV brain, 4V – DSA cerebral vasculature

3. Interpersonal and communication skills:
    a. **Goals:**
        i. (PGY II): learn to write comprehensive ICU notes, present patients comprehensively during rounds and passively participate in family conferences as an observer
        ii. (PGY III): learn how to effectively convey compiled or new data to patients, families and consultants in an active manner, including bad news
    b. **Objectives:**
        i. Learn to communicate clearly both verbally and written in order to minimize the possibility for errors resulting in potential patient harm in this fast paced environment
        ii. Listen carefully to what team members tell you and incorporate this information into your decision making process
        iii. Respect nursing staff and support staff and give them the credit they deserve. Incorporate their reports, observations and concerns into your own decision making process
        iv. Participate in family conferences to gain insight into how to convey bad news and how to talk about end of life issues.
4. Systems based practice:
    a. Understand the importance of the implementation of the multidisciplinary team approach when caring for critically ill patients.
    b. Learn the necessity to have a clear indication for performing studies and tests in ICU patients not only to contain cost, but also not to expose patients to unnecessary test with potential adverse events, that may not have any bearing on treatment

The above outlined goals will be achieved with the aid of the following:

1. Daily ICU rounds with integrated bedside teaching. The resident presents the patient and issues that have come up in the last 24h, a brief discussion takes place and then decisions are made. The resident writes the necessary orders. If the situation permits or requires it, an academic discussion about related issues may take place.
2. Formal lectures:
    a. A formal lecture series for the NSICU is in place (appended).
    b. Rotating residents are required to prepare two topics with a brief discussion during their rotation.
3. A neuroanatomy topic is discussed under the guidance of Dr. Haines once per week. The topic is related to one or two patients that are present in the unit at that time to have close clinical correlation.

Additionally, the following reference texts are available for review:

1. The clinical practice of Critical Care Neurology, Wijdicks, Eelco; Oxford
2. Textbook of Neurointensive Care, Layon, Joseph et al, Saunders.
3. Several critical journals are available for review as well.

EEG / EPILEPSY

Patient Care

Goal: Become competent in basic clinical EEG and clinical epilepsy.

Objective: A: EEG

PGY 2&3 year

i) Learn indications and limitations of EEG
ii) Become familiar with principles of EEG technology: electrode placement, montages, filters, sensitivity, paper speed, activation procedures, artifacts.
iii) Watch 5 EEGs, review available teaching materials, complete recommended reading.
iv) Recognize normal awake and sleep patterns in adults and children.
v) Learn nonspecific slow wave patterns and significance.
vi) Interictal and ictal eplieptiform discharges – focal and generalized
vii) Recognize coma and ICU patterns including brain death recordings

PGY 4 year

viii) Learn principles of video EEG telemetry monitoring.
ix) Thalamocortical anatomy and physiology of EEG
x) Basic principles of evoked potentials (second month).

B: Epilepsy

PGY 2&3 year

i) History and differential diagnosis of seizures and mimicks.
ii) Work up on patients with seizures/epilepsy
iii) Learn principles of anticonvulsants pharmacology and how to use them.
iv) Nonconvulsive and convulsive status epilepticus

PGY 4 year

v) Special conditions: pediatric epilepsy, pregnancy issues, epilepsy in the elderly, epilepsy surgery, psychiatric issues.

Assessment

i) Direct supervision during EEG reading and in the telemetry unit (monitoring)
ii) Interaction in the seizure clinic at least half day per week.
iii) Complete review of lab teaching material, videos of seizures, and reading material. Sign off sheets will be used at the end of the first month.

Medical Knowledge:

Goals: Understand the clinical and basic science aspects of epilepsy and EEG.

Objectives: **For all years**

i) Complete all recommended reading material and monographs on clinical topics, physiology and pathophysiology of EEG, pharmacology of anticonvulsants and basic neuropathology of epilepsy including hippocampal sclerosis and neuronal dysplasias.

Assessment:

i) Direct assessment of knowledge in above areas in the telemetry unit, during EEG reading and in the seizure clinics.
ii) Present one topic to other residents during the 2 month rotation.

Practice Based Learning and Improvement

Goal: Incorporate knowledge and experience gained into developing EEG reports and provide high quality epilepsy care.

Objectives: **PGY 2 year**

i) Handle straight forward EEG issues with limited supervision in the second month during night call

PGY 3&4 year

ii) Handle all but the most complex EEG issues with limited supervision in the second month during night call
iii) Learn how to develop EEG reports, complete 50 EEG reports under supervision during the second month.
iv) One Journal Club presentation.

Assessment:

i) Direct observation, quizzing and mentoring with feed back.
ii) Completion of clinical epilepsy exam (100 questions) and EEG quiz (25 EEGs).
iii) Check list completion: watch 5 EEGs, lab teaching materials/monographs, above exams with 75%, one presentation to residents, one to Journal Club.

Interpersonal and Communication Skills:

Goal: Communicate effectively with patients, nurses, techs, peers and supervisors.

Objectives: For **all years**

i) Adequate history taking and documentation, discharge instructions, verbal EEG reports.

Assessment:

i) Direct observation in the telemetry unit, EEG reading sessions clinic
ii) 360 degree evaluation from nurses, techs and patients.

Professionalism:

Goal: Acquire essential skills in clinical epilepsy and EEG to act professionally with others.

Objectives: For **all years**

i) Maintain respectful relationship with techs, nurses and peers.
ii) Complete patient care: H&P, follow up and discharges in a timely manner.
iii) Be prompt with answering calls, attending rounds and clinics.
iv) Do not make any derogatory or demeaning comments about peers.

Assessment:

i) Direct observation
ii) 360 degree evaluation from nurses, techs, patients and clinic staff.

System Based Practice:

Goal: Become familiar with epilepsy/EEG related health care issues.

Objectives:

i) Understand coding and compliance issues as they apply to EEG and epilepsy
ii) Learn your role in multidisciplinary team consisting of techs, psychologist, nurses, neurosurgeons and neuroradiologists.
iii) Be familiar with epilepsy issues in the society at large. such as referral delays, education of nonepilepsy professionals and public.

Assessment:

i) Direct interactions with feedback.

Curriculum for the Neuro-Radiology Rotation

Neuroradiology is a vital part of every Neurologist's daily practice. It has revolutionized Neurology and enabled us to look at the brain and its disorders in the living patient. Therefore, an understanding of basic principles, the ability to distinguish normal structures and recognition of a wide spectrum of pathologies and their correlation with clinical findings is imperative.

1. PGY I residents will be scheduled for one month of Neuroradiology during their Neuro-Science Block.
2. PGY II residents will be scheduled for one month of Neuroradiology as a mandatory rotation that will count toward the elective months.
3. Senior residents (PGY III and above) will be able to request a Neuroradiology rotation as an elective month.

PGY I level:

Goals

- Obtain basic knowledge of the physical principles used in CT and MRI technology.
- Correlate and expand your current anatomical knowledge through the review of CT, CTA and MRI patient exams.
- Gain basic experience in reading and interpreting CT and CTA imaging studies.

Objectives

- Participate in daily reading sessions with the Neuroradiologist on duty.
- Read appropriate chapters in "The Requisits Neuroradiology", second edition, by Grossman and Yousem.
- Collect at least four cases per day and correlate radiographic findings with clinical presentations.
- Review the applicable topographical and functional Neuroanatomy in "Fundamental Neuroscience" by Haines or "Neuroanatomy through clinical cases" by Blumenfeld.
- Read CT head, CTA head and neck and MRI brain patient exams independently prior to the formal reading session and compare your findings with the formal report.
- Become sufficient in the identification of the following:
    - Be able to identify normal structures and normal variations on CT/CTA and MRI/MRA/MRV brain and MRI spine.
    - Be able to identify CT and MRI changes of ischemic stroke, both early ischemia and evolution of ischemic changes over time.
    - Be able to identify acute, subacute and chronic intracranial hemorrhages on CT. This includes:
        - Epidural hematoma
        - Subdural hematoma
        - Intracerebral hemorrhage with and w/o ventricular extension
        - Subarachnoid hemorrhage

- Identify changes associated with mass lesions of the brain on CT and MRI, including midline shift, subfalcine herniation, transtentorial herniation and its variations (unilateral, bilateral and crossed) and tonsillar herniation.
- Know the appearance of enhancing lesions on CT, including neoplasms, abscess and subacute stroke.

PGY II level:

Goals

- Expand on the goals listed for PGY I residents for CT, CTA and MRI.
- Become familiar with Digital Subtraction Angiography (DSA) technology and expand your current knowledge base of neurovascular anatomy.
- Become familiar with indications for PET and functional MRI as applicable to the field of Neurology.

Objectives

- Participate in daily reading sessions with the Neuroradiologist on duty.
- Read appropriate chapters in "The Requisits Neuroradiology", second edition, by Grossman and Yousem.
- Collect at least four cases per day and correlate radiographic findings with clinical presentations.
- Review the applicable topographical and functional Neuroanatomy in "Fundamental Neuroscience" by Haines or "Neuroanatomy through clinical cases" by Blumenfeld.
- In addition the following is required:
  - Read the text on Neuroradiology by Mauricio Castillo; Neuroradiology Companion, Methods, Guidelines…. This book is available in the Currier Neurology Library for in-house reading. A second copy can be signed out through Margaret for the entire month of the rotatin.
  - At the end of the rotation, PGY II residents should be familiar:
    - With the normal appearance and variations of the cerebral vasculature on Digital Subtraction Angiography (DSA), CT-angiography (CTA) and MRA.
    - Should recognize specific lesions on above vascular studies:
      - Stenosis and occlusion of extra-and intracranial major vessels
      - AVM
      - Aneurysm
    - Should be familiar with principles and appearance of Perfusion CT and MRI.
    - MUST BE FAMILIAR with the appearance of blood and blood products during different stages of evolution on different MRI sequences. This includes:
      - Epidural hematoma
      - Subdural hematoma
      - Intracerebral hemorrhage with and w/o ventricular extension.
    - Must be familiar with the appearance of demyelinating lesions on non-contrasted and contrasted MRI of the CNS.

- Should be familiar with the appearance of meningeal enhancement on contrasted MRI.
- Should be familiar with the appearance of specific CNS infections:
  - CNS Toxoplasmosis
  - Bacterial abscess
  - Herpes encephalitis
  - Cryptococcal meningitis/encephalitis
  - HIV encephalitis
- Should be familiar with the appearance of extrinsic and intrinsic lesions on spine MRI as well as degenerative changes on spine MRI.

PGY III and IV level

Since the PGY III and IV rotations are not mandatory, the goals and objectives are more general in nature and reflect the level of functioning expected of a PGY IV resident ready to graduate from the program.

Goals

- Be sufficient in independently reading and interpreting CT, CTA and MRI patient exams and draw conclusions for clinical management.
- Have the ability to make decisions in regard to treatment options based on review of DSA patient exams.
- Have a good understanding of indications for neuroimaging in general in the context of systems based practice.
- Develop a good understanding of pediatric aspects of Neuroradiology, including but not limited to, the stages of myelination as well as developmental malformations.
- Be familiar with new or not routinely used technologies, e.g. MRI SPECT, PET, SPECT, f-MRI and other technologies on the horizon as they become available for clinical use.
- Broaden your knowledge of CNS infections, in particular CNS encephalitis and Prion diseases.
- Aging brain and adult Neurodegenerative disorders.
- Imaging in epilepsy, in particular temporal sclerosis.

Objectives

- Participate in daily reading sessions with the Neuroradiologist on duty.
- Read appropriate chapters in “The Requisits Neuroradiology”, second edition, by Grossman and Yousem.
- Collect at least four cases per day and correlate radiographic findings with clinical presentations.
- During the neuroradiology rotation, prepare and present a topic for the monthly Neuroradiology teaching session in the department.
- Take responsibility in junior resident and student education during rounds and on call.
- Play an active role in interpreting neuroimaging studies during daily sign-in and sign-out conferences in the department.
- Read the text by William Orrison, Jr., Neuroimaging. This book is currently only available in the Currier Neurology Library and CANNOT be taken out.

Rotation in Neurosurgery (PGY I year)
GENERAL LEARNING OBJECTIVES FOR ALL UMC ROTATIONS:

At the completion of this training program the resident will demonstrate:

Medical knowledge

Intellectual ability as evidenced by retention, comprehension, abstraction, discrimination and logical thinking**.**

Knowledge of field of Neurosurgery by showing evidence of the literature, methods of management, advantages and disadvantages of alternative treatments of their own patient care appraisal and assimilation of scientific evidence and improvements in patient care.

Patient care

O**.R. performance** as evidenced by exhibiting knowledge of anatomy, physiology and pathology of case. Evidenced also by an understanding of mechanics and demonstration of dexterity, efficiency, thoroughness and concern for professional O.R. atmosphere

Caring as evidenced by compassionate, appropriate and effective care of patients for the treatment of health problems and the promotion of health

Judgment as evidence by common sense, decisiveness, ability to draw sound conclusions, willingness to admit mistakes, regard for patient's needs & life conditions.

Professionalism

Conference performance as evidenced by punctuality, organization and preparation. It is also evidenced by showing knowledge of current literature & treatment.

Work habits as demonstrated by initiative or the amount of prodding or supervision needed. Also as demonstrated by the degree to which they accept responsibility, the quality work, and the amount of work produced.

Relating to students as demonstrated by accepting the role of teacher, explaining and elaborating and recognizing student's interests and needs

Reliability as evidenced by acceptance of responsibility, punctuality and availability.

Integrity as evidenced by showing honesty and discretion. Also by showing accountability to patients, society and the profession, as well as a commitment to excellence and on-going professional development.

Appearance as evidenced by showing poise, alertness, cleanliness, and appropriateness of dress.

Ethical principles as evidenced by showing a commitment to provide or withhold clinical care as appropriate and being confidential with patient information, informed consent, and business practices.

Professional promise as evidenced by whether one would let this person treat you or your family.

Emotional stability and stress management as evidenced by performing in emergency situations, responding to opposition or frustration, and maintaining mood stability or control.

Stamina as evidenced by physical endurance, perseverance, and health.

Interpersonal communication skills

Communication skills as evidenced by gathering essential & accurate information about patients and working with health care professionals to provide patient focused care.

Oral communication skills as evidenced by clarity of expression, articulateness, and proper grammar. It is also evidenced by demonstrating skills that allow for effective information exchange with patients, their families and other health professionals.

Written communication skills are evidenced by observing and documenting observations accurately and in good time. Also writes progress, operative and discharge notes completely and promptly.

Relating to patients is evidenced by being interested, honest and understanding as well as by explaining clearly to the patient's satisfaction details related to diagnosis, proposed treatment and the implications.

Systems Based Practice

Decision making as evidenced by making informed decisions about diagnostic-therapeutic treatment based on patient information, preferences, up-to-date scientific evidence & clinical judgment. Also evidenced by developing and carry out patient management plans and demonstrating investigatory & analytic thinking approaches to clinical situations.

Leadership as evidenced by the ability to elicit cooperation from nursing staff, technicians, and orderlies in the discharge of their functions in patient care.

System of health care as evidenced by the ability to demonstrate an awareness and responsiveness to the large context and system of health care as well as by the ability to effectively call on system resources to provide care for optimal value and by advocacy for quality patient care and help patients deal with system complexities.

Concern for others is evidenced by showing sensitivity to and consideration of others, tactfulness, as well as being committed to ethical principles and sensitivity to a diverse patient population (culture, age, gender, disabilities).

Practice Based Learning & Improvement

Use of information technology to manage information as evidenced by the ability to access on-line medical info to support their own education

Resourcefulness as evidenced by management of available resources. Also by demonstrating an understanding of roles of support personnel and making maximum use of their assistance and also through demonstrating resourcefulness in obtaining information about patients.

Research aptitude demonstrated through curiosity, creativity, and the ability to evaluate and analyze data. Also demonstrated by appropriate utilization of resources and working independently.

Motivation as evidenced by exhibits active, aggressive attitude toward learning**.**

SPECIFIC GOALS & OBJECTIVES FOR ALL CLINICAL UMC ROTATIONS FOR PGY 1s

Rotation: Adult Neuro-oncology

The primary goal of the tumor rotation is preparation of the neurosurgical resident to treat adult tumors of the central nervous system. At the completion of this rotation:

Level: Neurosurgery Intern (PGY 1):

Perform a history and physical examination and report the pertinent findings in oral and written format for a patient with a known or suspected brain tumor (MK, PC, P, ICS) as measured by the rotation evaluation.
Develop a preliminary plan for management, including the indications for the use of specific laboratory examinations for a patient with a known or suspected brain tumor (MK, PC, SBP) as measured by the rotation evaluation.
Identify appropriate neuron-radiographic studies to initiate a complete diagnostic workup of a patient with a known or suspected brain tumor (MK, PC, SBP) as measured by the rotation evaluation.
Perform basic wound closure after surgical treatment of a patient with a known or suspected brain tumor (MK, PC) as measured by the rotation evaluation & the surgical case evaluation.

Level: Neurosurgery Intern (PGY 1)

Care for traumatic brain injured (TBI) patients.
report the history and physical examination and imaging of a polytrauma patient with a traumatic brain injury both verbally and in written format.
differentiate central from peripheral nervous system injuries.

define brain death and discuss methods of making such a diagnosis.

Surgical management of blunt and penetrating trauma to the brain.
identify the signs, symptoms, and pathophysiology of cerebral herniation syndromes.
report the physical examination and monitoring parameters of a patient following surgery for a TBI verbally and in written format.

Management of the long-term surgical consequences of traumatic brain injury:
identify the signs, symptoms, and pathophysiology of common complications following traumatic brain injury such as seizure, hydrocephalus and CSF fistula.
report the history and physical examination of a patient with a complication following traumatic brain injury.

Rotation: Pediatric

A goal of the pediatric rotation is to prepare the neurosurgery residents to care for patients with hydrocephalus. At the completion of the pediatric neurosurgery rotation:

Level: Neurosurgery Intern (PGY 1):

recognize, by history and physical examination, patients with hydrocephalus, as measured by the rotation evaluation.
report the pertinent findings of the history and physical examination, both verbally and in written format, including head circumference measurement, as measured by the rotation evaluation.
order appropriate imaging studies for the evaluation of patients with hydrocephalus, as measured by the rotation evaluation.
communicate with patients and/or families regarding the diagnosis of hydrocephalus and its management, as measured by the rotation evaluation.

A goal of the pediatric rotation is to prepare the neurosurgery residents to care for patients with spinal dysraphic disorders, such as tethered cord, myelomeningoceles, and Lipomyelomeningoceles. At the completion of the pediatric neurosurgery rotation:

Level: Neurosurgery Intern (PGY 1):

recognize simple spinal dysraphic disorders, such as myelomeningocele by both history and physical examination, as measured by the rotation evaluation.
report the history and physical examination of a patient with a simple dysraphic disorder, both verbally and in written format, as measured by the rotation evaluation.
order appropriate imaging studies to further evaluate a patient with a spinal dysraphic disorder, as measured by the rotation evaluation.
communicate compassionately with patients and/or families, with a spinal dysraphic disorder regarding the nature of the condition and its acute care plan, as measured by the rotation evaluation.

A goal of the pediatric neurosurgery rotation is to prepare the neurosurgery residents to
care for patients with pediatric head injuries. At the completion of the pediatric neurosurgery rotation:

Level: Neurosurgery Intern (PGY 1):

recognize pediatric head injuries by both history and physical examination, as measured by the rotation evaluation.
report the history and physical examination of a patient with a pediatric head injury, both verbally and in written format, as measured by the rotation evaluation.
communicate compassionately with patients and/or families regarding the nature of the pediatric head injured, as measured by the rotation evaluation
demonstrate confidence in surgically implanting and intracranial pressure monitor, as measured by the rotation evaluation and surgical case evaluation.

Rotation: Peripheral Nerves

A goal of the peripheral nerve disorder rotation is to prepare neurosurgery residents to care for patients with traumatic injuries of the peripheral nerves, brachial plexus, and lumbosacral plexus. At the completion of the peripheral nerve rotation

Level: Neurosurgery Intern (PGY 1):

recognize acute peripheral nerve injuries by performing a history and physical examination specific for peripheral nerves (MK, PC) as measured by the peripheral nerve rotation evaluation.
report the pertinent findings of the history and physical exam verbally and in a written format (MK, P, ICS) as measured by the peripheral nerve rotation evaluation.
locate and interpret published books describing the peripheral nerve exam and their correlation to peripheral nerve injuries (PBLI) as measured by the peripheral nerve rotation evaluation.
perform basic wound closure (PC, MK) as measured by the peripheral nerve rotation evaluation and the surgical case evaluation.

A goal of the peripheral nerve disorder rotation is to prepare neurosurgery residents to care for patients with entrapment disorders of the peripheral nerves, brachial plexus, and
lumbosacral plexus.

Level: Neurosurgery Intern (PGY 1):

recognize chronic nerve entrapments by performing a history and physical examination specific for peripheral nerves (MK, PC) as measured by the peripheral nerve rotation evaluation.
report the pertinent findings of the history and physical exam verbally and in a written format (MK, P, ICS) as measured by the peripheral nerve rotation evaluation.
locate and interpret published books describing the peripheral nerve exam and their

correlation to peripheral nerve entrapment syndromes (PBLI) as measured by the peripheral nerve rotation evaluation.

A goal of the peripheral nerve disorder rotation is to prepare neurosurgery residents to care for patients with benign and malignant tumors of the peripheral nerves, brachial plexus, and lumbosacral plexus.

Level: Neurosurgery Intern (PGY 1):

recognize peripheral nerve tumors by performing a history and physical examination specific for peripheral nerves (MK, PC) as measured by the peripheral nerve rotation evaluation.
report the pertinent findings of the history and physical exam verbally and in a written format (MK, P, ICS) as measured by the peripheral nerve peripheral nerve rotation evaluation.
locate and interpret published books describing the peripheral nerve exam and their correlation to peripheral nerve tumors as measured by the peripheral nerve rotation evaluation.

Rotation: Pituitary

A goal of the pituitary rotation is to prepare the neurosurgery residents to care for patients
with hyposecretory pituitary disorders. At the completion of the pituitary rotation:

Level: Neurosurgery intern (PGY 1):

1) recognize patients with hypopituitarism by history and physical examination, as measured by
the rotation evaluation.
report the history and physical examination of patients with hypopituitarism, both verbally and in written format, as measured by the rotation evaluation.
order the appropriate endocrine evaluations to assess patients with hyposecretory disorders, as
measured by the rotation evaluation.

A goal of the pituitary rotation is to prepare the neurosurgery residents to care for patients
with hypersecretory disorders of the pituitary. At the completion of the pituitary rotation:

Level: Neurosurgery Intern (PGY 1):

recognize the signs and symptoms of patients with hypersecretory disorders, as measured by the rotation evaluation.
report the history and physical examination of patients with hypersecretory disorders, both verbally and in written format, as measured by the rotation evaluation.
corroborate with appropriate consultants to further evaluate patients with hypersecretory disorders, as measured by the rotation evaluation.

A goal of the pituitary rotation is to prepare the neurosurgery residents to care for patients
with mass lesions from the sellar/suprasellar area. At the completion of the pituitary rotation:

Level: Neurosurgery Intern (PGY 1):

Identify the signs and symptoms of patients with a mass lesion from the pituitary, as measured by the rotation evaluation.
Report the history and physical examination of patients with a pituitary mass lesion, both verbally and in written format, as measured by the rotation evaluation.
To be able to order the basic evaluations radiologically, ophthalmologically, and endocrinology for a patient with a mass lesion from the pituitary, as measured by the rotation evaluation.

Rotation: Cerebrovascular/Endovascular

A goal of the cerebrovascular/endovascular rotation is to prepare neurosurgical residents to care intracranial aneurysms, and subarachnoid hemorrhages. At the completion of the cerebrovascular/endovascular rotation:

Level: Neurosurgical Intern (PGY 1):

recognize subarachnoid hemorrhage by performing a history and physical examination (MK, PC) as measured by the rotation evaluation.
report the history and physical examination both verbally and written format (P, ICS) as measured by the rotation evaluation.
locate and interpret evidence-based reviews relevant to the treatment of intracranial aneurysms including *ISAT and ISUA* (PBLI) and institutional guidelines as measured by the rotation evaluation.
locate and review *Guidelines for the basic management of ruptured aneurysm/Guidelines for radiation exposure/Guidelines for artery catherization/Guidelines for endovascular interventions* (PBLI) as measured by the rotation evaluation.

A goal of the cerebrovascular/endovascular rotation is to prepare neurosurgical residents to care for intracranial vascular malformations. At the completion of the cerebrovascular/endovascular rotation:

Level: Neurosurgical Intern (PGY 1):

recognize intracranial vascular malformations by performing a history and physical examination (PC, MK) as measured by the rotation evaluation.
report the history and physical examination both verbally and written format (PC, MK) as measured by the rotation evaluation.
locate and interpret evidence based literature relevant to intracranial vascular malformations (PBLI) as measured by the rotation evaluation.
assist with femoral access for endovascular procedures (PC, MK) as measured by the rotation

evaluation.
5) locate and interpret *Guidelines to endovascular interventions including radiation exposure,*
artery catheterization, and air embolism (PBLI) as measured by the rotation evaluation.

A **goal of the cerebrovascular/endovascular rotation is to prepare neurosurgical residents to care for carotid stenosis and occlusions. At the completion of the cerebrovascular/endovascular rotation:**

Level: Neurosurgical Intern (PGY 1):

recognize carotid stenosis by performing a history & physical examination (PC, MMK) as measured by the rotation evaluation.
report the history & physical exam both verbally and written format ((P, ICS) as measured by the rotation evaluation.
locate & interpret evidence based literature relevant to carotid stenosis including the *ACAS, NASCET, and SAPPHIRE* (PBLI) as measured by the rotation evaluation.
assist w/femoral access for endovascular procedures (PC, MK) as measured by the rotation evaluation.

Goals and Objectives for a Neuropathology Rotation

This is a one month rotation and as of 2012 takes place in the PGY I year. The intern is expected to also participate in brain cuttings, whenever they are scheduled, and to participate in muscle biopsy review sessions that take place twice per month on a Saturday.

Knowledge base:
Goal: review and expand your knowledge in Neuropathology.
Objectives:

1. Receive and complete reading assignment. Core reading list is as follows:
    a. Chapter 29, *Peripheral Nerve and Skeletal Muscle*. in Robbin's Pathologic Basis of Disease. Cottran, Kumar, Collins. 6th Edition, Saunders, 1999.
    b. Chapter 30. *The Central Nervous System*. in Robbin's Pathologic Basis of Disease. Cottran, Kumar, Collins. 6th Edition, Saunders, 1999
    c. Chapters on peripheral nerve, muscle, and central nervous system in Histology for Pathologists. S. Sternberg, Lippincott-Raven Press, 1997
    d. Neuropathology, second edition, Ellison, Love, Chimelli, Harding, Lowe, Roberts, and Vinters. Here the resident will have access to an illustrated textbook specifically devoted to neuropathology
2. Participate in all gross pathology sections (brain cutting). The resident will learn the basic routine of examining gross specimens: the standard ways to produce coronal or axial sections, to identify lesions, and how to obtain the best sections for microscopic study. He/she will be expected to review the microscopic sections and be familiar with the microscopic features of the most common lesions encountered at autopsy.
3. Participate in the review of all real time surgical specimens. The resident will review, with Dr. Fratkin, surgical pathology specimens from neurosurgical patients. These will include a wide variety of adult brain tumors. Periodic muscle conferences involve clinicopathologic correlations with Dr. V. Veda of the Department of Neurology, who performs most of the muscle biopsies at UMMC. The rotating neurology resident will be invited to attend.
4. In self study, review archived slide material and discuss findings with instructor in intervals.
5. Participate and pass an exit exam consisting of the following:
    a. Computerized test, 70% passing score
    b. Analyze 20 slides, selected from previously reviewed archival material. Performance will be evaluated by mental in a formative fashion.

Interpersonal and Communication skills:
Goal: Present one slideshow on a scientific topic in a formal noon conference to residents and faculty.
Objective: Resident prepares slide show with an approximate four week lead time. Indepth review of a topic pertinent to Neurology, Neurosurgery or of scientific value through study of the literature. Incorporate histological slides into the presentation to illustrate the findings discussed.
The performance of this presentation will enter into the evaluation at the end of the month.

Professionalism:

Goal: display professional behavior during your Neuropathology rotation

Objectives:

1. Carry out all reading and self study assignments with a high level of independence and enthusiasm.
2. Be present for all special sessions, inquire about upcoming sessions.
3. Attend daily in a timely fashion. Utilize down time for reading in house of for slide review (archival slides).
4. Maintain dresscode.

Goals and objectives for a Neuro-ophthalmology rotation
This rotation is offered as a one month elective for PGY III or IV residents only

The rotation on neuro-ophthalmology consists of spending a month in clinics and on the ward, learning about and seeking out patients with neuro-ophthalmologic problems. The rotation is carried out under Dr. Corbett's tutelage. The resident will be expected to complete the reading assignments below. This rotation is designed to give residents basic knowledge of the field.
While this is primarily an outpatient based rotation, the attending staffing it is frequently consulted on inpatients (even when not on the consult service) and residents rotating will participate in these consultation visits.
The resident is evaluated on a monthly basis. While all competencies apply, emphasis is on the following:

- Knowledge base
  - Become familiar with neuroophthalmological conditions:
    - Ocular motility
      - Third nerve palsy
      - Fourth nerve palsy
      - Sixth nerve palsy
      - Combination III, IV, V and VI neuropathies
      - Cavernous sinus syndrome
      - Horizontal gaze palsy
      - Internuclear ophthalmoplegic - unilateral/bilateral
      - One and a half syndrome
      - Upgaze palsy
      - Downgaze palsy
      - 1 ½ Syndrome
      - Skew deviation
      - Nystagmus and other ocular oscillations
      - Slow saccades
      - Hypermetric overshoot
      - Hypometric saccades
    - Afferent visual problems and issues
      - Papilledema/Idiopathic Intracranial Hypertension
      - Optic neuritis/ONTT
      - Neuroretinitis with macular star
      - Anterior Ischemic Optic neuropathy
      - Anomalous elevation of discs
      - Drusen of disc
      - Myelinated nerve fibers
    - Glaucoma
      - Optic pits, coloboma
      - Morning-glory discs
      - Disc Pallor
      - Nerve fiber layer dropout
      - Retinitis pigmentosa

- Patient care
  - Become familiar with ophthalmological tests and examination techniques
    - Visual acuity – Distance, near, pinhole
    - Stereovisual acuity – Titmus test
    - Color vision – Ishihara, D-15/D-28
    - Visual fields – Able to interpret standard visual fields using the Humphrey perimeter, Amsler grid test
    - Pupil tests – Drop tests for Adies, Horners, RAPD, light-near dissociation, fixed dilated pupil
    - Ophthalmoscopy – How to use a direct ophthalmoscope
- Practice based learning and improvement
  - Residents are expected to read the following texts/publications:
    - Corbett, JJ - The bedside and office Neuro-ophthalmology Examination Seminars in Neurology 23:63-76, 2003
    - Neuroophthalmology: the Requisites, Martin T., Corbett, JJ
    - Residents are also required to incorporate NR Miller's **Slide Collection on the Fundus in Neurologic Diseases**, as well as Digre/Corbett **Practical Viewing of the Optic Disc** into their study

Goals and Objectives for a combined private practice/UMC clinic rotation with special emphasis on Neuro – oncology and MS

Residents have the option of choosing a one-month rotation with Dr. Fredricks. While this rotation does not exclusively deal with brain tumor patients, it is the only way that such an experience can be obtained in a concentrated fashion. Additionally, it provides a window into private practice neurology. This rotation is available for PGY IV residents only.
The resident will see patients at St. Dominique's hospital and clinics.
The resident will rotate in the above settings and perform H&P's, participate on rounds and participate in tumor board. Evaluation is done using the general competencies once per month. While all competencies apply, emphasis is given to the following:

- Knowledge base:
  - Goal: Advance your understanding, working knowledge and scientific knowledge of brain tumor types, treatment modalities and management.
  - Objectives:
    - Learn about specific brain tumors: meningioma, astro-and oligodendroglioma, ependymoma, brain metastases
    - Obtain basic knowledge about chemotherapy protocols trough SWOG and other consortia
    - Obtain more advanced knowledge about what side effects to expect from which chemotherapy regiments and how to counteract or treat them
    - Become familiar with problems that are commonly associated with brain tumors and how to anticipate, judge and treat them. This includes seizures, headaches, hypercoagulable states, fatigue, weight loss, depression, dementia, and others
    - Broaden your knowledge about paraneoplastic syndromes, diagnostic issues associated with them, w/u protocols when they are detected and current treatment options
    - Learn about other treatment regiments for MS patients who are failing or have failed immune modification and side effects of these medications
- Patient care
  - Goal: Gain hands-on experience in the inpatient and outpatient management of patients with brain tumor and MS, inclusive of end of life care and counseling of patients and families who are experiencing complications or first hear the diagnosis of these conditions
  - Objectives:
    - Experience the complicated situation patients with brain tumors, late stage MS and late stage neuro – sarcoidosis and their families are in and learn how to talk to them in counseling and educate them about expectations, life expectancy and comorbidities
    - Gain inside into the workings of a busy outpatient practice in the private setting
    - Learn how to deal with different kinds of grief reactions, form situational depression to open hostility
    - Learn how to perform focused neurological exams with attention to detail, since progression of tumor growth is often only associated with minimal clinical findings

- System based practice
    - Realize the importance of a multidisciplinary approach when treating brain tumor patients and utilize referral services and support services appropriately and efficiently
- Professionalism and practice based learning
    - Read assigned material – while this mainly applies to residents who rotate with neuro-oncology for an entire month, all residents must be reliable in their self study and are asked to read up on specific topics that are applicable to a clinic patient
    - Learn the principles of coding and billing

PROCEDURE EVALUATION SHEET

Procedure: Date:
Resident:

1. Consent:
   a. Obtained from? ☐patient ☐family ☐other
   b. Obtained how: ☐written ☐verbal ☐phone

2. Did the resident create a comfortable atmosphere for the patient before and during the procedure?
   a. ☐Yes ☐No

3. Technical aspects:
   a. Set up: ☐ efficient ☐ inefficient ☐ organized ☐ disorganized
   b. Sterile field: ☐ set up ☐ not set up ☐ maintained ☐ not maintained
   c. Local anesthetic: ☐ utilized ☐ not utilized ☐ N/A
   d. Performance: ☐ very skillful ☐ needs tutoring ☐ needs supervision

4. Procedure note:
   a. ☐ contained all necessary components
   b. ☐ missed one or two components, but not a key component
   c. ☐ missed key components, had to re-write note

Comments:

The Resident is competent in carrying out the above procedure:
☐ independently
☐ with supervision

The Resident is not competent in carrying out the above procedure and the following conditions are placed in effect:

Staff signature: Resident signature:

Competency based evaluation for Neurology residents

Name: Date:

Rank: ☐ PGY1 ☐ PGY2 ☐PGY3 ☐PGY4

Competency	Competent	Not competent
Patient care		
Medical knowledge		
Practice based learning and improvement		
Interpersonal and communications skills		
Professionalism		
Systems based practice		

Above information is acquired from summary of evaluations, comments from faculty and through 360º evaluation forms.

Personal development (a global way of looking at it)	Advancing	Not advancing
Takes personal responsibility for the continuous acquisition of knowledge and makes this task a high-priority.		
Develops a progressively more independent work style and assumes greater decision-making responsibilities.		
Cultivates multitasking skills but recognizes personal limitations and signs of fatigue.		
Demonstrates poise and effective management of emergency situations with ability to make timely, rational, and correct decisions with anticipation of immediate and short-term complications.		

A synthesis of personal opinion by the rater, combined with above ratings.

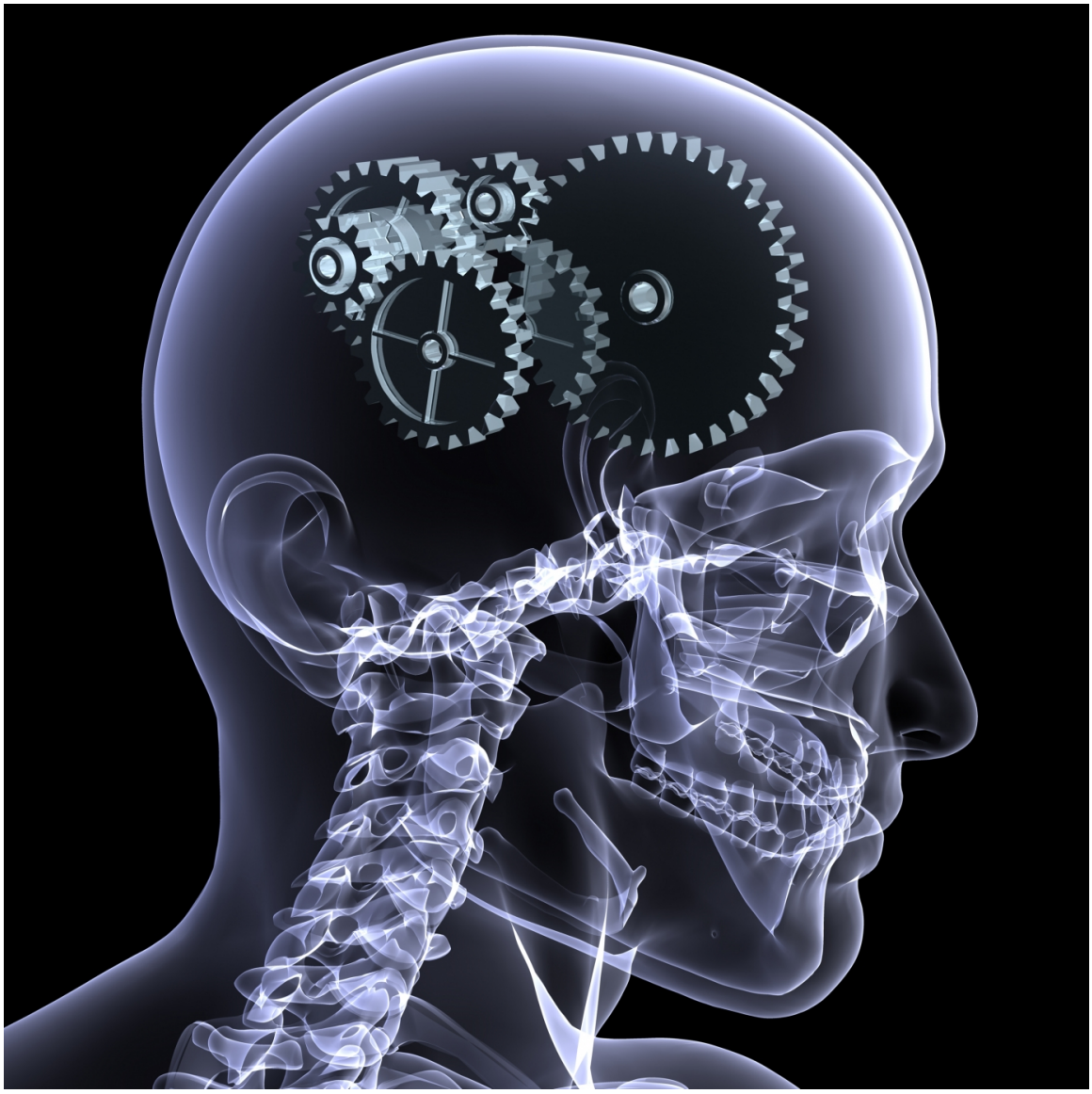
Comments:

Suggestions by the resident:

Reading list:

Part 4

Schedules



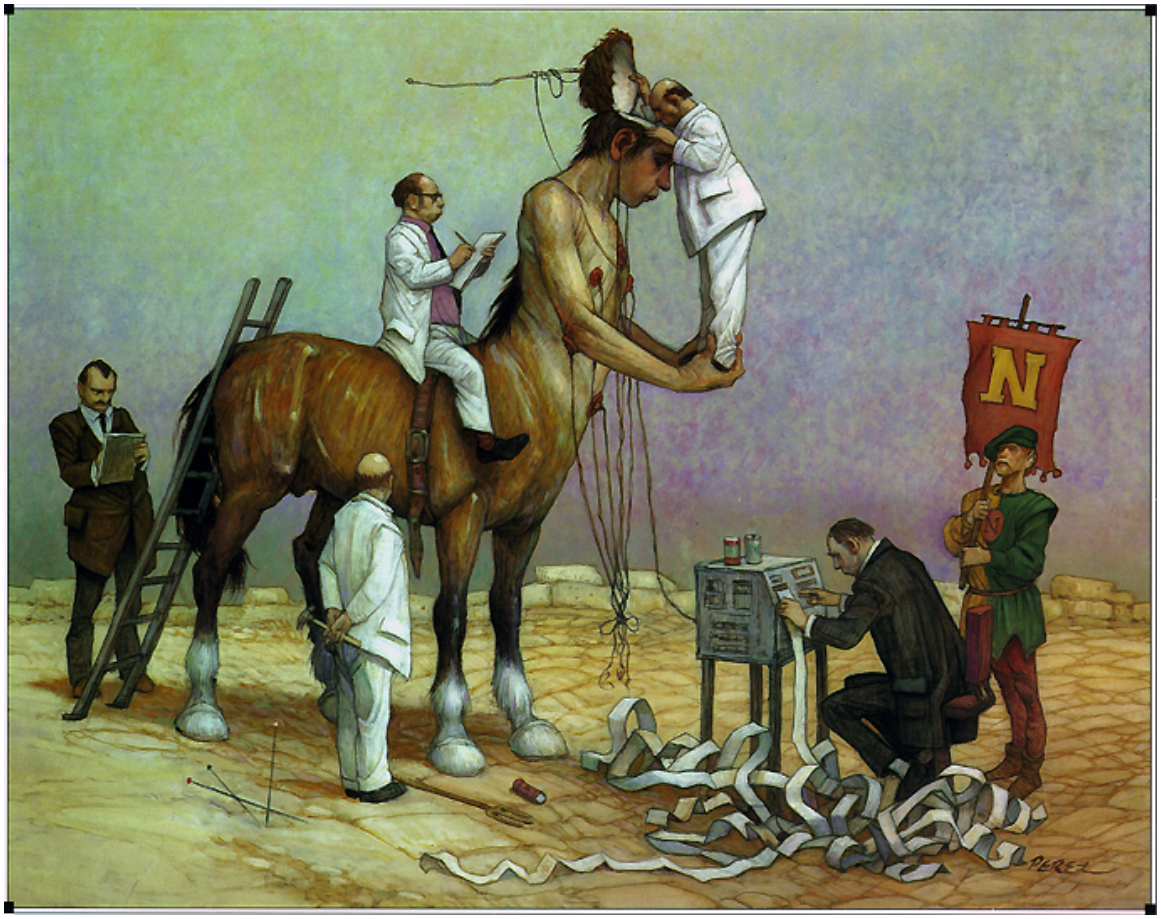
	July	August	September	October	November	December	January	February	March	April	May	June
Shah	Pediatric	Inpatient	VA	Elective	Elective	Consult	EEG	Elective	Consult	Elective	Elective	Elective
Lima	Elective	Pediatric	Consult	VA	Consult	Stroke	Elective	EEG	Elective (IR	Stroke	Elective	Elective
Chaudhry	Consult	Consult	Elective	NSICU	Pediatric	Elective	VA	Elective	Inpatient	EEG	Elective	Elective
Lee	Elective	Elective	EEG	Inpatient	Elective	Elective	Consult	Consult	Pediatrics	Elective	VA	Elective
Jubein	EEG	VA	Pediatric	Elective	Clinic	Inpatient	Elective	NSICU	Elective	Elective	Consult	VA
Kinjal	NSICU	EEG	Stroke	Clinic	VA	Pediatric	Elective	VA	Elective	Pediatric	Inpatient	Consult
Hua	VA	Stroke	Clinic	Pediatric (V)	NSICU	Elective	Inpatient	Pediatric	VA	Consult	EEG	Elective
Campbell	Stroke	NSICU	Elective	Consult	VA	EEG	Pediatric (V)	Inpatient	Clinic	VA	Elective	Pediatric
Dillon	Inpatient	Clinic	VA	VA	Stroke	NSICU	Elective	Stroke	EEG	VA	Stroke	Inpatient
Gadelmola	Stroke	Inpatient	Elective	Stroke	VA	Clinic	VA	Stroke	NSICU	Stroke	VA	EEG
Hassan	VA	VA	Inpatient	Elective	Stroke	VA	Stroke	Clinic	Stroke	NSICU	EEG	Stroke
Hussain	Clinic	VA	Stroke	Stroke	EEG	Stroke	Stroke	NSICU (V)	VA	Inpatient	Elective	VA
Alqadri	VA	Stroke	NSICU	EEG	Inpatient	VA	Clinic	VA	Stroke	IR	Stroke	Stroke
Shekhar	GI	ONC	VA house	Renal*	VA house	NSGY *	ER	VA house	NeuroRad*	Stroke	Va house	NSICU
Swaminathan	ER	VA house	ONC	VA house	Renal *	VA house	NeuroRad	GI*	Stroke	VA House	NSGY *	NSICU
Low	Renal	VA house	GI *	VA house	ONC*	ER	NSICU	VA house	NSGY*	NeuroRad	Stroke	Va house
Bashir	VA house	Renal *	VA house	ER	VA house	NeuroRad	GI	ONC *	VA house	NSGY *	NSICU	Stroke
Anaesthesia												
Boles							Neuro			NSICU		
Felton									Neuro		NSICU	
Hulet						NSICU				Neuro		
McCann			NSICU		Neuro							
Oliver	NSICU	Neuro										
Roberts	Neuro						NSICU					
Vinjirayer		NSICU	Neuro									
Webb				Neuro		NSICU						
PSYCH	Stroke	Stroke	VA	VA	Stroke	VA	VA	VA	VA	VA	VA	VA
NSGY												
Seward			NeuroOph			Consult			NSICU	NSICU		NSICU
Walsh	NSICU			NSICU	Neuro-Op			Consult	NSICU		NSICU	
ER												
Andrews						NSICU						

Cunningham	NSICU							
Dixon								NSICU
Doherty		NSICU						
Faulconer				NSICU				
Glass					NSICU			
Hoda			NSICU					
Salsbury							NSICU	
Swanson						NSICU		

		4:00:00 PM - 7:00 AM		24 hr	24 hr	24 hours		COC	Leave	
		1st Call	2nd Call	Non Stroke	Stroke	NSICU	VA	Att	Residents	Att
7/1/13	MON	Hussain	Shah							
7/2/13	TUE	Alqadri	Chaudhry							
7/3/13	WED	Hassan	Lima							
7/4/13	THU	Dillon	Campbell							
7/5/13	FRI	Hua	Lima							
7/6/13	SAT	Gadelmola	Shah							
7/7/13	SUN	Alqadri	Huang							
7/8/13	MON	Hussain	Lima							
7/9/13	TUE	Dillon	Chaudhry							
7/10/13	WED	Hassan	Hua							
7/11/13	THU	Gadelmola	Huang							
7/12/13	FRI	Campbell	Chaudhry							
7/13/13	SAT	Hussain	Lima							
7/14/13	SUN	Hassan	Chaudhry							
7/15/13	MON	Dillon (swap	Huang							
7/16/13	TUE	Gadelmola	Lee							
7/17/13	WED	Alqadri	Campbell							
7/18/13	THU	Hassan	Shah							
7/19/13	FRI	Chaudhry	Huang							
7/20/13	SAT	Gadelmola	Lee							
7/21/13	SUN	Alqadri	Hua							
7/22/13	MON	Hussain	Huang							
7/23/13	TUE	Dillon	Campbell							
7/24/13	WED	Gadelmola	Lee							
7/25/13	THU	Shah	Campbell							
7/26/13	FRI	Lima	Lee							
7/27/13	SAT	Hussain	Hua							
7/28/13	SUN	Hassan	Huang							
7/29/13	MON	Dillon (swap	Campbell							
7/30/13	TUE	Lee	Shah							
7/31/13	WED	Alqadri	Hua							

Part 5

Appendix



Tools and other important stuff

Various versions of Percussion tools

Queen Square

Telescoping Babinski

Taylor

Trömner

Other important tools

128 Hz tuning fork

LED flashlight

Regular, indirect Ophthalmoscopy head

Panoptic head