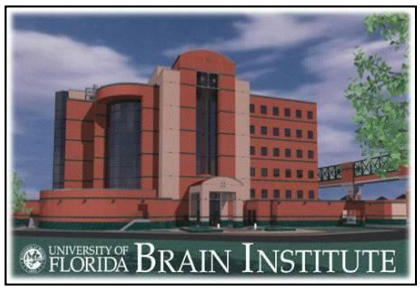
Neurology Residency Program at the University of Florida



INFORMATION FOR RESIDENTS

TABLE OF CONTENTS

ATTACHMENTS:

Note: The most current information about all institutional policies and procedures are on the Website (http://housestaff.medinfo.ufl.edu/) under Graduate Medical Education Policies

GENERAL OBJECTIVES

The goal of the neurology residency program is to prepare you for the independent practice of clinical neurology. This is achieved by exposure to a wide variety of clinical situations, including inpatients, outpatients, adults and children, first with the close guidance of senior residents and faculty, and then, as you demonstrate increasing competency, with lesser intensity of supervision. You will enhance your knowledge of the basic neurological sciences as they apply to clinical neurology, and you will learn the pathological appearance and pathogenesis of neurological diseases. You will have the opportunity to develop skill in the performance and interpretation of electrodiagnostic procedures. You will be assisted in achieving competence not only in medical knowledge and patient care, but also in the ability to learn from your own practice, in communicating effectively with patients and professionals, in developing professional principles and attitudes, and in understanding how your practice relates to the larger context of the health care system. You will be able to develop special interests and abilities by selecting appropriate elective experiences in preparation for a career in clinical practice or academics. We are confident that every resident that we accept into our program will be able, with suitable application, to become a first-rate clinical neurologist.

THE ACGME AND RESIDENCY REQUIREMENTS

The requirements for Neurology Residency Programs are set by the Accreditation Council for Graduate Medical Education (ACGME), and are enforced by periodic reviews of the programs by the ACGME's Residency Review Committees (RRCs). Current ACGME requirements can be found at the ACGME's website, www.acgme.org. Our program is fully accredited. We have two ACGME accredited fellowship positions in Vascular Neurology. We also provide a fellowship in Clinical Neurophysiology, which also was granted full accreditation in 2008. The Department of Pediatrics has approval of a program in Pediatric Neurology. The Department of Neurology also offers a non-ACGME-accredited fellowship programs in Behavioral Neurology (accredited through the UCNS), an NIH T-32 grant fellowship in Rehabilitation Neuroscience, and fellowship positions in Movement Disorders.

ACGME STATEMENT OF GOALS & OBJECTIVES FOR NEUROLOGY RESIDENCIES

GENERAL GOALS AND OBJECTIVES

Residency is an essential dimension of the transformation of the medical student to the independent practitioner along the continuum of medical education. It is physically, emotionally, and intellectually demanding, and requires longitudinally-concentrated effort on the part of the resident. The specialty education of physicians to practice independently is experiential, and necessarily occurs within the context of the health care delivery system. Developing the skills, knowledge, and attitudes leading to proficiency in all the domains of clinical competency requires the resident physician to assume personal responsibility for the care of individual patients. For the resident, the essential learning activity is interaction with patients under the guidance and supervision of faculty who give value, context, and meaning to those interactions. As residents gain experience and demonstrate growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater independence. This concept of graded and progressive responsibility is one of the core tenets of American graduate medical education. Supervision in the setting of graduate medical education has the goals of assuring the provision of safe and effective care to the individual patient; assuring the development of the skills, knowledge, and attitudes in the resident required to enter the unsupervised practice of neurology; and establishing a foundation for continued professional growth.

The purpose of neurology training is to prepare the physician for the independent practice of clinical neurology. This training must be based on supervised clinical work with increasing responsibility for outpatients and inpatients. It must have a foundation of organized instruction in the basic neurosciences.

THE COMPETENCIES

The Neurology Residency will provide educational experiences to ensure that each resident has the knowledge, skills, and attitudes in each of the six areas of competence defined by the ACGME, and will are devising methods to assess the resident's competence in each of these areas:

1. ***Patient Care*** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents must demonstrate competency in the management of outpatients and inpatients with neurological disorders across the lifespan, including those who require emergency and intensive care.

2. ***Medical Knowledge*** about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents must demonstrate understanding about major developments in the clinical sciences related to neurology and must demonstrate understanding of the basic sciences through application of this knowledge in the care of their patients and by passing clinical skills examinations.
3. ***Practice-Based Learning and Improvement*** that involves investigation and evaluation of the resident's patient care, appraisal and assimilation of scientific evidence, and improvements in patient care. Residents are expected to develop skills and habits to be able to meet the following goals:
    a. Identify strength, deficiencies, and limits in one's knowledge and expertise
    b. Set learning and improvement goals
    c. Identify and perform appropriate learning activities
    d. Systematically analyze practice using quality improvement methods, and implement changes with the goals of practice improvement
    e. Incorporate formative evaluation feedback into daily practice
    f. Locate, appraise, and assimilate evidence from scientific studies related to the patients' health problems
    g. Use information technology to optimize learning
    h. Participate in the education of patients, families, students, residents, and other health professionals
    i. Supervise other residents, medical students, nurses, and other health care personnel
4. ***Interpersonal and Communication Skills*** that result in effective information exchange between residents and their patients, their patients' families, and other health professionals. Residents are expected to:
    a. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
    b. Communicate effectively with physicians, other health professionals, and health related agencies
    c. Work effectively as a member or leader of a health care team or other professional group
    d. Act in a consultative role to other physicians and health professionals
    e. Maintain comprehensive, timely, and legible medical records
5. ***Professionalism***, as manifested through a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:
    a. Compassion, integrity, and respect for others
    b. Responsiveness to patient need that supersedes self-interest
    c. Respect for patient privacy and autonomy
    d. Accountability to patients, society, and the profession
    e. Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
6. ***Systems-Based Practice,*** as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide optimal care. Residents are expected to:
    a. Work effectively in various health care delivery settings and systems relevant to their clinical specialty
    b. Coordinate patient care within the health care system relevant to their clinical specialty
    c. Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate
    d. Advocate for quality patient care and optimal patient care systems
    e. Work in inter-professional teams to enhance patient safety and improve patient care quality
    f. Participate in identifying system errors and implementing potential systems solutions

A full listing of the Neurology Core Competencies as outlined by the American Board of Psychiatry and Neurology is listed in ATTACHMENT 1.

SPECIFIC OBJECTIVES FOR EACH YEAR OF RESIDENCY

At all levels of training, you are expected to demonstrate polite, compassionate and professional behavior towards patients, nurses, secretarial staff, and peers.

PGY-1

The main goal of the PGY1 resident is to transition from graduating medical student to practicing general physician, and to prepare for neurology training. All residents on this path are expected to complete a minimum of six months on internal medicine rotations, with direct responsibility for patient care, under the supervision of an internal medicine attending. Some of these months will be spent on general medicine inpatient rotations, but others will expose you to subspecialties of internal medicine germane to a future career in neurology. You will also have exposure to medical intensive care during this year. An additional two months is to be spent on further internal medicine training, emergency medicine training, or a combination of the two. The remainder of your year may be spent on additional internal medicine selectives, or non-medicine selectives such as Physical Medicine & Rehabilitation, that are relevant to the profession of neurology.

At the end of the PGY1 year of training, you will have gained competence in the care of patients with a range of common medical illnesses, both in the acute and chronic setting. You will have obtained a satisfactory rating on all 6 ACGME competencies. To insure that you acquire the clinical and basic information outlined above, you are expected in your first year to develop a self-study program and to effectively use the resources of the library and internet.

PGY-2

During the PGY2 year of residency, you will have maximal exposure to inpatients, spending several months on the wards (VA Junior; Shands General Junior; and Shands Stroke Junior). There are also several half-month blocks of Nightfloat. Furthermore, you will gain experience in epilepsy, both on the Epilepsy Monitoring Unit and in epilepsy clinic as part of the Epilepsy I rotation. You will also spend several months in outpatient neurology clinics as well, gaining exposure to general neurology clinic and then one or more subspecialty clinics. PGY2 residents who have a strong and clear interest in a specific clinical or research area may request specific subspecialty clinics or research rotations at the beginning of the year.

You will be generally paired with a Senior resident when you are in the wards. It is expected during the first year of neurology training you will learn to obtain complete and reliable histories, do a thorough and accurate neurological examination, and learn how to manage common neurological problems, including stroke, seizure disorders, headache, and disorders of similar prevalence. In addition, it is expected that you will learn how to respond to neurological emergencies, such as status epilepticus, acute stroke, respiratory compromise in neuromuscular disorders, acute encephalopathy, meningitis and encephalitis, spinal cord compression, raised intracranial pressure and space-occupying lesions. During the first months of training, you will be given the opportunity to learn how to read electroencephalograms (EEG). You are expected to acquire sufficient knowledge of neuroanatomy and neuroradiology to understand clinical localization and to develop skills in reading CT and MR scans. You should also read about basic neurophysiology, neurochemistry, and neuropharmacology. During your first year of residency you may have the opportunity to teach Neuroscience to first year Medical Students, which provides an ideal time to solidify this knowledge.

At the end of the PGY2 year of training, you will be allowed to proceed to the next level of training provided you have demonstrated progress in your daily care of patients to the satisfaction of the faculty, and you have obtained a satisfactory rating on all 6 ACGME competencies. To insure that you acquire the clinical and basic information outlined above, you are expected in your first and all subsequent years of training to develop a self-study program and to effectively use the resources of the library and internet. You are to document your progress in a *portfolio* that will include your experiences and achievements, including publications, attendance at national meetings, Neurology Grand Rounds presentations, etc. You will have the opportunity to review the appropriateness of patient care, by review of untoward results, and by comparison of your care with practice standards suggested by the American Academy of Neurology. You are expected to develop effective communication skills by observing faculty and senior residents, to insure that your patients are appropriately counseled and informed. You will develop an understanding of ethical, socioeconomic, medicolegal and cost-containment issues through supervised experience in patient care, quarterly departmental conferences on these subjects, and resident lecture series including these topics. Each resident must complete a structured clinical assessment and evaluation in 5 clinical areas (Emergency/Critical Care, Ambulatory, Neurodegenerative Disorders, Pediatrics, and Neuromuscular) before graduation. You are required to pass 2/5 of these formal assessments during your PGY2 year. In addition, the Clinical Competency Committee will expect graduating second year residents to demonstrate an appropriate degree of achievement in the six core competencies, and promotion to the PGY3 year will be dependent upon the faculty's judgment that these abilities have been acquired. Residents must demonstrate a satisfactory rating or better on all 6 ACGME competencies.

Specific goals for the PGY-2 year include:

1. The ability to elicit an accurate neurologic history and to perform and interpret a neurological examination on patients presenting with neurological symptoms (Core Competency: Patient Care)
2. The ability to appropriately order laboratory studies in neurology (EEG, EMG/NCS, evoked potentials,

lumbar puncture, CT and MRI imaging of the brain and spinal cord (Core Competencies: Patient Care and Medical Knowledge)

3. The ability to appropriately evaluate and treat common neurological problems (Core Competencies: Patient Care, Medical Knowledge):
    a. Neurological emergencies (eg, coma and mental status changes, stroke, seizures)
    b. Common outpatient neurological problems (eg, headache, dizziness, back and neck pain, peripheral neuropathies)
4. The ability to demonstrate effective written and oral communication skills (Core Competency: Interpersonal and Communication Skills)

PGY-3

During your PGY3 year of residency, you will have increasing responsibility on your months on the neurology wards (Shands General Senior; VA Senior; and Shands Stroke Senior). You will also continue to demonstrate independence during nightfloat. It is also at this time that you will begin to be exposed to clinical pediatric neurology. The remaining months are spent gaining more exposure to subspecialty clinical experience, and begin to explore research and electives.

Specific objectives for the PGY3 resident include improving clinical skills so that by the end of the year you are able expertly to summarize cases, reason soundly from the history and examination to a formulation of a complete differential diagnosis, and develop appropriate plans for diagnosis and management. You should be able to interpret CT and MR scans and EEGs with some confidence.

As a PGY3 resident your ability to practice independent, competent, and compassionate neurology will be assessed. If you have not already done so in the PGY2 year, you must develop plans for a research project. You must meet with the faculty research adviser to approve your project during or before your PGY3 year of Neurology residency.

During the PGY3 year, you should be developing career plans. If you decide to pursue fellowship training, you should acquire information about available programs and begin the application process. You should be prepared to discuss these plans with the Residency Director at the December and June semi-annual evaluations.

Residents who had received permission to defer selectives and other requirements during the PGY3 year will be expected to successfully complete either a research or clinical mini-fellowship. For residents who have not done their research or mini-fellowship early by the end of this year would be expected to identify such for the final year if they intend to do so, otherwise they are expected to identify electives that will provide a well-rounded completion of their neurology education.

Specific goals for the PGY-3 year include:

1. Further development of the resident's history-taking skills, as well as neurologic examination of infants and children (Core Competency: Patient Care)
2. Learn the diagnosis, evaluation and treatment of common neurologic illnesses including multiple sclerosis, Parkinson's disease and other movement disorders, dementia, central nervous system infection, and tumors of the nervous system (Core Competencies: Patient Care, Medical Knowledge)
3. Interrelate abnormalities of the nervous system with normal growth and development (Core Competency: Patient Care)
4. Continued refinement of effective written and oral communication skills (Core Competency: Interpersonal and Communication Skills)
5. Supervision of junior residents on the inpatient services (Core Competencies: Practice-Based Learning and Improvement, Systems-Based Practice)

PGY-4

During your final year of residency, you will complete your ward duties (General Senior, Stroke Senior, VA Senior) and the last of nightfloat. The remaining months are spent on research, selective, and elective rotations. You will also complete your pediatric neurology rotations (3 months total). The elective months allow the resident to acquire essential clinical information, but also allow you to learn what interests you most in Neurology, so that you may make appropriate career plans. Four to six months of time may be grouped together to create a mini-fellowship in such subspecialties as behavioral neurology, movement disorders, neuromuscular, epilepsy, and vascular neurology. Elective experiences are available in Neuroradiology, Epilepsy, Sleep Medicine, Movement Disorders, EMG/Rehabilitation, Behavioral Neurology, Neurosurgery, and Research Electives. Descriptions and specific objectives for each elective are described later in this document.

As a PGY4 year resident, you are expected to demonstrate leadership abilities, and to mentor junior residents. Beginning PGY4 year residents should have clear career goals. Arrangements for fellowships are generally made in the spring of the PGY3 year of residency, or in the summer and early fall of the PGY4 year of residency. Residents will make use of the elective time provided to acquire knowledge and skills that will specifically apply to their future goals, as well as filling in gaps in their clinical training by appropriate selection of elective rotations, and by appropriate study plans.

Residents are required to participate in clinical or laboratory research during a portion of their three years of residency. This can be done in your spare time during other rotations, but some residents will want to reserve one or more months during which to work on specific research projects. If three or more months are required, the resident will have to demonstrate sufficient progress in learning clinical neurology to allow for this expenditure of time in research. In the third year, residents will be required to present a summary of their research to the faculty and co-residents. One graduating resident is awarded for the Best Research Presentation each year (see Awards section later in the document).

Graduation from the program will depend upon the resident having demonstrating consistently competent care in all areas. The graduating 3rd year resident should demonstrate the ability to practice independent, competent, compassionate neurology. Each resident must satisfactorily complete the structured ABPN clinical assessment and evaluation in 5 clinical areas (Emergency/Critical Care, Neurodegenerative Disorders, Ambulatory, Neuromuscular and Pediatric Neurology, see below).

Specific goals for PGY-4 year include:

1. Independent evaluation and management of patient's presenting with a wide variety of inpatient and outpatient neurological disorders (Core Competency: Patient Care)
2. Performance and interpretation of EMGs, nerve conduction testing, EEGs, and evoked potentials (Core Competencies: Patient Care, Medical Knowledge)
3. Continued refinement of effective written and oral communication skills (Core Competency: Interpersonal and Communication Skills)
4. Supervision of junior residents on the inpatient services (Core Competencies: Practice-Based Learning and Improvement, Systems-Based Practice)
5. Participation in the Neuroscience course as an instructor (Core Competency: Practice-Based Learning and Improvement)

EVALUATION

The following evaluation instruments will be used to evaluate resident mastery of the Core Competencies:

1. RITE (Resident In-service Training Evaluation)
2. ABPN Clinical Skills Assessment
3. Attending Evaluations
4. Medical Student Evaluations
5. Chart Review
6. 360° assessment
7. Resident Portfolio

Each of these evaluation instruments are described in detail below.

Each resident meets with the Program Director every 6 months to discuss his or her performance. The resident's strengths and weaknesses in each ACGME competency are discussed in detail. An overall summary of the resident's performance (probation, warning, satisfactory, very good or exemplary), suggestions for improvement, and resident self-assessment and reflection are embedded in this evaluation. The discussion points and outcome of this meeting is documented in New Innovations by the Program Director for each resident.

The Program Director and the Clinical Competency Committee (comprised of core faculty members) will meet every 6 months to ensure that each resident meets the goals set forth for his or her level of training and remains on track for graduation. To assist with this determination, performance will be mapped using the Neurology Milestones assessment tools set forth by the ACGME (see ATTACHMENT 2. Promotion to the next level of training is contingent upon progression at an appropriate pace through the Milestones, meeting the specific objectives for each year of training, as well as the specific objectives for each individual rotation or elective. (Promotion guidelines are outlined in ATTACHMENT 3).

A resident who is deemed unqualified to advance to the next year of training, based upon not meeting the specific objectives note above, will be given a program of remediation. If remediation is unsuccessful in the allotted period of time, the resident may be asked to repeat the year.

Residents who are not satisfied with their evaluations should discuss their concerns with the Program Director. If the issues are not resolved to the satisfaction of the resident, the resident may follow grievance procedures that are approved by the institution and are detailed in ATTACHMENT 4.

Annual Neurology Resident In-Service Examination (RITE). This examination is prepared by the American Academy of Neurology and the American Neurological Association and is given each spring. It is similar to the Neurology Board

Examination that you will take after you complete your residency. Every resident is required to take the In-Service Examination every year. You may use your scores to judge your progress in Neurology as compared with residents nationally and are encouraged to strive to do your best each year. Residents who score below the 50th percentile will be counseled and will have close faculty supervision of a study plan.

Clinical Skills Assessment: In accordance with the standards set by the ABPN Neurology Council, the residents of the UF Neurology Residency Training Program will participate in five encounters. These encounters will be in the areas of 1) Child Neurology, 2) Critical Care, 3) Neuromuscular, 4) Episodic (headache, seizure), and 5) Neurodegenerative/ Movement/ Inflammatory. It is expected that 2 assessments will be successfully completed during the PGY-2 year, an additional 2 during the PGY-3 year, and all 5 by the time of graduation. All residents will need to take the 4 Adult Clinical Skills Evaluations and will need to take the Pediatric Neurology Clinical Skills Evaluation (See ATTACHMENT 5 A and B for the Clinical Skills Assessment rules and sample evaluation form). Residents who do not pass the first time will be allowed to reexamine until such time as they pass all 5 Clinical Skills Evaluations.

1. This exercise is mandatory for all residents. Certification of successful completion is required for each resident to be able to sit for the boards. In addition, the requirements for residency graduation will not be considered satisfied until all five clinical skills evaluations are successfully completed.
2. The resident should consider this as part of his/her Board requirement and is responsible for arranging a mutually convenient day with his/her selected faculty evaluator.
3. The patient to be examined should **not** be familiar to the resident.
4. The patient assessment should not last longer than 45 minutes.
5. The faculty member is not allowed to interrupt the assessment. The main purpose is to determine whether the resident can practice as an independent neurologist in the area being assessed. He/she may provide feedback at the end of the assessment.
6. The UF faculty member's grade is the final grade. Faculty are instructed to evaluate the resident's performance compared to the level of a practicing neurologist, not a resident.
7. The clinical skills evaluation form must be completed by and discussed with the attending immediately after the encounter. Retrospective completion of the evaluation form by the attending is not allowed by the ABPN.

Neuroscience examination: Residents who teach the Neuroscience course also help in the creation and administration of the final examination given to the first year medical students. Therefore, Neurology Residents can use the final examination as an assessment of their fund of knowledge in the basic neurosciences.

Attending rotation evaluations: During each rotation, each attending who supervised the resident is instructed to provide verbal feedback on the resident's performance. S/he is also required to evaluate the resident's performance in the 6 ACGME competency areas. Rotation-specific evaluations have been constructed that incorporate a subset of relevant Milestones as well as the opportunity for narrative comments. (See ATTACHMENT 6 for the evaluation form used by faculty at the end of each rotation).

Medical student evaluations: UF medical students complete evaluation forms on neurology residents at the completion of their neurology clerkship or elective blocks. The Program Director will review this feedback during the semi-annual evaluation meetings. This feedback will also be used to determine the winner of the medical student teaching award presented at graduation each year.

Chart review: Chart review can provide evidence about clinical decision making, follow-through on patient management and preventative health services, and appropriate use of clinical facilities and resources such as laboratory testing and consultations. Each resident will select one new inpatient consultation or admission note as well as one new outpatient clinic note twice per year and submit them to their faculty mentors for verbal and written review. The faculty mentor will then complete an evaluation form for each note (ATTACHMENT 7) and forward to the Program Director for inclusion in the resident's evaluation file.

The following items from each note will be specifically reviewed by the attendings:

- Chief complaint or reason for consultation
- History of the Present Illness
- Past medical history
- Neurological examination
- Assessment and differential diagnosis
- Diagnostic and treatment plan

360-degree evaluations: 360° evaluations consist of measurement tools completed by multiple people in the resident's sphere of influence. These include resident peers, nurses, other healthcare providers (eg, EEG technicians, physical therapists), the residency program coordinator, and administrative staff. These evaluations are designed to assess observed interpersonal and communication skills,

professional behaviors, and some aspects of patient care and system-based practice. The resulting feedback reports are expected to help residents gain insight into their strengths and developmental needs from a non-faculty perspective.

Portfolio: A portfolio is a collection of products and experiences collected by the resident that provides evidence of learning and achievement. The ACGME Core Competency Project has established the resident portfolio as a valid assessment method. Your portfolio is maintained in the New Innovations management suite.

Items to be included in the portfolio include:

- Curriculum vitae
- Neurology Grand Rounds presentations
- Resident research project results
- Abstracts presented at local and national meetings
- Papers published during residency
- Listing of meetings attended each year
- Participation in hospital and university committees
- Participation in quality improvement projects
- Attendance at Grand Rounds, lecture series, M&M conferences, CPCs, and Journal Club
- RITE results
- Written one-page semi-annual self-reflection with an individualized learning plan, including answers to the following three questions:
  1. What are your strengths?
  2. What are your areas for development?
  3. What are your plans to achieve these goals?

PROGRAM FEEDBACK

RESIDENT EVALUATION OF FACULTY

After each ward or elective rotation, residents will be asked to fill out a questionnaire in New Innovations evaluating the faculty member supervising that rotation. Please complete these questionnaires honestly and completely, and provide comments when possible. Please be assured that your responses will be entirely confidential. Your evaluations are required for annual Departmental faculty evaluations (see ATTACHMENT 8 for a sample form of the resident's evaluation of faculty members)

RESIDENT EVALUATION OF PROGRAM

At the end of each rotation, you will be asked to complete an evaluation of the rotation in New Innovations (see ATTACHMENT 9 for a sample form of resident's evaluation of each rotation). Please take this opportunity to suggest how rotations can be improved. These evaluations will be submitted to, and reviewed by, the program director, and recommendations and criticisms will be discussed at the Annual Departmental Faculty Retreat on Education.

Although we require these on-line evaluations, it is also helpful for residents to meet with each other, the Chief Resident, and the Program Director to discuss the adequacy of specific rotations, and any other aspects of the residency program that give them concern.

In addition, residents can voice their concerns and suggestions during: 1) the regular Resident-Program Director Business meetings, held weekly on Wednesdays at 1 pm in the large conference room; 2) the monthly Neurology Residency Oversight Committee (NROC) meetings held on the second Tuesday of each month at 10 am in the large conference room ; 3) Resident's Retreat; 4) Annual Faculty Retreat on Education. The NROC is a committee comprised of the Department Chair, Residency Program Director, Residency Coordinator, a minimum of 1 resident representative from each year of training (including the Chief Resident),and a minimum of 1 faculty representative from both the VA and Shands. The group meets monthly to discuss how the training program can be enhanced and to address complaints and concerns from the residents and faculty.

RESIDENT SUPERVISION

In the clinical learning environment, each patient has an identified, appropriately-credentialed and privileged attending physician who is ultimately responsible for that patient's care, and this information should be available to residents, faculty members, and patients. Residents and faculty members are expected to inform patients of their respective roles in each patient's care. Our program provides an appropriate level of supervision for all residents who care for patients, and is exercised through a variety of methods. For many aspects of patient care, the supervising physician may be a more advanced resident or fellow. Some portions of care provided by the resident can be adequately supervised by the immediate availability of the supervising faculty member or resident physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision will include post-hoc review of resident-delivered care with feedback as to the appropriateness of that care (such as discharges from the ED overnight after discussion with the attending).
This program uses the following definitions of supervision.

- Direct Supervision – the supervising physician is physically present with the resident and patient.
- Indirect Supervision with direct supervision immediately available – the supervising physician is physically within the hospital or other site of

patient care, and is immediately available to provide Direct Supervision.

- Indirect Supervision with direct supervision available – the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision.
- Oversight – the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident is assigned by the program director and faculty members. The program director evaluates each resident's abilities based on specific criteria found throughout our resident manual. Our evaluations are in harmony with national standards-based criteria for residency, such as the core competencies. Faculty members functioning as supervising physicians will delegate portions of care to residents, based on the needs of the patient and the skills of the residents. Senior residents and fellows serve in a supervisory role of junior residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow.

As part of the maturity process for a physician, each resident must know the limits of his/her scope of authority, and the circumstances under which he/she is permitted to act with conditional independence. In particular, when PGY-1 residents are in our program, they should be supervised either directly or indirectly with direct supervision immediately available.

Our faculty supervision assignments are of sufficient duration to assess the knowledge and skills of each resident and delegate to him/her the appropriate level of patient care authority and responsibility.

Resident supervision of patient care generally occurs in 2 settings: the in-patient hospital and the out-patient clinics.

In the in-patient setting, 3 separate teams comprised of 1 Junior resident, 1 Senior resident and 1 Attending, are assigned for each facility (Shands General Neurology; Shands Stroke; and the VA General Neurology). During the day, each attending provides in the morning direct supervision, overseeing the Morning Report with the nightfloat resident and teams, then rounds during the morning on patients. Each patient is examined and discussed. After morning rounds during the regular work week, attendings provide indirect supervision with direct supervision immediately available. The residents have their attending's pager and cell phone number and are encouraged to call the attendingat any time with any questions. "Wrap-up rounds" are led by the attending or senior resident at the end of each business day prior to signing out to the short call resident.

At night and after morning rounds on weekends, attendings provide indirect supervision with direct supervision available, and the Shands and VA attendings serve as second-line/back-up for all consults and admissions. **Each resident is REQUIRED to call their attending for every new admission and discharge, for any acute worsening of a patient admitted to the neurology service, or for any patient related question.**

In the outpatient setting, each resident has his/her weekly continuity clinic. The continuity clinic alternates between the VA and Shands to benefit from the unique patient population of each setting. A dedicated attending is assigned to supervise the resident continuity clinics to provide better patient care and greater resident supervision. These attending provide a mixture of direct and indirect supervision with direct supervision immediately available during these clinics. Each resident is required to present every case to his/her assigned clinic attending.

Thus, there is always a designated faculty member responsible for the care of each patient. You should therefore always be able to call on a faculty person for assistance. The responsible faculty physician must always be fully informed about the patients under his or her care. If you have any doubt, call the attending. Attending availability is of paramount importance. If you have difficulty reaching the responsible attending, you should not hesitate to call upon *any* of the attending staff for help, at any time of day or night. The Program Director should be informed if you are not able to reach an attending in a timely fashion.

RESIDENT MENTORING PROGRAM

The objective of the resident mentoring program is to establish a formal career mentoring system throughout the Department of Neurology, as well as to increase resident exposure to research and academic projects within the department. The major component of the mentoring program will be a formal one-on-one mentoring program between selected faculty and individual residents. Incoming residents will be assigned to a faculty mentor. If these resident-mentor pairings prove inappropriate based on interests or personalities, they can be changed, with the responsibility of identifying a new mentor placed equally on the faculty mentor and the resident. Faculty mentors will meet with residents at least twice yearly to review progress, assist with determination of a research mentor/project, identify any departmental resources that may help the resident achieve

his/her goals, and complete the formal Chart Review requirement as documented in the "Evaluation" section above.

TEACHING BY RESIDENTS

Teaching is a wonderful way to learn: in order to teach students, you must first have knowledge that is accurate and usefully organized. Teaching responsibilities are integrated into the residency program.

Teaching of medical students on the inpatient services. An important object of medical education that guides the curriculum in Neurology is to insure that every student has achieved certain minimal clinical competencies by the time of graduation. For example, they must know how to recognize, examine, assess and treat patients with headache, stroke, dementia, dizziness, seizures, back pain, and common neuromuscular disorders. You will have the opportunity to read the excellent basic and clinical science teaching material provided to medical students when you teach the neuroscience course. You should also read and thoroughly understand the reading material provided third year students on their clerkship rotation. Every third year student is assigned to the inpatient services at Shands and the VA for two weeks. These students will round with you (on work rounds and attending rounds), and will work up most new admissions. The student on call will, if not otherwise occupied, accompany you when you see consults in the hospital or in the ER on your nights on call. Students should present to you on work rounds, and you should prepare them for their presentation of new patients to the attending. You should do as much teaching as feasible on work rounds. During the rotation you should see that the student is writing appropriate notes, learns how to write orders, is able to function well on the ward team, and is acquiring a basic knowledge of clinical neurology. If a student is not doing well, it is your responsibility to communicate your concerns to the attending physician by the end of the first week of their rotation, so that you may both formulate a plan to assist such students. It is your responsibility to evaluate each student at the end of the rotation. Students routinely evaluate resident teaching, and the Neurology resident who achieves the best overall assessment from students during the year will receive an award at the annual end-of-year department party.

Teaching of medical students during the Neuroscience course: You will teach first year medical students during their neuroscience course. In order to be effective, you will have to be a couple of steps ahead of them in your understanding of neuroanatomy, neurophysiology, and related areas. During this time, you will also meet many of the neuroscience faculty and graduate students, and have the opportunity of learning from them. Evaluation of resident teaching and knowledge of the neuroscience course will be based on assessments by the Neuroscience faculty and by performance by the resident on the same final examination given to the first year medical students (see Examinations, above).

Teaching of residents and interns from other departments: Neurology residents also have the opportunity to teach residents from other services who rotate on the Neurology service. Residents from Anesthesiology, Medicine, Psychiatry, Neurosurgery, and Family Medicine rotate on the Neurology service and interaction with these residents is mutually beneficial. Each rotator has different goals and objectives when they rotate through neurology. It is your responsibility to make sure that their goals are met by the end of their rotation.

Teaching of Junior Neurology Residents: Senior neurology residents are expected to act as mentors to incoming neurology residents, and neurology residents in general take every opportunity to help their fellow residents learn. The senior residents help create and update guidelines and "survival kits" for junior residents. The neurology residents also take turns in preparing cases for presentation during Grand Rounds. In Neuropathology, residents take turns in preparing the clinical-pathological conferences: They select cases, write protocols, and prepare a 10-15 minute presentation on the topic(s) that the case illustrates. Finally, the Chief resident or the senior residents divide the responsibility of facilitating (i.e. choosing the speakers, selecting the topic and finding the reading materials, and coordinating the dates) the Resident's Noon Lecture Series, Monthly Journal clubs, Weekly Board Review Sessions and Morbidity and Mortality Conference.

.

All residents are required to participate in the *Residents As Educators Program* sponsored by the institution. This program offers workshops and lectures that are helpful in developing your instructional and evaluative skills.

ECONOMIC, ETHICAL AND LEGAL ISSUES

Medicare Compliance:

House officers are paid in part by funds from Medicare. For many years Medicare also reimbursed attending physicians for their care of the same patients, and it was considered adequate documentation of service if the attending physician merely countersigned the resident's note. As of July 1, 1996, Medicare required that attending physicians (whom they now call teaching physicians) independently document their involvement with the patient. Medicare will only pay the teaching physicians for the time they spend in direct patient care. They will not pay for the time teaching physicians

spend with residents, even if this indirectly benefits the patient, and even though the attending is still legally responsible for the patient. The teaching physician must document that he or she has personally provided the requisite level of service. Medicare will allow the teaching physician to reference the resident's notes for some aspects of documentation, such as past medical history, review of systems, social history, but the teaching physician must personally document key portions of the history, examination, and decision-making. Rules announced in November of 2002 allow the teaching physician to rely more on the resident's notes for documentation of the teaching physician's involvement. Thus, the attending physician may simply provide for each encounter an attestation that they have personally seen and examined the patient, discussed care with the resident, and that the resident's not accurately documents the assessment and plan. This makes it even more important that resident's notes are complete and support the level of billing.

Audits of teaching hospitals in the past decade have routinely resulted in large settlements assessed against medical schools, up to $40 million. The settlement agreements have typically included an Institutional Compliance Agreement that details requirements for education of employees (including house officers), internal (or external) audits of compliance, and specification of penalties for non-compliance (such as a $1000/day penalty for each employee who has not received education in the specified time period, and similar penalties for failure to refund charges that were not supported by proper documentation -- for example, a note that did not include all of the specified information). In 2001 the University of Florida negotiated a settlement with the government which involved a payment of around $8,000,000 and entered into an Institutional Compliance Agreement. Under this agreement, residents are required to attend annual educational sessions that review the terms of the agreement and review special requirements for neurologists. The agreement terminated in 2007; however, there is still a requirement for mandatory annual training for all residents and faculty.

You must therefore become aware of Medicare requirements for documentation of billing (which are becoming the standard for all compensation by third parties), since not only must you comply with these regulations while a resident, but you must comply once you go out in practice. For each level of billing Medicare requires that specific information be included in the history, examination, review of records and films, diagnostic considerations, plan and treatment. When dictating about a patient seen in conjunction with an attending, residents letters should contain:

- A statement that you saw the patient in conjunction with Dr. [Attending's name].
- Make sure your dictation contains documentation of services required for the bill rendered. For billing at the highest level, a detailed history of present illness, a review of systems that contains 10 systems or pertinent positives plus a statement that "all other systems were negative," and a past medical, family, and social history are required. Your physical examination must contain sufficient detail (a comprehensive examination must include documentation of 3 vital signs, general appearance, examination of either carotid pulses, heart or pulses, ophthalmic examination, and a complete neurological examination, including orientation, memory, attention, language, fund of knowledge, CN 2-12 (you may state CN 2-12 intact, or provide details when there are abnormalities), strength, tone, observation for abnormal movements, sensation, reflexes, coordination, gait and station. In addition, you should specifically note who you spoke with to obtain the history, if you and your attending reviewed records and/or films, and briefly summarize what of importance was derived from these reviews. You should document all requests for records, and all discussions with other physicians about the case (be specific who was involved in these discussions). You should document all diagnoses that apply, as well as diagnoses you have considered as important in the differential.
- To document involvement in the case, the attending can write or dictate a separate note or letter or add an attestation to the resident's note. The attending may refer to your note for documentation of history and examination findings.

Bills that are submitted for patients seen by both residents and attending physicians must include a GC modifier code. It is helpful if you remember to check this code on the billing sheet for each out-patient you see with an attending.

Laboratory and Radiology Requests: It is necessary that each request for laboratory or radiologic examinations include an *appropriate* diagnosis, that is, a diagnosis that justifies the test. Thus, if you are requesting a chest x-ray on a patient with Guillian-Barré to rule out pneumonia, you should not put Guillain-Barré as the diagnosis, but rather, fever, cough, or aspiration. In most instances, this is self-evident; however, you must be aware of particular regulations. For example, you may not put down "tube placement" as a diagnosis, even if this is why you are requesting an x-ray. Not only is this required for reimbursement, but clinical pathology and radiology faculty are liable for prosecution for fraud if they bill for a procedure without appropriate documentation.

License requirements:
Residents with temporary licenses will be given a number (UM number) that must be indicated on every

pharmaceutical prescription provided by the resident. Residents with permanent State licenses must include their license number on prescriptions.

Prescription requirements:
All prescriptions must be written electronically or on special fraud-proof prescription pads that will be provided to each resident. Please remember to carry your personal prescription pad with you.

Patient Confidentiality (HIPAA):
You must respect the confidential nature medical information. You must have the patient's permission to speak to anybody else about the patient's medical condition, even to first degree relatives. If the patient is not present to ask, you must have the patient's written permission. You must routinely exercise care that your discussions of patient information with colleagues is not overheard by anyone who is not entitled to the information (do not, for example, discuss patients with your colleagues on elevators, even if you don't refer to the patients by name). Whenever possible, you should make presentations at the bedside rather than in the hallway, after requesting that persons who should not be privy to the information leave the room. An exception can be made of patients who share the room with your patient. You should also make others, such as medical students and secretaries, aware that casual talk about patients' medical information that may broach confidentiality is not to be tolerated. You may access medical records on any patient for whom you are caring, either as their resident physician, or as a consultant, or covering for another resident. You may also access medical records for valid teaching purposes (for example, presentation to the Neuropathology Conference). You may not access medical records of any other patient, including not only famous patients, but also other faculty, medical students, or even members of your own family. Remember that the electronic medical system tracks every record access, and flags suspicious events. If asked, you will have to be able to justify every record review, and unauthorized access can be a cause for reprimand, probation and eventually dismissal. Following implementation of the Health Insurance Portability and Accountability Act (HIPAA) in April of 2003, breaches of confidentiality become punishable by fines, and intentional breaches are punishable by fines and imprisonment. You are required to have HIPAA training for Shands and for the VA (training is separate). HIPAA also increases the regulation of protected health information for research. You must obtain IRB (Institutional Review Board) approval before initiating any research that entails review of patient records or other protected health information.

Cost-awareness:
It has become increasingly important that we inform ourselves about the cost of our medical practice. ATTACHMENT 10 addresses general issues related to cost-awareness. Specific policies relating to cost of services will be addressed in the context of individual patient care. Development of algorithms regulating management of specific neurological problems (paths) will impact on our management of patients increasingly in coming years. One aspect of practicing cost-effective medicine is the appropriate ordering of lab tests. Recurring orders for lab tests (i.e., morning CBC and metabolic profile) are to be discouraged unless there is a compelling reason for monitoring. They are usually unnecessary, they are costly and they cause pain and contribute to anemia.

Impaired physician policy:
Faculty, staff, peers, family or other individuals who suspect that a member of the housestaff is suffering from a psychological or substance abuse problem are obligated *by law* to report such problems. Individuals suspecting such impairment can either report directly to the Physician's Recovery Network (PRN) or can discuss their concerns with the Program Director, Chairman, or Director of Graduate Medical Education. The specific regulations are in ATTACHMENT 11.

Gender Harassment:
Inappropriate professional behavior in any form is not permissible. The Institutional policy regarding gender harassment is provided in ATTACHMENT 12.

Medical-legal issues:
Residents must be aware of medical-legal issues relating to informed consent, standard of care, competency, restraints, HIV testing, confidentiality, and similar issues, and must know how to document their care so that it complies with medical and legal requirements. Residents are encouraged to attend seminars given at the Health Center each year dealing with medical-legal issues. Attendings will discuss such issues when relevant to the care of individual patients.

ON-CALL SCHEDULE (DUTY HOURS)

We have a nightfloat system in which two residents are responsible for coverage of Shands and the VA hospital, from 8 pm to 8 am. Nightfloat is done in two-week blocks. In the gap between end of the normal work day at 5 pm until 8 pm, residents will be assigned to short call to cover the Shands and VA services. On the weekends, during the days there will be residents covering Shands and the VA. These residents cover from 8 am until 8 pm. There are two Saturdays of the month where a VA resident does a 24 hour call. They will not resume work until 24 hours later. During Flex weeks (the last two weeks of December), instead of a nightfloat, residents may take turns covering the 8 pm to 8 am shifts. Residents who cover Shands remain at Shands during their shift, whereas VA short call and weekend call may leave the hospital depending on the workload of the VA neurology service and as long as the resident can arrive in

the hospital within 15 minutes of being called. A designated call room is assigned for the on-call neurology house officers for resting. The resident on call is also responsible for answering outside calls from patients and physicians. You will notify the attending neurologist on call at Shands or at the VAMC of any but the most routine occurrence, and even of routine matters if you are a beginning resident. When more than one resident is covering Shands and the VA, they may serve as emergency reserve should one be tied up with another emergency or otherwise unable to respond to an emergent call in an expeditious manner, but it should only be for long enough to allow the regularly responsible resident to take over care. Attendings are responsible for back-up. Ward residents on each side of the street must sign out to the short-call residents each afternoon, the short-call residents must sign out to the nightfloat resident or overnight call resident on Saturdays and flex weeks, and the nightfloat must report to the ward teams each morning during Morning Report.

The coverage schedule will be listed on our online system New Innovations, in a calendar sent out monthly, and in our weekly departmental newsletter. In addition, Shands intranet has an online coverage listing and both Shands and VA operators receive a copy of the coverage schedules.

The resident duty hours as specified above are to be in compliance with ACGME requirements. Residents may not work more than 80 hours a week, averaged over a four-week period during a rotation. Residents must get at least one day (24-hours) off every 7 days, averaged over a four-week period, during which they are free from all educational, clinical, and administrative responsibilities. Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Residents may remain in house for up to four additional hours to participate in didactic activities, transfer care of patients, and maintain continuity of medical and surgical care; but they may not admit or consult upon new patients during this time. There must be at least an 8-hour and preferably a 10-hour time period provided between all daily duty periods and after in-house call.

PGY-2 residents are considered to be at the intermediate level. PGY-3 and PGY-4 residents are considered to be in the final years of education. Duty hours may be rarely amended in special circumstances such as: required continuity of care for a severely ill or unstable patient, or a complex patient with whom the resident has been involved; events of exceptional educational value; or humanistic attention to the needs of a patient or family. Residents should not have more than two consecutive weeks of night float or half of a calendar month (maximum 16 days).

The Neurology Department of the University of Florida takes duty hour violations very seriously. Residents are required to keep track of their duty hours daily while on service and inform their service attending, Chief Resident, and Program Director if they are in danger of violating the 80-hour work week, so that alternate arrangements for coverage can be made in advance. In addition, residents are not permitted to resume work until 8 hours have elapsed after the end of their last shift, and are required to notify the service attending, Chief Resident, and Program Director if unforeseen extension of service hours will cause a delay in the start of the next shift. Although it is expected that these alternate arrangements may need to be made on occasion due to the high volume of patients on our Shands services, chronic requests for alternate coverage due to duty hour violations by individual residents will require a meeting with the Program Director to discuss efficiency strategies.

Resident Duty Hours

Maximum Hours of Work per Week

Duty hours must be limited to 80 hours per week, averaged over a four week period, inclusive of all in-house call activities and all moonlighting.

Moonlighting

Moonlighting must not interfere with the ability of the resident to achieve the goals and objectives of the educational program. Time spent by residents in Internal and External Moonlighting must be counted towards the 80-hour Maximum Weekly Hour Limit. PGY-1 residents are not permitted to moonlight.

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.

Common Program Requirements

Maximum Duty Period Length

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

Duty periods of PGY-2 residents and above may be scheduled to a maximum of 24 hours of continuous duty in the hospital. Residents are encouraged to use alertness management strategies in the context of patient care responsibilities. Strategic napping, especially after 16 hours of continuous duty and between the hours of 10:00 p.m. and 8:00 a.m., is strongly recommended. Residents will not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.

In unusual circumstances, residents, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient or family. Under those circumstances, the resident must: appropriately hand over the care of all other patients to the team responsible for their continuing care; and document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director. The program director must review each submission

of additional service, and track both individual resident and program-wide episodes of additional duty.

Hand-Offs
It is essential for patient safety and resident education that effective transitions in care occur. Residents are allowed to remain on-site in order to accomplish these tasks; however, this period of time must be no longer than an additional four hours.

Minimum Time Off between Scheduled Duty Periods
PGY1 residents should have 10 hours, and must have 8 hours, free of duty between scheduled duty periods.
Intermediate-level residents [PGY2 residents] should have 10 hours free of duty, and must have eight hours between scheduled duty periods. They must have at least 14 hours free of duty after 24 hours of in-house duty. Residents in the final years of education [PGY3, PGY4] must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods. This preparation must occur within the context of the 80-hour, maximum duty period length, and one-day-off-in seven standards. While it is desirable that residents in their final years of education have eight hours free of duty between scheduled duty periods, there may be circumstances when these residents must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty. Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by residents in their final years of education must be reported in writing (New Innovations) to the program so as to be monitored by the program director.
Maximum Frequency of In-House Night Float
Residents must not be scheduled for more than six consecutive nights of night float.
Maximum In-House On-Call Frequency
PGY-2 residents and above must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four-week period).
At-Home Call
Time spent in the hospital by residents on at-home call must count towards the 80-hour maximum weekly hour limit. The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one-day-in-seven free of duty, when averaged over four weeks. At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each resident. Residents are permitted to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new "off-duty period".
If a resident recognizes or is observed to show signs of fatigue, or if a resident must go home because they would otherwise exceed the limits of contiguous in-house service, the resident should request relief from the resident designated as a back-up resident, or from the attending physician.

Continuity clinic responsibility will be assumed by the faculty member supervising the VA continuity clinic, and by a resident on elective rotation at Shands. Ward responsibilities will be assumed by the other Neurology resident on the service at Shands, or by the resident designated to be on call that evening, provided this is not a resident on a ward rotation. It is assumed that this will no longer occur except in rare instances.

The 80-hour rule and the 8 (10 preferred)-hour between-shift rule will apply to hours spent in approved outside employment (see next section).

VACATION

There are institution-wide provisions for annual leave that are stipulated in the section on BENEFITS in this document. Fifteen days of annual leave are allowed each year. Annual leave (vacation) may not be taken in increments of less than five days, except for special permission from the program. All vacations must be approved in advance by the program director. It is preferable for vacations to be scheduled during Elective, Clinic or some Selective rotation months. They should be scheduled at the beginning or end of the month when possible, so as to minimize disruption of the elective experience. Except for unusual circumstances, vacations should not be scheduled during ward months (Shands, VA or Pediatrics). All vacations must be approved in advance by the program director or designee.

OUTSIDE EMPLOYMENT

The institutional policy regarding Outside Employment (formerly referred to as "moonlighting") is provided in ATTACHMENT 13. The Department of Neurology's policy is more restrictive than the institutional policy. We do not permit our neurology residents to engage in non-programmatic outside professional employment except in specific circumstances, which include Compensation and Pension Examinations at the VA and staffing the Emergency Room at the VA.

Residents must understand that outside employment hours apply to the calculation of resident duty hours (see above). Therefore, approval will not be given to outside employment that exceeds these limits. Residents must inform the Program Director of the dates and times of all outside employment, and obtain the Program Director's approval ***in advance***. The Program Director is responsible for submitting a

summary annual report of outside professional employment of housestaff to the GMEC indicating that the Program Director is aware of the activities and approves.

The ACGME expects programs to monitor and approve any outside employment, even if it occurs during annual leave (vacation) time. Vacation is considered time during which the resident may recoup strength and resources so that he or she may return to the residency refreshed. This purpose is defeated by working during that time.

Housestaff who are tempted to consider non-programmatic outside professional employment despite these restrictions should consider: (a) that they are not covered by the College of Medicine's malpractice insurance for nonprogrammatic outside employment; (b) that they may not represent themselves as agents of the University of Florida; and (c) most importantly, that violation of the Department's outside employment policy by the resident will lead to disciplinary action, which could include dismissal from the program.

OVERVIEW OF THE RESIDENCY

The Neurology residency program is designed to meet specific goals and objectives, which have been discussed in the first section, and to be in compliance with the Requirements for Residency set forth by the ACGME. In this section we will specify how the major requirements are to be fulfilled during your residency.

CORE ROTATIONS: Neurology residents are required to have at least 18 months during their residency of direct patient care on the adult neurology in-patient or out-patient services, and they must have experience caring for patients in an intensive care setting. They must see neurological consultations, and they must evaluate patients in emergency settings. Residents on the Shands or VA ward/consult services gain this experience. In addition, neurology residents must have three months of pediatric neurology direct patient care.

Therefore, the following are your core rotations throughout the three years of residency:

- Shands General Neurology Junior
- Shands General Neurology Senior
- Shands Stroke Junior
- Shands Stroke Senior
- VA General NeurologyJunior
- VA General Neurology Senior
- Pediatric Neurology
- Neuropsychiatry
- Longitudinal Neuro I Clinic
- Longitudinal Continuity Clinics

SELECTIVE ROTATIONS: In addition, our program must have basic science instruction, and they must spend at least two months studying one of the basic clinical sciences, such as neuropathology. They must have experience in the management of patients with psychiatric disease. We fulfill these requirements by the following required selective rotations, distributed over the two years (three years with special permission of the program director) of training:

- Neuroscience
- Neuropathology
- Epilepsy I
- Epilepsy II
- General Neurology Clinic
- Behavioral Neurology Clinic
- Movement Disorders Clinic
- Neuromuscular Clinic

ELECTIVE ROTATIONS: Neurology residents must also become proficient in reading neuroimaging studies, and in understanding the indications for, physiology underlying, and techniques of performing electrodiagnostic studies. In addition, you must have the opportunity to study in sub-specialty areas of neurology, and in neurosurgery. You must understand the principles of neurological rehabilitation, and you must be involved in planning and supervising the rehabilitation of your patients. The following elective experiences are designed to help achieve these goals. They are more specifically described in later sections.

- Additional Behavioral neurology
- Sleep disorders
- Additional Neuromuscular
- Additional Epilepsy
- Neurophysiology
- Neurorehabilitation
- Neuroradiology
- Neurosurgery/Neuro-oncology
- Neuro-ophthalmology
- Movement disorders
- Research electives

In summary, the block and longitudinal rotations should fulfill the ACGME recommended curriculum for core, selective and elective rotations. The following is the distribution of block and longitudinal rotations throughout the 3 years of Neurology Residency at the University of Florida.

Block Rotations:	*Approximate Time:*
Shands General Neurology	4-5 months
Shands Stroke Service	4-5 months
VA In-patient/Consult	4-5 months
Nightfloat	4-5 months
Epilepsy I & II	2 months
General Neurology Clinic	1 month
Behavioral Neurology Clinic	1 month

Movement Disorders Clinic	1 month
Neuromuscular Clinic	1 month
Neuroscience	1 month
Pediatric Neurology	3 months
Neuropsychiatry	1 month
Neuropathology	1 month
Electives	6 months
Total:……..	**36 months**

Longitudinal Rotations:

Neuro I Clinic	Once per week, with exceptions
Continuity Clinics	Once per week, except NF/vacation

HOUSESTAFF SALARY SUPPORT

Your salary is provided by Shands Hospital and by the Veterans Administration. We must document your service to each institution to justify your salary. The Department takes care of such documentation; however, the VA requires that your time at the VA hospital is logged in. This is the responsibility of the Neurology secretary at the VA. It is important that residents inform this secretary when they are present, particularly when they are on elective rotations that have a VA component. Whenever starting a VA rotation, please check in with the VA Neurology office to make certain you are following proper procedure logging in your VA time.

CLINIC RESPONSIBILITIES

Longitudinal Clinic Rotations:

New-patient clinics: During your VA ward and your selective and elective months you will attend the Thursday morning (Neuro I) clinics at the VA with the following exceptions: you are not expected to attend this clinic as the VA senior resident, when you are on the General Neurology or Stroke rotations at Shands, when you are on Nightfloat, when you are on Pediatric Neurology, when you are on the Epilepsy rotations, and when you are on Neuroscience.

Continuity clinics: To provide continuity of care, experience in following the course of neurologic illness, and experience in long-term management, you have your own half-day return patient clinic each week. You alternate between Shands and the VAMC (Neuro II clinic). There is attending supervision available at all clinics. You are expected to provide long-term out-patient care for your patients who require it. In this way you will learn the course of chronic neurological illness, the benefits and risks of treatments, and the value of establishing strong patient-physician professional relationships.

CONFERENCES

You *must* attend each of the following conferences, except when you are on nightfloat, on vacation, or taking an away elective more than an hour's drive away that may preclude attendance. You must sign the attendance roster for each conference. The Neurology Chief resident or designee is responsible for bringing the roster to the secretary in charge of keeping these records. The attendance roster for Neuro-pathology/neuroradiology is kept by the pathology department.

Grand Rounds (Tuesdays from 12:00 pm to 1:00 pm, DeWeese Auditorium, McKnight Brain Institute). A prominent guest lecture is featured weekly. Neurology Grand Rounds lectures are accredited for CME.

M&M conference: Quarterly conference held during Grand Rounds. Residents are responsible for reporting complications or poor outcome (death, hospital-acquired infection, or any case in which there is a question of patient safety to the Neurology Chief Resident. The Chief Resident will review the salient features of each of these cases, and there will be discussion by residents and faculty. Periodically, the Chief Resident will organize a review of quality care for common neurologic illness and compare our practice with national benchmarks.

Morning Report: See Shands inpatient service descriptions for details.

Board Review Sessions: From 12:00-1:00 pm at the UF MBI conference room as part of your resident lecture series, board review is held highlighting a "high yield topic" in in-service and/or board examinations. Every resident should attend these sessions.

Clinico-Pathological Conference (A conference held during Grand Rounds, the conference is devoted to radiology and pathology. You should take this opportunity to learn about clinical, radiological and pathological aspects of neurological diseases, and about their treatment. A clinical case protocol is provided to neurology residents in advance of the conference. Residents are expected to be prepared to discuss the case. Following this discussion, other residents are invited to comment. Clinical faculty will comment, and then the pathologist will discuss the pathology. There may be further didactic presentation by the neurology or neurosurgery resident on the neuropathology service. When such residents are on the neuropathology service, they are responsible for organizing this conference.

Vertical Integration Lecture Series:

Incorportated as part of the noon lecture series on Mondays, Wednesdays and Fridays from noon to 1pm

in the UF MBI conference room (L3-101). Each year the program director, faculty and residents will confer to organize a list of subjects of importance for didactic presentations by faculty or residents. During July and August, lectures cover basic clinical material of importance for incoming residents. At other times, the presentations address basic science areas not covered by other conferences or seminars, such as statistics, epidemiology, and basic genetics. They should also cover other basic and clinical areas of particular interest to residents. All subspecialties are represented including: Stroke, Movement Disorders, Dementia and Neurobehavior, Neuropathology, Neuroradiology, Neurorehabilitation, Neuro-ophthalmology, Ethics, and "Life after Residency". Faculty are assigned lectures, but in addition, each resident may be expected to prepare at least one talk each year directed at fellow residents on one or more topics of clinical interest. It is expected that the resident review the current literature and prepare a handout for this presentation.

Journal clubs: This is a regularly recurring meeting monthly in which an article on a particular theme is discussed. Both residents and faculty participate in this activity.

Stroke Radiology Conference: Held every Thursday at 12:30 in the south tower neuroradiology reading room. Residents rotating on the stroke service are required to attend, but others are welcome as well. This is an interactive, interdisciplinary conference on cases with interesting and challenging neuroradiological features, led by an attending neuroradiologist.

Annual Status Epilepticus/ EEG Workshop: Held once per year, both residents and faculty are given an "in service" in spotting status epilepticus, especially non-convulsive status via EEG, and its proper management.

Resident-Program Director Business Meeting:
This is a weekly meeting held at on Wednesdays at 1 pm (after noon conference) in the UF MBI for residents to express any problems or concerns regarding the residency curriculum and other similar matters to the residency program director.

Other Conferences:

Behavioral Neurology "CNS" conference (Fridays from 1:30 to 2:30, 3rd floor VA conference room E-336). *This is a meeting of the Center for Neuropsychological Studies. The research of Center faculty and fellows or by invited guests is presented. The format varies: case presentations, informal discussions, prepared debates, and formal lectures are all included.*

EMG conference (2nd and 4th Mondays, 11:30-12:30, Neurology Small Conference Room). *EMG Faculty, CNP residents, and neurology residents on the EMG rotation meet. There is an annual curriculum for CNP residents, with a different topic each week. The other half of the conference is devoted to reviewing interesting cases of the week and discussing questions that residents may have.*

Epilepsy Management conference (Tuesdays from 8:30 to 10 AM). *You should attend this conference if you are on the EEG rotation, or if your patient is to be discussed.*

Movement Disorders Video conference (1st and 3rd Tuesday of the month from 8-9 AM) *Held at the UFMBI DeWeese Auditorium. This is a video-based conference of interesting and challenging movement disorders conference with the entire multi-disciplinary team of the Movement Disorders Center*

Pediatric Morning Report (Monday, 7:30-8:30am)
When you are on Pediatric neurology, you should attend Pediatric Morning Report. Management of current cases seen will be discussed.

Psychiatry Grand Rounds. (Check with Department of Psychiatry for schedule) *Attendance at Psychiatry grand rounds will be strongly recommended when the topic or speaker is appropriate.*

Neurosurgery conferences:

Tumor Conference. (Tuesday at 4pm) *Held at the Neurosurgery Conference Room. This is an interdisciplinary Conference participated by Neurosurgery, Neuroradiology, Neuro-oncology and Neuropathology*.

Chief Conference (Wednesday at 7am).*Mandatory during Pathology Rotation. Lectures by neurosurgery residents with attending participation. Joint orthopedics / neurosurgery conference first Wednesday of each month.*

Neurosurgical case conference (Monday, Tuesday, Thursday 7am) *Review of surgical cases.*

SUGGESTED TEXTBOOKS AND READING MATERIALS

General Neurology

- Ropper A, Samuels M. Adams and Victor's Principles of Neurology. (10th Ed, 2014)
- Rowland LP. Merritt's Textbook of Neurology (12th Ed, 2009)
- Brazis P, Masdeu J, Biller J. Localization in Clinical Neurology. (6th Ed, 2011)
- Aminoff M, Josephson S. Neurology and General Medicine (5th Ed, 2014)
- Howard J. Neurology Video Textbook DVD.
- Blumenfeld H. Neurology Through Clinical Cases (2nd Ed, 2011)
- Biller J, Gruener G, Brazis P. DeMyer's The Neurologic Examination (6th Ed, 2011)
- AAN practice guidelines (http://www.aan.com/go/practice/guidelines)

Vascular Neurology/Critical Care

- Posner JB, Saper CB, Schiff N, Plum F. Diagnosis of Stupor and Coma. (4th Ed, 2007)
- Wijdicks E. The Clinical Practice of Critical Care Neurology (2nd Ed, 2003)
- American Heart Association Stroke Statements and Guidelines (http://my.americanheart.org/professional/StatementsGuidelines/ByTopic/TopicsQ-Z/Stroke-Statements-Guidelines_UCM_320600_Article.jsp)

Pediatric Neurology

- Menkes J, Sarnat H, Maria B. Textbook of Child Neurology. (7th Ed, 2005)
- Pina-Garza J. Fenichel's Clinical Pediatric Neurology: A signs and symptoms approach (2013)
- Volpe J. Neurology of the Newborn (2008)

Neuromuscular

- O'Brien M. Aids to the Examination of the Peripheral Nervous System (5th Ed, 2011)
- Griggs and Mendell: Evaluation of myopathies (Contemporary Neurology series black book)
- Katirji: Neuromuscular Disorders in Clinical Practice
- Electromyography (Subramony and Carpenter: will make available)
- Kimura's Electrodiagnosis in Diseases of Nerves and Muscle: Principals and Practice
- Neuromuscular Disorder: Textbook and CD ROM 2005 by David Preston and Barbara Shapiro
- Diagnosis and management of peripheral nerve disorders by Mendell, Kissel and Cornblath, Oxford 2001
- Peripheral Neuropathy by Dyck and Thomas, Elsevier/Sanders, 2005 (3rd edition)

Epilepsy/EEG

- Handbook of EEG Interpretation 2007 by William Tatum
- Fisch and Spehlmann's EEG Primer: Basic Principle of Digital and Analog EEG 1999 by B.J. Fisch
- An Atlas of EEG Patterns 2009 by John Stern and Robert Engel
- Epilepsy: A Cleveland Clinic Guide 2007 by Elaine Wyllie
- Handbook of Epilepsy 2008 by Thomas Browne and Gregory Holmes
- EEG Teaching files at Shands and the VAMC

Behavioral Neurology

- Mesulam's Principles of Behavioral Neurology
- Cummings & Benson's Dementia: A Clinical Approach
- Heilman and Valenstein's Clinical Neuropsychology

Movement Disorders

- The Practical Approach to Movement Disorders: Diagnosis, Medical and Surgical Management 2007 by Hubert H. Fernandez, Michael S. Okun, Ramon L. Rodriguez, et al.
- Video file/collection of the UF Movement Disorders Center

Neuroscience:

- Basic Clinical Neuroscience 2007 by Paul Young and Daniel Tolbert
- Medical Neuroscience 2003 by Stephen Nadeau
- Manter and Gatz's Essentials of Clinical Neuroanatomy and Neurophysiology 2002 by Sid Gilman, et al
- UF College of Medicine Neuroscience Course Syllabus

Neuropathology:

- Escourolle and Poirier's Manual of Basic Neuropathology 2003 by Francois Gray et al
- Greenfield's Neuropathology 8th Edition (2 Volume Set

and CD ROM) by Seth Love et al
- Teaching file/slides of the UF Neuropathology Division

Neuroradiology:

- Neuroradiology: The Requisites 2003 by Robert Grossman and David Yousem
- Neuroradiology teaching files at Shands Hospital

DETAILED DESCRIPTION, GOALS & OBJECTIVES OF CORE, SELECTIVE AND ELECTIVE ROTATIONS

A) Core Block Rotations:

1. Shands General Neurology Junior

Description:
You will be expected to gain experience caring for patients on the neurology general service, including consultations from the Emergency Department and Hospital Services, neurology in-patients, and neurology intensive care unit (NICU) service, and you will assist the attending physician and provide leadership in supervising students and rotating residents. You will also evaluate, treat, and make dispositions on patients in the Emergency Room. You are expected to fully evaluate each patient before conferring with the attending physician. Based on your evaluation, you should be able to comment upon localization and differential diagnosis, and you should have a plan for evaluation and treatment. You must confer with the attending prior to making important decisions in the management of cases; but you should not expect that the attending will do your thinking for you. The socio-economic and emotional aspects of patient care are to be addressed, and you will be conferring with the social worker to make appropriate plans for your patients. The rehabilitation of every patient begins with admission, and you will be involved in the planning and execution of rehabilitation efforts in every patient.

Your day starts with Morning Report from 8:00 to 9:00 daily. The overnight residents present all admissions to the general team. A concise but comprehensive presentation is given to the team on each patient admitted. The case, including differentials, diagnosis and management are discussed within the time allotted. Immediately following Morning Report, the general neurology teaching rounds follow. All resident-assigned new and old patients seen in consultation and admitted to the Neurology service in the regular floors and the NICU are seen, and the day's management is discussed. The daily teaching rounds should end by 11 am. The rest of your day should be spent admitting new patients and seeing new consultations, discharging old patients, and attending all conferences during the day. You should prepare to sign out to the short-call resident at 5pm every day on the weekdays.

As the Junior resident in this rotation, you may be assigned by your Senior resident to assess patients in the emergency room (ER) as promptly as possible.

As a resident educator, you are also responsible for preparing medical students, service Pas, or rotators (neurosurgery and psychiatry interns, family medicine rotators) in presenting their cases to the attending physician. At the end of their rotation, each resident must complete their respective evaluation forms in New Innovations.

You are responsible for signing out your patients in an efficient but effective manner at the end of your day, 5 pm. You will also take short call several days of the week, in which case you will receive sign out from your colleagues on the Shands service starting at 5 pm, and be responsible for all service patients, whether ward, consult, or ED, until you sign them out to the nightfloat at 8 pm. You will be responsible for seeing new ED and inpatient consults during short call.

During the weekend there will be times when you are called upon to cover the dayshift where you will be responsible for all neurology patients on the Shands service and in the ED, as well as new ED consults. These shifts are from 8 am to 8 pm, when you will be relieved by the overnight resident or nightfloat. Sign out responsibilities are the same as during short call.

Goals and Objectives:

Patient Care

- You should demonstrate proficiency in obtaining a complete and accurate neurological history and perform a complete neurological examination
- You should be able to perform technical skills for neurological procedures such as lumbar puncture, assessment of brain death, operating EEG long term monitoring equipment.
- You should begin to demonstrate knowledge in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the inpatient setting.
- You should effectively carry out the management plans for all your patients in an organized and efficient manner.
- You should be able to adequately carry out the

management of neurological emergencies such as acute stroke, status epilepticus, spinal cord compression, brain herniation, respiratory decompensation, etc under the supervision of your Senior resident or attending neurologist.

- You should demonstrate awareness in assessing the rehabilitation potential for each patient, and to make appropriate plans for rehabilitation, both during the hospital stay, and after discharge.

Medical Knowledge

- You should demonstrate knowledge about major neurological diseases that require inpatient care, including stroke, seizures, CNS infections, coma, dementia, common movement disorders, myelopathy, neuromuscular disorders, and specific neurological situations that require urgent or emergent responses.
- You should demonstrate ability to localize disease in the nervous system, and formulate a complete differential diagnosis.

Practice-based Learning

- You should demonstrate ability to use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for life-long learning.
- You should demonstrate the ability to extract information and salient features from the history, examination, and caregiver and paramedical personnel interview, and organize them to base your differential diagnosis and management.
- You should demonstrate the ability to use the review of your own practice to guide your own learning objectives.

Interpersonal and communication skills

- You should demonstrate the ability to communicate effectively with patients and families in the inpatient setting.
- You should demonstrate the ability to efficiently and effectively present information about your patients to your Senior resident, attending physicians, and other health care professionals.
- You should demonstrate the ability to participate with other members of the health care team (nurses, physical and occupational therapists, speech therapists, social workers and others) to promote the best care for your patients (team-work).

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate the ability to recognize and deal effectively with ethical issues that arise in the management of your patients.
- You should be on time and prepared for Morning Report and daily work rounds.
- You should do all documentation, from admission notes to discharges, comprehensively and in a timely manner.

Systems-based practice

- You should demonstrate consideration the costs of medical care, and learn about resources available to cover these costs.
- You should demonstrate the ability to work with social services to plan for the care of patients after discharge; about resources available in the patient's community to promote the patient's health.
- You should demonstrate the ability to consider and discuss ways to improve the practice of neurology at your institution.

2. Shands General Neurology Senior

Description:
As the Senior in the general service, you are expected to act as the Junior Attending and you will play a supervisory role in addition to caring for patients on the neurology general, neurology intensive care unit (NICU) service, and the Emergency Room. Your team will be comprised of one senior resident, one junior resident, and one PA, and may include additional rotators and medical students. As the team leader, you are expected to assist the attending physician in supervising students and rotators. You are expected to fully evaluate each patient seen by your team before conferring with the attending physician. You also have the responsibility of distributing patients and workload to your team, making sure that everyone is able to attend lectures, conferences and Grand Rounds, and ensuring that daily Morning Report and teaching rounds start and end on time.

Your day may start before 8am as the Senior resident to familiarize yourself with the events from last night, update the patient census and prepare the team for Morning Report. Daily Morning Report is held from 8:00 to 9:00, followed by work rounds with the attending which should last ideally last no longer than 2 hours. It is your responsibility to ensure that Morning Report and work rounds are organized and start and end on time. The rest of your day should be spent personally admitting new patients, discharging old patients, or supervising your team members, and attending all

conferences during the day. You should prepare your team to sign out to the night-call resident at 5pm every day on the weekends.

Your team is also responsible for a subset of non-stroke neurology consultations from the Emergency Room (ER) in the afternoon (split with the neurohospitalists in the afternoon). You should confer each case seen in the ER with your attending physician.

As the Senior on service, you will also field all requests for new consults called to the 413-1234 pager. General neurology consults will be assigned to the neurohospitalists between 8 am and 1 pm. After 1 pm, new consults will be shared between the neurohospitalists and the general neurology service.
.

As a resident educator, you are also responsible for preparing medical students, service PA, and rotators (neurosurgery and psychiatry interns, and family medicine rotators) to present to the attending physician. You are expected to provide third year medical students on their clerkship with daily formative feedback and to reply to the daily summative evaluations sent you via email.

You are responsible for signing out your patients in an efficient but effective manner at the end of your day, 5 pm. You will also take short call once or twice a week, in which case you will receive sign out from your colleagues on the Shands services starting at 5 pm, and be responsible for all Shands neurology patients, whether ward, consult, or ED, until you sign them out to the nightfloat at 8 pm. You will be responsible for seeing new ED and inpatient consults during short call.

During the weekend there will be times when you are called upon to cover the dayshift where you will be responsible for all neurology patients on the Shands ward service and in the ED, as well as new ED consults. These shifts are from 8 am to either 5 mp or 8 pm, depending on whether you are on short call that weekend, when you will be relieved by the overnight resident or nightfloat. Sign out responsibilities are the same as during short call.

Therefore, in summary, as the Senior resident your main administrative responsibilities include:

- supervising the entire team in caring for all in-patients and consults on the general neurology service on the neurology floor, NICU and ER
- distributing patients and workload to your team
- ensuring that everyone is able to attend lectures, conferences and Grand Rounds
- ensuring that daily Morning Report and work rounds start and end on time.
- preparing your team to sign out to the night-call resident at 5pm on the weekends
- help attending field all requests for admission to the neurology service, including hospital to hospital transfers
- selecting cases to present at Grand Rounds, and preparing/supervising presentations
- preparing students, rotators, interns and junior residents in their case presentations to the attending physician.
- holding the new consult pager (413-1234) and appropriately distributing consults to the general, neurohospitalist, and stroke teams
- completing student evaluations daily, both formative and summative, for each student (student has formative feedback form and summative evaluation is sent daily in your email).

Goals and Objectives:

Patient Care

- You should continue to develop your ability to obtain an accurate history, perform accurate neurological examinations, localize lesions, and plan for effective diagnosis, management and rehabilitation.
- You should demonstrate proficiency in the neurological examination, and in the performance of routine neurological procedures such as lumbar punctures, operating EEG long term monitoring equipment, assessing brain death, checking for the integrity of implanted devices such as baclofen pumps, deep brain stimulation and vagal nerve stimulation.
- You should demonstrate proficiency in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the inpatient setting, at the level of a junior attending.
- You should demonstrate proficiency in the care and management of patients with neurological emergencies status epilepticus (including placing a patient on burst suppression), brain herniation, spinal cord compression, neuroleptic malignant syndrome, and respiratory decompensation from myasthenia gravis and Guillain Barre syndrome.
- You should demonstrate proficiency in assessing the rehabilitation potential for each patient, and to make appropriate plans for rehabilitation, both during the hospital stay, and after discharge.

Medical Knowledge

- You should continue to refine your knowledge about major neurological diseases that require inpatient care, and about specific neurological situations that require urgent or emergent responses
- You should demonstrate in-depth understanding of common and uncommon/rare neurological disorders, including basic mechanisms of disease, neuropathology,

and current methods of diagnosis and treatment.

Practice-based Learning

- You should demonstrate proficiency in utilizing computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for life long learning. Be able to critically review the salient literature, and base treatment on the best medical evidence.
- You should demonstrate proficiency in reviewing your own practice to guide learning.
- You should demonstrate the proficiency to extract information and salient features from the history, examination, and caregiver and paramedical personnel interview, and organize them to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning.

Interpersonal and communication skills

- You should demonstrate effective communication with patients, families in the inpatient setting.
- You should demonstrate effective communication with fellow residents, attending physicians, and other health care professionals; help junior residents to improve their communication skills.
- You should demonstrate team-work: Supervise and teach neurology Junior residents, and residents from other services. You should take a leading role in student teaching; ensure that ward responsibilities are effectively shared among rotating residents.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate proficiency in discussing ethical issues of patient care with junior residents and students, and raise these issues on attending rounds. Be prepared to use selected ethical problems encountered on the ward as a focus for discussion in conferences devoted to ethical issues.
- You should make sure that your team is on time and prepared for Morning Report and daily work rounds.
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should now always demonstrate awareness and careful consideration of the costs of the resources needed to care for your patients.
- You should demonstrate the ability to lead your team, work with social services to plan for the care of patients after discharge; You should be very familiar with the resources available in the patient's community to promote the patient's health. You should make junior residents aware of these issues and resources.
- You should demonstrate proficiency in utilizing resources in the hospital and in the community to foster the best quality care for all patients, including the poor and the uninsured.
- You should demonstrate the ability to suggest specific ways to improve the practice of neurology at your institution.
- You should demonstrate how to use what you have learned to plan your own practice of neurology after residency.

3. Shands Stroke Junior

Description:

You will be expected to gain experience caring for patients on the stroke service, including stroke alerts and stroke consultations from the Emergency Department and Hospital Services, neurology in-patients, and neurology intensive care unit (NICU) service. You will assist the senior resident and attending physician and provide leadership in supervising students and rotating residents. You will also evaluate, treat, and make dispositions on patients in the Emergency Room under appropriate supervision. You are expected to fully evaluate each patient before conferring with the attending physician. Based on your evaluation, you should be able to comment upon localization and differential diagnosis, and you should have a plan for evaluation and treatment. You **must** confer with the attending prior to making important decisions in the management of cases; but you should not expect that the attending will do your thinking for you. The socio-economic and emotional aspects of patient care are to be addressed, and you will be conferring with the social worker to make appropriate plans for your patients. The rehabilitation of every patient begins with admission, and you will be involved in the planning and execution of rehabilitation efforts in every patient.

Your day starts with stroke teaching rounds beginning at 7:30. The overnight resident presents all admissions to the stroke team. A concise but comprehensive presentation is given to the team on each patient admitted. The case, including differentials, diagnosis and management are discussed within the time allotted. All resident-assigned new and old patients seen in consultation and admitted to the Stroke service in the regular floors and the NICU are seen and the day's management are discussed and carried out. The daily teaching rounds, including walk rounds evaluating the patient, should end by 11:00. The rest of your day should be spent admitting new patients and seeing new consultations, discharging old patients, and attending all

conferences during the day. You should prepare to sign out to the short-call resident at 5pm every day on the weekdays.

As the Junior resident in this rotation, you may be assigned by your Senior resident to assess patients in the emergency room (ER) as promptly as possible, especially stroke alerts where time is of the essence.
As a resident educator, you are also responsible for preparing students, stroke team PAs, rotators (neurosurgery interns, family medicine residents) in presenting their cases to the attending physician.

You are responsible for signing out your patients in an efficient but effective manner at the end of your day, 5 pm. You will also take short call several days of the week, in which case you will receive sign out from your colleagues on the Shands service starting at 5 pm, and be responsible for all service patients, whether ward, consult, or ED, until you sign them out to the nightfloat at 8 pm. You will be responsible for seeing new ED and inpatient consults during short call.

During the weekend there will be times when you are called upon to cover the dayshift where you will be responsible for all neurology patients on the Shands service and in the ED, as well as new ED consults. These shifts are from 8 am to either 5 pm or 8 pm, depending whether you are on short call, when you will be relieved by the overnight resident or nightfloat. Sign out responsibilities are the same as during short call.

Goals and Objectives:

Patient Care

- You should demonstrate proficiency in obtaining a complete and accurate neurological history and perform a complete neurological examination
- You should recognize the signs and symptoms of acute ischemic stroke
- You should demonstrate proficiency in the rapid assessment of stroke patients and calculation of the NIH stroke scale (NIHSS)
- You should begin to demonstrate knowledge in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the inpatient setting.
- You should effectively carry out the management plans for all your patients in an organized and efficient manner.
- You should be able to adequately carry out the management of neurological emergencies such as acute ischemic stroke (including the administration of IV tPA or referral to endovascular intervention when appropriate), acute CNS hemorrhage, brain herniation, respiratory decompensation, etc under the supervision of your senior resident and attending neurologist.
- You should demonstrate awareness in assessing the rehabilitation potential for each patient, and to make appropriate plans for rehabilitation, both during the hospital stay, and after discharge.

Medical Knowledge

- You should demonstrate knowledge about current treatment guidelines for ischemic stroke, especially concerning blood pressure management, anticoagulation, and use of thrombolytic therapy.
- You should be able to identify common risk factors for stroke.
- You should demonstrate knowledge about specific neurological situations that require urgent or emergent responses.
- You should demonstrate knowledge of current recommendations for the use of antiplatelet agents and anticoagulants in stroke prevention.
- You should demonstrate ability to localize disease in the nervous system, and formulate a complete differential diagnosis.

Practice-based Learning

- You should demonstrate ability to use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for lifelong learning.
- You should demonstrate the ability to extract information and salient features from the history, examination, and caregiver and paramedical personnel interview, and organize them to base your differential diagnosis and management.
- You should demonstrate the ability to use the review of your own practice to guide your own learning objectives.

Interpersonal and communication skills

- You should demonstrate the ability to communicate effectively with patients, families in the inpatient setting.
- You should demonstrate the ability to efficiently and effectively present information about your patients to your Senior resident, attending physicians, and other health care professionals.
- You should demonstrate the ability to participate with other members of the health care team

(nurses, physical and occupational therapists, speech therapists, social workers and others) to promote the best care for your patients (team-work).

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate the ability to recognize and deal effectively with ethical issues that arise in the management of your patients.
- You should be on time and prepared for Morning Report and daily work rounds.
- You should do all documentation, from admission notes to discharges, comprehensively and in a timely manner.

Systems-based practice

- You should demonstrate consideration the costs of medical care, and learn about resources available to cover these costs.
- You should demonstrate the ability to work with social services to plan for the care of patients after discharge; about resources available in the patient's community to promote the patient's health.
- You should demonstrate the ability to consider and discuss ways to improve the practice of neurology at your institution.

4. Shands Stroke Senior

Description:
As the Senior in the stroke service, you are expected to act as the Junior Attending and you will play a supervisory role in addition to caring for patients on the neurology stroke service, neurology intensive care unit (NICU) service, and the Emergency Room. Your team will usually be comprised of 1 Junior Resident, 1 Neurosurgery and/or Anesthesiology Intern, 1-2 physician extenders, medical students and other rotators. As the team leader, you are expected to assist the attending physician in supervising students and rotators. You are expected to fully evaluate each patient seen by your team before conferring with the attending physician. You also have the responsibility of distributing patients and workload to your team, making sure that everyone is able to attend lectures, conferences and Grand Rounds, and ensuring that daily Morning Report and teaching rounds start and end on time.

At the beginning of your day, you should familiarize yourself with the events from last night, update the patient census and prepare the team for team rounds. Stroke rounds begin at 7:30, which should ideally be completed by 11:00. It is your responsibility to ensure that rounds are organized and start and end on time. The rest of your day should be spent personally admitting new patients, discharging old patients, or supervising your team members, and attending all conferences during the day. You should prepare your team to sign out to the night-call resident at 5pm every day on the weekends.

Your team is also responsible for all stroke neurology consultations from the Emergency Room (ER). You should confer each case seen in the ER with your attending physician.

As a resident educator, you are also responsible for preparing medical students, physician extenders, and rotators to present to the attending physician. You are expected to provide third year medical students on their clerkship with daily formative feedback and to reply to the daily summative evaluations sent you via email.

You are responsible for signing out your patients in an efficient but effective manner at the end of your day, 5 pm. You will also take short call once or twice a week, in which case you will receive sign out from your colleagues on the Shands services starting at 5 pm, and be responsible for all Shands neurology patients, whether ward, consult, or ED, until you sign them out to the nightfloat at 8 pm. You will be responsible for seeing new ED and inpatient consults during short call.

During the weekend there will be times when you are called upon to cover the dayshift where you will be responsible for all neurology patients on the Shands stroke service and in the ED, as well as new ED consults. These shifts are from 8 am to either 5 pm or 8 pm, depending on whether you are on short call that weekend, when you will be relieved by the overnight resident or nightfloat. Sign out responsibilities are the same as during short call.

Therefore, in summary, as the Senior resident your main administrative responsibilities include:

- supervising the entire team in caring for all in-patients and consults on the stroke neurology service on the neurology floor, NICU and ER
- distributing patients and workload to your team
- ensuring that everyone is able to attend lectures, conferences and Grand Rounds
- ensuring that daily rounds start and end on time.
- preparing your team to sign out to the night-call resident at 5pm on the weekends
- help attending field all requests for admission to the neurology service, including hospital to hospital transfers

- selecting cases to present at Grand Rounds, and preparing/supervising presentations
- preparing students, rotators, and junior residents in their case presentations to the attending physician.
- completing student evaluations daily, both formative and summative, for each student

Goals and Objectives:

Patient Care

- You should continue to refine proficiency in obtaining a complete and accurate neurological history and perform a complete neurological examination
- You should recognize the signs and symptoms of acute ischemic stroke
- You should demonstrate proficiency in the rapid assessment of stroke patients and calculation of the NIH stroke scale (NIHSS)
- You should begin to demonstrate knowledge in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the inpatient setting.
- You should effectively carry out the management plans for all your patients in an organized and efficient manner.
- You should be able to adequately carry out the management of neurological emergencies such as acute ischemic stroke (including the administration of IV tPA or referral to endovascular intervention when appropriate), acute CNS hemorrhage, brain herniation, respiratory decompensation, etc under the supervision of your senior resident and attending neurologist.
- You should demonstrate awareness in assessing the rehabilitation potential for each patient, and to make appropriate plans for rehabilitation, both during the hospital stay, and after discharge.

Medical Knowledge

- You should demonstrate basic knowledge acquired during the PGY-2 year about major stroke types that require inpatient care, and about specific neurovascular situations that require urgent or emergent responses
- You should demonstrate in-depth understanding of common and uncommon/rare stroke disorders, including basic mechanisms of disease, neuropathology, and current methods of diagnosis and treatment.

Practice-based Learning

- You should demonstrate proficiency in utilizing computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for lifelong learning. Be able to critically review the salient literature, and base treatment on the best medical evidence.
- You should demonstrate proficiency in reviewing your own practice to guide learning.
- You should demonstrate the proficiency to extract information and salient features from the history, examination, and caregiver and paramedical personnel interview, and organize them to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning.

Interpersonal and communication skills

- You should demonstrate effective communication with patients, families in the inpatient setting.
- You should demonstrate effective communication with fellow residents, attending physicians, and other health care professionals; help junior residents to improve their communication skills.
- You should demonstrate team-work: Supervise and teach neurology Junior residents, and residents from other services. You should take a leading role in student teaching; ensure that ward responsibilities are effectively shared among rotating residents.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate proficiency in discussing ethical issues of patient care with junior residents and students, and raise these issues on attending rounds. Be prepared to use selected ethical problems encountered on the ward as a focus for discussion in conferences devoted to ethical issues.
- You should make sure that your team is on time and prepared for Morning Report and daily work rounds.
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should now always demonstrate awareness and careful consideration of the costs of the resources needed to care for your patients.
- You should demonstrate the ability to lead your team, work with social services to plan for the care of patients after discharge; You should be very familiar with the resources available in the patient's community to promote the patient's health. You should make junior residents aware of these issues and resources.
- You should demonstrate proficiency in utilizing

resources in the hospital and in the community to foster the best quality care for all patients, including the poor and the uninsured.

- You should demonstrate the ability to suggest specific ways to improve the practice of stroke neurology at your institution.

5. VA In-patient/Consult Junior

Description:

You will be expected to gain experience caring for patients on the neurology in-patient and consult service, and you will assist the attending physician in supervising students and rotating residents. You will also evaluate, treat, and make dispositions on patients in the Emergency Room. You are expected to fully evaluate each patient before conferring with the attending physician. Based on your evaluation, you should be able to comment upon localization and differential diagnosis, and you should have a plan for evaluation and treatment. You must confer with the attending prior to making important decisions in the management of cases; but you should not expect that the attending will do your thinking for you. The socio-economic and emotional aspects of patient care are to be addressed, and you will be conferring with the social worker to make appropriate plans for your patients. The rehabilitation of every patient begins with admission, and you will be involved in the planning and execution of rehabilitation efforts in every patient.

Your day starts by doing your "pre rounds" from 8:00 to 9:00 am daily (except Thursdays), prior to Morning Report. Daily Morning Report is held at the VA Neurology Team Room from 9:00 to 9:30am. The post-call resident presents all admissions and consults to the neurology team. A concise but comprehensive presentation is given to the team on each patient admitted. The case, including differentials, diagnosis and management are discussed within the time allotted. Except on Thursdays, immediately following Morning Report, the in-patient and consult work rounds follow (work rounds on Thursdays occur in the afternoon after Neuro 1 clinic). The management of all new and old inpatients and consultations patients are discussed. The daily work rounds should not last longer than 3 hours. The rest of your day should be spent admitting new patients, discharging old patients, and attending all conferences during the day. As the Junior resident in this rotation, you may be assigned by your Senior resident to assess patients in the Emergency Room (ER) as promptly as possible.

You are responsible for entering each inpatient and consults seen on the inpatient admissions/consultation log in the Departmental offices.

As a resident educator, you are also responsible for preparing students, rotators in presenting their cases to the attending physician. At the end of each their rotation, each resident must complete their respective evaluation form and return it to the Neurology Office.

You are responsible for signing out your patients in an efficient but effective manner at the end of your day, 5 pm. You will also take short call several times a week, in which case you will receive sign out from your colleagues on the VA inpatient/consult service starting at 5 pm, and be responsible for all VA neurology patients, whether ward, consult, or ED, until you sign them out to the nightfloat at 8 pm. You will be responsible for seeing new ED and inpatient consults during short call.

During the weekend there will be times when you are called upon to cover the dayshift where you will be responsible for all neurology patients on the VA ward service and in the ED, as well as new Shands consults. These shifts are from 8 am to 8 pm, when you will be relieved by the overnight resident or nightfloat. Sign out responsibilities are the same as during short call.

Goals and Objectives:

Patient Care

- You should demonstrate proficiency in obtaining a complete and accurate neurological history and perform a complete neurological examination
- You should be able to perform technical skills for neurological procedures such as lumbar puncture, assessment of brain death, operating EEG long term monitoring equipment.
- You should begin to demonstrate knowledge in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the VAMC inpatient setting.
- You should effectively carry out the management plans for all your patients in an organized and efficient manner.
- You should be able to adequately carry out the management of neurological emergencies such as acute stroke, status epilepticus, spinal cord compression, brain herniation, respiratory decompensation, etc under the supervision of your Senior resident or attending neurologist.
- You should demonstrate awareness in assessing the rehabilitation potential for each patient, and to make appropriate plans for rehabilitation, both during the hospital stay, and after discharge.

Medical Knowledge

- You should demonstrate knowledge about major neurological diseases affecting veterans

that require inpatient care, including stroke, seizures, CNS infections, coma, dementia, common movement disorders, myelopathy, neuromuscular disorders, and specific neurological situations that require urgent or emergent responses.

- You should demonstrate ability to localize disease in the nervous system, and formulate a complete differential diagnosis.

- You should demonstrate knowledge about major neurological diseases that affect medical, surgical veteran patients.

Practice-based Learning

- You should demonstrate ability to use computerized and non-computerized information systems available at the veterans hospital to facilitate veterans care and to facilitate the development of techniques for lifelong learning.
- You should demonstrate the ability to extract information and salient features from the history, examination, and caregiver and paramedical personnel interview, and organize them to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate the ability to communicate effectively with your veteran patients and their families in the inpatient setting.
- You should demonstrate the ability to efficiently and effectively present information about your veteran patients to fellow residents, attending physicians, and other health care professionals.
- You should demonstrate the ability to participate with other members of the veteran health care team (nurses, physical and occupational therapists, speech therapists, social workers and others) to promote the best care for your veteran patients (teamwork).

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate the ability to recognize and deal effectively with ethical issues that arise in the management of your patients.
- You should make sure you are on time and prepared for Morning Report and daily work rounds.
- Most importantly, you should do all dictations—admission notes and discharges comprehensively and in a timely manner.

Systems-based practice

- You should demonstrate consideration the costs of medical care, and learn about resources available to all veterans to cover these costs.
- You should demonstrate the ability to work with social services, allied health professionals and the Veterans Health Care system to plan for the care of veterans after discharge; and know about the resources available in the community to promote the veteran's health.
- You should demonstrate the ability to consider and discuss ways to improve the practice of neurology at the VAMC.

6. VA In-patient/Consult Senior

Description:

As the Senior on the inpatient and consult service, you are expected to act as the Junior Attending and you will play a supervisory role in addition to caring for patients on the neurology in-patient, consult services, and the Emergency Room. Your team will usually be comprised of 1 Junior Resident, 1 medical student and other rotators. As the team leader, you are expected to assist the attending physician in supervising students and rotators. You are expected to fully evaluate each veteran patient seen by your team before conferring with the attending physician. You also have the responsibility of distributing patients and workload to your team, making sure that everyone is able to attend lectures, conferences and Grand Rounds, and ensuring that daily Morning Report and work rounds start and end on time.

Your day starts at 8am as the Senior resident to familiarize yourself with the events from last night, update the in-patient and consult census and prepare the team for Morning Report. Daily Morning Report is held from 9:00 to 9:30 am (except Thursdays from 8:00 to 8:30) at the Neurology Team Room, followed by work rounds with the attending which should last no longer than 3 hours. On Thursdays, work rounds are held in the afternoon after Neuro I clinic. It is your responsibility to ensure that Morning Report and work rounds are organized and start and end on time. The rest of your day should be spent personally admitting new patients, discharging old patients, or supervising your team members, and attending all conferences during the day. You should prepare your team to sign out to the night-call resident at 5pm every day on the weekends.

Your team is also responsible for all neurology consultations from other services and the Emergency Room (ER), including the prompt assessment of all stroke patients and the administration of tPA. You should confer each case seen in the ER with your attending physician. As the Senior on service, you will also field all requests for admission to the

neurology service, including hospital to hospital transfers from other Veterans Hospitals.

As a resident educator, you are also responsible for preparing students and rotators in presenting their cases to the attending physician. At the end of each rotation, you must complete their evaluation form and return it to the Neurology Office.

You are responsible for signing out your patients in an efficient but effective manner at the end of your day, 5 pm. You will also take short call about twice a week, in which case you will receive sign out from your colleagues on the VA inpatient/consult service starting at 5 pm, and be responsible for all VA neurology patients, whether ward, consult, or ED, until you sign them out to the nightfloat at 8 pm. When the workload is light, this short call may be taken from home if you can be back at the VAMC within 15-20 minutes of being called. You will be responsible for seeing new ED and inpatient consults during short call.

During the weekend there will be times when you are called upon to cover the dayshift where you will be responsible for all neurology patients on the VA ward service and in the ED, as well as new Shands consults. These shifts are from 8 am to 8 pm, when you will be relieved by the overnight resident or nightfloat. When the workload is light, this short call may be taken from home if you can be back at the VAMC within 15-20 minutes of being called. Sign out responsibilities are the same as during short call.

Therefore, in summary, as the Senior resident your main administrative responsibilities include:

- supervising the entire team in caring for all in-patients and consults
- distributing veteran patients and workload to your team
- ensuring that everyone is able to attend lectures, conferences and Grand Rounds
- ensuring that daily Morning Report and work rounds start and end on time.
- preparing your team to sign out to the night-call resident at 5pm on the weekends
- fielding all requests for admission to the neurology service, including hospital to hospital transfers from other Veteran Hospitals
- ensuring that each in-patient admission and consultation is entered in the admission log
- selecting cases to present at Grand Rounds, and preparing/supervising presentations
- preparing students, rotators, interns and junior residents in their case presentations to the attending physician.
- completing a student evaluation form for each student and rotator and returning it to the Neurology Office

Goals and Objectives:

Patient Care

- You should consistently demonstrate the abilities achieved in the PGY-2 year to obtain accurate histories, perform accurate neurological examinations, localize lesions, and plan for effective diagnosis, management and rehabilitation.
- You should demonstrate proficiency in the neurological examination, and in the performance of routine neurological procedures such as lumbar punctures, operating EEG long term monitoring equipment, assessing brain death, checking for the integrity of implanted devices such as baclofen pumps, deep brain stimulation and vagal nerve stimulation.
- You should demonstrate proficiency in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the inpatient setting at the level of a junior attending.
- You should demonstrate proficiency in the care and management of patients with neurological emergencies such as acute strokes (including intravenous TPA administration and other interventional procedures), status epilepticus (including placing a patient on burst suppression), brain herniation, spinal cord compression, neuroleptic malignant syndrome, and respiratory decompensation from myasthenia gravis and Guillain Barre syndrome.
- You should demonstrate proficiency in assessing the rehabilitation potential for each patient, and to make appropriate plans for rehabilitation, both during the hospital stay, and after discharge.

Medical Knowledge

- You should demonstrate basic knowledge acquired during the PGY-2 year about major neurological diseases that require inpatient care, and about specific neurological situations that require urgent or emergent responses
- You should demonstrate in-depth understanding of important neurological disorders, including basic mechanisms of disease, neuropathology, and current methods of diagnosis and treatment.
- You should demonstrate knowledge about major neurological diseases that affect medical, surgical veteran patients in the hospital.

Practice-based Learning

- You should demonstrate proficiency in using computerized and non-computerized information systems at the Veterans Health Care system to facilitate veteran care and to facilitate the development of techniques for life long learning. Be able to critically

review the salient literature, and base treatment on the best medical evidence.

- You should demonstrate proficiency in extracting information and salient features from the history and examination of your veteran patient, and their caregivers upon which to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate effective communication with veteran patients and their families in the inpatient setting.
- You should demonstrate effective communication with fellow residents, attending physicians, and other Veteran Health Care professionals; help Junior residents to improve their communication skills.
- You should demonstrate team-work: Supervise and teach PGY-2 residents, and residents from other services. You should take a leading role in student teaching; ensure that ward responsibilities are effectively shared among rotating residents.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards veteran patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate the ability to discuss ethical issues of patient care with junior residents and students, and raise these issues on attending rounds. Be prepared to use selected ethical problems encountered on the ward as a focus for discussion in conferences devoted to ethical issues.
- You should make sure that your team is on time and prepared for Morning Report and daily work rounds.
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should now always demonstrate awareness and careful consideration of the costs of the resources needed to care for your veteran patients.
- You should demonstrate the ability to lead your team, work with social services to plan for the care of patients after discharge. You should be very familiar with the resources available to the veteran community to promote your patient's health. You should make junior residents aware of these issues and resources.
- You should demonstrate how to use what you have learned from caring for veterans in the Veteran Health Care system to plan your own practice of neurology after residency.
- You should demonstrate the ability to suggest specific ways to improve the practice of neurology at the VAMC.
-

7. Nightfloat Rotation

Description:

You will be expected to gain experience in the solo practice of neurology during the nightfloat rotation. While providing coverage for two hospitals, Shands and the VAMC, and all late calls from patients you will develop your independence as a practicing neurologist, learn to assess and triage cases in the inpatient setting. You will evaluate, treat, and make dispositions on patients in the Emergency Department as well as inpatient consultations from other services. You will be able to localize neurological complaints, determine acuity of problem, derive appropriate differential diagnoses, establish an appropriate course of evaluation, again making decisions as to level of urgency for said evaluation. You will determine appropriate management and treatment for all levels of neurology care from urgent care, brief emergency visit, inpatient, and neurointensive care patients. You will be responsible for directing care overnight on neurology ward patients in the unit and on the floor.

Nightfloat is in two week blocks of six days (Sunday night to Friday night, or Monday night to Saturday night) from 8 pm to 8 am. As nightfloat, you are expected to take report from the Short Call residents covering Shands and the VA and answer all calls to neurology overnight. At 8 am you attend Morning Report where you are expected to present cases from overnight and give updates on patients being followed by neurology.

You will start rotating through Nightfloat in your PGY2 year. At this stage in your training you will be expected to gather an initial H&P, provide evaluation and management plans for common neurological complaints, and identify patients in neurological emergencies and initiate immediate treatment. You will always have the inpatient attendings on Shands and the VA available via phone at any time to review your cases and give further education and advice. At need, attendings may come into the hospital to assist in your work-up and management for particularly challenging cases.

You will continue to rotate through nightfloat in your PGY3 year. At this point in your training it is anticipated that you will be able to independently assess neurology complaints for acuity and urgency, localize the neurologic complaint, develop well crafted differential diagnoses, and order and prioritize evaluation and initial management. While some of the more esoteric or complex diagnoses may still require mentorship, you should be able to identify the categories of problem in even these cases. While attendings at Shands and the VA remain available overnight via telephone for

mentorship and back-up, it is anticipated that at this level of training this will be more of a formality rather than a necessity in all but the most vexing of cases.

Your last rotation on nightfloat will be in the first half of your PGY4 year. By this point in your training it is anticipated that you are essentially practicing at the level of an independent neurologist. You have mastered localization, development of differential diagnosis, and evaluation and management of neurology patients. You should only need to call for attending assistance for multiple simultaneous emergencies requiring back-up. The rotation at this point should show that you are able to balance the many demands of independent solo neurological practice and can efficiently pass on information during transfer of care during Morning Report, when you should be leading the discussion of the academic points of the cases seen overnight.

Goals and Objectives:

Patient Care

- You should demonstrate proficiency in obtaining a complete and accurate neurological history and perform a complete neurological examination
- You should be able to perform technical skills for neurological procedures such as lumbar puncture, assessment of brain death, operating EEG long term monitoring equipment.
- You should begin to demonstrate knowledge in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the inpatient setting.
- You should effectively carry out the management plans for all your patients in an organized and efficient manner.
- You should be able to adequately carry out the management of neurological emergencies such as acute stroke, status epilepticus, spinal cord compression, brain herniation, respiratory decompensation, etc under the supervision of your attending neurologist.

Medical Knowledge

- You should demonstrate knowledge about major neurological diseases affecting veterans that require inpatient care, including stroke, seizures, CNS infections, coma, dementia, common movement disorders, myelopathy, neuromuscular disorders, and specific neurological situations that require urgent or emergent responses.
- You should demonstrate ability to localize disease in the nervous system, and formulate a complete differential diagnosis.

- You should demonstrate knowledge about major neurological diseases that affect medical, surgical patients.

Practice-based Learning

- You should demonstrate ability to use computerized and non-computerized information systems available at the hospital to facilitate patient care and to facilitate the development of techniques for life long learning.
- You should demonstrate the ability to extract information and salient features from the history, examination, and caregiver and paramedical personnel interview, and organize them to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate the ability to communicate effectively with your patients and their families in the inpatient setting.
- You should demonstrate the ability to efficiently and effectively present information about your patients to fellow residents, attending physicians, and other health care professionals.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate the ability to recognize and deal effectively with ethical issues that arise in the management of your patients.
- You should make sure you are on time and prepared for Sign Out rounds and at the end of your nightfloat shift, Morning Report.
- Most importantly, you should do all dictations—admission notes and discharges comprehensively and in a timely manner.

Systems-based practice

- You should demonstrate consideration the costs of medical care, and learn about resources available to all patients to cover these costs.
- You should demonstrate the ability to consider and discuss ways to improve the practice of neurology overnight in the inpatient setting.

8. Pediatric Neurology Rotation

Description:
You will do a total of 3 months of Pediatric Neurology during your residency. While on Pediatric Neurology you will make rounds on pediatric neurology in-patients and attend to pediatric neurology general and specialty clinics. You will admit selected patients to the service. A pediatric resident will have the responsibility of working up each patient, and writing orders. You will function more as a consultant or advisor. You will attend the pediatric neurology clinics every morning. You are expected to attend the Pediatric Neurology morning report on Mondays at 7:30am. You also expected to prepare and deliver one pediatric neurology lecture topic for pediatric interns, residents, and medical students The following are your responsibilities while in this rotation:

1. You will be directly involved in the management of patients on the inpatient service. This includes:
   a. interviewing and examining every new admission/consult.
   b. composing an abbreviated admission note on your patients.
   c. reviewing, guiding and teaching the interns in their performance of a complete and accurate admission history and physical on every patient.
   d. leading work rounds with the intern and students.
   e. assuring that the team is prepared for rounds with the attending daily.
   f. personally reviewing all CT and MRI scan and other diagnostic tests of your patients admitted to the service and patients seen in consultation.
2. You must write a progress note on all your patients. Notes must be in "SOAP"-note format and must be written *in addition to* a medical student note.
3. You must review all student and pediatric intern notes for accuracy and correct/ amend them if necessary. You are the primary teacher of the pediatric intern and students
4. You will see consults in the ER or the general pediatric floors during daytime hours as directed by the pediatric neurology attending.
5. You will also be directly involved in the management of patients in the out-patient clinics.

Goals & Objectives:

Patient Care

- You should demonstrate the ability to obtain a history from a child's family and, when appropriate, from the child.
- You should demonstrate the ability to distinguish those features of the neurological examination of the child from the neurological examination of the adult.
- You should be able to recognize when a child is normal or has a neuropathological condition.
- You should be able to recognize and manage neurological conditions that do not require a referral, and you should be able to initiate management of neurological conditions generally requiring referral
- You should know the indications for neurological tests.
- You should know the uses, side effects, and mode of action of commonly used neurological drugs.

Medical Knowledge

- You should demonstrate knowledge of fetal development, and the susceptibility of the fetus to maternal disease, drugs, hypoxia, hyperbilirubinemia, and similar disorders.
- You should know the normal development of the infant and young child.
- You should demonstrate proficient knowledge of the common "bread and butter" problems of child neurology, including seizures, movement disorders, migraine, other headaches, developmental delay, sleep problems, and inflammatory conditions of the nervous system including meningitis, encephalitis, transverse myelitis, and Guillain-Barré syndrome.
- You should demonstrate adequate knowledge of less common problems, including leukoencephalopathies, progressive epilepsies, brain tumors, and muscular dystrophies. When appropriate, you should demonstrate the ability to review the genetic, molecular, and neuropathologic basis of the inherited neurological disorders of childhood.

Practice-based Learning

- You should be able to use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for lifelong learning. You should be able to critically review the salient literature, and base treatment on the best medical evidence.
- You should demonstrate proficiency in extracting information and salient features from the history and examination of your pediatric patient, and their parents upon which to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate the ability to communicate with your patients' families and with pediatric patients, when applicable.

- You should be able to communicate with clerks, secretaries, nursing staff, other residents, consulting residents and attendings, and neurology attending staff, and with referring physicians.
- You should demonstrate team-work skills, including the supervision of pediatric residents and students.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues that are germane to pediatric practice.
- You should be on time and prepared for weekly Morning Report and daily work rounds.
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should demonstrate consideration of cost and appreciation of resources available to pediatric patients to cover the costs of medical care
- You should demonstrate the ability to work with social services to plan for the care of patients after discharge; Learn about resources available in your patient's community to promote your patient's health.

9. Continuity Clinic Longitudinal Rotation

Description:
You will follow selected patients whom you have cared for on the wards, seen in consultation, or evaluated in the clinics, in a continuity clinic, held one half day each week, alternately at Shands or at the VA, regardless of your current block rotation/tour of duty with the exception of Nightfloat. You will also see new general neurology patients.

When you begin your residency, you will pick up patients from outgoing residents. In addition, you will also schedule all patients that you have seen in the in-patient who require out-patient follow-up in your return clinics. You may also schedule patients you have seen in the Emergency Room or on consults or some of the patients evaluated by rotating residents (e.g., neurosurgical residents on the VA ward service) that you have supervised. Remember, you need not follow these patients indefinitely. Discharge patients who do not require specialized neurological follow-up to the care of their primary physician. A dedicated attending is available during each of the resident continuity clinic days. Every patient must be staffed by the attending. It is necessary to learn how a disease process develops and to develop management strategies. This is something only learned from experience. But, just as importantly, once you have constructed an adequate treatment course and the patient will no longer benefit from your continued specialty care, you must also learn how to terminate follow-up. Do not hesitate to ask you attending for assistance.

If you are unable to attend one of your return clinics because of vacation or unusual circumstances, you must cancel your clinic at least 60 days in advance. It places a considerable burden on secretarial staff to call patients and reschedule them, and it can be a major inconvenience to your patients. If you do cancel a clinic, be sure that patients are rescheduled on a timely basis. It may be necessary to schedule an extra clinic to avoid problems with patient care.

It is important that you follow patients at appropriate intervals. Since you will have a continuity clinic every other week at each institution, you should be able to accommodate most patients within an adequate time. If patients require more urgent evaluation, you can arrange to see them in clinic as "special patients" in one of the attending's clinics. Emergent conditions can be referred to the Emergency Department, but you should continue to oversee the neurological care of these patients, or, if you cannot, at least remain informed about the patient's condition and progress.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to obtain accurate histories, perform accurate neurological examinations, localize lesions, and plan for effective diagnosis, management and rehabilitation in patients with chronic neurological disorders.
- You should know the complications and course of neurologic illness, learn how to use medications and how to monitor and recognize side effects of medications; learn about the appropriate use of non-medication treatments and how and when to refer.
- You should be able to formulate an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the outpatient setting.
- You should be able to effectively carry out the out-patient management of common neurological disorders seen in the general neurology clinic.

Medical Knowledge

- You should demonstrate facility in discussing major neurological diseases that are managed in the out-patient setting, and mastery of current evidence from knowledge of the literature.
- You should demonstrate mastery in the understanding of common and adequate understanding of less common neurological disorders, including a thorough understanding of basic mechanisms of disease, neuropathology, and current methods of diagnosis and

treatment.

- You should demonstrate proficiency in the diagnosis and management of neurological disorders seen in the general neurology clinics such as pain, headache, seizures, neuropathy, myasthenia gravis, Parkinson's disease, Alzheimer's disease, post-stroke, and multiple sclerosis.
- You should be familiar with common outpatient neurological procedures such as botulinum toxin injection, interrogation of devices such as deep brain stimulation and vagal nerve stimulation settings; and be fluent in the interpretation of EEG, evoked potentials, EMG, NCV, muscle biopsies, polysomnographies, neuropsychological reports, PET, SPECT, MRI and CT images.

Practice-based Learning

- You should demonstrate the ability to use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for lifelong learning. You should be able to critically review the salient literature, and base treatment on the best medical evidence.
- After your PGY-2 year, you should demonstrate the abilities similar to those of a junior attending physician to abstract from the history and examination the salient features upon which to base your differential diagnosis and management.
- You should demonstrate the ability to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate effective communication with patients, families in the outpatient setting
- You should demonstrate effective communication with clinic staff (schedulers, nurses), and with patient's referring physicians, other health professionals and health-related agencies to ensure proper delivery of care.
- You should demonstrate the ability to orient, teach, and assist medical students, interns and other residents on their neurology out-patient rotation.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should know when to refer and coordinate the care of your more complicated patients from your general neurology continuity clinic to subspecialty clinics such as Movement Disorders, Epilepsy, Behavioral Neurology, Multiple Sclerosis, Botulinum Toxin, and Neuromuscular clinics.
- You should demonstrate knowledge of resources available in the patient's community to promote the patient's health.
- You should demonstrate knowledge of Medicare billing and documentation requirements; about the variety of public and private insurance plans; and, about resources (or the lack of resources) for uninsured patients.
- You should demonstrate the ability to use resources in the hospital and in the community to foster the best quality care for all patients, including the poor and the uninsured.

10. VA Neuro I Longitudinal Clinic Rotation

Description

This is a weekly "new" clinic for veterans held every Thursday mornings from 8:00 to early afternoon. You must attend VA Neuro 1 clinic throughout your three years of residency regardless of your rotation/tour of duty except when you are on service at Shands or on Pediatric Neurology rotation. A neurology attending is always available for consultation. If you are unable to attend one of your return clinics because of vacation or unusual circumstances, you must cancel your clinic at least 60 days in advance. It places a considerable burden on secretarial staff to call veterans and reschedule them, and it can be a major inconvenience to your veteran patients.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to obtain accurate histories, perform accurate neurological examinations on your veteran patients, localize lesions, and plan for effective diagnosis, management and rehabilitation in patients with chronic neurological disorders.
- You should know the complications and course of neurologic illness, learn how to use medications and how to monitor and recognize side effects of medications; learn about the appropriate use of non-medication treatments and how and when to refer.
- You should be able to formulate an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the outpatient VAMC setting.
- You should be able to effectively carry out the out-patient management of common neurological disorders seen in the general veterans neurology clinic.

Medical Knowledge

- You should demonstrate facility in discussing major neurological diseases that are managed in the out-patient setting, and mastery of current evidence from knowledge of the literature.
- You should demonstrate mastery in the understanding of common and adequate understanding of less common neurological disorders, including a thorough understanding of basic mechanisms of disease, neuropathology, and current methods of diagnosis and treatment.
- You should demonstrate proficiency in the diagnosis and management of neurological disorders seen among veterans such as pain, headache, seizures, neuropathy, myasthenia gravis, Parkinson's disease, Alzheimer's disease, post-stroke, multiple sclerosis, post-traumatic stress disorders, and agent orange syndrome.
- You should be familiar with common outpatient neurological procedures such as botulinum toxin injection, interrogation of devices such as deep brain stimulation and vagal nerve stimulation settings; and be fluent in the interpretation of EEG, evoked potentials, EMG, NCV, muscle biopsies, polysomnographies, neuropsychological reports, PET, SPECT, MRI and CT images.

Practice-based Learning

- You should demonstrate the ability to use computerized and non-computerized information systems to facilitate veteran patient care and to facilitate the development of techniques for life long learning.
- You should be able to critically review the salient literature, and base treatment on the best medical evidence.
- After your PGY-2 year, you should demonstrate the abilities similar to those of a junior attending physician to abstract from the history and examination the salient features upon which to base your differential diagnosis and management.
- You should demonstrate the ability to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate effective communication with your veteran patients and their families in the outpatient setting
- You should demonstrate effective communication with clinic staff (schedulers, nurses), and with patient's referring physicians at the VAMC outpatient facilities.
- You should demonstrate the ability to orient, teach, and assist medical students, interns and other residents on their neurology out-patient rotation.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should know when to refer and coordinate the care of your more complicated patients from your general neurology continuity clinic to subspecialty clinics such as Movement Disorders, Epilepsy, Behavioral Neurology, Multiple Sclerosis, Botulinum Toxin, and Neuromuscular clinics.
- You should demonstrate knowledge of resources available in the veteran patient's community to promote the patient's health.
- You should demonstrate the ability to use resources at the VAMC and in the community to foster the best quality care for all veteran patients.

B) Selective Rotations:

1. General Neurology Clinic Block

Description:
The general neurology clinic rotation provides an opportunity to see patients with important and interesting disorders who do not qualify for admission to the hospital. You will work up new patients and see return patients with general neurologic complaints during each half-day clinic, under the supervision of one or more neurology attendings. You will discuss each case with the attending. For the more challenging patients, you should research the patients' problems after the clinic visit, and discuss your assessment with an attending.

The clinic rotation will be comprised of 10 half-day blocks. The resident is typically expected to be at the general clinic from 8AM to 12 Noon and 1PM to 5PM, Monday to Friday, except holidays unless otherwise notified. However, 2 blocks are reserved for your own Continuity Clinic, for Neuro I Clinic at the VAMC. In addition to general neurology clinics, you will also have the opportunity depending on availability to rotate through an MS clinic and Headache clinic during this rotation.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to obtain a complete and accurate neurological history and examination

- You should demonstrate the ability to localize disease in the nervous system, and formulate a complete differential diagnosis.
- You should be able to formulate an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the outpatient setting.
- You should be able to carry out the out-patient management of common neurological disorders seen in the general neurology clinic; and assist in the delivery of out-patient care of patients seen in the general neurology clinics.

Medical Knowledge

- You should demonstrate knowledge about major neurological diseases that are diagnosed and managed in the out-patient setting.
- You should demonstrate in-depth understanding of important outpatient neurological disorders, including basic mechanisms of disease, neuropathology, and current methods of diagnosis and treatment.
- You should be familiar with common outpatient neurological procedures encountered in the outpatient setting and their interpretation including but not limited to botulinum toxin injection, interrogation of devices such as deep brain stimulation and vagal nerve stimulation settings; and be fluent in the interpretation of EEG, evoked potentials, EMG, NCV, muscle biopsies, polysomnographies, neuropsychological reports, PET, SPECT, MRI and CT images

Practice-based Learning

- You should demonstrate the ability to use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for life long learning.
- You should demonstrate ability in extracting information and salient features from the history and examination of your patient, and their caregivers upon which to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning.

Interpersonal and communication skills

- You should demonstrate your ability to communicate effectively with patients, families in the outpatient setting.
- You should demonstrate your ability to communicate with clinic staff (schedulers, nurses), and with patient's referring physicians.
- You should demonstrate your ability to orient, teach, and assist the medicine resident and medical student on their neurology rotation.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate the ability to recognize and deal effectively with ethical issues that arise in the management of your patients.
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should demonstrate knowledge of resources available in the patient's community to promote the patient's health.
- You should demonstrate knowledge about Medicare billing and documentation requirements; about the variety of public and private insurance plans; and about resources available for uninsured patients.
- You should demonstrate the ability to consider and discuss ways to improve communication between services and enhance the outpatient practice of neurology at your institution

2. Epilepsy I Rotation

Description:
You will spend 1 month during your PGY2 year in this selective rotation. You will round on the EMU service daily, and develop basic EEG reading and review skills. You will work with the EEG technicians to learn how to perform an EEG both at Shands and the VAMC. You will also watch the technicians perform evoked potential studies as available, and review these studies with the attending at Shands and the VAMC. You will become familiar with the EEG monitoring setup, and participate in the decision-making process in the evaluation of patients for seizures and seizure surgery.

You are expected to attend clinic at assigned times and evaluate both new and return patients. Friday mornings are generally spent at the VA reading available studies and participating in journal club. If multiple residents are on service, one may be assigned to clinic or Long Term Monitoring. (LTM)

You are expected to provide the routine care for patients admitted to the Epilepsy Monitoring Unit (EMU) at Shands as well as to be an emergency responder for the EEG technologists in conjunction with the epilepsy fellow in case of questions or emergencies such as status epilepticus. This includes the prompt performance of the admission history and examination, admitting orders, daily progress notes and

discharge summaries. You will round daily on your EMU patient along with the EMU attending of the week. . You will be responsible for signing out any pertinent information to the on-call resident at the end-of-day. You may also act as the liaison between the EMU attending and the Consult or Neurology In-patient team and assist in the management of patients in status epilepticus or in long-term EEG monitoring as well as any additional consultations performed by the EEG/EMU service.

As time permits, you are encouraged to read EEGs with the pediatric neurology attending in order to gain familiarity with the similarities and differences. You are not expected to round with them during this rotation.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to obtain accurate histories, perform accurate neurological examinations, localize lesions, and plan for effective diagnosis and management of patients admitted to the EMU and seen in the Epilepsy clinics.
- You should demonstrate proficiency in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies for your epileptic patients.
- You should demonstrate proficiency in the care and management of patients with epilepsy, including those in convulsive and non-convulsive status epilepticus. This includes a basic working knowledge of medications and both urgent and emergent care for seizing patients.

Technical Knowledge

- You should know the placement of EEG electrodes and methods of recording
- You should be able to describe problems associated with scalp electrodes and artifacts that may develop during recording
- You should know the ways in which age, level of consciousness, stage of sleep, systemic and neurological disorders, and epilepsy affect the EEG.
- You should know the physiology underlying clinical EEG; recognize the neuronal (i.e. microscopic) origin of macroscopic brain electrical activity and conceptualize neuronal synchronization as a consequence of the interconnectedness of brain circuitry
- You should be able to recognize and describe the common EEG patterns (alpha, beta, theta, and delta waves), what they represent, and where they are recorded
- You should be able to describe the two types of sleep (slow wave sleep and REM sleep)
- You should demonstrate knowledge of the principles underlying evoked response testing (visual, auditory and somatosensory)
- You should be able to define epilepsy and describe the general classification of epileptic seizures with EEG correlation.

Practice-Based Learning

- Demonstrate the ability to use texts, on-line resources, and computerized databases to effectively research best medical practice; education and sharing of information with the team is expected.
- You should demonstrate proficiency in extracting information and salient features from the history and examination of your EMU patient, upon which to base your differential diagnosis and management.

Interpersonal and communication skills

- Develop the ability to present a history and physical examination for epilepsy patients and begin to develop care plans both for the short and long term.
- You should demonstrate the ability to communicate results of studies to physicians and patients and develop patient education skills for counseling epileptic patients and their families.

Professionalism

- You should demonstrate dedication to work, respect for the feelings of patients, and willingness to acknowledge mistakes, and dedication to improving performance.
- You should be on time and be prepared for all work rounds and EEG reading sessions.
- You should dictate all admission and discharge notes in the most comprehensive, accurate and timely manner as well as review them for prompt cosigning.

Systems-based Practice

- You should demonstrate knowledge of the cost-effective use of electrodiagnostic procedures; and, about the contribution of procedure-based billing to the economic health of neurologic practice

3. Behavioral Neurology Clinic Rotation

Description:
Residents evaluate patients with neurobehavioral disorders in the Memory and Cognitive Disorders Clinics, Traumatic Brain Injury Clinic, and on rare occasion in consultation on the wards. They are supervised by attending faculty from neurology. Patients with the full spectrum of dementing diseases, traumatic brain injury, encephalopathies, plus patients with focal neurobehavioral syndromes such as aphasia, alexia, agnosia, or apraxia, are discussed in detail.

Residents will observe and learn about neuropsychological testing used to assess specific disorders, such as disorders of language or memory. Residents attend all Memory and Cognitive Disorders Clinics at Shands and the VA, especially the Wednesday Memory Disorders Clinic with Dr. Heilman that begins at 11 am. In addition, residents are expected to attend Tuesday Grand Rounds and weekly Dementia Consensus Conference (check with rotation attendings for date and time). Residents attend behavioral neurology conferences, including the weekly meetings of the Center for Neuropsychological Studies on Fridays from 1:30 – 2:30 in the VA 3rd floor conference room E-336 from Labor Day to Memorial Day, as well as monthly Language and Brain Group meetings from 2:30 – 3:30 pm (immediately following CNS lecture in same location). There is also the option to attend Dr. Heilman's Friday noon lab meeting in lieu of Friday noon resident conference (prior permission required and attendance at one or the other is mandatory).

Goals and Objectives:

Patient care

- You should be proficient in performing a complete mental status examination. You should use the Florida Mental Status Examination as a guide.
- You should demonstrate the ability to develop hypotheses to explain specific behaviors, and how to examine the patient to test these hypotheses.
- You should demonstrate the ability to develop differential diagnostic considerations, plans for assessment and for treatment of patients with behavioral disorders, including when to order and how to be guided by neuropsychological testing.
- You should demonstrate knowledge of how "neurologic" disorders produce "psychiatric" symptoms, and how to distinguish illnesses that are traditionally called psychiatric from degenerative and other neurological disorders.

Medical knowledge

- You should demonstrate knowledge of the anatomic basis of behavior, and about the lesions associated with specific behavioral disorders.
- You should demonstrate knowledge about dementia, its forms, and causes, including genetic and biochemical disorders.
- You should demonstrate knowledge about the effects of drugs on behavior, both toxic and therapeutic.

Practice-based Learning

- You should demonstrate the ability to computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for lifelong learning. Be able to critically review the salient literature, and base treatment on the best medical evidence.

Interpersonal and communication skills

- You should demonstrate the ability to communicate with patients who have behavioral disorders, and with their families.
- You should demonstrate the ability to work with behavioral neurology fellows to improve your knowledge of patient care and research in behavioral neurology.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues involved in the care of patients with behavioral disorders, including competency, and the appropriate use of surrogates to make medical decisions.

Systems-based practice

- You should demonstrate knowledge about resources available in the patient's community to promote the patient's health.
- You should demonstrate knowledge about the resources available to assist patient with behavioral disorders and to assist their families.

4. Movement Disorders Clinic Rotation

Description:

During this selective you will learn how to identify the different types of hypo- and hyper-kinetic movement disorders. You will be familiar with the most common movement disorders (such as Parkinson's disease, Essential Tremor and dystonia) and also have the opportunity to see rare movement disorders (such as neuroacanthocytosis, Lubag disease, spinocerebellar ataxias, dystonia-myoclonus syndrome, etc). You will learn how to manage these disorders in an interdisciplinary fashion. This rotation is predominantly outpatient based where you will join the Movement Disorders attendings in their clinic. In particular, you will join new and follow up general movement disorders clinics, botulinum toxin clinics, fast-track surgical screening clinics, DBS clinics, Huntington's disease clinics, Parkinson Day Clinical and Educational programs, etc. You also have the option of observing DBS surgery while on this rotation. You are expected to attend the weekly alternating clinical and research Movement Disorders Conference every Tuesday from 8-9 am at the UF MBI, the monthly journal club from 10-11 am the first Tuesday each month, and the monthly video lecture series from 10-11am the fourth Tuesday each month.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to examine for and recognize the variety of movement disorders encountered in clinical practice.
- You should demonstrate the knowledge of the optimal management of the movement disorders, specifically, the optimal management of patients with Parkinson's disease in the early, middle and late stages of progression.
- You should demonstrate the knowledge of the pharmacologic agents used in treatment, including the indications, side effects, and drug interactions of each, and have some understanding of non-pharmacologic treatments, including the importance of physical and occupational therapy, as well as the indications for surgical procedures such as DBS.
- You should demonstrate appreciation of the limits of medical therapy, and the need for developing strategies to assist the patient and family to cope with effects of the illness.
- You should be familiar with the proper administration of botulinum toxin therapy and its various neurological indications.

Medical Knowledge

- You should demonstrate the knowledge of relevant neuroanatomy, with particular attention to cortical motor systems, the basal ganglia, and brain stem and cerebellar systems involved in motor control. You should demonstrate the knowledge of the connectivity of these regions, including motor and supplementary motor cortex, neostriatum (caudate, putamen), globus pallidus, subthalamic nucleus, thalamus, substantia nigra, cerebellar hemispheres and nuclei, and red nucleus.
- You should demonstrate the knowledge of the neurochemistry of motor systems, with special attention to the dopaminergic system. Demonstrate the knowledge of the biochemical pathways of dopamine synthesis and degradation, and how toxins and pharmacologic agents influence these pathways.
- You should demonstrate the knowledge of the genetic basis and neurochemical pathogenesis of the movement disorders that have been related to specific mutations, including inherited forms of PD, the spinocerebellar degenerations, and the inherited dystonias. Demonstrate the knowledge of how the science of genetics informs clinical practice.
- You should demonstrate the knowledge of the clinical presentations of the disorders included among movement disorders.
- You should be familiar with the different types of botulinum toxins and their advantages and disadvantages, differences in their mechanism of action, and dosing in different muscle and age groups.

Practice-based Learning

- You should demonstrate the use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for life long learning. Be able to critically review the salient literature, and base treatment on the best medical evidence.
- You should demonstrate the ability to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate effective communication with patients with movement disorders and their families
- You should demonstrate effective communication with clinic staff (schedulers, nurses), and with patient's referring physicians.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues in Movement Disorders, such as the weighing the risk-benefit ratio of a patient who is intent on having DBS surgery.
- You should ensure that office visit dictations for all patients seen are comprehensive, accurate and finished in a timely manner.

Systems-based practice

- You should demonstrate knowledge about resources available in the patient's community to promote the patient's health.
- You should demonstrate the knowledge about Medicare billing and documentation requirements; about the variety of public and private insurance plans; and, about resources (or the lack of resources) for uninsured patients.
- You should observe the interdisciplinary model used for the outpatient care of the movement disorders patients and realize its advantages and develop similar practices in the way you care for your own patients.

5. Neuromuscular Clinic Rotation

Description:
One block of this selective rotation is provided during your residency. You will learn the clinical approach to patients with neuromuscular problems, review EMG and biopsy results and other results with a view to correct diagnosis, and learn the basics of pharmacological and non-pharmacological therapy as it applies to neuromuscular disease. You will also learn the basics of nerve conduction

and EMG, and the anatomy underlying these studies. You will learn how to use the equipment and to perform nerve conduction studies first on normal subjects, and then on patients, under the supervision of the EMG technician, the Clinical Neurophysiology Fellow, or the Attending Neurologist, and then more independently. You will also perform needle EMG examination under direct supervision. You will learn to analyze clinical situations, plan appropriate diagnostic studies, and begin to interpret studies and formulate reports. You are welcome to do more EMG block rotations throughout your residency to hone these skills, and to be able to proficiently plan and carry forth the electrodiagnostic examination of patients with neuromuscular disorders. (Needle EMG studies are *never* to be done without direct attending supervision.) This rotation will take place both at Shands Medical Plaza and the VAMC clinic facility.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to obtain a focused neurological history and neurological examination focusing on the peripheral nervous system.
- You should demonstrate knowledge of the technical basics of performing and interpreting the results of nerve conduction studies and electromyography.
- You should demonstrate the ability to use nerve conduction studies and electromyography to test hypotheses regarding patient differential diagnosis.
- You should demonstrate knowledge to use the results of nerve conduction studies and electromyography in planning appropriate treatment recommendations.

Medical Knowledge

- You should demonstrate knowledge on how to localize a patient's problem in terms in terms of the anatomy and physiology of the peripheral nervous system.
- You should demonstrate knowledge about the specific categories of diseases that affect the peripheral neuromuscular system and to formulate testable hypotheses with respect to differential diagnosis.

Practice-Based Learning

- You should be able to use texts, on-line resources, and computerized databases to effectively research best medical practice

Interpersonal and Communication Skills

- You should demonstrate the ability to communicate the results of an electrodiagnostic consultation to patients and to referring physicians.

Professionalism

- You should demonstrate dedication to work, respect for the feelings of patients, and willingness to acknowledge mistakes, and dedication to improving performance
- You should dictate all EMG and NCS procedure notes in a timely manner and relay findings to the requesting primary service

Systems-based Practice

- You should demonstrate knowledge of the cost-effective use of electrodiagnostic procedures; and, about the contribution of procedure-based billing to the economic health of neurologic practice.

6. Neuropsychiatry Rotation

Description:
During your selective month on neuropsychiatry, you will work on the geropsychiatry unit mainly at the VAMC. You will attend Memory Disorders Clinic, and you will attend psychiatry teaching conferences and the conference of the Center for Neuropsychological Studies. The psychiatry teaching conferences include the student lecture series, psychopharmacology lecture series, and a lecture series for neurology residents on psychiatric disorders that present with neurological symptoms. There may also be opportunities to participate in the Tourette's/OCD clinic, and to visit the State Mental Hospital.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to interview patients with behavioral disorders, and to acquire accurate histories from all available sources.
- You should demonstrate the ability to examine patients with behavioral disorders, and to formulate reasonable differential diagnoses.
- You should demonstrate the ability to formulate treatment plans, including behavioral strategies and pharmacologic treatments and carry them out in a compassionate and competent manner.

Medical Knowledge

- You should demonstrate knowledge about psychiatric disorders that manifest with neurological symptoms, such as somatiform disorder, factitious disorder, conversion disorder, and pain disorder.
- You should demonstrate knowledge of the psychiatric manifestations of neurological disease, and of drugs commonly used by neurologists
- You should know the neurobiologic basis of psychiatric disease, including neurotransmitter balance, and the effects of psychotherapeutic agents
- You should know the indications, side effects, interactions, and therapeutic doses of commonly used

psychotherapeutic agents.

Practice-based Learning

- You should demonstrate the use of the computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for lifelong learning. Be able to critically review the salient literature, and base treatment on the best medical evidence.
- You should demonstrate the use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate the ability to communicate with patients, families, staff, residents and attendings
- You should demonstrate team-work: work effectively with other members of the psychiatry team to ensure that patients get the best possible care.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues in psychiatry.

Systems-based practice

- You should demonstrate consideration of the special problems entailed in obtaining and paying for psychiatric care;
- You should demonstrate appreciation of resources available to patients with behavioral and psychiatric disorders in the community.

7. Concentrated Study of Basic Science—Neuroscience Rotation

Description:

During your PGY4 year of neurology residency, you will help teach the Neuroscience course to medical students. You will participate in laboratory exercises and attend course lectures. You will read all course material and should be available to tutor students. You will conduct clinical teaching exercises during this course. This rotation is 5 weeks in duration and is the longest block rotation during your residency training. The curriculum of this neuroscience course includes:

- Neuroanatomy: Major divisions, ventricular system, meninges, cortex, white matter, subcortical gray structures, diencephalon, brain stem, cerebellum, spinal cord & spinal meninges.
- CNS vasculature, blood flow, and metabolism
- Neurohistology: cellular classes; blood brain barrier; cellular organization
- Chemical Neurotransmission: Synaptic transmission; glutamate, GABA, Glycine, the neuropeptides, the catecholamines, serotonin, acetylcholine
- Neurophysiology: The membrane potential, the action potential, the neuron as an integrative structure, axonal conduction and the role of myelin, maintenance of ionic gradients.
- The Motor System: the motor unit, segmental reflexes, spinal cord reflex systems, spinal cord motor systems, brainstem centers for tone, posture and movement, bladder & bowel control, corticospinal system, basal ganglia, cerebellum.
- Somathesis: peripheral afferents and receptors, CNS sensory pathways, somatosensory cortex, trigeminal system.
- Pain systems: CNS modulatory mechanisms, peripheral mechanisms, neurogenic pain, the generation of chronic pain states.
- Cranial nerves and Brainstem organization
- Vision: retinal organization, visual pathways neurophysiology and Processes underlying Feature Enhancement; pupillary responses to light; vascular supply of the eye
- Intracranial Pressure and papilledema
- Auditory and Vestibular systems: hearing (cochlea anatomy, transduction of the auditory signal, generation of the neural signal, central auditory pathways, signal processing in the auditory cortex
- Autonomic, neuroendocrine and regulatory functions: the hypothalamus, autonomic nervous system, neuroendocrine function, hypothalamic regulatory systems, hypothalamic drive systems, brainstem regulatory systems.
- Higher Neural Functions: cerebral cortical anatomy, functions of sensory association cortices, functions of polymodal and supramodal cortices, the limbic system, memory, frontal systems, arousal, attention and selective engagement, parallel distributed processing.

Goals and Objectives:

Patient Care

- Not applicable

Medical Knowledge

- By the end of the rotation, you are expected to demonstrate a good fund of knowledge of the biological bases of neurological disorders.
- You should be well-versed on neuroanatomy, neurohistology/pathology, neurophysiology, neurochemistry, genetics, and the principles of neuropharmacology.

Practice-based Learning

- You should demonstrate the ability to use the library and computer resources to find needed information and improve teaching skills

Interpersonal and communication skills

- You should demonstrate the ability to encourage medical students and teach them how to apply basic neuroscience knowledge in the clinical arena.

Professionalism

- You should demonstrate attitudes that foster the values of teaching, analytical thinking and need for lifelong learning.
- You should attend all lectures and exercises during this course and be on time.

Systems-based practice

- Not applicable

8. Concentrated Study of Basic Science—Neuropathology

Description:
You must take at least one month of Neuropathology. During this time you will work under Dr. Yachnis and other neuropathology attendings and fellows, and you will attend conferences in Neuropathology, including brain-cutting, pathology residents' conferences, Pediatric and Adult Neuropathology conferences, and the weekly tumor board conference (see above).

Goals and Objectives:

Patient Care

- Not applicable

Medical Knowledge

- You should demonstrate the ability to handle gross brain and brain sections to further enhance their knowledge of neuroanatomy and further appreciate and correlate the clinical manifestations of neurological disorders
- You should demonstrate the ability to acquire a solid fund of knowledge of normal microscopic anatomy and become familiar with the pathologic features of common neurologic illnesses, most especially, brain tumors, infections, neurodegenerative disorders, muscle and nerve disorders.

Practice-based Learning

- You should demonstrate the ability to use the library and computer resources to find needed information.
- You should demonstrate the ability to gain a solid understanding of the clinical utility of neuropathology in the practice of neurology in the diagnosis and prognosis of specific neurologic disorders. In particular, the proper utility of brain, muscle and nerve biopsies

Interpersonal and communication skills

- You should demonstrate the ability to encourage effective teaching and communication to medical students, fellow residents and attendings through the responsibility of preparing the protocols for the weekly clinico-pathological conferences.

Professionalism

- You should demonstrate attitudes that foster the values of teaching, analytical thinking and need for lifelong learning.

Systems-based practice

- You should demonstrate knowledge of cost effective use of brain, muscle and nerve biopsies and the importance of autopsies.

9. Epilepsy II Rotation

Description:
You will spend 1 months during your time as a senior resident in this selective rotation. While this rotation is similar to the Epilepsy I Rotation you had early in your PGY2 year, it greatly increases the amount of responsibility you have for more independent, less directly supervised, practice of Epilepsy subspecialty neurology. You are expected to take increasing responsibility for treatment plans in the clinical setting and will be expected to begin to dictate studies, independently reviewing them prior to reading sessions with the attending whenever time permits. You will also be responsible for article selection for journal club when applicable. You will round on the EMU service daily, and demonstrate EEG reading and review skills. You will work with the EEG technicians to demonstrate knowledge of how to perform an EEG both at Shands and the VAMC. You will also work with the technicians to perform evoked potential studies as available, and review these studies independently and present them to the attending for final review with the attending at Shands and the VAMC. You will show you are familiar with the EEG monitoring setup, and lead in the decision-making process in the evaluation of patients for seizures and seizure surgery.

You are expected to attend clinic at assigned times and evaluate both new and return patients. Friday mornings are generally spent at the VA reading available studies and participating in journal club.

You are expected to provide the routine care for patients admitted to the Epilepsy Monitoring Unit (EMU) at Shands as well as to be an emergency responder for the EEG technologists in conjunction with the epilepsy fellow in case of questions or emergencies such as status epilepticus. This includes the prompt performance of the admission history and examination, admitting orders, daily progress notes and discharge summaries. You will round daily on your EMU patient along with the EMU attending of the week. You will be responsible for signing out any pertinent information to

the on-call resident at the end-of-day. You may also act as the liaison between the EMU attending and the Consult or Neurology In-patient team and assist in the management of patients in status epilepticus or in long-term EEG monitoring as well as any additional consultations performed by the EEG/EMU service.

As time permits, you are encouraged to read EEGs with the pediatric neurology attending in order to gain familiarity with the similarities and differences. You are not expected to round with them during this rotation.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to obtain accurate histories, perform accurate neurological examinations, localize lesions, and plan for effective diagnosis and management of patients admitted to the EMU and seen in the Epilepsy clinics.
- You should demonstrate proficiency in creating an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies for your epileptic patients.
- You should demonstrate proficiency in the care and management of patients with epilepsy, including those in convulsive and non-convulsive status epilepticus. This includes a basic working knowledge of medications and both urgent and emergent care for seizing patients.

Technical Knowledge

- You should know the placement of EEG electrodes and methods of recording
- You should be able to describe problems associated with scalp electrodes and artifacts that may develop during recording
- You should know the ways in which age, level of consciousness, stage of sleep, systemic and neurological disorders, and epilepsy affect the EEG.
- You should know the physiology underlying clinical EEG; recognize the neuronal (i.e. microscopic) origin of macroscopic brain electrical activity and conceptualize neuronal synchronization as a consequence of the interconnectedness of brain circuitry
- You should be able to recognize and describe the common EEG patterns (alpha, beta, theta, and delta waves), what they represent, and where they are recorded
- You should be able to describe the two types of sleep (slow wave sleep and REM sleep)
- You should demonstrate knowledge of the principles underlying evoked response testing (visual, auditory and somatosensory)
- You should be able to define epilepsy and describe the general classification of epileptic seizures with EEG correlation.
- You should perform an EEG under supervision of one of the senior technologists.

Practice-Based Learning

- Demonstrate the ability to use texts, on-line resources, and computerized databases to effectively research best medical practice; education and sharing of information with the team is expected.
- You should demonstrate proficiency in extracting information and salient features from the history and examination of your EMU patient, upon which to base your differential diagnosis and management.

Interpersonal and communication skills

- Develop the ability to present a sophisticated history and physical examination for epilepsy patients and begin to develop care plans both for the short and long term.
- You should demonstrate the ability to communicate results of studies to physicians and patients and develop patient education skills for counseling epileptic patients and their families.

Professionalism

- You should demonstrate dedication to work, respect for the feelings of patients, and willingness to acknowledge mistakes, and dedication to improving performance.
- You should be on time and be prepared for all work rounds and EEG reading sessions.
- You should dictate all admission and discharge notes in the most comprehensive, accurate and timely manner as well as review them for prompt cosigning.

Systems-based Practice

- You should demonstrate knowledge of the cost-effective use of electrodiagnostic procedures; and, about the contribution of procedure-based billing to the economic health of neurologic practice

C. Elective Rotations:

1. Out-patient Clinics Block Elective

Description:
The clinic elective provides an opportunity to see patients with important and interesting disorders who do not qualify for admission to the hospital. You will review prospective patients with the clinic appointment secretary in the

Neurology Office, and select those who appear to have interesting problems, especially those that you feel you need more experience seeing. You will work up two to four such patients during each half-day clinic, under the supervision of one or more neurology attendings. You will discuss each case with the attending. For the more challenging patients, you should research the patients' problems after the clinic visit, and discuss your assessment with the attending. For these cases, it is expected that your letters will be well-referenced.

The clinic rotation will be comprised of 10 half-day blocks. The resident is expected to be at the subspecialty clinic from 8AM to 12 Noon and 1PM to 5PM, Monday to Friday, except holidays. However, 2 blocks are reserved for your own Continuity Clinic, for Neuro I Clinic at the VAMC and Tuesday am block should end early for attending the weekly Grand Rounds/Lectures. You are required to select 5 blocks on the following clinics: Neuromuscular clinic; Movement Disorders or Botulinum toxin clinic; "Episodic" Disorders (Epilepsy, Pain, Multiple Sclerosis) clinic; General Adult or Pediatric Neurology clinic; and Memory Disorders Clinic. In addition, you may be assigned one or more Wednesday mornings to the Gait and Balance clinic at the VA. For the two remaining blocks, you may chose from any of the "optional" clinics. You may choose to do any these clinics at the Shands Medical Plaza, VAMC in Gainesville, VAMC in Lake City or the University Hospital at Jacksonville.

The following clinics are ***optional*** and may be requested by the resident to fill in the remaining 2 blocks during his/her clinic rotation.

a. Additional Neuromuscular clinic
b. Additional Movement Disorders Clinic
c. Additional Neuromuscular/MS Clinic
d. Additional Epilepsy Clinic
e. Additional General Neurology Clinic
f. Additional Memory Disorders Clinic
g. Additional Pediatric Neurology Clinic
h. Surgical/DBS Mov. Dis. Clinic
i. Pain Clinic
j. Neuro-ophthalmology clinic
k. Speech/Swallowing Clinic
l. Sleep Clinic
m. Botulinum toxin Clinic
n. Neuro-oncology Clinic

Each rotating resident should fill out their chosen mandatory and optional clinic block form before the beginning of that academic year You should review the schedule again a month prior to starting the rotation for any changes in schedule that is needed due to clinic cancellations. If the requested clinic is unable to accommodate the resident during the requested month, the resident is expected to find a substitute specialty clinic. In each clinic block, the resident, at a minimum, should see two new patients, or, a total of 3 patients (i.e.,1 new and 2 follow-up patients; or 3 follow-up patients).

Goals and Objectives:

Patient Care

- You should demonstrate the ability to obtain a complete and accurate neurological history and examination
- You should demonstrate the ability to localize disease in the nervous system, and formulate a complete differential diagnosis.
- You should be able to formulate an appropriate and cost-effective diagnostic and treatment plan, including appropriate use of laboratory, clinical neurophysiologic, and imaging studies in the outpatient setting.
- You should be able to carry out the out-patient management of common neurological disorders seen in the general neurology clinic; and assist in the delivery of out-patient care of patients seen in the subspecialty clinics.

Medical Knowledge

- You should demonstrate knowledge about major neurological diseases that are diagnosed and managed in the out-patient setting.
- You should demonstrate in-depth understanding of important outpatient neurological disorders, including basic mechanisms of disease, neuropathology, and current methods of diagnosis and treatment.
- You should be familiar with common outpatient neurological procedures encountered in the outpatient setting such as botulinum toxin injection, interrogation of devices such as deep brain stimulation and vagal nerve stimulation settings; and be fluent in the interpretation of EEG, evoked potentials, EMG, NCV, muscle biopsies, polysomnographies, neuropsychological reports, PET, SPECT, MRI and CT images

Practice-based Learning

- You should demonstrate the ability to use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for life long learning.
- You should demonstrate ability in extracting information and salient features from the history and examination of your patient, and their caregivers upon which to base your differential diagnosis and management.
- You should be able to use the review of your own practice to guide learning.

Interpersonal and communication skills

- You should demonstrate your ability to communicate effectively with patients, families in the outpatient setting.
- You should demonstrate your ability to communicate with clinic staff (schedulers, nurses), and with patient's referring physicians.
- You should demonstrate your ability to orient, teach, and assist the medicine resident and medical student on their neurology rotation.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate the ability to recognize and deal effectively with ethical issues that arise in the management of your patients.
- You should ensure that all your dictations are complete, accurate and on time.

Systems-based practice

- You should demonstrate knowledge of resources available in the patient's community to promote the patient's health.
- You should demonstrate knowledge about Medicare billing and documentation requirements; about the variety of public and private insurance plans; and about resources available for uninsured patients.
- You should demonstrate the ability to consider and discuss ways to improve communication between services and enhance the outpatient practice of neurology at your institution

2. Neuroradiology Elective Rotation

Description:
You will sit in while the neuroradiology attending reads studies each morning and afternoon. You will attend neuroradiology teaching conferences (2nd and 4th Thursdays at noon, Shands Radiology Conference Room). You will have access to the neuroradiology teaching files, which include normal MRIs with anatomic details indicated and PowerPoint presentations on a broad range of neuroradiologic subjects. You will be able to interact with neuroradiology attendings and fellows, who can answer specific questions.

Goals and Objectives:

Patient Care

- You should know the indications for each of the neuroimaging techniques available (plain x-ray, tomography, CT, CT Angiograms, MRI, MRA, radionucleide studies, PET, SPECT scans, etc.)
- You should demonstrate the ability to look at an imaging study systematically and how to identify important normal structures.
- You should demonstrate knowledge of the appearance of pathology in the various imaging studies.

Medical Knowledge

- You should demonstrate knowledge of the principles underlying plain x-ray, x-ray tomographic studies, and CT studies and their clinical applications.
- You should demonstrate knowledge of various means of visualizing blood vessels including angiography, CT-angiography, MRA, and 3-D MRA, and their clinical applications.
- You should demonstrate knowledge of the principles underlying MR and how they are applied to clinical problems.
- You should demonstrate knowledge of the principles underlying functional neuroimaging, including fMRI and the use radionucleide agents in SPECT and PET, and how these studies are applied to clinical problems.

Practice-based Learning

- You should demonstrate the ability to use computerized and non-computerized information systems to assist your learning of neuroimaging.
- You should demonstrate knowledge to use the review of your own practice to guide learning.

Interpersonal and communication skills

- You should demonstrate understanding on how clinicians can best address questions to radiologists.
- You should demonstrate understanding on how radiologists communicate their findings to clinicians.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.

Systems-based practice

- You should demonstrate consideration of cost, risks, and benefits of neuroimaging studies.

3. Movement Disorders Elective Rotation

Please refer to description under "Selectives" above.

4. Sleep Medicine Elective Rotation

Description:

During this rotation, you will join sleep disorders clinics at the VAMC and Shands and learn the approach, diagnosis and management of sleep disorders from the medical (pulmonary) and neurological perspective. You will be familiar with the indications, proper administration, and interpretation of polysomonography. Sleeps disorders faculty members from Internal Medicine and Neurology, along with the sleep disorders fellow will supervise you during this rotation.

Goals and Objectives:

Patient Care

- You should demonstrate proper placement of scalp electrodes and recording devices
- You should also demonstrate proper methods of recording

Medical Knowledge

- You should demonstrate knowledge of the physiology underlying clinical polysomnography
- You should know the common EEG patterns (alpha, beta, theta, and delta waves), what they represent, and where they are recorded
- You should describe the two types of sleep (slow sleep and REM sleep)
- You should demonstrate familiarity with the ways in which age, level of consciousness, stage of sleep, systemic and neurological disorders, pulmonary disorders, sleep disorders, and epilepsy affect the EEG during a sleep study.
- You should demonstrate the knowledge of problems associated with scalp electrodes and sleep recording devices and the possible artifacts that may develop during recording
- You should demonstrate knowledge of the types of sleep disorders and how to clinically assess patients with sleep disorders.

Practice-based Learning

- You should demonstrate the use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for life long learning. Be able to critically review the salient literature, and base treatment on the best medical evidence.
- You should demonstrate the ability to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate effective communication with patients, families
- You should demonstrate effective communication with clinic staff (schedulers, nurses), and with patient's referring physicians.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues related to sleep disorders such as addressing driving competency.

Systems-based practice

- You should demonstrate knowledge about resources available in the patient's community to promote the patient's health.
- You should demonstrate knowledge about Medicare billing and documentation requirements; about the variety of public and private insurance plans; and, about resources (or the lack of resources) for uninsured patients.

Suggested textbooks:

- Sleep Disorders and Neurologic Diseases, Second Edition, 1997 by Antonio Culebras
- Sleep Medicine 2008 by Harold Smith, Cynthia Comella, and Birgit Hogl ($70)

6. Behavioral Neurology Elective Rotation

Please note description and objectives under "Selectives" above.

7. Neuro-Oncology Elective:

Please discuss with the Program Director if you are interested in this elective. At the present time, options include a individualized rotation with Oncology/Neurosurgery, or an away elective.

7. Neurosurgery Elective

Description:

In this elective will rotate predominantly on the sections of neurosurgical service that concentrates on neurovascular and tumor cases, but you will also get exposure to patients with the full range of common neurosurgical problems. You will make rounds with the neurosurgical team, care for patients in the Neurological Intensive Care Unit and neurosurgical ward, and evaluate patients in the Emergency Room. You will have responsibility for daytime call (6am to 6pm) on a rotation basis, with the backup of neurosurgical residents and attendings. You will attend neurosurgery clinics, including neuron-oncology, where you will have the opportunity to evaluate new patients, and see the long-term benefits and complications of neurosurgical procedures, radiation and chemotherapy. You will attend neurosurgical conferences each morning and the tumor board meeting.

Goals and Objectives:

Patient Care

- You should demonstrate the ability to manage patients in an intensive care setting, including patients with subarachnoid hemorrhage, head trauma, and increased intracranial pressure.
- You should demonstrate the ability to judge the appropriate medical and surgical management of diseases of the spine and spinal cord.
- You should demonstrate knowledge about the appropriate surgical management of diseases affecting the extracranial arteries, and of vascular malformations of the brain and spinal cord
- You should demonstrate knowledge about the presentation, diagnosis, and management of patients with primary and secondary brain neoplasm.
- You should demonstrate knowledge about the risks and complications of neurosurgical procedures, and the sequelae of surgery, and of head injury and subarachnoid hemorrhage, and of the treatment of brain tumors.

Medical Knowledge

- You should demonstrate knowledge about the neuroanatomic issues that concern surgical approaches to disease
- You should demonstrate knowledge about the genetics of cancer and its bearing on treatment.
- You should demonstrate knowledge of the mechanisms that determine intracranial pressure in health and disease

Practice-based Learning

- You should demonstrate the ability to use computerized and non-computerized information systems to facilitate patient care and to facilitate the development of techniques for life long learning. Be able to critically review the salient literature, and base treatment on the best medical evidence.
- You should demonstrate the ability to use the review of your own practice to guide learning

Interpersonal and communication skills

- You should demonstrate effective communication with patients, families
- You should demonstrate effective communication with clerks, secretaries, nursing staff, other residents, consulting residents and attendings, and neurology and neurosurgery attending staff, and with the patient's referring physicians.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients and peers, dedication to patient care, and willingness to acknowledge mistakes.
- You should demonstrate consideration of ethical issues in neurosurgery such as addressing surgical risks, complications, brain death, prognosis to patients and their families.

Systems-based practice

- You should demonstrate consideration of cost and appreciation of resources available to patients to cover the costs of surgical care
- You should demonstrate the ability to work with social services and other allied health professionals to plan for the care of surgical patients after discharge;
- You should be aware of the resources available in the patient's community to promote the patient's health.

Suggested Textbooks:

- Wilkins & Rengachary's *Neurosurgery*
- Youman's *Neurological Surgery*
- Greenburg's *Handbook of Neurosurgery*

C. Mini-Fellowship Rotations: Mini-Fellowships are comprised of at least five rotation blocks completed during a six month period as a senior resident in neurology. Residents will function at the level of a fellow in their chosen subspecialty during the course of the mini-fellowship. Please contact the Program Director if you are interested in designing a min-fellowship in a specific area.

Research Electives:

Description:

Each resident is required to carry on a scholarly project during their three years of residency under faculty supervision.

Given the resources within the Departments of Neurology, Neurosurgery, Neuroscience, Psychiatry, Radiology, Psychology, Medicine, Physiology, Pharmacology, and the McKnight Brain Institute, there are nearly limitless opportunities to find guidance and support for your interests. The Center for Neurobiological Sciences currently lists 50 faculty as active in neuroscience research.

During your PGY2 year, you will be expected to identify a faculty mentor to develop a plan of study and meetings during this time to explore areas of interest to you for research. By the end of the PGY2 research selective you should report to your faculty mentor your progress during the rotation. You should choose a research mentor and general topic of interest by the end of your PGY2 year.

You will have an additional 1 - 2 months (depending on level of development of project) in your PGY3 year for working with your chosen project mentor on a protocol and any institutional review board submissions that are necessary for implementation of your project. You should meet with your faculty research mentor prior to this time to develop a timetable for project study and writing so that by the end of the first month you have the necessary protocol and if applicable IRB submission to move forward with your project. Advanced residents may go on to actual initiation of data collection in a second block. A fully-formed research hypothesis and plan should be in place by the completion of the PGY3 year.

In the PGY4 year you will have time to complete data collection, analysis of data, and prepare presentation of your project at the end of the academic year. Typically this is done in conjuncture with electives or a dedicated mini-fellowship track, though residents who did not use a second month in the PGY3 year for research may opt to do a pure research block to advance the project.

Written records of the progress of your research project become a part of your portfolio.

In addition, throughout your residency, you are encouraged to write up cases or treatments of interest as case reports or short notices. This experience is valuable, as it allows you carefully to review a subject, learn how to evaluate the clinical literature, and enhance your writing skills under the supervision of a faculty member. Faculty are ready to assist you.

Goals and Objectives:

Patient Care

- When involved in clinical research, you should demonstrate the ability to incorporate research such as clinical trials in the care of the neurological patient.
- You should demonstrate the conduct of clinical research in the most compassionate manner.

Medical Knowledge

- You should demonstrate knowledge about good clinical practices (GCP), and human subjects protection in the conduct of clinical research.
- You should demonstrate in-depth understanding of the research you are conducting.

Practice-based Learning

- You should demonstrate the ability to use computerized and non-computerized information systems to facilitate research to instill the value of life long learning.
- You should demonstrate ability in extracting information and salient features from the history and examination of your patient, and their caregivers upon which to base your differential diagnosis and management.
- You should be able to use research to guide your own growth in neurology.

Interpersonal and communication skills

- You should demonstrate your ability to communicate effectively with research subjects and their families.
- You should demonstrate your ability to communicate with clinic and research staff (schedulers, nurses, coordinators), and with patient's referring physicians.
- You should demonstrate your ability to communicate and interact with your research mentor and other research collaborators.

Professionalism

- You should demonstrate attitudes that foster honesty, respectfulness towards patients, good work ethic and willingness to acknowledge mistakes.
- You should demonstrate the ability to recognize and deal effectively with ethical issues that arise in the conduct of research
- You should try to meet all your research timelines.

Systems-based practice

- You should demonstrate knowledge of how your research can improve the delivery of care for your patients and their communities.

FACULTY

DEPARTMENT OF NEUROLOGY

The Department of Neurology has 29 full-time, Board Eligible or Certified adult neurologists, while the Division of Pediatric Neurology has 6 faculty members. These comprise the core faculty of the UF Neurology Residency Training Program. In addition, there are 3 full-time non-neurologists in the faculty. Affiliate faculty include 5 Pediatric Neurologists, 12 full-time neurologists at the University Hospital in Jacksonville, and several full time faculty members from the Departments of Neurosurgery (11), Psychiatry (38); Division of Neuroradiology (8), Division of Neuropathology (2), Neurooncology (1), and other allied health departments.

A) Core Neurology Faculty @ UF Gainesville

Tetsuo Ashizawa, M.D. *Professor of Neurology* Dr. Ashizawa received his M.D. from Keio University School of Medicine in Tokyo, Japan and completed his Neurology residency training at Baylor College of Medicine where he was appointed Chief Neurology Resident. He then completed fellowship training in Neuromuscular Studies and Neurochemistry with the Muscular Dystrophy Association at Baylor. He joined the faculty of the University of Florida in April 2009 when he was selected as Chairman for the Department of Neurology. His research interests include Spinocerebellar Ataxia Sub-type 10, Myotonic Dystrophy Type 1, Huntington's Disease, Friedreich's Ataxia, Parkinson's Disease, and Myasthenia Gravis. Role in residency training: Didactic lecturer in clinical neurology, ataxias, movement disorders, and neurogenetics. Member, Neurology Resident Oversight Committee, Discussant, Grand Rounds.

Lucas J. Beerepoot, M.D., *Assistant Professor of Neurology* In addition to general neurology, Dr. Beerepoot specializes in neuro-oncology, epilepsy and palliative care. Dr. Beerepoot is board certified in neurology by the ABPN. Role in residency training: Didactic lecturer in general & clinical neurology, Shands Consult attending, Discussant Neurology Grand Rounds.

David Burks, M.D., *Assistant Professor of Neurology* Dr. Burks obtained his MD degree from the University of Texas at San Antonio and did his Neurology residency at Tulane. He completed fellowships in clinical neurophysiology (at Tulane) and behavioral neurology (at the University of Florida) and joined our faculty in 2000.Role in residency training: Didactic lecturer in clinical neurology, behavioral neurology; VA ward attending; Multiple Sclerosis and Memory Disorders clinic attending; Neuro I longitudinal rotation faculty supervisor; Member, Neurology Residency Oversight Committee; Discussant, Neurology Grand Rounds

Brandon David Burtis, DO *Assistant Professor* Dr. Burtis received his doctor of Osteopathic Medicine degree from the Kansas City University of Medicine and Biosciences. He completed his Neurology Residency Training at the University of Kentucky, where he served as chief resident in his final year. Dr. Burtis then came to the University of Florida he completed a Fellowship in Cognitive and Behavioral Neurology and then a T32 Post Doctoral Fellowship. Dr. Burtis joined the Department of Neurology as a faculty member in July 2012. Role in residency training: Didactic lecturer in general & clinical neurology, Shands Consult attending, Discussant Neurology Grand Rounds.

Jean Cibula, M.D., *Associate Professor, Wilder Family Professorship in Epilepsy*, Dr. Cibula obtained her MD degree from Case Western Reserve University in Cleveland, Ohio and completed her neurology residency at the University of Florida. She completed fellowships in Behavioral Neurology and Epilepsy at the University of Florida. Dr. Cibula joined the faculty of the University of Florida in 2008. She has interests in Women's and Adolescent Issues in Epilepsy, Surgical Evaluation and Management of Epilepsy, and New Onset Seizures as well as medical education. Role in residency training: Didactic lecturer in EEG, epilepsy; Epilepsy monitoring unit attending; Epilepsy clinic attending; Introduction to EEG selective rotation faculty; liaison for Epilepsy education to the UF Neurology Residency Program.

Stephan Eisenschenk, M.D., *Clinical Associate Professor; Clinical Director, Adult Neurology Comprehensive Epilepsy Program; Medical Director, UF & Shands Epilepsy Monitoring Unit.* Dr. Eisenschenk was a Junior Honors student at UF, and completed his Neurology Residency here in 1997. He completed a fellowship in Clinical Neurophysiology with emphasis on EEG in 1998. He has maintained an interest in neurological research throughout his schooling and training, and has developed a special interest in epilepsy and sleep medicine. Role in residency training: Didactic lecturer in EEG, epilepsy and sleep disorders; Epilepsy monitoring unit attending; Epilepsy clinic attending; Introduction to EEG selective rotation faculty supervisor;

David Fitzgerald, M.D., *Assistant Professor* Dr. FitzGerald is a neurologist specializing in behavioral neurology using functional neuroimaging. He completed his medical internship at St. Elizabeth's Medical Center in Brighton, MA in 2001. He subsequently completed his neurology residency at UMass Medical Center in 2004. Dr. FitzGerald joined the University of Florida community in 2004 as a Neurology Fellow under Kenneth M Heilman, MD. He has strong research interests in cognitive neuroscience and functional magnetic resonance imaging. His current functional imaging projects include:

diffusion tensor imaging of traumatic brain injury; clinical trial investigation as to the effectiveness of Donepizil on Alzheimer's disease; and pathological gambling behavior. Role in residency training: Didactic lecturer in clinical neurology, behavioral neurology and memory disorders; VA attending; VA Resident Continuity Clinic Attending; Discussant, Neurology Grand Rounds

Elakkat D. Gireesh, M.D., *Assistant Professor of Neurology* Dr. Gireesh received his medical degree from from the Calicut Medical College, India in 2000. In 2004, he joined the National Institutes of Helath in Bethesda, MD as a Post Doctoral fellow. Dr. Gireesh began his Neurology residency in 2010 at New York University School of Medicine. He finished up his residency in 2013 at John Hopkins University School of Medicine and then stayed there to complete a EEG Epilepsy fellowship. He is a board certified neurology with the American Board of Psychiatry and Neurology. Role in residency training: Didactic lecturer in EEG, epilepsy; Epilepsy monitoring unit attending; Epilepsy clinic attending

Kenneth M. Heilman, M.D., *Clinical Professor of Neurology and Clinical Psychology; Co-Director, Behavioral Neurology Fellowship, Co-Director, Memory and Cognitive Disorders Program, Co-Director, Center for Neuropsychological Studies.*Dr. Heilman received his M.D. from the University of Virginia and did his neurology training at Boston City Hospital. He came to the University of Florida in 1970, where he continued research into the mechanisms of the neglect syndrome. His numerous publications include articles in all areas of behavioral neurology, and in other aspects of clinical neurology. He is a recognized authority in behavioral neurology, and was elected President of the International Neuropsychological Society in 1982. He is Director of the Center for Neuropsychological Studies at the University of Florida. Role in residency training: Didactic lecturer in clinical neurology, behavioral neurology and memory disorders; VA ward attending; Memory disorders clinic attending; Neuro I clinic longitudinal rotation and Neuropsychiatry selective rotation faculty supervisor; Discussant, Neurology Grand Rounds; Research mentor

Maria Hella, M.D., ***Assistant Professor*** Dr. Hella received her MD degree from the University of Miami, Miller School of Medicine. She then completed both her Neurology Residency and fellowship in Clinical Neurophysiology at the University of Florida. Role in residency training: Didactic lecturer in EEG, epilepsy; Epilepsy monitoring unit attending; Epilepsy clinic attending;

Christopher Hess, MD *Assistant Professor* Dr. Hess received his medical degree from the Albert Einstein College of Medicine in New York. He went on to complete his neurology residency and serve as chief resident at Columbia University Medical Center.

Dr. Hess completed subspecialty fellowship training in movement disorders at Columbia under Dr. Stanley Fahn with additional training in movement disorders neurophysiology and intraoperative mapping for deep brain stimulation.

Dr. Hess is a member of the International Parkinson and Movement Disorders Society, the American Academy of Neurology and the American Medical Association. Dr. Hess is board-certified by the American Board of Neurology and Psychiatry. Role in residency training: Didactic lecturer in Movement Disorders; Movement Disorders clinic attending; Discussant, VA ward attending, Neurology Grand Rounds discussant.

Anna Khanna, M.D. *Assistant Professor* Dr. Khanna completed her Preliminary Internal Medicine residency year in the University of Medicine and Dentistry of New Jersey in 1999 and completed her neurology residency there in 2002. She was inspired to pursue an interest in vascular neurology and became UMDNJ's first stroke fellow and completed the fellowship in 2003. She remained on faculty at UMDNJ as an Assistant Professor and stroke program director. Dr Khanna was the director of the outpatient stroke clinic. She introduced a comprehensive vascular ultrasound examination to the outpatient setting. She also was the director of the resident clinic. Dr. Khanna then joined the faculty in Saint Barnabas University Hospital where she was the stroke program director. Dr Khanna moved to Florida after a search for warmer climate in 2007. She joined Neurological Associates, a private practice group headed by Dr Jay Rubin. She provided general neurology care to the community serving mainly as a neurohospitalist in Ocala Regional and West Marion hospitals. She decided to return to academics after her interest in vascular neurology was rekindled by the current director of the vascular division at University of Florida. She joined the faculty as an Assistant Professor in the vascular neurology division in the University of Florida in 2011. She is currently providing care to patients on the stroke service and in the outpatient clinic. Role in residency training: Senior resident continuity clinic attending; Didactic lecturer in cerebrovascular disorders; Shands Neurovascular attending; Discussant, Neurology Grand Rounds

Irene Malaty, M.D., *Assistant Professor* . Dr. Malaty, M.D., studied microbiology and psychology at Indiana University in Bloomington, IN. She attended Indiana University School of Medicine on the Notre Dame campus and in Indianapolis, IN. After completing a transitional year of medicine at St. Vincent's hospital in Indianapolis, she moved to Gainesville for neurology residency and served as chief resident. She completed a fellowship in movement disorders at the University of Florida and joined the faculty thereafter. She cares for patients with a variety of movement disorders at the Shands medical plaza and at the Malcolm Randall Veteran's hospital. She serves on the executive

board of the Florida Society of Neurology, and on the executive committee of the American Academy of Neurology Neuroendocrinology Section, as the Movement Disorder Subsection Chair. Dr. Malaty is committed to providing quality, state-of-the-art care for all movement disorders, but has specific interests in the non-motor aspects of Parkinson's disease, and in compulsivity as it applies to Tourette's syndrome and other movement disorders. Role in residency training: Didactic lecturer in Movement Disorders; Shands ward attending; Movement Disorders clinic attending;

Michael Maraist, MD *Assistant Professor* Dr. Maraist earned his medical degress from the University of Florida. He then went on to complete both his Neurology Residency Training and a fellowship in Sleep Medicine here at the University of Florida as well. Role in residency training: Didactic lecturer in general & clinical neurology, Shands Consult attending, Discussant Neurology Grand Rounds.

Stephen E. Nadeau, M.D., *Professor of Neurology and Clinical & Health Psychology; Director, Gait and Balance Clinic.* Dr. Nadeau received his M.D. from the University of Florida, where he also trained in neurology. He joined the Neurology staff in 1987 after having been on the faculty of the Department of Neurology of the University of Mississippi. He is a member of the Geriatric Research, Education and Clinical Center at the Gainesville VA Medical Center. He is a recognized authority on cerebrovascular disease and neurological aspects of collagen vascular disease, and pursues research interests in stroke, dementia, neurolinguistics, and other aspects of higher cortical function. Role in residency training: Didactic lecturer in clinical neurology, behavioral neurology and cerebrovascular disorders; VA ward attending; Stroke and Pain clinic attending; Neuro I clinic and Continuity clinic longitudinal rotation faculty supervisor; Discussant, Neurology Grand Rounds; Research mentor

Michael S. Okun, M.D., *Interim Chair of Neurology, Adelaid Lackner Associate Professor of Neurology; Co-Director, Movement Disorders Center.* Dr. Okun received his MD and did his residency at the University of Florida, and then completed two years of fellowship at Emory studying movement disorders and intraoperative physiology for deep brain stimulation (DBS). He is well published in Movement Disorders, especially in deep brain stimulation surgery and currently serves as the Medical Director of the National Parkinson Foundation. Role in residency training: Didactic lecturer in Movement Disorders; Movement Disorders and DBS clinic attending; Discussant, Neurology Grand Rounds; Research mentor

Nikolaus McFarland, M.D., Ph.D., *Assistant Professor;* Dr. McFarland's research focuses on understanding the pathological mechanisms of Parkinson disease and related disorders (atypical parkinsonisms) and in particular the role of alpha-synuclein in cell toxicity and neurodegeneration. A major hallmark of neurodegenerative disorders, including Parkinson disease, is abnormal protein aggregation and deposition. In Parkinson disease and related disorders, intracellular inclusions called Lewy bodies are found. A principal component of these Lewy bodies is alpha-synuclein. Abnormal folding, aggregation, and deposition of alpha-synuclein are believed to be central to the development of neuronal dysfunction and degeneration. A primary goal of my research is thus to elucidate the mechanisms of alpha-synuclein toxicity and to characterize molecular mediators that may enhance or rescue its toxicity. Work involves use of cellular, neuronal, and animal models that employ alpha-synuclein overexpression and allow for testing of various genes, molecules, and compounds that may modify toxicity and have the potential for novel therapeutics. Role in residency training: Didactic lecturer in Movement Disorders; Movement Disorders clinic attending; Discussant, Shands ward attending, Neurology Grand Rounds discussant.

Leslie A. Rudzinski, M.D.; *Assistant Professor,* Dr. Rudzinski is from Centerville, Ohio and received her B.S. in the Biological Sciences and M.D. from The Ohio State University. She completed her internship in preliminary medicine at Riverside Methodist Hospital in Columbus, Ohio and neurology residency at Mayo Clinic Florida in Jacksonville. She then completed a two-year fellowship in clinical neurophysiology/electroencephalography and epilepsy at Mayo Clinic Rochester. She is board certified by the American Board of Psychiatry and Neurology in Adult Neurology, Clinical Neurophysiology, and Epilepsy. She is a member of the American Academy of Neurology, American Epilepsy Society, and the American Clinical Neurophysiology Society. She is a current member of the Scientific Program Committee and Advocacy Committee of the American Epilepsy Society. She served on the Professional Advisory Board of the Epilepsy Foundation of Georgia and was a member of the Critical Care EEG Monitoring Research Consortium while at Emory University. Role in residency training: Didactic lecturer in EEG, epilepsy; Epilepsy monitoring unit attending; Epilepsy clinic attending;

J. Chris Sackellares, M.D., *Professor, VAMC.* Dr. Sackellares joined our faculty in 1993, after pursuing his career in epilepsy and EEG on the faculty at the University of Michigan. He has investigated the biochemical and neurophysiological mechanisms of human temporal lobe epilepsy. He has conducted clinical trials of many of the newer anticonvulsants. He is currently engaged in the mathematical analysis of EEG in epilepsy, using chaos theory. Role in residency training: VA ward attending; Epilepsy clinic attending; Neuro I clinic and Continuity clinic longitudinal rotation faculty supervisor; Research mentor

S.H. Subramony, M.D., *Professor, Chief of the Neuromuscular Division* Dr S. H. Subramony was trained in Neurology and Electromyography/ Neuromuscular diseases at the Cleveland Clinic, Cleveland, OH. Subsequent to that, he was on the faculty at the University of Mississippi Medical Center from (from 1980 to 2007), where he was named the Billy Guyton Distinguished Professor of Neurology. Later, at University of Texas Medical Branch in Galveston where he was appointed the Charlotte Warmoth Professor of Neurology (2007 to 2009), before coming to University of Florida in 2009. At the University of Mississippi Medical Center, he was the director of the Muscular Dystrophy Association (MDA) clinic and the Neuromuscular Division, in addition to directing a busy Ataxia Clinic. His investigative interests have been in the field of ataxias and he brings a wealth of experience in evaluating and managing patients with ataxias. At UF, he co-directs the Ataxia Clinic in the Movement Disorder Center with Dr Tetsuo Ashizawa, Chair of the Department of Neurology. In addition to patient management, this clinic will also be involved in many research projects.

His clinical experience includes the management of patients with all types of neuromuscular diseases including ALS, myasthenia gravis, polymyositis, neuropathies and muscular dystrophies. In the past he has participated in clinical trials in ALS and published in the field of neuromuscular genetics. His clinic at UF provides expert evaluation of patients with neuromuscular disorders and offers treatment that includes electromyography, muscle biopsy when appropriate, appropriate genetic testing and referral to ancillary services such as physical, occupational and speech therapy and evaluation for mobility aids. Role in residency training: Senior resident continuity clinic attending; Shands ward attending; Didactic lecturer in Neuromuscular disorders; Discussant, Neurology Grand Rounds.

Swapna Surabhi, M.D., *Asst. Prof. of Neurology, VAMC* Dr. Surhabi underwent her residency in neurology followed by a clinical neurophysiology fellowship at the University of Florida. She has been on faculty at the Gainesville VA Medical Center specializing in epilepsy related conditions since 2013. Role in residency training: Didactic lecturer in EEG & Epilepsy; VA inpatient ward attending; VA Resident Continuity Clinic Attending

William Triggs, M.D., *Associate Professor of Neurology, Chief of Neurology VAMC* Dr. Triggs received MD at the University of Florida and his training in Neurology at the University of Texas in Houston, and has completed fellowships in Electromyography and Neuromuscular Disease and in Neurorehabilitation and Neurophysiology at Harvard Medical School. He joined the Department in July 1992. Dr. Triggs' interests include application of neurophysiologic techniques, including motor cortex stimulation, to clinical neurology. He assists in supervision of EMG training, and he teaches principles of neurorehabilitation to Neurology residents. Role in residency training: Didactic lecturer in clinical neurology and neuromuscular disorders; VA ward attending; Neuromusclar clinic attending; Discussant, Neurology Grand Rounds

Aparna Wagle Shukla, M.D., *Assistant Professor of Neurology.* Dr. Wagle Shukla is an Assistant Professor in Department of Neurology at University of Florida. She has an extensive clinical experience with double training in Neurology. She has undergone three years of Internal Medicine and 3 years of Neurology training in India, subsequently completed her second Neurology Residency from Little Rock, Arkansas. She did her movement disorders fellowship with special training in clinical electrophysiology from University of Toronto, Canada, a world renowned center for movement disorders. Her goal of practice is to provide highest level of quality care to her patients and she is also committed to pursue her research interests in movement disorders. Currently she is working on projects elucidating the underlying mechanisms of action for deep brain stimulation in DYT1 dystonia and the use of repetitive Transcranial Magnetic Stimulation as a treatment modality for symptoms of Parkinson's disease, depression associated with Parkinson's disease and apathy as a consequence of Deep Brain Stimulation therapy in Parkinson's Disease. In addition she is a co-investigator on clinical trials focusing on improved therapies for motor fluctuations in Parkinson's Disease. Role in residency training: Didactic lecturer in Movement Disorders; Shands ward attending; Movement Disorders clinic attending; Discussant, Neurology Grand Rounds; Research mentor

Vishnumurthy Shushrutha Hedna, MD *Assistant Professor* Role in residency training: Didactic lecturer in cerebrovascular disorders; Shands Neurovascular attending; Discussant, Neurology Grand Rounds

Yue Wang, MD, PhD *Assistant Professor* Dr. Wang received her medical degree from the Capital Medical University in Bejing China. She then earned her PhD from the Iniversity of Mississippi Medical Center in Jackson Mississippi. Dr. Wang completed both her Neurology Residency Training and her Clinical Neurophysiology Training here at the University of Florida. Role in residency training: Didactic lecturer in EEG, epilepsy; Epilepsy monitoring unit attending; Epilepsy clinic attending;

Michael F. Waters, M.D., Ph.D., *Associate Professor, Director, University of Florida Stroke Program.* Dr. Waters received his MD and PhD at the University of Florida. He finished residency and neurogenetics fellowship at UCLA

and served as the Director of the Stroke Program at Cedars Sinai before he moved back to the University of Florida in 2007. His special interests include stroke and neurogenetics, especially cerebellar ataxias. Role in residency training: Didactic lecturer in neurogenetics and cerebrovascular disorders; Shands Neurovascular attending; Discussant, Neurology Grand Rounds

Meredith Wicklund, M.D. *Assistant professor*. Dr. Wicklund completed a B.S. in Microbiology, graduating Magna Cum Laude from the University of Illinois at Urbana-Champaign. She obtained her M.D. from the University of Illinois College of Medicine at Rockford, where she graduated With Honors. Dr. Wicklund completed her internship at the University of Illinois in Urbana-Champaign and then residency in Neurology at Mayo Clinic in Rochester, MN. Following residency, she pursued fellowship training in Behavioral Neurology at Mayo Clinic in Rochester, MN.

Dr. Wicklund's clinical practice is devoted to providing the highest level of neurologic care to a wide variety of neurologic disorders. She has a special interest in autoimmune, paraneoplastic and degenerative neurologic disorders and traumatic brain injury. Her research interests include developing a database and clinical trials in Alzheimer's disease and other cognitive and degenerative brain conditions. Dr. Wicklund has made several presentations and been invited to speak at national and international meetings. Role in residency training: Junior resident continuity clinic attending; Shands ward attending; Didactic lecturer in general neurology; Discussant, Neurology Grand Rounds.

Christina A. Wilson, M.D., Ph.D. *Assistant Professor, Neurology Residency Program Director*. Dr. Wilson completed her medical school, residency, and vascular neurology fellowship training at the University of Pennsylvania. She also earned a Ph.D. in neuropharmacology for research related to the cell biology of presenilin proteins in Alzheimer's disease. Her current interests include acute ischemic stroke management, quality improvement in stroke care, and community/EMS outreach to improve awareness of neurovascular diseases. She is also the UF site investigator for multiple national clinical stroke trials. Role in residency training: Residency Program Director; Shands Neurovascular attending; Didactic lecturer in cerebrovascular disorders; Discussant, Neurology Grand Rounds.

Guangbin Xia, M.D., *Assistant Professor* Dr. Xia is a board-certified Neurologist and is also board-certified in Neuromuscular Medicine. He holds hospital privileges for EMG/NCS, muscle biopsy and skin biopsy. His clinical experience includes management of patients with motor neuron diseases, neuropathies, myasthenia gravis, myopathy/muscular dystrophies and other neuromuscular disorders. Role in residency training: Didactic lecturer in clinical neurology and neuromuscular disorders; Shands ward attending; Neuromuscular clinic attending; Discussant, Neurology Grand Rounds

B) Core Pediatric Neurology Faculty

Edgard Andrade, M.D., *Assistant Professor of Pediatrics, Acting Co-Chief for the division of Pediatric Neurology (Pediatric Neurology)*. Dr. Andrade pursued subspecialty training in Clinical Neurophysiology at the University of Miami following his residency in Child Neurology at Vanderbilt University. Role in residency training: Didactic lecturer in Pediatric Neurology, EEG and epilepsy; Shands pediatric neurology ward attending; Pediatric neurology clinic attending; Pediatric neurology core rotation faculty supervisor; Discussant, Grand Rounds

Paul Carney, M.D., *Professor of Pediatrics and Neurology, Wilder Chair for Epilepsy Research; Director, Pediatric Comprehensive Epilepsy Program* Dr. Carney trained in pediatric neurology and clinical neurophysiology at the University of Michigan. He directs the pediatric epilepsy program in addition to being Chief of Pediatric Neurology. His research uses animal models of epilepsy and involves real-time prediction of seizures. Role in residency training: Didactic lecturer in Pediatric Neurology, EEG and epilepsy; Shands pediatric neurology ward attending; Pediatric neurology clinic attending; Pediatric neurology core rotation faculty supervisor; Discussant, Grand Rounds

Suman Ghosh, MD *Assistant Professor, Pediatric Neurology* Dr. Ghosh, MD, MPA, is board-certified in general pediatrics and child neurology. He completed his residency training in pediatrics at the Children's Hospital of Orange County. Dr. Ghosh continued his child neurology training at the University of California Irvine and joined the University of Florida faculty in 2014.

Dr. Ghosh's main clinical interests include pediatric brain injury, neuronal rehabilitation, neonatal neurology, movement disorders, spasticity and cerebral palsy. In January 2015, he started a spasticity clinic at UF Health to provide evaluation and treatment of children with spasticity from cerebral palsy and brain and spine injuries. Through the clinic, Dr. Ghosh performs Botox™ injections for spasticity, torticollis and dystonia. He has also developed a multidisciplinary clinic with pediatric rehabilitation, neonatology and pediatric cardiology to provide early developmental assessments for infants at high risk for developmental delays. Role in residency training: Didactic lecturer in Pediatric Neurology; Shands pediatric neurology ward attending; Pediatric neurology clinic attending

Peter Kang, M.D. *Associate Professor and Chief, Division of Pediatric Neurology* Dr. Kang completed medical school at the University of Pennsylvania, pediatric residency at Yale-New Haven Hospital, a pediatric neurology residency at the University of Pennsylvania and a fellowship in clinical neurophysiology at Beth Israel Deaconess Medical Center. He serves as principle investigator on rats from NIH and the Muscular Dystrophy Association. Role in residency training: Didactic lecturer in Pediatric Neurology; Shands pediatric neurology ward attending; Pediatric neurology clinic attending; Pediatric neurology core rotation faculty supervisor; Discussant, Grand Rounds

Zhao Liu, M.D, PhD, *Assistant Professor* Role in residency training: Didactic lecturer in Pediatric Neurology, EEG and epilepsy; Shands pediatric neurology ward attending; Pediatric neurology clinic attending; Pediatric neurology core rotation faculty supervisor; Discussant, Grand Rounds

Anne-Marie Slinger-Constant, M.D., *Clinical Assistant Professor; Director of the UF Multidisciplinary Diagnostic and Training Program.* Role in residency training: Didactic lecturer in Pediatric Neurology, learning disorders, ADHD, autism, memory disorders; Shands pediatric neurology ward attending; Pediatric neurology clinic attending; Pediatric neurology core rotation faculty supervisor; Discussant, Grand Rounds

John Ross, M.D. *Professor Emeritus of Pediatrics (part-time)* Role in residency training: Didactic lecturer in Pediatric Neurology, learning disorders, behavioral neurology and memory disorders; Pediatric neurology clinic attending;

C) Non-Neurologist Faculty @ UF Gainesville

Janis Daly, Ph.D., M.S., *Director, Brain Rehabilitation Research Center of Excellence, Professor of Neurology* Dr. Daly is a Research Career Scientist from the Louis Stokes VA Medical Center (LS VAMC) in Cleveland, OH, where she has also been Director of the Cognitive and Motor Learning Research Program and Associate Director of the Functional Electrical Stimulation Center (FESC), an RR&D Center of Excellence similar to the BRRC. She also has been Professor of Neurology at Case Western Reserve University.

Leilani Doty, Ph.D., *Associate Research Scientist; Administrator, University of Florida Cognitive and Memory Disorder Clinics* Dr. Doty has a Ph.D. in Counselor Education with a Specialty in Gerontology. She has more than a decade of experience dealing with problems of the elderly, and especially those with Alzheimer's disease. She is currently Administrator of the Memory Disorder Clinic. Her counseling skills and her encyclopedic knowledge of resources for the elderly are an invaluable resource for patients attending the clinic. Dr. Doty also carries on research in gerontological issues, and trains health-professionals in the care of the elderly.

Pedro Fernandez-Funez, Ph.D., *Assistant Professor of Neurology* Dr. Fernandez-Funez received his Ph.D in February 1998 from Universiad Autonoma de Madrid, where he worked as a Postdoctoral Associate until October of 1998. In November 1998, he became a Postdoctoral Associate at Baylor College in Houston, Texas. In February 2004, he left Baylor and became an Assistant Professor for the Department of Neurology at UTMB. At UTMB, he worked in the George and Cynthia Mitchell Center for Neurodegenerative disorders. His research interests include Molecular mechanisms of neurodegeneration in Alzheimer's disease & Prion disorders.

Yuqing Li, Ph.D. *Professor,* Dr. Li joined the Department of Neurology in November of 2010 as a Professor in the Center for Movement Disorders and Neurorestoration. Prior to the current position, Dr. Li served as Associate Professor of Neurology and Neurobiology in the Department of Neurology and Center for Neurodegeneration and Experimental Therapeutics, School of Medicine, University of Alabama at Birmingham. From 2001 to August of 2006, Dr. Li served as Assistant Professor with the Beckman Institute for Advanced Science and Technology at the University of Illinois at Urbana-Champaign with the focus of his research in genetic analysis of neural development and plasticity, animal models of neurodevelopmental disorders. From 1996 to 2000, he was appointed as Lucille P. Markey Assistant Professor of Molecular and Developmental Neuroscience in the Department of Molecular and Integrative Physiology and the Beckman Institute for Advanced Science and Technology at the University of Illinois at Urbana-Champaign. He received his Ph.D. in Biology from Nagoya University, Nagoya, Japan in 1991 and was a Postdoctoral Research Associate with the Center for Learning and Memory, Massachusetts Institute of Technology, Cambridge, Massachusetts from 1991 to 1996. He majored in Biology in 1991 from Nagoya University, Japan, in molecular biology from Fudan University, China in 1988, and majored in Biochemistry with a Bachelor of Science degree from Fudan University, China in 1984.

Diego Rincon-Limas, Ph.D., *Assistant Professor of Neurology* Dr. Rincon-Limas obtained a Master's degree in Microbiology and a *summa cum laude* Ph.D. in Molecular Biology and Genetic Engineering at the Autonomous University of Nuevo Leon in Monterrey, Mexico. He then moved to Baylor College of Medicine in Houston to conduct his postdoctoral training in the Department of Human and Molecular Genetics, where he got training in Developmental

Biology and Neurobiology. Later on, he got his first Faculty position in the Department of Neurology and the Mitchell Center for Neurodegenerative Disorders at the University of Texas Medical Branch in Galveston. He moved to the University of Florida in 2010 as an Assistant Professor in the Department of Neurology at the McKnight Brain Institute and is also a member of the UF Genetics Institute.

John Williamson, Ph.D. *Assistant Professor*

Fumaki Yokoi, Ph.D. *Assistant Scientist*

Lin Zhang, Ph.D. *Assistant Scientist* Dr. Zhang joined the Department of Neurology in March of 2011 as an Assistant Scientist for the Center for Movement Disorders and Neurorestoration. She received her Ph.D. in Psychiatry from Chiba University, in Chiba, Japan, and was a postdoc in Chiba Cancer Center Research Institute. In 2001, Dr. Zhang got her M.D. at Yanbian University Medical College in China. She did a residency in Neurology at Yanbian University Hospital in China the following year.

HOSPITAL, OUTPATIENT AND ADMINISTRATION FACILITIES

Shands HealthCare, affiliated with the University of Florida Health Science Center, is one of the Southeast's premier health systems. Shands includes eight hospitals: two academic medical centers; four community hospitals; and two specialty hospitals. The two primary teaching hospitals for the Neurology Residency Training Program are: ***Shands at UF*** and the ***Gainesville VAMC.***

Shands at UF is the primary teaching hospital and assembles more than 500 physicians representing 110 medical specialties work with a team of healthcare professionals to provide quality care for patients Shands at the University of Florida was established in 1958. It is a 618-bed tertiary care center with 144 intensive care beds. Shands at UF features four *Centers of Excellence* including Cancer, Cardiovascular medicine, Neurological services, and Transplantation. Neurology shares a 34-bed ward with Neurosurgery. This includes six epilepsy monitoring unit beds. Cardiac telemetry is available for six or more patients. Intensive care is provided in the newly opened Neurological Intensive Care Unit (Ward 82), Medicine Intensive Care Unit (Ward 52), Surgical Intensive Care Unit and the Intermediate Care Unit (Ward 94), with neurology residents serve as either primary caregivers or consultants. In addition, the hospital has been designated a Level 1 Trauma Center with its own Trauma Ward/Unit. A new 170-bed patient tower is scheduled for completion in 2009.

The ***Gainesville Veterans Administration Medical Center*** (VAMC) is a 473-bed tertiary care facility that is also an active teaching hospital, with an extensive array of specialty services. Gainesville VA Medical Center combines a full range of patient care services with state-of-the-art technology that is enhanced and supported through education and research. It has facilities that include CT and MR scanners. Neurology shares beds with Medicine on Ward 4A and 4B which has 40 beds, and patients needing telemetry are placed on Ward 3C. A 300-bed patient tower is also scheduled for completion in 2009.

Regarding ***Outpatient Clinics***, Neurology is located in the third floor of the Shands Medical Plaza. The total space includes 36 examining rooms, two large conference rooms with view boxes and computers, four nurses stations with computers, six procedure rooms, offices for staff, check-in and check-out areas, and a large waiting room. Neurology uses from 10 to 20 rooms at any one time. In addition, Neurology has two rooms in this clinic dedicated for EMG. At the VA Medical Center, Neurology patients are seen in the Out-patient facility. Neurology uses six rooms.

The ***McKnight Brain Institute*** provides leadership for strong basic science and clinical programs in the Neurosciences, including Neuroscience, Neurology, Neurosurgery, and Psychiatry. It houses the administrative offices and research laboratories of the Department of Neurology and its Residency Training Program. It is one of the world's largest research institutions devoted to the challenges resulting from brain and nervous system disorders. The building opened in September of 1998 and provides world-class facilities for research including sophisticated brain imaging laboratories, a 15T research MR unit, and a state-of-the-art linear accelerator.

LIBRARY AND COMPUTER FACILITIES

Residents can access literature in many ways. At the VMAC and in the resident's room, a small collection of reference books are available. The VAMC has a small but very useful medical library. The Greer Library in the departmental offices has a nice selection of neurology journals and texts, plus selected medicine and neurosurgery journals. Finally, the Health Center Library is conveniently located in the Communicore center.

Computerized databases: There are currently many readily available databases that residents can easily search. The computer in the resident's room can access the following:

Free Medline searches are available through the Health Center Library, which has Medline on CD ROM discs. It is accessible from the Informatics Laboratory on the 2nd floor of the Health Center Library, or from any of the departmental computers that are on the network, including the computers in the Residents Room. Medline, Toxline, and

several other databases are available from the Health Center Library web-page.

The course syllabi from the latest American Academy of Neurology meetings are available on CD-ROM.

OTHER COMPUTER RESOURCES

Residents should be able to take advantage of the increasing resources available via computer. We expect residents to be computer-literate. If you are not, consult with your fellow residents or knowledgeable faculty. The residents have a Pentium computer running Windows 95. Some of the programs and facilities you may access include:

On the computer hard drive:
- Microsoft Word (word processor)
- Microsoft Excel (spreadsheet program)
- Microsoft Access (database program)
- Microsoft Powerpoint (presentation program)
- *Medlink Neurology* (text-book of Neurology)

On the Local Network:
- SMS (on-line clinical records, including web-based viewing of many notes, labs, and radiology reports).
- Stentor: Web-based viewing of current imaging.
- Health Center Library Medline searching (see above)
- E-mail

On the Internet:
- Web access to Shands Hospital Information System
- Web access to electronic signature documents
- Neurology Examination site (Nadeau & Valenstein)
- UF facilities

BENEFITS

Compensation and benefits will be determined by the College of Medicine with the advice of the Graduate Medical Education Committee.

Financial Support: The College of Medicine sets the annual stipend for residents at each level. An attempt is made to bring this stipend to the 50 percentile of the College of Teaching Hospitals data for hospitals in the southern region. Exceptions to these stipend levels should be approved by the Graduate Medical Education Committee. The College of Medicine pays the employer contribution of FICA. The residents are also eligible for in the deferred compensation plan of the State of Florida.

Insurance:
The College of Medicine recognizes the need to provide insurance coverage in a variety of different categories.

Health Insurance. This policy is underwritten by First Allmerica Financial Life Insurance Company with premiums paid by the College of Medicine for both individual and dependent coverage. See Summary of Health Insurance Benefits Appendix A. Refer to plan booklet for details or call the UF Fringe Benefits Office at 352-395-8016.

COBRA **(Title X of the Consolidated Omnibus Budget Reconciliation Act of 1985).** In the event of termination, under COBRA, residents have the option to continue their health insurance policy at the current premium plus 2% for a maximum of 18 months. Eighteen month continuation is also available in the event of reduction in hours or layoff. Thirty-six month continuation is available in the event of divorce, death, retirement and a dependent losing that status because of age. It is the resident's responsibility to notify the Fringe Benefits Office within 30 days of any of the above events.

Life Insurance, Term group life insurance of $10,000 is provided at no cost. Coverage is through First Allmerica Financial Life Insurance Company. For any questions on coverage or claims, please contact the Fringe Benefits Office at 395-8016.

Accidental Death and Dismemberment. Premiums are paid by the College of Medicine. Coverage is through First Allmerica Financial Life Insurance Company. This coverage pays an additional $10,000 on top of the $10,000 from life insurance if death is accidental. Dismemberment benefits are paid on a pro-rated basis.

Disability Insurance. All active full-time College of Medicine housestaff members working at least 30 hours a week are provided Long Term Disability Insurance. The policy is underwritten by Provident Life and Accident. The monthly benefit is equal to 60% of the first $3,333 monthly salary to a maximum monthly benefit of $2,000 reduced by benefit offsets. The benefits as set forth under this policy will begin after the insured's sixth month of total disability. The maximum benefit period due to sickness and accident is to age 65. A special conversion feature is provided.

Workers' Compensation. All housestaff who are injured on the job should immediately go to the Shands Emergency Department. Blood and body fluid exposures are treated exclusively through the Shands Department of Employee Health. Incident reports should be filled out within 24 hours and can be obtained through each department training office. In addition, to assure prompt payment of the workers'

compensation claims, each resident should sign a "Statement of Authorization" form to release their medical record to the UF Workers' Compensation Office. These forms can will be given at the time and place of treatment.

The University of Florida is required to report all industrial accidents to the Division of Worker's Compensation within seven days of the department's first knowledge of an employee's on-the-job-accident. In order to meet this time limit, the University of Florida Worker's Compensation Office, Room 422, Stadium West, should receive the appropriate notifications no later than four days after knowledge of the accident or injury.

Professional Liability Insurance. As an employee of the University of Florida, residents are personally immune from civil liabilities that may arise from any acts or omissions committed in the course of employment. Pursuant to Section 768.28 Florida Statutes, the Florida Board of Regents (BOR), the state agency which operates UF, is vicariously responsible for any civil claims or actions arising from the acts of its employees and agents. The BOR is protected for such liabilities through the J. Hillis Miller Health Center Self-Insurance Trust Fund (TF), a self-insurance program which is managed by the University of Florida.

Personal professional liability protection is afforded by the Trust Fund while residents act as a good samaritan, are involved in community service work which has been pre-approved by your college, or while on a job assignment outside of Florida. Questions regarding professional liability should be directed to the Trust Fund at 352-395-8028.

Vacation and Leave

Members of the housestaff shall be entitled to leave with pay for the purpose of annual and sick leave depending upon the length of appointment during the training period July 1 through June 30, as described in this section. Leave will be granted and charged in one-day increments for each workday of leave requested and approved. If specialty board regulations for annual and sick leave accrual and usage differ from that outlined in this rule, written notification of the board policy shall be completed by the program director and submitted to the Dean for approval. The total maximum time a housestaff member can be away from a program in any given year or for the duration of the residency program shall be determined by the requirements of the specialty board involved. All absences must be approved by the program director. Each program will have a policy that addresses the effect of leave on promotion and length of training. If excessive time is taken, the resident may be required to extend his/her training to fulfill Board requirements.

The College of Medicine recognizes a variety of categories of leave:

Vacation Leave: Vacation leave shall be requested and approved by the program director prior to the date taken. Vacation leave should not be fragmented into less than one-week periods except under unusual circumstances and must be taken at the time approved by the program director. Vacation leave may be advanced to housestaff proportionate to expected service. This advance leave cannot exceed the amount of the leave accrual rate for a one-year period. The amount of advanced leave will not exceed that which can be earned during the remainder of the housestaff leave year. Vacation leave which has been granted but not earned by the housestaff member at the time of separation from the academic department will require an appropriate reduction for the value thereof in the final stipend payment. Vacation leave accruals are normally based on an annual rate of fifteen (15) work days for all housestaff, provided this does not exceed that allowed by the appropriate board. Housestaff may be permitted to carry over unused leave to a new year, as consistent with department policy; however, carryover must be approved by the program director and an excess of twenty-five (25) work days cannot be accumulated. All unused leave is considered non-payable leave, and there is no entitlement for lump-sum payment for unused leave upon separation or completion of training.

Sick Leave: All housestaff shall accrue sick leave at the rate of 10 working days per year of full employment if consistent with board requirements Housestaff shall be entitled to utilize for special cases severe illness, in the immediate family (spouse, parents, brothers, sisters, children, grandparents, and grandchildren of both housestaff and spouse).The number of days allowed will be determined by the program director. Sick leave may be advanced to housestaff proportionate to expected service. This advance leave cannot exceed the amount of the leave accrual rate for a one-year period. The amount of advanced leave will not exceed that which can be earned during the remainder of the housestaff leave year. Sick leave which has been granted but not earned by the housestaff member at the time of separation from the academic department will require an appropriate reduction for the value thereof in the final stipend payment. Housestaff may be permitted to carry over sick leave to a new year, as consistent with department policy; however, carryover must be approved by the program director and an excess of fifteen days (15) work days cannot be accumulated. All unused leave is considered non-payable leave, and there is no entitlement for lump-sum payment for unused leave upon separation or completion of training.

Parental Leave: Housestaff may take up to 6 weeks paid leave using accrued sick leave and vacation leave to care for a new child by birth or adoption. Sick/Vacation leave may be advanced to housestaff proportionate to expected service. Please see above sick leave policy. The official

parental leave period may begin two week before the expected date of the child's arrival and must occur with the 12-month period beginning with that date. Residents that plan to utilize parental leave are expected to notify their Training Program Director as soon as they know they will need to use parental leave to facilitate appropriate scheduling. Complicated pregnancy or delivery will be handled through additional sick leave and disability policies. FMLA mandates that up to 12 workweeks may be taken for the birth of a biological child or placement of child pending adoption. If the housestaff member chooses to take more than the 6 weeks leave, he/she will be placed on unpaid leave the remaining 12 weeks. While on unpaid leave, housestaff's insurance benefits will be covered by the academic department for up to two (2) months. After two (2) months, the house officer will be responsible for payment of insurance premiums. Such coverage may be purchased for a time period consistent with COBRA regulations.

The total time allowed away from a program in any given year or for the duration of the housestaff program will be determined by the requirements of the specialty board involved. Any absences must be made up in accordance with specialty board policy. The housestaff will be paid for makeup or extended time.

FMLA Entitlement

The Family and Medical Leave Act (FMLA) is federal legislation enacted to provide job protection for up to 12 weeks an entitlement year to an employee, or for an employee to care for his or her parent, spouse, or child who has a serious health condition determined to be FMLA-qualifying by the patient's physician, or when an employee must be absent due to becoming a parent. Employers must approve leave for events that qualify under the FMLA. Employees hired into leave-accruing positions are eligible for FMLA leave upon hire at the University of Florida.

Twelve weeks of entitlement translates to 12 weeks of an employee's regular schedule. The maximum entitlement for FMLA leave is 480 hours in the FMLA year for a full-time employee. The entitlement is prorated based on FTE, so an employee at .50 FTE would have a maximum entitlement of 240 hours in the FMLA entitlement year, which is from July 1 through June 30.

OPS employees (Staff, Academic Personnel and Graduate Assistants) who have been employed by the University of Florida at least 12 months (need not have been consecutive), and have worked a minimum of 1,250 hours during the 12 months immediately preceding the requested leave, are eligible for a total entitlement (not per event) of up to 12 workweeks of leave without pay in a fiscal year for events determined to be FMLA-qualifying. Residents are included in this group.

At the University of Florida, the leave benefits to which employees have access are frequently more generous than those provided by the FMLA. As a result, when granting appropriate leave in keeping with university policy, departments will likely meet the requirements of the FMLA as a matter of course.

Domestic Violence Leave: Housestaff are eligible up to 3 days leave in a twelve-month period if the housestaff member or a family or household member is a victim of domestic violence. The fiscal year of July 1 to June 30 will be considered the 12 month period. Except in case of imminent danger to the health or safety of a housestaff member, or the health or safety of a family or household member, a housestaff member seeking leave from work under this section must provide his or her program director advanced notice of the leave. The housestaff member is required to use accrued sick or annual leave. In the event that the employee does not have sufficient leave hours to cover the event, the leave that is not covered will be unpaid.

Bereavement Leave: Housestaff shall be granted, upon request to the program director, up to 5 days off for funeral of an immediate family member. Housestaff members are granted 2 days of bereavement pay and for the other 3 days, the resident may use their sick or annual leave time. Immediate family shall include spouse, cohabiters, registered same sex domestic partners, children, step children, parents, parents of spouse, and the stepparents, grandparents, grandchildren, brothers, and sisters.

Military Leave: Absences for temporary military duty (e.g. two-week annual training) will not be taken from sick or annual leave but will be considered leave with pay for up to 17 days. If activated from reserve to active duty status, the housestaff member will receive thirty (30) days full pay before going on leave without pay. Insurance policies will remain in effect for dependents during the period of active duty for one year. Additional extensions require special approval from the Dean of the College of Medicine.

Jury Duty Leave: Housestaff who are summoned to jury duty will be granted paid leave for all hours required for such duty. If jury duty does not require absence for the entire workday, the employee should return to work immediately upon release by the court. The university will not reimburse the employee for meals, lodging, and travel expense while as a juror. This type of leave must be approved by program director in advance. Any absences must be made up in accordance with specialty board policy. The housestaff will be paid for makeup or extended time.

Educational Assignment: Housestaff shall be eligible for absence pertaining to educational and training provided it is allowed by the appropriate board and agreed to, in writing, by the program director. This should not be charged as either annual or sick leave.

Licensure Examination Leave: Housestaff taking American specialty board and state licensure examinations will be authorized leave at the discretion of the program director. The amount of absence authorized will not exceed the time actually required for taking the examination and for travel to and from the place of examinations. Only one licensure and one specialty exam shall be authorized per housestaff member. Any additional absence will be charged to annual leave or leave without pay if annual leave is not available.

Holidays: Housestaff shall be entitled to observe all official holidays designated by the Department of Administration for state employees except when they are on call for clinical responsibilities. Housestaff on Veteran's Administration Medical Center (VAMC) rotations shall be entitled to observe all official holidays designated by the federal government for VAMC employees except when they are on call for clinical responsibilities. When on duty or call for clinical responsibilities on designated holidays, the assignment will be considered as part of the residency and will not result in extra remuneration.

Meals
Meals for overnight call residents are provided by the hospitals to which the residents rotate. As a general rule residents who do not appear as on overnight call on the call schedule are not entitled to meals.

On-Call Quarters/Work Room
The Neurology Work Room at Shands is located at Ward 65. It has 3 computers, 2 printers, a bookshelf with general neurology and subspecialty text books, lockers, a refrigerator, white board, round table for discussion and a couch. A similar but smaller Work Room at the VA is located at 4B. On-Call Quarters for the resident on night call is located at ward 54. As a general rule, living quarters and laundry, other than on-call, are not provided by the institution. Some departmental exceptions to this may exist for residents who are sent to specific rotations outside of the immediate home area. Departmental policies will govern provision of living quarters at these sites.

The Department does provide 2 lab coats for each resident, and also provides laundering for these.

Book allowance
A book allowance of up to $500.00 per year are provided for each resident.

Miscellaneous benefits

- The resident chosen to be Chief Resident during the final year of residency receives an additional stipend.
- Low-interest loans are sometimes available through the Resident Loan Assistance Program.
- Lab coats and laundry (for lab coats) are provided.

Working environment
The institution is required to provide adequate patient support services (such as intravenous services, phlebotomy services and laboratory services, as well as messenger and transporter services). An effective laboratory, medical records, and radiologic information retrieval system must be in place to provide for appropriate conduct of the educational programs and quality and timely patient care. Also, appropriate security measures must be provided to residents in all locations including but not limited to parking facilities, on-call quarters, hospital and institutional grounds, and related clinical facilities. If you perceive that the working environment does not meet these and other reasonable requirements, please report the perceived deficiency to the Program Director or to the Office for Housestaff Affairs.

AWARDS

During the residency graduation ceremonies, the following awards are given by the faculty to the residents:

1. **Robert H. Watson Resident Teacher of the Year Award**: this award is given to the resident with the best evaluation from the medical students rotating in neurology.

2. **Kenneth Heilman Award for the Best Research Presentation**: this award is given to the graduating resident with the best research presentation.

3. **Chairman's Award for Excellence in Patient Care**: This is award is voted by the PGY2 and 3 residents and awarded to the graduating senior deemed as providing the most compassionate and comprehensive care to patients.

4. **Program Director's Scholastic Achievement Award**: this award is given to the resident with the highest in-service examination score at the year's in-service examination.

The following awards are given by the residents to the faculty:

1. **Didactic Teacher of the Year Award:** the award is given by the graduating residents for the outstanding achievement in didactic teaching of neurology and neuroscience to one faculty member.

2. **Clinical Teacher of the Year Award**: this award is given by the graduating seniors for the outstanding achievement in bedside teaching of the art and science of clinical neurology to one faculty member.

All graduating residents and fellows are also inducted to the **Melvin Greer Society**—the University of Florida Residency and Fellowship Alumni Association.

IF THERE ARE PROBLEMS

We hope that you will feel free to call upon any of the Neurology faculty or on the Program Director at any time. Stress that results from program requirements should be discussed with fellow residents and faculty, so that adjustments can be made in the program to eliminate unwarranted stress.

There are several mechanisms to deal with personal stress, whether related to the reasonable demands of residency or to factors outside of the residency, such as family problems, parenting issues, family illness, depression, anger, anxiety, or other issues. Neurology faculty members are always available to counsel you. It is understandable, however, that you may not wish to confide in faculty within the Department. The Office of House Staff Affairs, under the direction of Dr. Timothy Flynn, is available to all residents. This office can assist residents obtain counseling, housing, financial planning, spouse employment, child care and provides other benefits. Sharon Wallace in that office has years of experience. Third, if you want completely confidential assistance to deal with stress, you may avail yourself of the Resident Assistance Program (RAP), which provides short-term counseling (3 visits) free of charge to residents and their families, funded by the College of Medicine. Neither your Program Director nor the Office of Housestaff Affairs has any knowledge of these visits. The RAP counselor may arrange referrals for longer-term care (not covered financially under this plan). To arrange an appointment, please call (352) 265-5493 or (866) 643-9375, 24 hours per day, seven days a week.

Please see the attachments or institutional policies on discipline and substance abuse. The Department is obligated to follow these policies.

TECHNICAL REQUIREMENTS FOR RESIDENTS

The Neurology Program has the right not to accept residents into the program who do not meet minimum technical requirements. These are the same as requirements of the institution for admission to medical school, and are stated as follows:

1) Observation: The candidate must be able to observe demonstrations and experiments in the basic sciences, including but not limited to physiologic and pharmacologic demonstrations in animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states. A candidate must be able to observe a patient accurately at a distance and close at hand. In detail, observation necessitates the functional use of the sense of vision and other sensory modalities.

2) Communication: A candidate must be able to speak, to hear, and to observe patients in order to elicit information, describe changes in mood, activity, and posture, and perceive nonverbal communications. A candidate must be able to communicate effectively and sensitively with patients. Communication includes not only speech but reading and writing. The candidate must be able to communicate rapidly, effectively and efficiently in oral and written form with all members of the healthcare team.

3) Motor: Candidates must have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. A candidate must be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of physicians are: The administration of intravenous medication, the application of pressure to stop bleeding and the opening of obstructed airways. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4) Intellectual-Conceptual, Integrative, and Quantitative Abilities: These abilities include measurement, calculation, reasoning, analysis and synthesis of complex information.

5) Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his or her intellectual abilities, the exercise of good

judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive, and effective relationships with patients. Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, interpersonal skills, interest and motivation are all personal qualities that are assessed during the admission and education processes.

Attachment 1

AMERICAN BOARD OF PSYCHIATRY & NEUROLOGY
NEUROLOGY CORE COMPETENCIES

I. Patient Care and Procedural Skills

A. Neurologists shall demonstrate the following abilities:

1. To perform and document a relevant history and examination on culturally diverse patients to include as appropriate:

a. Chief complaint

b. History of present illness

c. Past medical history

d. A comprehensive review of systems

e. A family history

f. A sociocultural history

g. A developmental history (especially for children)

h. A situationally germane general and neurologic examination

2. To delineate appropriate differential diagnoses

3. To evaluate, assess, and recommend effective management of patients

B. Based on a comprehensive neurological assessment, neurologists shall demonstrate the following abilities:

1. To determine:

a. If a patient's symptoms are the result of a disease affecting the central and/or peripheral nervous system or are of another origin (e.g., of a systemic, psychiatric, or psychosomatic illness)

b. A formulation, differential diagnosis, laboratory investigation, and management plan

2. To develop and maintain the technical skills to:

a. Perform comprehensive neurological examination

b. Perform screening psychiatric examination

c. Perform lumbar puncture, edrophonium, and caloric testing

d. Identify and describe abnormalities seen in common neurological disorders on radiographic testing, including plain films, myelography, angiography, CT, isotope, and MRI

e. Evaluate the application and relevance of investigative procedures and interpretation in the diagnosis of neurological disease, including the following:

i. Electroencephalogram

ii. Motor and nerve conduction studies

iii. Electromyography

iv. Evoked potentials

v. Polysomnography

vi. Autonomic function testing

vii. Electronystagmogram

viii. Audiometry

ix. Perimetry

x. Psychometrics

xi. CSF analysis

xii. Imaging with ultrasound (Duplex, transcranial Doppler)

xiii. Radiographic studies as outlined above

f. Identify and describe gross and microscope specimens taken from the normal nervous system and from patients with major neurologic disorders

II. Medical Knowledge

A. Neurologists shall demonstrate the following:

1. Knowledge of major disorders, including considerations relating to age, gender, race, and ethnicity, based on the literature and standards of practice. This knowledge shall include:

a. The epidemiology of the disorder

b. The etiology of the disorder, including medical, genetic, and sociocultural factors

c. The phenomenology of the disorder

d. An understanding of the impact of physical illness on the patient's functioning

e. The experience, meaning, and explanation of the illness for the patient and family, including the influence of cultural factors and culture-bound syndromes

f. Effective treatment strategies

g. Course and prognosis

2. Knowledge of healthcare delivery systems, including patient and family counseling

3. Systems-based Practice

4. Knowledge of the application of ethical principles in delivering medical care

5. Ability to reference and utilize electronic systems to access medical, scientific, and patient information

B. Neurologists shall demonstrate knowledge of the following:

1. Basic neuroscience that is critical to the practice of neurology

2. Pathophysiology and treatment of major psychiatric and neurological disorders and familiarity with the scientific basis of neurology, including:

a. Neuroanatomy

b. Neuropathology

c. Neurochemistry

d. Neurophysiology

e. Neuropharmacology

f. Neuroimmunology/neurovirology

g. Neurogenetics/molecular neurology and neuroepidemiology

h. Neuroendocrinology

i. Neuroimaging

j. Neuro-ophthalmology

k. Neuro-otology

l. Child neurology

m. Geriatric neurology

n. Interventional neurology (basic principles only)

3. Neurologic disorders and diseases across the lifespan, including treatment for the following:

a. Dementia and behavioral neurology disorders

b. Epilepsy and related disorders

c. Neuromuscular disorders

d. Demyelinating and dysmyelinating disorders of the central nervous system

e. Cerebrovascular disorders

f. Infectious diseases of the nervous system

g. Neoplastic disorders and tumors of the nervous system

h. Nervous system trauma

i. Toxic and metabolic disorders of the nervous system

j. Acute, chronic pain

k. Sleep disorders

l. Changes in mental state second to therapy

m. Critical care and emergency neurology

n. Coma and brain death

o. Headache and facial pain

p. Movement disorders, including abnormalities caused by drugs

q. End of life care and palliative care

r. Neurologic disorders associated with vitamin deficiency or excess

4. Patient evaluation and treatment selection, including:

a. The nature of patients' histories and physical findings and the ability to correlate the findings with a probable localization for neurologic dysfunction

b. Probable diagnoses and differential diagnoses

i. In adults

ii. In children

c. Planning for evaluation and management

d. Potential risks and benefits of potential therapies, including surgical procedures

5. Psychiatry, including:

a. Psychopathology, epidemiology, diagnostic criteria, and clinical course for common psychiatric disorders, including

i. Disorders usually first diagnosed in infancy, childhood, or adolescence

ii. Schizophrenic and other psychotic disorders

iii. Mood disorders

iv. Anxiety disorders

v. Somatoform disorders

vi. Factitious disorders

vii. Dissociative disorders

viii. Sexual and gender identity disorders

ix. Eating disorders

x. Adjustment disorders

xi. Delirium, dementia, amnestic, and other cognitive disorders

xii. Mental disorders due to general medical conditions

xiii. Neurologic presentations following emotional, sexual, and/or physical abuse

xiv.Substance-related disorders

xv. Disorders of higher cortical function

b. Psychopharmacology

i. Major drugs used for treatment, e.g., antipsychotics, antidepressants, antianxiety agents, mood stabilizers

ii. Side effects of drugs used for treatment, e.g., acute, motor, neuroleptic malignant syndrome

iii. Iatrogenic disorders in psychiatry and neurology, changes in mental status, and movement disorders

iv. Nonpharmacologic treatments and management

6. Employment of principles of quality improvement in practice

III. Interpersonal and Communications Skills

A. Neurologists shall demonstrate the following competencies:

1. To listen to and understand patients and to attend to nonverbal communication

2. To communicate effectively with patients using verbal, nonverbal, and written skills as appropriate

3. To develop and maintain a therapeutic alliance with patients by instilling feelings of trust, honesty, openness, rapport, and comfort in the relationship with physicians

4. To partner with patients to develop an agreed upon healthcare management plan

5. To transmit information to patients in a clear and meaningful fashion

6. To understand the impact of physicians' own feelings and behavior so that it does not interfere with appropriate treatment

7. To communicate effectively and work collaboratively with allied healthcare professionals and with other professionals involved in the lives of patients and families

8. To educate patients, their families, and professionals about medical, psychosocial, and behavioral issues

9. To preserve patient confidentiality

B. Neurologists shall demonstrate the ability to obtain, interpret, and evaluate consultations from other medical specialties. This shall include:

1. Knowing when to solicit consultation and having sensitivity to assess the need for consultation

2. Formulating and clearly communicating the consultation question

3. Discussing the consultation findings with the consultant

4. Discussing the consultation findings with the patient and family

C. Neurologists shall serve as an effective consultant to other medical specialists, and community agencies by demonstrating the abilities to:

1. Communicate effectively with the requesting party to refine the consultation question

2. Maintain the role of consultant

3. Communicate clear and specific recommendations

4. Respect the knowledge and expertise of the requesting professionals

D. Neurologists shall demonstrate the ability to communicate effectively with patients and their families by:

1. Matching all communication to the educational and intellectual levels of patients and their families

2. Demonstrating sociocultural sensitivity to patients and their families

3. Providing explanations of psychiatric and neurological disorders and treatment that are jargon-free and geared to the educational/intellectual levels of patients and their families

4. Providing preventive education that is understandable and practical

5. Respecting patients' cultural, ethnic, religious, and economic backgrounds

6. Developing and enhancing rapport and a working alliance with patients and their families

7. Ensuring that the patient and/or family have understood the communication

8. Responding promptly to electronic communications when used as a communication method agreed upon by neurologists and their patients and patients' families

E. Neurologists shall maintain up-to-date medical records and write legible prescriptions. These records must capture essential information while simultaneously respecting patient privacy, and they must be useful to health professionals outside neurology.

F. Neurologists shall demonstrate the ability to effectively lead a multidisciplinary treatment team, including being able to:

1. Listen effectively

2. Elicit needed information from team members

3. Integrate information from different disciplines

4. Manage conflict

5. Clearly communicate an integrated treatment plan

G. Neurologists shall demonstrate the ability to communicate effectively with patients and their families while respecting confidentiality. Such communication may include:

1. The results of the assessment

2. Use of informed consent when considering investigative procedures

3. Genetic counseling, palliative care, and end-of-life issues when appropriate

4. Consideration and compassion for the patient in providing accurate medical information and prognosis

5. The risks and benefits of the proposed treatment plan, including possible side-effects of medications and/or complications of non-pharmacologic treatments

6. Alternatives (if any) to the proposed treatment plan

7. Appropriate education concerning the disorder, its prognosis, and prevention strategies

IV. Practice-Based Learning and Improvement

A. Neurologists shall recognize limitations in their own knowledge base and clinical skills, and understand and address the need for lifelong learning.

B. Neurologists shall demonstrate appropriate skills for obtaining and evaluating up-to-date information from scientific and practice literature and other sources to assist in the quality care of patients. This shall include, but not be limited to:

1. Use of medical libraries

2. Use of information technology, including Internet-based searches and literature databases

3. Use of drug information databases

4. Active participation, as appropriate, in educational courses, conferences, and other organized educational activities both at the local and national levels

C. Neurologists shall evaluate caseload and practice experience in a systematic manner. This may include:

1. Case-based learning

2. Use of best practices through practice guidelines or clinical pathways

3. Review of patient records

4. Obtaining evaluations from patients, e.g., outcomes and patient satisfaction

5. Employment of principles of quality improvement in practice

6. Obtaining appropriate supervision and consultation

7. Maintaining a system for examining errors in practice and initiating improvements to eliminate or reduce errors

D. Neurologists shall demonstrate the ability to critically evaluate relevant medical literature. This may include:

1. Using knowledge of common methodologies employed in neurologic research

2. Researching and summarizing a particular problem that derives from their own caseloads

E. Neurologists shall demonstrate the abilities to:

1. Review and critically assess scientific literature to determine how quality of care can be improved in relation to one's practice, e.g., reliable and valid assessment techniques, treatment approaches with established effectiveness, practice parameter adherence. Within this aim, neurologists shall be able to assess the generalizability or applicability of research findings to one’s patients in relation to their sociodemographic and clinical characteristics

2. Develop and pursue effective remediation strategies that are based on critical review of the scientific literature

V. Professionalism

A. Neurologists shall demonstrate responsibility for their patients' care, including:

1. Responding to communication from patients and health professionals in a timely manner

2. Establishing and communicating back-up arrangements, including how to seek emergent and urgent care when necessary

3. Using medical records for appropriate documentation of the course of illness and its treatment

4. Providing coverage if unavailable, e.g. when out of town or on vacation

5. Coordinating care with other members of the medical and/or multidisciplinary team

6. Providing for continuity of care, including appropriate consultation, transfer, or referral if necessary

B. Neurologists shall demonstrate ethical behavior, integrity, honesty, compassion, and confidentiality in the delivery of care, including matters of informed consent/assent, professional conduct, and conflict of interest.

C. Neurologists shall demonstrate respect for patients and their families, and their colleagues as persons, including their ages, cultures, disabilities, ethnicities, genders, socioeconomic backgrounds, religious beliefs, political leanings, and sexual orientations.

D. Neurologists shall demonstrate understanding of and sensitivity to end of life care and issues regarding provision of care and clinical competence.

E. Neurologists shall review their professional conduct and remediate when appropriate.

F. Neurologists shall participate in the review of the professional conduct of their colleagues.

VI. Systems-Based Practice

A. Neurologists shall have a working knowledge of the diverse systems involved in treating patients of all ages, and understand how to use the systems as part of a comprehensive system of care in general and as part of a comprehensive, individualized treatment plan. This shall include the:

1. Evaluation and implementation, where indicated, of the use of practice guidelines

2. Ability to access community, national, and allied health professional resources that may enhance the quality of life of patients with chronic neurologic and psychiatric illnesses

3. Demonstration of the ability to lead and work within health care teams needed to provide comprehensive care for patients with neurologic and psychiatric disease and respect professional boundaries

4. Demonstration of skills for the practice of ambulatory medicine, including time management, clinical scheduling, and efficient communication with referring physicians

5. Use of appropriate consultation and referral mechanisms for the optimal clinical management of patients with complicated medical illness

6. Demonstration of awareness of the importance of adequate cross-coverage

7. Use of accurate medical data in the communication with and effective management of patients

B. In the community system, neurologists shall:

1. Recognize the limitation of healthcare resources and demonstrate the ability to act as an advocate for patients within their sociocultural and financial constraints

2. Demonstrate knowledge of the legal aspects of neurologic diseases as they impact patients and their families

3. Demonstrate an understanding of risk management.

C. Neurologists shall demonstrate knowledge of different health care systems, including:

1. Working within the system of care to maximize cost effective utilization of resources

2. Participating in utilization review communications and, when appropriate, advocating for quality patient care

3. Educating patients concerning such systems of care

D. Neurologists shall demonstrate knowledge of community systems of care and assist patients to access appropriate care and other support services. This requires knowledge of treatment settings in the community, which include ambulatory, consulting, acute care, partial hospital, skilled care, rehabilitation, nursing homes and home care facilities, substance abuse facilities, and hospice organizations. Neurologists shall demonstrate knowledge of the organization of care in each relevant delivery setting and the ability to integrate the care of patients across such settings.

E. Neurologists shall be aware of safety issues, including acknowledging and remediating medical errors, should they occur.

[1]Cultural diversity includes issues of race, gender, language, age, country of origin, sexual orientation, religious/spiritual beliefs, sociocultural class, educational/intellectual levels, and physical disability. Working with a culturally diverse population requires knowledge about cultural factors in the delivery of health care. For the purposes of this document, all patient and peer populations are to be considered culturally diverse.

[2]For the purposes of this document, "family" is defined as those having a biological or otherwise meaningful relationship with the patient. Significant others are to be defined from the patient's point of view.

Attachment 2

The ACGME Milestones Project

As the ACGME began to move toward continuous accreditation, specialty groups developed outcomes-based milestones as a framework for determining resident and fellow performance within the six ACGME Core Competencies.

What are Milestones?
Simply defined, a milestone is a significant point in development. For accreditation purposes, the Milestones are competency-based developmental outcomes (e.g., knowledge, skills, attitudes, and performance) that can be demonstrated progressively by residents and fellows from the beginning of their education through graduation to the unsupervised practice of their specialties.

Who developed the Milestones?
Each specialty's Milestone Working Group was co-convened by the ACGME and relevant American Board of Medical Specialties (ABMS) specialty board(s), and was composed of ABMS specialty board representatives, program director association members, specialty college members, ACGME Review Committee members, residents, fellows, and others.
Why Milestones?
First and foremost, the Milestones are designed to help all residencies and fellowships produce highly competent physicians to meet the health and health care needs of the public. To this end, the

Milestones serve important purposes in program accreditation:

- Allow for continuous monitoring of programs and lengthening of site visit cycles
- Public Accountability – report at a national level on aggregate competency outcomes by specialty
- Community of practice for evaluation and research, with focus on continuous improvement of graduate medical education

For educational (residency/fellowship) programs, the Milestones will:

- Provide a rich descriptive, developmental framework for clinical competency committees
- Guide curriculum development of the residency or fellowship
- Support better assessment practices
- Enhance opportunities for early identification of struggling residents and fellows

And for residents and fellows, the Milestones will:

- Provide more explicit and transparent expectations of performance
- Support better self-directed assessment and learning
- Facilitate better feedback for professional development

How will the Milestones be used by the ACGME?
Residents'/fellows' performance on the Milestones will become a source of specialty-specific data for the specialty Review Committees to use in assessing the quality of residency and fellowship programs and for facilitating improvements to program curricula and resident performance if and when needed. The Milestones will also be used by the ACGME to demonstrate accountability of the effectiveness of graduate medical education within ACGME-accredited programs in meeting the needs of the public.

Milestone Reporting
Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as a resident moves from entry into residency through graduation.

Milestones are arranged into numbered levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice to expert. These levels do not correspond with post-graduate year of education. Selection of a level implies that the resident substantially demonstrates the milestones in that level, as well as those in lower levels.

Level 1: The resident demonstrates milestones expected of a resident who has completed his or her first post-graduate year of education.

Level 2: The resident is advancing and demonstrates additional milestones, but is not yet performing at a mid-residency level.

Level 3: The resident continues to advance and demonstrate additional milestones, consistently including the majority of milestones targeted for residency.

Level 4: The resident has advanced so that he or she now substantially demonstrates the milestones targeted for residency. This level is designed as the graduation target.

Level 5: The resident has advanced beyond performance targets set for residency and is demonstrating "aspirational" goals which might describe the performance of someone who has been in practice for several years. It is expected that only a few exceptional residents will reach this level.

History — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Obtains a neurologic history	• Obtains a complete and relevant neurologic history	• Obtains a complete, relevant, and organized neurologic history	• Efficiently obtains a complete, relevant, and organized neurologic history	• Efficiently obtains a complete, relevant, and organized neurologic history incorporating subtle verbal and non-verbal cues
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Comments: **Not yet rotated** ☐				

Neurological Exam — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Performs complete neurological exam	• Performs complete neurological exam accurately	• Performs a relevant neurological exam incorporating some additional appropriate maneuvers • Visualizes papilledema • Accurately performs a neurological exam on the comatose patient	• Efficiently performs a relevant neurological exam accurately incorporating all additional appropriate maneuvers • Accurately performs a brain death examination	• Consistently demonstrates mastery in performing a complete, relevant, and organized neurological exam
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Comments: **Not yet rotated** ☐				

Management/Treatment — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Demonstrates basic knowledge of management of patients with neurologic disease	• Discusses general approach to initial treatment of common neurologic disorders, including risks and benefits of treatment • Identifies neurologic emergencies	• Individualizes treatment for specific patients • Initiates management for neurologic emergencies and triages patient to appropriate level of care • Appropriately requests consultations from non-neurologic care providers for additional evaluation and management	• Adapts treatment based on patient response • Identifies and manages complications of therapy • Independently directs management of patients with neurologic emergencies • Appropriately requests consultations from a neurologic subspecialist for additional evaluation or management	• Demonstrates sophisticated knowledge of treatment subtleties and controversies
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Movement Disorders — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient may have a movement disorder	• Identifies movement disorder phenomenology and categories (hypokinetic and hyperkinetic)	• Diagnoses and manages common movement disorders • Identifies movement disorder emergencies	• Diagnoses uncommon movement disorders • Appropriately refers a movement disorder patient for a surgical evaluation or other interventional therapies • Manages movement disorders emergencies	• Manages uncommon movement disorders • Engages in scholarly activity in movement disorders (e.g., teaching, research)
☐	☐	☐	☐	☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Neuromuscular Disorders — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient may have a neuromuscular disorder	• Identifies patterns of neuromuscular disease (e.g., anterior horn cell disease, nerve root, plexus, peripheral nerve, neuromuscular junction, muscle) • Identifies neuromuscular disorder emergencies • Orders NCS (nerve conductive study)/EMG (electromyography) testing appropriately	• Diagnoses and manages common neuromuscular disorders • Manages neuromuscular disorder emergencies • Interprets results of NCS/EMG testing in context of clinical presentation	• Diagnoses uncommon neuromuscular disorders • Recognizes when tissue biopsy is warranted	• Manages uncommon neuromuscular disorders • Engages in scholarly activity in neuromuscular disorders (e.g., teaching, research)
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Cerebrovascular Disorders — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient may have a cerebrovascular disorder	• Describes stroke syndromes and etiologic subtypes • Identifies cerebrovascular emergencies • Lists indications and contraindications for intravenous thrombolytic therapy	• Identifies specific mechanism of patient's cerebrovascular disorder • Appropriately refers for interventional or surgical evaluation • Manages common cerebrovascular disorders including appropriate use of thrombolytics	• Diagnoses uncommon cerebrovascular disorders	• Manages uncommon cerebrovascular disorders • Engages in scholarly activity in cerebrovascular disorders (e.g., teaching, research)
☐	☐	☐	☐	☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Cognitive/Behavioral Disorders — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient may have a cognitive/behavioral disorder	• Identifies common cognitive/behavioral disorders	• Diagnoses and manages common cognitive/behavioral disorders, including cognitive effects of traumatic brain injury • Manages behavioral complications of cognitive/behavioral disorders • Appropriately refers for neuropsychological testing in evaluating patients with cognitive/behavioral disorders	• Diagnoses and manages uncommon cognitive/behavioral disorders	• Engages in scholarly activity in cognitive/behavioral disorders (e.g., teaching, research) • Demonstrates sophisticated knowledge of advanced diagnostic testing and controversies
☐	☐	☐	☐	☐
Comments:				**Not yet rotated** ☐

Demyelinating Disorders — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient may have a demyelinating disorder	• Diagnoses and manages common demyelinating disorders	• Recognizes uncommon demyelinating disorders • Manages acute presentations of demyelinating disorders	• Diagnoses uncommon demyelinating disorders	• Manages uncommon demyelinating disorders • Engages in scholarly activity in demyelinating disorders (e.g., teaching, research)
☐	☐	☐	☐	☐
Comments:				**Not yet rotated** ☐

Epilepsy — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient may have had a seizure	• Identifies epilepsy phenomenology, and classification of seizures and epilepsies • Diagnoses convulsive status epilepticus	• Diagnoses and manages common seizure disorders and provides antiepileptic drug treatment • Diagnoses non-convulsive status epilepticus • Manages convulsive and non-convulsive status epilepticus	• Diagnoses uncommon seizure disorders • Appropriately refers an epilepsy patient for surgical evaluation or other interventional therapies	• Manages uncommon seizure disorders • Engages in scholarly activity in epilepsy (e.g., teaching, research)
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Headache Syndromes — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes common headache syndromes	• Diagnoses and manages common headache syndromes • Identifies headache emergencies	• Recognizes uncommon headache syndromes • Diagnoses and manages headache emergencies	• Diagnoses and manages uncommon headache syndromes	• Engages in scholarly activity in headache syndromes (e.g., teaching, research)
☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Neurologic Manifestations of Systemic Disease — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient's neurologic symptoms may be due to systemic illness • Identifies neurologic emergencies due to systemic disease	• Diagnoses and manages common neurologic manifestations of systemic diseases • Diagnoses and manages neurologic emergencies due to systemic disease	• Recognizes uncommon neurologic manifestations of systemic disease	• Diagnoses and manages uncommon neurologic manifestations of systemic disease	• Engages in scholarly activity in neurologic manifestations of systemic disease (e.g., teaching, research)
☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐
Comments:				**Not yet rotated** ☐

Child Neurology for the Adult Neurologist — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Obtains basic neurologic history of infants and children	• Lists the elements of a neurological examination of infants and children • Recognizes broad patterns of neurologic disease in infants and children • Lists normal developmental milestones	• Obtains a complete and age-appropriate neurologic history of infants and children • Performs a complete and age-appropriate neurological examination of infants and children • Diagnoses common child neurologic disorders	• Initiates management of common childhood neurologic disorders • Initiates management of common neurologic emergencies in infants and children	• Diagnoses uncommon childhood neurologic disorders
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Neuro-Oncology — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes common clinical presentations of a brain or spine mass	• Identifies neuro-oncological emergencies and initiates management	• Provides differential diagnosis of brain or spine mass • Identifies neurologic complications due to cancer or the treatment of cancer	• Appropriately refers for advanced testing, including biopsy • Manages neurologic complications due to cancer or the treatment of cancer	• Engages in scholarly activity in neuro-oncology (e.g., teaching, research)
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Psychiatry for the Adult Neurologist — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Recognizes when a patient may have a psychiatric disorder • Obtains an appropriate psychiatric history	• Identifies common psychiatric disorders • Identifies psychiatric co-morbidities in patients with a neurologic disease	• Recognizes when a patient's neurological symptoms are of psychiatric origin • Recognizes when a patient's psychiatric symptoms are of neurologic origin • Identifies major side effects of psychiatric medications	• Diagnoses common psychiatric disorders • Initiates management of psychiatric co-morbidities in patients with a neurologic disease	• Engages in scholarly activity in psychiatric disorders (e.g., teaching, research)
☐	☐	☐	☐	☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Neuroimaging — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Identifies basic neuroanatomy on brain magnetic resonance (MR) and computerized tomography (CT)	• Recognizes emergent imaging findings on brain MR and CT • Identifies basic neuroanatomy on spine MR and CT • Identifies major vascular anatomy on angiography	• Describes abnormalities of the brain and spine on MR and CT • Identifies major abnormalities on angiography	• Interprets MR and CT neuroimaging of brain and spine	• Identifies subtle abnormalities on angiography • Interprets carotid and transcranial ultrasound
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Electroencephalogram (EEG) — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Explains an EEG procedure in non-technical terms	• Uses appropriate terminology related to EEG (e.g., montage, amplitude, frequency)	• Describes normal EEG features of wake and sleep states • Recognizes EEG patterns of status epilepticus • Recognizes common EEG artifacts	• Interprets common EEG abnormalities and creates a report • Recognizes normal EEG variants	• Interprets uncommon EEG abnormalities • Describes normal and some abnormal EEG features of wake and sleep states in children
☐	☐	☐	☐	☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Nerve Conduction Studies (NCS)/Electromyography (EMG) — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Explains an NCS/EMG procedure in nontechnical terms	• Uses appropriate terminology related to NCS/EMG	• Describes NCS/EMG data • Lists NCS/EMG findings in common disorders	• Interprets NCS/EMG data in common disorders • Describes common pitfalls of NCS/EMG • Formulates basic NCS/EMG plan for specific, common clinical presentations	• Performs, interprets, and creates a report for NCS/EMG
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Comments: **Not yet rotated** ☐				

Lumbar Puncture — Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
• Lists the indications and contraindications for lumbar puncture	• Lists the complications of lumbar puncture and their management	• Performs lumbar puncture under direct supervision	• Performs lumbar puncture without direct supervision	• Performs lumbar puncture on patients with challenging anatomy
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Comments: **Not yet rotated** ☐				

Localization — Medical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
• Attempts to localize lesions within the nervous system • Describes basic neuroanatomy	• Localizes lesions to general regions of the nervous system	• Accurately localizes lesions to specific regions of the nervous system	• Efficiently and accurately localizes lesions to specific regions of the nervous system • Describes advanced neuroanatomy	• Consistently demonstrates sophisticated and detailed knowledge of neuroanatomy in localizing lesions
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments:				**Not yet rotated** ☐

Formulation — Medical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
• Summarizes history and exam findings	• Summarizes key elements of history and exam findings • Identifies relevant pathophysiologic categories to generate a broad differential diagnosis	• Synthesizes information to focus and prioritize diagnostic possibilities • Correlates the clinical presentation with basic anatomy of the disorder	• Efficiently synthesizes information to focus and prioritize diagnostic possibilities • Accurately correlates the clinical presentation with detailed anatomy of the disorder • Continuously reconsiders diagnostic differential in response to changes in clinical circumstances • Diagnoses brain death	• Consistently demonstrates sophisticated and detailed knowledge of pathophysiology in diagnosis • Effectively educates others about diagnostic reasoning
☐	☐	☐	☐	☐	☐	☐	☐	☐
Comments:				**Not yet rotated** ☐

Diagnostic Investigation — Medical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
• Demonstrates general knowledge of diagnostic tests in neurology	• Discusses general diagnostic approach appropriate to clinical presentation • Lists risks and benefits of tests to patient	• Individualizes diagnostic approach to the specific patient • Accurately interprets results of common diagnostic tests	• Explains diagnostic yield and cost-effectiveness of testing • Accurately interprets results of less common diagnostic testing • Recognizes indications and implications of genetic testing • Recognizes indications of advanced imaging and other diagnostic studies	• Demonstrates sophisticated knowledge of diagnostic testing and controversies
☐	☐	☐	☐	☐

Comments:

Not yet rotated ☐

Systems thinking, including cost and risk effective practice — Systems-based Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
• Describes basic cost and risk implications of care	• Describes cost and risk benefit ratios in patient care	• Makes clinical decisions that balance cost and risk benefit ratios	• Incorporates available quality measures in patient care	• Engages in scholarly activity regarding cost- and risk-effective practice
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Comments: **Not yet achieved Level 1** ☐				

Work in inter-professional teams to enhance patient safety — Systems-based Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
• Describes team members' roles in maintaining patient safety	• Identifies and reports errors and near-misses	• Describes potential sources of system failure in clinical care such as minor, major, and sentinel events	• Participates in a team-based approach to medical error analysis	• Engages in scholarly activity regarding error analysis and patient safety
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Comments: **Not yet achieved Level 1** ☐				

Self-directed learning — Practice-based Learning and Improvement

- Identify strengths, deficiencies, and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform appropriate learning activities
- Use information technology to optimize learning

Level 1	Level 2	Level 3	Level 4	Level 5
• Acknowledges gaps in knowledge and expertise	• Incorporates feedback	• Develops an appropriate learning plan based upon clinical experience	• Completes an appropriate learning plan based upon clinical experience	• Engages in scholarly activity regarding practice-based learning and improvement

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Comments:

Not yet achieved Level 1 ☐

Locate, appraise, and assimilate evidence from scientific studies related to the patient's health problems – Practice-based Learning and Improvement

Level 1	Level 2	Level 3	Level 4	Level 5
• Uses information technology to search and access relevant medical information	• Uses scholarly articles and guidelines to answer patient care issues	• Critically evaluates scientific literature	• Incorporates appropriate evidence-based information into patient care • Understands the limits of evidence-based medicine in patient care	• Engages in scholarly activity regarding evidence-based medicine

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Comments:

Not yet achieved Level 1 ☐

Compassion, integrity, accountability, and respect for self and others — Professionalism				
Level 1	Level 2	Level 3	Level 4	Level 5
• Demonstrates compassion, sensitivity, and responsiveness to patients and families • Demonstrates non-discriminatory behavior in all interactions, including diverse and vulnerable populations • Describes effects of sleep deprivation and substance abuse on performance	• Demonstrates appropriate steps to address impairment in self • Consistently demonstrates professional behavior, including dress and timeliness	• Demonstrates compassionate practice of medicine, even in context of disagreement with patient beliefs • Incorporates patients' socio-cultural needs and beliefs into patient care • Demonstrates appropriate steps to address impairment in colleagues	• Mentors others in the compassionate practice of medicine, even in context of disagreement with patient beliefs • Mentors others in sensitivity and responsiveness to diverse and vulnerable populations • Advocates for quality patient care	• Engages in scholarly activity regarding professionalism
☐	☐	☐	☐	☐	☐	☐	☐	☐
Comments:				**Not yet achieved Level 1** ☐

Knowledge about, respect for, and adherence to the ethical principles relevant to the practice of medicine, remembering in particular that responsiveness to patients that supersedes self-interest is an essential aspect of medical practice — Professionalism				
Level 1	Level 2	Level 3	Level 4	Level 5
• Describes basic ethical principles	• Determines presence of ethical issues in practice	• Analyzes and manages ethical issues in straightforward clinical situations	• Analyzes and manages ethical issues in complex clinical situations	• Demonstrates leadership and mentorship on applying ethical principles
☐	☐	☐	☐	☐	☐	☐	☐	☐
Comments:				**Not yet achieved Level 1** ☐

Relationship development, teamwork, and managing conflict — Interpersonal and Communication Skills				
Level 1	Level 2	Level 3	Level 4	Level 5
• Develops a positive relationship with patients in uncomplicated situations • Actively participates in team-based care	• Manages simple patient/family-related conflicts • Engages patients in shared decision-making	• Manages conflict in complex situations • Uses easy-to-understand language in all phases of communication	• Manages conflict across specialties and systems of care • Leads team-based patient care activities	• Engages in scholarly activity regarding teamwork and conflict management
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Comments: **Not yet achieved Level 1** ☐				

Information sharing, gathering, and technology — Interpersonal and Communication Skills				
Level 1	Level 2	Level 3	Level 4	Level 5
• Effectively communicates during patient hand-overs using a structured communication tool • Completes documentation in a timely fashion • Accurately documents transitions of care	• Effectively communicates during team meetings, discharge planning, and other transitions of care • Educates patients about their disease and management, including risks and benefits of treatment options • Completes all documentation accurately, including use of EHR, to promote patient safety	• Effectively communicates the results of a neurologic consultation in a timely manner • Effectively gathers information from collateral sources when necessary • Demonstrates synthesis, formulation, and thought process in documentation	• Effectively leads family meetings • Effectively and ethically uses all forms of communication • Mentors colleagues in timely, accurate, and efficient documentation	• Develops patient education materials • Engages in scholarly activity regarding interpersonal communication
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not yet achieved Level 1 ☐

ATTACHMENT 3: Criteria for Advancing from One Year to the Next

The decision to promote a resident from PGY II → PGY III → PGY IV → graduation shall be determined by the Chairman of the Department and the Residency Program Director based upon the advice of Clinical Competency Committee (CCC). The CCC and Residency Program Director will review the performance of each resident and make a recommendation to the Chairman as to the advisability of promoting the house officer to the next year of training or graduating that resident from the program.

The criteria for advancement shall be based upon the 6 core competencies:

1. **Patient Care** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health,
2. **Medical Knowledge** about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care,
3. **Practice-Based Learning and Improvement** that involves the investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care,
4. **Interpersonal and Communication Skills** that result in effective information exchange and teaming with patients, their families, and other health professionals,
5. **Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population, and
6. **Systems-Based Practice**, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context of health care and the ability to effectively call on system resources to provide care that is of optimal value.

The resident must demonstrate competency in **all six areas**.

The methods of evaluation shall include direct observation of the resident, indirect observations through rotation evaluations and 360 degree evaluations, self-evaluations, examinations such as the in-service exams and clinical skills assessments, and assessment of the resident's attention to required duties, including attendance and participation at required conferences, timely review of dictations, timely completion of evaluations of students, faculty, and educational experiences, completion of patient and duty hours logs, and compliance with other administrative requirements.

Introduction

The residents will be evaluated by the CCC on a monthly basis on each rotation. In addition, a summary evaluation shall occur every six months in the fall and spring. An end of the year evaluation will be completed in June at which time the resident will be promoted or graduate from the program. Residents not meeting expectations for performance will be counseled at the time of the unfavorable evaluation as well as during the semi-annual evaluations and appropriate measures for remediation will be instituted. At the end of the year, the Residency Program Director will make a recommendation to the Chairman of the Department regarding the advisability of promoting the house officer to the next year's training or regarding the graduation of that resident from our program.

SUMMARY of METHODS of EVALUATION

Rotation Evaluations

The basic method of evaluating house staff consists of the monthly rotation evaluations completed by all faculty for residents rotating with them. These are the fundamental tools for monitoring the progress of the resident. These summary evaluations shall be written by the Program Director and reviewed with each resident during their 6-month reviews.

The evaluations are based upon expectations of a resident at that particular point in his or her training.

The resident and faculty evaluators should have a face to face meeting to discuss the evaluation.

The criteria for failing a rotation are as follows:

- The 'core' rotations are designated as all of the Adult VA and Shands In-patient and Consult Rotations, the Out-Patient Rotations and the Pediatric Neurology Rotations, all of which consist of multiple months for the resident to become competent in those areas.
- A one-time evaluation with 3 or more competencies evaluated as "needs remediation"; or repeated (2 or more) evaluations with 1 or 2 competencies evaluated as “needs remediation” will constitute failure of that rotation. The resident will be placed on probation.
- A one-time evaluation consisting of 1 or 2 competencies being judged as “needs remediation” will constitute a 'provisional' pass for that rotation. The resident will be given a warning.
- A resident who fails a 'core' rotation/on probation must perform a remedial month of that rotation in lieu of an elective and must pass that rotation in order to be promoted or to graduate. A resident who fails a core rotation near the end of an academic year may be passed on probation to the next year, pending successful completion of the remedial rotation. Failure of the remedial month of a core rotation is grounds for dismissal of the resident from the program.
- A resident who 'fails' an elective rotation will be given a warning and must re-take that rotation in lieu of another elective. Failure to pass the repeat elective would constitute grounds for dismissal from the program after review by the Residency Program Director and Chairman.
- Two 'provisional' passes/warnings in the same 'core' rotation shall be considered as if the resident had failed a rotation and that resident must perform a remedial month in lieu of an elective and must pass that rotation in order to be promoted or to graduate.
- At each 6-month review, any areas in which the resident is below expectations shall be addressed with a plan of action for improvement.
- If a resident receives a “critical deficiency” or “needs remediation” on any monthly evaluation, then a conference with that resident, the program director and preferably the staff who identified the deficiency shall be arranged to discuss the problems and means to correct this. This will not wait until the 6-month review.

The In-Service Examination

This will serve as an objective measure of the resident's academic/didactic knowledge. The in-service scores shall be reviewed with each resident in an individual conference with the Program Director, and shall be reviewed critically with the residents at the following 6-month review.

- Residents scoring < 50 percentile on major sub-categories of neurological knowledge will develop an individualized plan to improve this deficiency. The resident will review this plan at the time of the next meeting with the Program Director when the RITE scores are returned.
- Residents with an overall score < 25th percentile will be asked to use one of his/her Electives for “Board Review”. The resident needs to take a written examination given by the Program Director at the end of the Board Review Elective Month as a means of assessing competency in Medical Knowledge.

Student Evaluations of Residents

- Student evaluations of residents are considered an independent marker of the resident's interpersonal and teaching skills. All problems identified by the students will be addressed with the resident in question during the 6-month evaluation, or sooner if need be upon the discretion of the Program Director.

Clinical Skills Assessment

The American Board of Psychiatry and Neurology (ABPN) Neurology Council has recently shifted the evaluation of resident clinical skills into the residency years rather than by oral examination (Part II of the ABPN Board Certification in Neurology) after completion of residency. The resident must display competence in 5 areas (Emergency/Critical Care, Neuromuscular, Neurodegenerative (including Movement Disorders and Multiple Sclerosis), Episodic (such as epilepsy, headache) and Pediatric Neurology through live patient encounters. Along with this change, it is expected that each residency program should evaluate their own residents and document performance.

- All PGY 4 residents will need to pass all 5 areas (including Pediatric Neurology) for graduation

Resident self-assessments

- Residents should provide a self-assessment at time of each 6 month review giving their own perspective of their strengths and weaknesses as well as areas that they identify as needing more work.

Professional Development

- Ongoing research projects - Residents should provide a brief summary of any research projects with which they are involved and status reports at each 6 month evaluation.
- Yearly update of CV with any meetings attended, presentations made, professional society memberships and ongoing research.
- Grand Rounds Presentation- the feedback from the audience goes into the resident's file.
- Complaints or disciplinary actions pertaining to residents should be summarized and evaluated at each 6 month review.
- Compliments shall also become a permanent part of file
- Summary of medical records proficiency or deficiencies

Duties and Requirements for Promotion:

The PGY-2 resident should complete the following requirements prior to transition to the PGY-3 year:

1. Have successfully completed all core rotations for the year, as demonstrated by the evaluation forms for each rotation and the semiannual 6-month summary evaluations. Failure of a core rotation or 2 provisional passes in core rotations as described above mandate a remedial month on that rotation. The resident is then placed on probation. Failure to satisfactorily complete the remedial core rotation is grounds for dismissal prior to promotion. If a core rotation is failed near the end of an academic year, then the resident may be provisionally promoted under a probationary arrangement to repeat the failed rotation within the first 3 months of the next academic year. Again, failure of the remedial month is grounds for immediate dismissal. Failure of a non-core rotation requires remediation of that rotation, and repeat failure may constitute grounds for dismissal after review by the Program Director and Chairman.
2. All medical records documentation, including dictation and review of discharge summaries and outpatient charts, must be up to date or with a planned date of completion within 30 days of matriculation into the PGY-3 year.
3. Documentation of all patient encounters and procedures performed and diagnostic studies must be logged.
4. Have satisfied all requirements of any disciplinary action.
5. Must have attended 75% of all required conferences (Grand Rounds, Neuropathology conferences and resident conferences) when not on vacation or ill.
6. The following global assessment will be made at each semiannual evaluation and must be satisfactory in order for the resident to be promoted. If resident is judged to have unsatisfactory performance, then a remedial plan to address the deficiencies will be instituted:

By the end of the PGY-2 year, residents should have the ability to recognize and manage "new" clinical problems, understand neurological localization, develop core differential diagnosis, execute proper workup and evaluation, lead and teach Neurosurgey and Anesthesia interns, and medical students, interact professionally with patients, staff, and colleagues.

- ○ **Needs Remediation** lacks insight and judgment in clinical situations
- ○ **Acceptable** recognizes most new clinical situations and seeks appropriate consultation; performing at expected level
- ○ **Very Good** recognizes difficult/complicated clinical situations and seeks appropriate consultation; performing at or near a PGY-3 level
- ○ **Exemplary** recognizes and manages new clinical situations skillfully; performing at a PGY- 4 level

The PGY-3 resident should complete the following requirements prior to transition to the PGY-4 year:

1. Have successfully completed all core rotations for the year, as demonstrated by the evaluation forms for each rotation and the semiannual six-month summary evaluations. Failure of a core rotation or 2 provisional passes in core rotations as described above mandate a remedial month on that rotation. Failure to satisfactorily complete the remedial core rotation is grounds for dismissal prior to promotion. If a core rotation is failed near the end of an academic year, then the resident may be provisionally promoted under a probationary arrangement to repeat the failed rotation within the first 3 months of the next academic year. Again, failure of the remedial month is grounds for immediate dismissal. Failure of a non-core rotation requires repeat and repeat failure may constitute grounds for dismissal after review by the Residency Advisory Committee.
2. The resident must successfully complete the four adult Clinic Skills Evaluation/Assessments.
3. All medical records documentation, including dictation and review of discharge summaries and outpatient charts, must be up to date or with a planned date of completion within 30 days of matriculation into the PGY-4 year.
4. Documentation of all patient encounters and procedures performed and diagnostic studies reviewed/interpreted must be logged.
5. Have satisfied all requirements of any disciplinary action.
6. The resident must have attended 75% of all required conferences (Grand Rounds, Neuropathology conferences and resident conferences) when not on vacation or ill.
7. The following global assessment will be made at each semiannual evaluation and must be satisfactory in order for the resident to be promoted. If resident is judged to have unsatisfactory performance, then a remedial plan to address the deficiencies will be instituted:

By the end of the PGY-3 year, residents should demonstrate mastery of a large set of skills in neurological subspecialty areas, demonstrate efficiency of clinical triage and decision-making, mastery of handling of neurological emergencies, and continued professional interactions with patients, staff and colleagues.

- **Needs Remediation** not yet capable of practicing at the expected level
- **Acceptable** performing at the expected level
- **Very Good** performing at or near a PGY-4 level already
- **Exemplary** performing beyond a PGY-4 level

Criteria required for graduation:

1. Have successfully completed all core rotations for the year, as demonstrated by the evaluation forms for each rotation and the semiannual six-month summary evaluations. Failure of a core rotation or 2 provisional passes in core rotations as described above mandate a remedial month on that rotation. Failure to satisfactorily complete the remedial core rotation is grounds for dismissal prior to graduation. Failure of a non-core rotation requires repeat and repeat failure may constitute grounds for dismissal prior to graduating after review by the Residency Advisory Committee.
2. The resident must successfully complete and pass all 5 areas of the Clinical Skills Evaluation/Assessment.
3. The house officer must have satisfactorily completed all of the requirements for the previous years, as given above.
4. The PGY-4 must have given a presentation of a scholarly activity (prospective/retrospective study, case series, or case report with review of literature).
5. The resident must have attended 75% of all required conferences (Grand Rounds, Neuropathology conferences and resident conferences) when not on vacation or ill.
6. Documentation of all patient encounters and procedures performed and diagnostic studies reviewed/interpreted must be logged into the ACGME website
7. Have satisfied all requirements of any disciplinary action.
8. Dictation of discharge summaries and outpatient charts must be up to date.
9. Must complete all portions of the Common Curriculum appropriate for this year's training, as recommended by the Graduate Medical Education Committee of the Medical Center.
10. The following global assessment will be made at each semiannual evaluation and must be satisfactory in order for the resident to be promoted. If resident is judged to have unsatisfactory performance, then a remedial plan to address the deficiencies will be instituted:

By the end of the PGY-4 year, residents should demonstrate leadership skills to head a neurology consult team or ward team, and be fully prepared to practice the specialty of neurology independently

- **Unsatisfactory:** not yet capable of practicing as an independent neurologist
- **Satisfactory:** capable of practicing as an independent neurologist

General criteria:

The Program Director and Chairman anticipate that each house officer would not have disciplinary issues that would prevent them from graduating from the program or transitioning from one year to the next. However, if such a disciplinary issue should arise, the house officer is encouraged to meet all obligations as soon as possible. Discipline may be given by informal meeting or communication with the Chairman or Program Director or discipline may be given by written reprimand, written probation, or loss of other privileges.

If a house officer is placed on probationary status, specific criteria will be given to that house officer that must be met before the probation can be lifted. If those requirements are not completed satisfactorily, then immediate dismissal may occur.

Different violations of hospital or departmental policy may invoke different levels of discipline. Some disciplinary issues may lead to immediate dismissal without prior reprimand or probation.

The resident's performance of the six core competencies must be deemed adequate and appropriate to that resident's level of training to be promoted or graduated. This recommendation will be made by the Program Director to the Chairman after assessing the information in the resident's file with specific attention paid to items outlined above and upon overall assessment of the faculty as a whole. In order to graduate from the program, the resident must be deemed to be able to practice neurology competently as judged by the faculty.

In the event of suspension, non-renewal or dismissal of a resident from the program, the UF Procedure for Grievance, Suspension, Non-Renewal or Dismissal shall be followed (see Attachment 4).

ATTACHMENT 4: Procedure for Grievance, Suspension, Nonrenewal or Dismissal

INTENT:

Each training program is responsible for the conduct of that training program and for the policy on defining satisfactory performance of the resident as a student. The sponsoring institution wishes to ensure that the application of such policies are not arbitrarily illegal, unjust or create unnecessary hardship. Therefore, a policy and procedure for addressing resident dissatisfaction is established.

POLICY STATEMENT:

Context of the institutional and program requirements. Each program must develop fair and consistent standards for the residents. If a resident feels that a decision by the program violates standards of fairness then the resident is afforded a process whereby individuals outside the program may review such decisions.

DESCRIPTION:

The position of the resident presents the dual aspect of a student in graduate training while participating in the delivery of patient care. For purposes of this policy, the term "resident" applies residents, fellows, and adjunct clinical post-doctoral associates in training programs recognized and approved by the Graduate Medical Education Committee at the University of Florida College of Medicine. These training programs may be either ACGME Accredited Programs or non-accredited programs formally approved by the GMEC. The University of Florida College of Medicine is committed to the maintenance of a supportive educational environment in which residents are given the opportunity to learn and grow. Inappropriate behavior in any form in this professional setting is not permissible. A resident's continuation in the training program is dependent upon satisfactory performance as a student, including the maintenance of satisfactory professional standards in the care of patients and interactions with others on the health care team. The resident's academic evaluation will include assessment of behavioral components, including conduct that reflects poorly on professional standards, ethics, and collegiality. Disqualification of a resident as a student or as a member of the health care team from patient care duties disqualifies the resident from further continuation in the program.

Grievances: A grievance is defined as dissatisfaction when a resident believes that any decision, act or condition affecting his or her program of study is arbitrary, illegal, unjust or creates unnecessary hardship. Such grievance may concern, but is not limited to, the following: academic progress, mistreatment by any University employee or student, wrongful assessment of fees, records and registration errors, discipline (other than nonrenewal or dismissal) and discrimination because of race, national origin, gender, marital status, religion, age or disability, subject to the exception that complaints of sexual harassment will be handled in accordance with the specific published policies of the University of Florida College of Medicine.

Prior to invoking the grievance procedures described herein, the resident is strongly encouraged to discuss his or her grievance with the person(s) alleged to have caused the grievance. The discussion should be held as soon as the resident becomes aware of the act or condition that is the basis for the grievance. In addition, or alternatively, the resident may wish to present his or her grievance in
writing to the person(s) alleged to have caused the grievance. In either situation, the person(s) alleged to have caused the grievance may respond orally or in writing to the resident.

If a resident decides against discussing the grievance with the person(s) alleged to have caused such, or if the resident is not satisfied with the response, he or she may present the grievance to the Chair. If, after discussion, the grievances cannot be resolved,
the resident may contact the Associate Dean of Graduate Medical Education (ADGME). The ADGME will meet with the resident and will review the grievance. The decision of the ADGME will be communicated in writing to the resident and constitute the final action of the University.

Suspension: The Chief of Staff of a participating and/or affiliated hospital where the resident is assigned, the Dean, the President of the Hospital, the Chair, the Division Chief or Program Director may at any time suspend a resident from patient care responsibilities. The resident will be informed of the reasons for the suspension and will be given an opportunity to provide information in response. The resident suspended from patient care may be assigned to other duties as determined and approved by the Chair. The resident will either be reinstated (with or without the imposition of academic probation or other conditions) or dismissal proceedings will commence by the University against the resident within thirty (30) days of the date of suspension.

Any suspension and reassignment of the resident to other duties may continue until final conclusion of the decision-making or appeal process. The resident will be afforded due process and may appeal to the ADGME for resolution, as set forth below.

Nonrenewal : In the event that the Program Director decides not to renew a resident's appointment, the resident will be provided written notice which will include a statement specifying the reason(s) for nonrenewal. This should be done at least 4 months prior to the end of the resident's current agreement.

If requested in writing by the resident, the Chair will meet with the resident; this meeting should occur within 10 working days of the written request. The resident may present relevant information regarding the proposed nonrenewal decision. The resident may be accompanied by an advisor during any meeting held pursuant to these procedures, but the advisor may not speak on behalf of the resident. If the Chair determines that nonrenewal is appropriate, he or she will use their best efforts to present the decision in writing to the resident within 10 working days of the meeting. The resident will be informed of the right to appeal to the ADGME as described below.

Dismissal: In the event the Program Director of a training program concludes a resident should be dismissed prior to completion of the program, the Program Director will inform the Chair in writing of this decision and the reason(s) for the decision. The resident will be notified and provided a copy of the letter of proposed dismissal; and, upon request, will be provided previous evaluations, complaints, counseling, letters and other documents that relate to the decision to dismiss the resident.

If requested in writing by the resident, the Chair will meet with the resident; this meeting should occur within 10 working days of the written request. The resident may present relevant information regarding the proposed dismissal. The resident may be
accompanied by an advisor during any meeting held pursuant to these procedures, but the advisor may not speak on behalf of the resident. If the Chair determines that dismissal is appropriate, he or she will use their best efforts to present the decision in writing to the
resident within 10 working days of the meeting. The resident will be informed of the right to appeal to the ADGME as described below.

Appeal: If the resident appeals a decision for suspension, nonrenewal or dismissal, this appeal must be made in writing to the ADGME within 10 working days from the resident's receipt of the decision of the person suspending the resident or the Chair. Failure to file such an appeal within 10 working days will render the decision
of the person suspending the resident or the Chair the final agency action of the University.

The ADGME will conduct a review of the action and may review documents or any other information relevant to the decision. The resident will be notified of the date of the meeting with the ADGME; it should occur within 15 wooo/p;working working days of the ADGME's receipt of the
working days of the appeal. The ADGME may conduct an investigation and uphold, modify or reverse the recommendation for suspension, nonrenewal or dismissal. The ADGME will notify the resident in writing of the ADGME's decision. If the decision is to uphold a suspension, the decision of the ADGME is the final agency action of the University. If the decision is to uphold the nonrenewal or dismissal, the resident may file within 10 working days a written appeal to the Dean of the College of Medicine. Failure to file such an appeal within 10 working days will render the decision of the ADGME the final action of the University.

The Dean will inform the ADGME of the appeal. The ADGME will provide the Dean a copy of the decision and accompanying
documents and any other material submitted by the resident or considered in the appeal process. The Dean will use his or her best efforts to render a decision within 15 working days, but failure to do so is not grounds for reversal of the decision under appeal. The
Dean will notify in writing the Chair, the ADGME, the Program Director and resident of the decision. The decision of the Dean will be the final agency action of the University. The resident will be informed of the steps necessary for the resident to further challenge
the action of the University.

ATTACHMENT 5: Clinical Skills Assessment

A) UF Neurology Resident's Clinical Skills Assessment Rules and Regulations:

In accordance with the standards set by the ABPN Neurology Council, the residents of the UF Neurology Residency Training Program who are in their PGY-3 and PGY-4 year of training will participate in four to five encounters. These encounters will be in the areas of [1)] Child Neurology, [2)] Critical Care, [3)] Neuromuscular, [4)] Episodic (headache, seizure), and [5)] Neurodegenerative/ Movement/ Inflammatory. All PGY-2 residents will need to have successfully completed two of the four Adult Clinical Skills Evaluations, all PGY-3 will need to have successfully completed four Clinical Skills Evaluations; and all PGY-4 residents will need to have successfully completed all five Clinical Skills Evaluations.

A) Examination: The patient chosen should not be familiar to the resident and can be an in-patient or out-patient at either Shands at UF or the Veterans Affairs Medical Center. The timed patient encounter should be no longer than 45 minutes in length and will be observed by one of the UF neurology faculty members who has expertise in the topic being evaluated. During this time, the resident is expected to take an appropriate history, perform all relevant physical/neurological examinations, have a working diagnosis and treatment plan, and counsel the patient accordingly. After the form has been completed it should be handed over to the Residency Coordinator, Jennifer Shipley AND NOT to the resident. At least five minutes should be spent providing feedback/constructive criticisms to the resident without providing the final evaluation. Thus, the entire clinical skills evaluation should take not longer than 50 minutes.

B) Evaluation: It will be clear to both attendings and the residents being evaluated that the evaluation will be completed with the expectations being a performance equal to that of an independent neurologist and the attending should NOT adjust for residency level. The verbal feedback provided to the resident at the end of the examination by the faculty member will be written along with the faculty member's final evaluation in each criterion. The faculty members will use two scales: a) the UF Neurology Residency four point scale used in all other residency evaluations; and b) the standardized/Neurology RRC/ACGME-Approved eight point scale for the Major Neurology Clinical Evaluation Examination. The UF four point scale is as follows:

1. Unsatisfactory: The history, examination, assessment or counseling is substandard and the resident is not yet ready to function as a competent and humanistic independent neurologist in the area being assessed.
2. Satisfactory: The history, examination, assessment and counseling performed by the resident is satisfactory and s/he meets the minimum standards of functioning as a safe and independent neurologist.
3. Very Good: The entire patient assessment was comprehensive and performed in a compassionate manner. The resident is comfortable with the area being assessed and is clearly ready to function as an independent neurologist.
4. Exemplary performance: The resident showed mastery in the patient assessment and counseling and performed like a seasoned neurologist.

The RRC/ACGME-Approved 8-point scales is as follows:

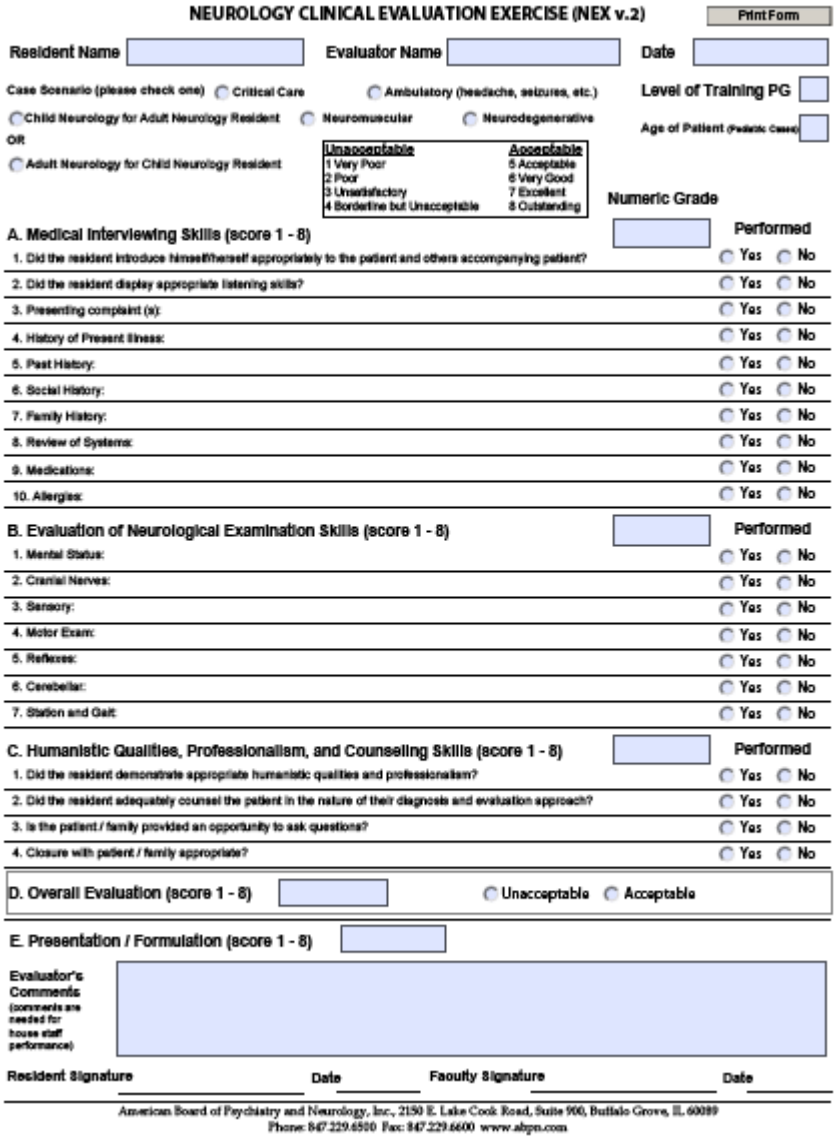
1. Very Poor
2. Poor
3. Unsatisfactory
4. Borderline but Unacceptable
5. Borderline but Acceptable
6. Very Good
7. Excellent
8. Outstanding

These two scales will be placed next to each other on each area to be evaluated to guide the faculty member of the equivalence of each scale.

C) Passing/Failing: The 8-point grading system outlined above will be used to determine the final grade that will assess resident competency. Two criteria must be met in each of the five areas of evaluation to achieve competency and will be understood by both the attending and resident: [1)] the overall rating must be "5" or higher and [2)] each subcategory must have scored "5" or higher.

D) Remediation procedures: If the resident fails to achieve a passing score, the resident will have the opportunity to review his/her evaluation and feedback provided by the attending, reflect on possible shortcomings, and participate in a remediation with the same attending. Should the

resident fail on the second attempt, the resident will need to remediate again but with a different attending. The resident will need to pass all required Clinical Skills Evaluation prior to promotion to the next PGY level, and all 5 evaluations prior to graduation from the Residency Training Program.



NEUROLOGY CLINICAL EVALUATION EXERCISE (NEX v.2) Print Form

Resident Name | Evaluator Name | Date

Case Scenario (please check one) ○ Critical Care ○ Ambulatory (headache, seizures, etc.) Level of Training PG

○ Child Neurology for Adult Neurology Resident ○ Neuromuscular ○ Neurodegenerative Age of Patient (Pediatric Cases)

OR

○ Adult Neurology for Child Neurology Resident

Unacceptable	Acceptable
1 Very Poor	5 Acceptable
2 Poor	6 Very Good
3 Unsatisfactory	7 Excellent
4 Borderline but Unacceptable	8 Outstanding

Numeric Grade

A. Medical Interviewing Skills (score 1 - 8)	Performed
1. Did the resident introduce himself/herself appropriately to the patient and others accompanying patient?	○ Yes ○ No
2. Did the resident display appropriate listening skills?	○ Yes ○ No
3. Presenting complaint (s):	○ Yes ○ No
4. History of Present Illness:	○ Yes ○ No
5. Past History:	○ Yes ○ No
6. Social History:	○ Yes ○ No
7. Family History:	○ Yes ○ No
8. Review of Systems:	○ Yes ○ No
9. Medications:	○ Yes ○ No
10. Allergies:	○ Yes ○ No

B. Evaluation of Neurological Examination Skills (score 1 - 8)	Performed
1. Mental Status:	○ Yes ○ No
2. Cranial Nerves:	○ Yes ○ No
3. Sensory:	○ Yes ○ No
4. Motor Exam:	○ Yes ○ No
5. Reflexes:	○ Yes ○ No
6. Cerebellar:	○ Yes ○ No
7. Station and Gait:	○ Yes ○ No

C. Humanistic Qualities, Professionalism, and Counseling Skills (score 1 - 8)	Performed
1. Did the resident demonstrate appropriate humanistic qualities and professionalism?	○ Yes ○ No
2. Did the resident adequately counsel the patient in the nature of their diagnosis and evaluation approach?	○ Yes ○ No
3. Is the patient / family provided an opportunity to ask questions?	○ Yes ○ No
4. Closure with patient / family appropriate?	○ Yes ○ No

D. Overall Evaluation (score 1 - 8) ○ Unacceptable ○ Acceptable

E. Presentation / Formulation (score 1 - 8)

Evaluator's Comments (comments are needed for house staff performance)

Resident Signature Date Faculty Signature Date

American Board of Psychiatry and Neurology, Inc., 2150 E. Lake Cook Road, Suite 900, Buffalo Grove, IL 60089
Phone: 847.229.6500 Fax: 847.229.6600 www.abpn.com

ATTACHMENT 6: Neurology Faculty Evaluation of Residents per Rotation

2015 Faculty Evaluation of Resident

[Subject Name]
[Subject Status]
[Subject Program]
[Evaluation Dates]
[Subject Rotation]

Evaluator
[Evaluator Name]
[Evaluator Status]
[Evaluator Program]

Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME competencies organized in framework from less to more advanced. The milestones are arranged into numbered labels. Level 1 being the bottom which indicates novice moving up to Level 5 indicating expert. The numbers are not correspondent to the PGY levels.

Patient care - History (PC1)

a. Level 0.5: Does not obtain a neurologic history, or history is severely flawed (critical deficiency).

b. Level 1: Obtains a neurologic history (beginner resident expectation)

c. Level 2: Obtains a **complete and relevant** neurologic history

d. Level 3: Obtains a complete, relevant, and **organized** neurologic history

e. Level 4: **Efficiently** obtains a complete, relevant, and organized neurologic history (Graduation target)

f. Level 5: Efficiently obtains a complete, relevant and organized neurologic history, **incorporating subtle verbal and non-verbal cues**. (Exceptional performance beyond graduating resident).

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Patient care – Neurological Exam (PC2)

a. Level 0.5: Attempts a neurologic exam, but essential basic elements are missing (critical deficiency)

b. Level 1 – Performs a complete neurological exam (beginner resident expectation)

c. Level 2 - Performs a complete and accurate basic neurological exam

d. Level 3 - Performs a relevant basic neurological exam incorporating some additional and appropriate patient-specific maneuvers.

e. Level 4 - Efficiently performs a relevant neurological exam with accuracy, incorporating all additional and appropriate patient-specific maneuvers (graduation target).

f. Level 5 - Consistently demonstrates mastery in performing a complete, relevant, and organized neurological exam. (Exceptional beyond a graduating resident) appropriate maneuvers.

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Management/Treatment—Patient Care (PC3)

a. Level 0.5 – Lacks basic knowledge of management of patients with neurologic disease demonstrates marked flaws (Critical deficiency)

b. Level 1 – Demonstrates basic knowledge of management of patients with neurological disease (beginner resident expectation)

c. Level 2 - Able to identify a general approach to the treatment of common neurologic disorders, including risks and benefits of treatment.

d. Level 3 - Individualizes treatment for specific patients.

e. Level 4 - Adapts treatment based on patient response. Identifies and manages complications of therapy. (Graduation target).

f. Level 5 - Demonstrates sophisticated knowledge of treatment subtleties and controversies. (Exceptional beyond a graduating resident)

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Management/Treatment (2) (PC3)

a. Level 1: Does not appropriately recognize neurological emergencies. (Critical deficiency)

b. Level 2: Can identify neurological emergencies.

c. Level 3: Initiates management for neurologic emergencies. Triages patient to appropriate level of care.

d. Level 4: Independently directs management of patients with neurologic emergencies. (Graduation target)

e. Level 5: Demonstrates sophisticated management of neurologic emergencies. (Exceptional beyond a graduating resident).

a. Level 1b. Level 2c. Level 3d. Level 4e. Level 5N/A

Comments

Remaining Characters: 5,000

Neuroimaging—Patient Care (GENERAL EVALUATION) (PC15)

a. Level 0.5 – Cannot identify basic neuroanatomy on MR and CT. (Critical deficiency)

b. Level 1 – Identifies basic neuroanatomy on brain magnetic resonance (MR) and computerized tomography (CT). (Pre-residency expectation)

c. Level 2 - Recognizes emergent imaging findings on brain MR and CT (eg, acute infarct, hemorrhage, CNS tumor). Identifies basic neuroanatomy on spinal imaging.

d. Level 3 –. Generally able to identify abnormalities on MR and CT neuroimaging of brain and spine, but requires some assistance with subtle findings.

e. Level 4 – Consistently able to independently interpret MR and CT neuroimaging of brain and spine (graduation target).

f. Level 5 - Identifies very subtle abnormalities and anatomical variants. (Exceptional beyond a graduating resident)

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Localization—Medical Knowledge (MK1)

a. Level 0.5 – Lacks basic ability to localize within the nervous system. Cannot describe basic neuroanatomy (critical deficiency)

b. Level 1 - Attempts to localize lesions within the nervous system. Describes basic neuroanatomy. (Pre-residency expectation)

c. Level 2 - Localizes lesions to general regions of the nervous system.

d. Level 3 - Accurately localizes lesions to specific regions of the nervous system.

e. Level 4 - Efficiently and accurately localizes lesions to specific regions of the nervous system. Describes advanced neuroanatomy. (Graduation target)

f. Level 5 - Consistently demonstrates sophisticated and detailed knowledge of neuroanatomy in localizing lesions (Exceptional beyond a graduating resident)

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Formulation—Medical Knowledge (MK2)

a. Level 1 - Summarizes history and exam findings (Pre-residency expectation)

b. Level 2 - Summarizes key elements of history and exam findings. Identifies relevant pathophysiologic categories to generate a broad differential diagnosis.

c. Level 3 - Synthesizes information to focus and prioritize diagnostic possibilities. Correlates the clinical presentation with basic anatomy of the disorder.

d. Level 4 - Efficiently synthesizes information to focus and prioritize diagnostic possibilities. Accurately correlates the clinical presentation with detailed anatomy of the disorder. Continuously reconsiders diagnostic differential in response to changes in clinical circumstances. (Graduation target)

e. Level 5 - Consistently demonstrates sophisticated and detailed knowledge of pathophysiology in diagnosis. Effectively educates others about diagnostic reasoning. (Exceptional beyond a graduating resident)

a. Level 1 b. Level 2 c. Level 3 d. Level 4 e. Level 5 N/A

Comments

Remaining Characters: 5,000

Diagnostic Investigation — Medical Knowledge (MK3)

a. Level 1 - Demonstrates only a very general knowledge of diagnostic tests in neurology. (Pre-residency expectation)

b. Level 2 - Discusses general diagnostic approach appropriate to clinical presentation. Lists risks and benefits of tests to patient.

c. Level 3 - Individualizes diagnostic approach to the specific patient. Accurately interprets results of common diagnostic tests.

d. Level 4 - Explains diagnostic yield of testing. Accurately interprets results of less common diagnostic testing. Recognizes indications of advanced imaging and other diagnostic studies. (Graduation target)

e. Level 5 - Demonstrates sophisticated knowledge of diagnostic testing and controversies. (Exceptional beyond a typical graduating resident)

a. Level 1 b. Level 2 c. Level 3 d. Level 4 e. Level 5 N/A

Comments

Remaining Characters: 5,000

Systems thinking, including cost and risk effective practice —Systems-based Practice (SBP1)

a. Level 0.5- Does not consider cost and risk when generating plan of care, or cannot describe basic cost and risk implications of care. (Critical deficiency)

b. Level 1 – Describes basic cost and risk implications of care (Pre-residency expectation)

c. Level 2 – Describes cost and risk-benefit ratios in patient care.

d. Level 3 - Makes clinical decisions that balance cost and risk benefit ratios.

e. Level 4 - Incorporates available quality measures in cost analysis and risk/benefit ratios. (Graduation target)

f. Level 5 - Engages in scholarly activity regarding cost-and risk-effective practice. (Exceptional beyond a typical graduating resident)

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Locate, appraise, and assimilate evidence from scientific studies related to the patient's health problems –Practice-based Learning and Improvement (PBLI2)

a. Level 0.5 – Fails to use information technology to search and access relevant medical information (critical deficiency)

b. Level 1 - Uses the EHR to search and access relevant medical information (Pre-residency expectation)

c. Level 2 - Uses scholarly articles and guidelines to answer patient care issues.

d. Level 3 - Critically evaluates scientific literature

e. Level 4 - Incorporates appropriate evidence-based information into patient care. Understands the limits of evidence-based medicine in patient care. (Graduation target)

f. Level 5 - Engages in scholarly activity regarding evidence-based medicine. (Exceptional beyond a typical graduating resident)

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Compassion, integrity, accountability, and respect for self and others—Professionalism (P1)

a. Level 0.5: Does not consistently demonstrate compassion, sensitivity, and responsiveness to patients and families. Does not consistently demonstrate non-discriminatory behavior in all interactions. (Critical deficiency).

b. Level 1 - Demonstrates basic compassion, sensitivity, and responsiveness to patients and families. Demonstrates non-discriminatory behavior in all interactions, including diverse and vulnerable populations.

c. Level 2 - Consistently demonstrates professional behavior, including professional dress and punctuality.

d. Level 3 - Demonstrates compassionate practice of medicine, even in context of disagreement with patient beliefs. Incorporates patients' socio-cultural needs and beliefs into patient care.

e. Level 4 - Mentors others in the compassionate practice of medicine, even in context of disagreement with patient beliefs. Mentors others in sensitivity and responsiveness to diverse and vulnerable populations. Advocates for quality patient care.

f. Level 5 - Engages in scholarly activity regarding professionalism.

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Knowledge about, respect for, and adherence to the ethical principles relevant to the practice of medicine, remembering in particular that responsiveness to patients that supersedes self-interest is an essential aspect of medical practice —Professionalism (P2)

a. Level 0.5 – Unable to describe basic ethical principles, or exhibits behavior that is in violation of basic ethical principles. (Critical deficiency/need for remediation).

b. Level 1 –Describes basic ethical principles

c. Level 2 - Determines presence of ethical issues in practice.

d. Level 3 - Analyzes and manages ethical issues in straightforward clinical situations.

e. Level 4 - Analyzes and manages ethical issues in complex clinical situations. (Graduation target)

f. Level 5 - Demonstrates leadership and mentorship on applying ethical principles. (Exceptional beyond a typical graduating resident)

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Information sharing, gathering, and technology—Interpersonal and Communication Skills (ICS2)

a. Level 0.5: Does not complete documentation in a timely manner (critical deficiency)

b. Level 1 - Completes documentation in a timely fashion.

c. Level 2 - Effectively communicates during team meetings, discharge planning, and other transitions of care. Educates patients about their disease and management, including risks and benefits of treatment options. Completes all documentation accurately, including use of EHR, to promote patient safety.

d. Level 3 - Effectively communicates the results of a neurologic consultation in a timely manner. Effectively gathers information from collateral sources when necessary. Demonstrates synthesis, formulation, and thought process in documentation.

e. Level 4 - Effectively leads family meetings. Effectively and ethically uses all forms of communication. Mentors colleagues in timely, accurate, and efficient documentation. (Graduation target)

f. Level 5 - Develops patient education materials. Engages in scholarly activity regarding interpersonal communication. (Exceptional beyond a typical graduating resident)

a. Level .5b. Level 1c. Level 2d. Level 3e. Level 4f. Level 5N/A

Comments

Remaining Characters: 5,000

Does this resident's performance meet or exceed his/her level of training?

Please respond in the comment box below with "Yes" or "No". If your answer is No, please provide explanation and suggestions for improvement.

Remaining Characters: 5,000

Did the resident fail to recognize when he/she needed help with patient management? Were critical mistakes made due to overconfidence?

Please respond in the comment box below with "No" or "Yes". If your answer is Yes, please provide further explanation.

Remaining Characters: 5,000

Did you personally witness the resident engage in any behavior that you consider a lapse in professionalism?

Please respond in the comment box below with "No" or "Yes". If your answer is Yes, please explain in full.

Remaining Characters: 5,000

Resident Strengths (response required.)

Remaining Characters: 5,000

Suggestions for improvement (Response required)

Remaining Characters: 5,000

Was feedback given directly to the resident at the end of the rotation?

Please respond in the comment box below with "Yes" or "No". If your answer is no, please explain why this did not occur.

Remaining Characters: 5,000

Subcompetency questions are generated based on the resident's rotation.

ATTACHMENT 7: Chart Review Form

Department of Neurology
University of Florida
Resident Chart Review

Resident _____ Year in training _____

Attending physician _____ Rotation _____

Date of review _____

Please mark each item below as “satisfactory” or “unsatisfactory” and provide feedback via comments. Any “unsatisfactory” items MUST be accompanied by an explanatory comment.

	Satisfactory	Unsatisfactory
Chief complaint/reason for consultation		
History of present illness		
Past medical history		
Family history		
Social history		
Review of systems		
Neurological examination		
Assessment		
Treatment plan		

Comments:

Attending signature _____

Resident signature _____

Please return to Jennifer Shipley

ATTACHMENT 8: Sample Resident's Evaluation of Faculty

Faculty Evaluation by Residents

[Subject Name]
[Subject Employer]
[Evaluation Dates]
[Subject Rotation]

Evaluator
[Evaluator Name]
[Evaluator Employer]

The following are important characteristics of good instruction. Using a scale of Poor-Excellent, please assess your instructor's performance on the following items. Please respond to all statements; if you cannot, leave blank.

PART I INSTRUCTOR

1) Description of rotation objectives and assignments
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

2) Communication of ideas and information
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

3) Expression of expectations for performance
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

4) Availability to assist residents in or out of class
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

5) Respect and concern for residents
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

6) Stimulation of interest in course
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

7) Facilitation of learning
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

8) Showed enthusiasm for the subject
1 = Needs Improvement 2 = Acceptable 3 = Very Good 4 = Exemplary N/A

9) Encouraged residents to think independently, creatively, critically

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

10) Overall rating of instructor

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

PART II OPTIONAL QUESTIONS

11) Provided direction and feedback effectively

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

12) Provided conscientious supervision of resident care for patients

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

13) Reliably responded to pages and messages from residents

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

14) Provided instruction to students on the service

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

15) Effectively taught to the level of the residents on service

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

16) Promoted regular review of cost containment issues

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

17) Promoted regular review of ethical, socioeconomic, and medical-legal issues in the care of patients

1 = Needs Improvement | 2 = Acceptable | 3 = Very Good | 4 = Exemplary | N/A

PART III COMMENTS

18) What were the strengths of this instructor's teaching?

Remaining Characters: 5,000

19) What were the weaknesses of this instructor's teaching?

Remaining Characters: 5,000

20) What teaching improvements would you suggest to the instructor?

Remaining Characters: 5,000

ATTACHMENT 9: Sample Resident's Evaluation of each Rotation

Resident's Evaluation of Neurology Rotations

Month of Rotation:

Name of Rotation:

1. Educational value of the rotation
    - Poor
    - Fair
    - Good
    - Very good
    - Excellent
2. Conduciveness of the rotation's environment and organization to learning
    - Poor
    - Fair
    - Good
    - Very good
    - Excellent
3. Ability to meet all applicable core competencies at the end of the rotation
    - Poor
    - Fair
    - Good
    - Very good
    - Excellent

What are the strengths of this rotation? (response required):

_____
_____
_____
_____
_____

What could be improved in this rotation? (response required):

_____
_____
_____
_____
_____

ATTACHMENT 10: Medical Cost Awareness for New Housestaff

In an academic health center, residents are responsible for the majority of patient care decisions involving clinical resources such as radiology, laboratory, and length of time patients spend in the hospital. To adequately prepare themselves for future practice in any setting, housestaff must be aware they will be entering a competitive marketplace in which physician performance is measured and reported routinely.

The two most common measures of performance in healthcare are cost and quality. It is the relationship between the patient=s outcome and the cost of supporting that outcome which defines the value a healthcare provider can claim to provide. Increasingly, medical care payment is managed by payers responding to cost and satisfaction data which may compel them to choose one institution as more effective and efficient over another. Patient care costs are followed closely within the Shands system. Use of billable items such as x-rays, diagnostic laboratory tests, intensive care days, and O.R. time are tracked. Patient satisfaction is surveyed and comparison reports are shared among dozens of academic health centers similar to Shands.

The Clinical Resource Management office (395-0374) and the Clinical Resource Management Council, comprised of representative clinical attending faculty, support evaluation and ongoing improvement in patient care outcomes, costs, and value. Shands= Coordinated Care program, administered through the Department of Nursing and Patient Services, works with CRM to assist physicians in identifying clinical practice patterns which are efficient, effective, and satisfying for the patient as well as care provider.

During two years of concentrated effort, over 10% of Shands' internal costs have been trimmed by residents and attendings making more judicious and appropriate decisions to utilize tests, exams, sites of care, and days of hospitalization. There remain, however, many opportunities to reduce clinical cost without negatively affecting care. It is the housestaff member's particular daily challenge to identify these opportunities and act on them.

Costs to Patients and Their Payers

Examples of the 1996 price-to- the-patient for typical, high-volume diagnostic orders within Radiology and the Clinical Laboratory are found in the tables below. Shands must often discount these charges heavily to ensure continuing payment within the increasingly competitive marketplace. Even when discounted, payment by insurers and for those without insurance rarely meets total billings. Because we cannot rely on consistent levels of reimbursement, it is imperative that our internal costs be as lean as possible to afford providing the broadest array of clinical services and resident training. Further information about Amanaged care@ is available through the CRM office. Specific charges to patients for other exams can be obtained by calling Radiology Administration at 395-0101, or the Clinical Laboratory at 395-0172.

High-Volume Radiology Exams (Annual Shands at UF Patients: Approx. 25,000)

Exam	Patient Charge per Exam	Annual Quantity Ordered	Annual Inpatient Charges
Chest x-ray, 1 view	**$ 100**	**65,884**	**$6,588,400**
Chest x-ray, pa/lat (2 views)	**$ 115**	**6,692**	**$769,580**
Portable Svc. Charge	**$ 0**	**72,000**	**$0**
Abdomen, 1 view	**$105**	**2,830**	**$ 297,150**
Abdominal Ultrasound	**$310**	**1,841**	**$570,630**
CT-Abdomen w/ contrast	**$1,537**	**4,804**	**$7,382,460**
MRI Brain	**$1,697**	**1,890**	**$3,208,090**

Note: Housestaff are more likely to independently make decisions about use of less complex radiology exams such as abdominal and chest views than more expensive MRI and CT scans. Yet it can quickly be seen from the table that due to annual volume, resident decisions determine the greater overall financial impact of these top-volume radiology resources. Hypothetically, if all 600 residents participated equally in deciding to utilize chest and abdominal exams alone, each resident would have accounted for over $15,000 in cost-to-patient during the year for just these 2 resources.

High-Volume Laboratory Tests

Exam	Patient Charge per Exam	Annual Quantity Ordered	Annual Inpatient Charges
Electrolyte Battery	**$66**	**118**	**$ 7,762**
Renal Disease Batt.	**$133**	**114**	**$15,198**
Liver Battery	**$135**	**22,705**	**$ 3,075,952**
UA	**$ 44**	**16,975**	**$ 743,206**
CBC w/Diff	**$114**	**57,109**	**$ 6,488,219**
CBC	**$ 40**	**110,031**	**$ 4,386,428**
PT/INR	**$ 48**	**55,524**	**$ 2,652,684**
Blood Culture	**$111**	**29,748**	**$ 3,302,028**
Urine Culture	**$ 56**	**13,969**	**$ 788,918**
Sensitivity	**$ 44**	**11,942**	**$ 522,088**

Again, it can be easily seen that during a single day (and night) on-service, a busy resident ordering multiple, serial lab batteries or common, single tests can impact his or her patient=s billings by thousands of dollars. In the intensive care areas, that figure can jump to thousands of dollars per day *per patient*.

Sensitivity and Specificity Criteria

The judicious use of diagnostic technology is a skill requirement for successful 21st century medical practice. This skill depends upon the clinician=s knowledge of a test=s sensitivity (the ability of the test to detect the disease), and it=s specificity (the ability of the test to exclude patients without the disease), and the prevalence of the disease in the population under consideration. The predictive value of an abnormal test result (how often the abnormal results will be due to the presence of the disease as opposed to a false positive) can be calculated from the sensitivity and specificity of the test and the prevalence of the disease. For example:

Clean catch urine cultures in women may illustrate the predictive value of a test. A single clean catch specimen, using a count of $\exists\ 10^5$ organisms/mm, indicates a diagnosis of urinary tract infection with a sensitivity of 95% and a specificity of 84% (1). When women with complaint of both polyura and dysura are cultured, 60% will have true urinary tract infections (2). A positive urine culture will thus have a predictive value of 90% when compared to direct bladder puncture. When women complaining of dysura alone are cultured, only 33% will have infection, as $\flat$ have vaginitis (3). A positive culture in this situation will be of less use, with a predictive value of about 75%. If women with no symptoms are studied, only 5% will have asymptomatic bacturia. In this situation, the predictive value of a positive culture indicating true infections is only 24%, much less than flipping a coin. Thus a laboratory test is most helpful in the context of strong clinical suspicion.

When to Order a Test?

For many patient groups, planned coordination of care will include specific pre-printed order sets to launch a patient into the clinical setting. Order sets will most often be used in conjunction with a clinical pathway, a time-and-event grid of the necessary care to ensure specific patient outcomes during hospitalization. The clinical pathway, developed by a multi-disciplinary team including attending faculty members, is used as a guide to optimizing the patient=s ongoing care and may include suggested intervals for standard diagnostic and monitoring tests. Although structured across a time grid, the pathway is intended to be adjusted to each individual patient=s particular situation.

An adjunct to a pathway may be an algorithm, or mapped-out sequence of key decision points which assist the housestaff member in weighing treatment and diagnostic options. When applied to the care of a specific patient, algorithms and pathways both will involve the ongoing tracking of selected variances from intended outcomes. It is through the analysis of variance patterns that structured data emerges. The data are used to enhance revision of these tools, better supporting the clinician=s decision-making process.

Beyond the structured test-ordering patterns suggested in pathways and algorithms, housestaff should consult with their attendings and may order exams and tests to:

- X confirm a clinical diagnosis based on reasonable expected prevalence
- X rule out treatable, life-threatening or serious disease
- X stage a disease for therapeutic or prognostic purposes
- X screen for asymptomatic disease only if evidence exists that finding the condition in an asymptomatic state can alter the long-term outcome of the patient
- X delineate risk factors for prognostic & counseling purposes

X monitor drug therapy (pharmacy will provide guidelines 395-0418)
X generate clinical research data among patients participating, with informed consent. (Cost of tests are absorbed by the institution and not applied to a patient=s bill)

The predictive value of laboratory tests and diagnostic procedures must be measured against the norm of the diagnostic power of a medical history and exam. Historically, the ability to solve clinical problems at the beside without the laboratory information approached 90% (4). Today and in the future, the housestaff member's skill in judging when and to what extent further diagnostic information clearly contributes to clinical decision-making and avoiding complications of care will be a critical factor in the success of that physician=s professional career.

References

1. Robbin, JA and AI Mushlin: Preoperative evaluation of the healthy patient. Med Clin N Am 1979; 63:1150
2. Stamm WE, KF Wagner, R Amsel, ER Alexander, et al: Causes of the acute urethral syndrome in women. N Eng J Med 1980; 303:409-415
3. Komaroff AL, TM Pass, JD McCue, F Frielund, and AM Cohen: Symptoms of urinary and vaginal infection in a primary care practice. Clin Res, 1978;26:328A
4. Hampton JR, MJG Harrison, JRA Mitchell, et al: Relative contributions of history-taking, physical examination, and laboratory investigation to diagnosis and management of medical patients. Brit Med J 1975; 1:

ATTACHMENT 11: Impaired Physician

INTENT:

The sponsoring institution and each program is responsible for monitoring residents for signs of psychological and substance abuse problems and for initiating appropriate interventions.

POLICY STATEMENT:

The University of Florida College of Medicine will fully participate in the provisions of the Florida Medical Practice Act (F.S.458), the rules of the Board of Medicine, and Department of Professional Regulation. The College of Medicine supports the Florida Impaired Practitioners Program.

DESCRIPTION:

1. Faculty, staff, peers, family or other individuals who suspect that a member of the housestaff is suffering from a psychological or substance abuse problem are obligated to report such problems. Individuals suspecting such impairment can either report directly to the Florida Professional's Resource Network (PRN) or can discuss their concerns with the Program Director, Chairman, or Associate Dean of Graduate Medical Education.
    a) It is the intent of the sponsoring institution that all appropriate rules that govern the practice of medicine be strictly enforced.
    b) All referrals to the PRN are confidential and are evaluated by the professionals of the PRN. Decisions about intervention, treatment and after care are determined by the PRN.
    c) As long as the practitioner satisfactorily participates in the PRN program no regulatory action would normally be anticipated by the Board of Medicine.
    d) Resumption of patient care and residency program activities will be contingent upon the continued successful participation in the PRN and continuation of the resident in the program will be determined in consultation between the program director and the professionals at the PRN.
    e) Information on the Florida Professional Resource Network (PRN) and its program can be obtained by calling 1-800-888-8PRN or by writing to the PRN at P.O. Box 1020, Fernandina Beach, Florida 32035. (see attached)

2. Each program must provide an educational program to their residents regarding substance abuse.
3. Compliance with the above will be monitored by the Institutional Program Review Committee.

Last Reviewed and Approved: Graduate Medical Education Committee
February 12, 2015

ATTACHMENT 12: Institutional Policy on Gender Harassment

SUBJECT: Sexual Harassment

INTENT:

The Accreditation Council for Graduate Medical Education Institutional Requirements requires the Sponsoring Institution to have written policies covering sexual and other forms of harassment.

POLICY STATEMENT:

It is the policy of The University of Florida to provide an educational and working environment for its students, faculty and staff that is free from sex discrimination and sexual harassment. In accordance with federal and state law, the University prohibits discrimination on the basis of sex, including sexual harassment. Sex discrimination and sexual harassment will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. The University encourages residents / fellows, students, faculty, staff and visitors to promptly report sex discrimination and sexual harassment. In addition, the University of Florida prohibits harassment based on any other legally protected characteristic including, but not limited to, gender, pregnancy, age, color, race, national origin, religion, and disability.

DEFINITIONS:

Sexual Harassment is a form of sex discrimination that can occur when:

- The submission to unwelcome physical conduct of a sexual nature, or to unwelcome requests for sexual favors or her

verbal conduct of a sexual nature, is made an implicit or explicit term or condition of employment or education; or

- The submission or rejection to unwelcome physical conduct of a sexual nature, or to unwelcome requests for sexual favors or other verbal conduct of a sexual nature, is used as a basis for academic or employment decisions or evaluations; or
- Unwelcome physical acts of a sexual nature, or unwelcome requests for sexual favors or other verbal conduct of a sexual nature, have the effect of creating an objectively hostile environment that interferes with employment or education on account of sex.

Harassment is the creation of a hostile or intimidating environment in which verbal or physical conduct is so severe and pervasive that it is likely to interfere significantly with someone's work, education, or on-campus living conditions. Examples include slurs, jokes or degrading comments, or threatening, intimidating, or hostile acts that relate to gender, age, race, color, national origin, religion, sexual orientation or disability.

.

REPORTING: **Confidential Discussion – No Reporting**

Resident Reporting

If a resident / fellow would like to confidentially discuss this type of issue prior to reporting they may contact Shae Kosch, Ph.D., kosch@ufl.edu, Darrell-594-0507, Maricel-594-0571, Linda Holt-594-0570.

This designated counselor does not have an obligation to report any incident that is brought to his/her attention.

Mandatory Action Required

A person who believes that he or she has been subjected to sex discrimination, sexual harassment, or other harassment may report the incident to any University official, administrator or supervisor. Larry Ellis, in the Office of Human Resource Services, investigates all complaints. Incidents should be reported as soon as possible after the time of their occurrence.

Additional policy information should be reviewed and can be obtained at http://hr.ufl.edu/eeo.

Any complaint or report of sexual harassment to any UF official MANDATES that individual to report it the Office of Human Resource Services.

Self Reporting– A resident / fellow can contact Human Resources directly:
All Sexual Harassment complaints are investigated by the Office of Human Resource Services. The Complaint form is available is at http://www.hr.ufl.edu. All incidents should be reported as soon as possible to:

Larry T. Ellis, Director of Administration and Equal Employment Opportunity
Human Resource Services
P.O. Box 115010
Gainesville, FL 32611-5010
352-392-1075

Last Reviewed and Approved: Graduate Medical Education Committee
February 12, 2015

ATTACHMENT 13: Outside Employment Policy

SUBJECT:

Extra Duty (Moonlighting) Policy

INTENT:

The Accreditation Council for Graduate Medical Education Institutional Requirements require that the Sponsoring Institution have policies regarding professional activities outside the educational program.

POLICY
STATEMENT:

Housestaff must adhere to State University System Guidelines regarding outside activities/outside employment, conflict of interest, and additional compensation. Such outside activity includes private practice, private consultation, teaching, research, or other employment outside State government which is not part of assigned University duties and for which the University provides no compensation. Individual housestaff programs are accredited by their Residency Review Committee (RRC) and must adhere to RRC requirements regarding outside employment. Although RRC's vary, the general theme is that any professional activities which are outside the established educational program must not interfere with the resident's established educational process or the quality care of patients. Residents shall not be required to engage in professional activities outside the educational program.

DESCRIPTION

1. Each program must have a policy regarding additional duty employment which meets RRC requirements and University of Florida College of Medicine policy. There are two categories of extra duty activity defined in University of Florida policy:
   a) Programmatic: These activities are initiated by departmental training programs to provide additional clinical experiences within the program specialty. These activities usually occur at campus health care sites. Supplemental salary income is provided by the University to housestaff who participate in programmatic activities.
   b) Non-programmatic: These activities are initiated by the resident and do not involve any agreement between the College of Medicine and an outside employer. Residents must be licensed for unsupervised medical practice in the state where such activity occurs and attest to adequate professional liability coverage. In no circumstance is the resident to hold him or herself out as an employee of the University while engaged in such activities

2. Each program's rules regarding outside and extracurricular employment must be reviewed during the periodic internal program reviews and subsequently approved by the GMEC. The program director is ultimately responsible for assuring that outside activities do not interfere with the educational program and should monitor all outside activities of the residents in their program on an ongoing basis. Program Directors are required to prospectively approve any programmatic and non-programmatic activities, to be aware of the number of hours per week such activities shall consume.

   Additionally, activities considered to be outside activity should be reviewed and approved by Gary Wimsett's office (352.273.7508).

   Programmatic & Non-Programmatic includes time spent in patient care, and consideration of patient and resident safety demand that these hours must be counted toward the residents' 80 hour per week maximum, counted toward residents' maximum continuous duty period (24 hours) All Programmatic & Non-Programmatic must be completed at least 10 hours prior to the next scheduled residency duty period. Non-programmatic outside activities should be documented in New Innovations for tracking purposes.

3. A summary annual report of programmatic and non-programmatic professional employment of housestaff will be provided by the program director to the GMEC indicating that the program director is aware of the activities and approves.

4. All housestaff participating in non-programmatic outside professional employment must first complete a Non-Programmatic Professional Activity Form for approval and signature by their chairperson or program director and the Associate Dean, GME before undertaking such activity –Each episode of anticipated service must be included. Requests may be made for activities spanning up to one month, but in no circumstance will blanket approval for periods longer than one month be permitted.(See attached form)

5. Programs, departments and services will be responsible for enforcement of this policy. **Violation by the resident may lead to immediate dismissal.**

6. Housestaff employed under a J-1 or H1-b visa may participate in PROGRAMMATIC extra duty activities only. Non-programmatic extra duty activities are strictly prohibited by law. However, prior to beginning any extra duty activities, each individual with a J-1 or H1-b visa must be certain that their individual visa permits this additional work activity and receive clearance from the program director, the Office of Graduate Medical Education, and the College of Medicine Dean's office.

7. PGY-1 Housestaff may not moonlight. (CPR Vl.G.2.C)

Last Reviewed and Approved: Graduate Medical Education Committee
February 12, 2015

ATTACHMENT 14: Official holidays as defined by the Housestaff office for Academic year 2015-2016:

Holiday	Day	Date	Shands	VAMC
Independence Day	Friday	7/3/2015 (observed)	X	X
Labor Day	Monday	9/7/2015	X	X
Columbus Day	Monday	10/12/2015		X
Veteran's Day (observed)	Wednesday	11/11/2015	X	X
Thanksgiving Day	Thursday	11/26/2015	X	X
Day after Thanksgiving	Friday	11/27/2015	X	
Christmas Day	Friday	12/25/2015	X	X
New Year's Day	Friday	1/1/2016	X	X
Martin Luther King Day	Monday	1/18/2016	X	X
President's Day	Monday	2/15/2016		X
Memorial Day	Monday	5/30/2016	X	X

ATTACHMENT 15:

University of Florida
College of Medicine
Policy on Industry Conflicts of Interest/Industry Academic Relations

Introduction

The University of Florida has long had a document providing guidelines, policies and procedures on conflict of interest and outside activities for faculty, staff and students. All COM faculty, residents, staff and students must be familiar with this policy and its reporting requirements. The policy can be accessed at:
http://www.research.ufl.edu/research/outside_activities.html
The faculty, staff and students of the College of Medicine (COM) must be especially sensitive to even the appearance of conflict of interest when it comes to relationships with the pharmaceutical and medical device industry. The basic principle of healthcare is that the patient's well being takes priority over that of the care giver's. Recently, several high profile instances have come to light where it appears physicians and researchers have violated this trust. The public has responded with outrage and legislation at both the state and federal levels has been proposed that would establish government regulation of the vendor-healthcare provider relationship.
The pharmaceutical and medical device industry spends more on advertising to healthcare providers and the public than it spends on research and development. There is ample evidence that such advertising efforts are effective in influencing prescribing practice, especially when advertising is accompanied by gifts. Data reflect that even small gifts create a sense of obligation in the recipient that translates as sales for the company. Besides calling into question the issue of the provider's unwavering devotion to the patient's well being, such practice also may lead to higher cost by increasing the volume of prescriptions and the tendency to prescribe name-brand rather than generic drugs.
Because there are legitimate and necessary interactions between COM faculty, residents, staff and students and the pharmaceutical and medical device industry, the COM has established a policy that defines the boundaries regarding acceptable relationships with the pharmaceutical and medical device industry, as well as establishing mechanisms to monitor these relationships.

Applicability of Policy

This policy applies to all COM faculty, residents, staff and students. This policy does not supersede the University of Florida's policy regarding the disclosure of outside activities, financial interests and conflict of interest, which is applicable to all University of Florida employees

Statement of Policy

The goal of this policy is to ensure that all clinical, educational and research decision-making is free of influence created by relationships with any outside interest and that all individuals are aware of their individual and institutional responsibilities with regard to industry relations. It is the policy of the COM that complete transparency shall occur in all interactions and encounters between COM faculty, residents, staff and students and the pharmaceutical and medical device industry. A care giver's primary responsibility is to his/her patients. Researchers must be free of any potential for bias. When appropriate interactions occur between industry and COM faculty, residents, staff and students, the boundaries for such interaction must be consistent with this policy.
All COM faculty, residents, staff and students shall receive specific instruction tailored to their role in appropriate academic-industry interactions. Ultimately, the COM and its faculty, residents, staff and students are accountable for their respective actions. The following guidelines identify specific activities that address interactions with industry representatives and vendors. COM faculty, residents, staff and students also should consult with their respective department chairs or immediate supervisors to obtain further guidance.

Specific Activities

A. Gifts to Individuals

COM faculty, residents, staff and students may not accept gifts from industry representatives or

vendors regardless of the monetary value of the gift.

B. Pharmaceutical Samples, Devices and Other Materials

Pharmaceutical Samples

Pharmaceutical samples shall be distributed through a voucher system administered by Shands HealthCare pharmacy service. In the event a faculty member feels doing so would jeopardize a vulnerable population of patients, the physician may request a waiver from this rule from the UFP Clinical Safety Committee. Physicians requesting a waiver must show clear benefit and provide safeguards for the appropriate distribution and control of samples. Samples shall not be accepted for personal use by faculty, staff, residents or students.

Teaching Aids/Books/Devices

COM faculty, residents, staff and students are not permitted to accept books, instruments and other teaching aids from industry representatives or vendors. Industry representatives or vendors requesting to support the educational mission of the COM may provide an unrestricted grant, which will be placed in a central fund and monitored/distributed by the COM Industry Academic Relations committee.

Patient materials

Educational materials for COM faculty, residents, staff and students or for patients supplied by industry representatives or vendors is permitted provided such materials are preapproved by the COM Industry Academic Relations committee and are not “branded” by the supplier of the materials. Such materials may not be distributed directly to COM faculty, residents, staff and students or to patients by industry representatives or vendors.

C. On-Site Access by Industry Representatives and Vendors

On-site access by industry representatives or vendors is restricted to non-patient care and public areas only. Industry representatives and vendors are permitted access to patient care areas and non-public areas only when their presence is necessary for educational purposes and then only by appointment and, when appropriate, with the prior consent of the patient. Such on-site access by industry representatives and vendors must be under the constant supervision of a COM faculty member. These activities also are subject to the policies of Shands HealthCare regarding such access.

On-site access by industry representatives and vendors at “vendor fairs” is permitted with the preapproval of the COM Industry Academic Relations committee. Participation by industry representatives and vendors in such events is subject to the provisions referenced in the “Gifts” section of this policy.

D. Continuing Medical Education (CME)

On-Site Courses

COM faculty, residents, staff and students are permitted to engage in educational activities in on-site venues. All such courses must conform to ACCME standards and must be processed through and approved by the COM’s Continuing Medical Education office.

Off-Site Courses

COM faculty, residents, staff and students are permitted to participate in off-site CME courses if these courses conform to the requirements of the ACCME. Specifically there must be full disclosure of the sources of financial support, the program must be free of bias and the planners and speakers must declare any source of possible conflict of interest. Payment for attendance is prohibited. Individuals may receive an honorarium for speaking from the sponsors of the CME event .

Required On-Site Training

Industry representatives or vendors may provide on-site training to COM faculty, residents, staff and students with preapproval from the COM’s Continuing Medical Education office. Such training shall be conducted in accordance with ACCME standards. Training to be conducted in patient care areas must conform to Shands HealthCare policy.

E. Speaker Bureaus

COM faculty, residents, staff and students participation in industry-sponsored speakers’ bureaus is discouraged. However, where such activity has an educational value and is preapproved by the employee’s department chair or immediate supervisor, COM faculty, residents, staff and

students engaging in such activity must comply with the University of Florida's regulation regarding the disclosure of outside activities, financial interests and conflict of interest. Approval for such activity will be denied if the content of the talk is in any way provided by industry or subject to industry approval or if the attendees of the event are selected by industry or provided a gift or stipend to attend. Such activities also require the COM faculty, resident or staff to report appropriate leave usage while in engaged in such activities.

F. Food/ Entertainment

On-Site Food

COM faculty, residents, staff and students may not accept food or meals sponsored by or provided by industry representatives or vendors. Industry representatives or vendors requesting to support the educational mission of the COM may provide an unrestricted grant, which will be placed in a central fund and monitored/distributed by the COM Industry Academic Relations committee.

Food and meals supplied by industry representatives or vendors in conjunction with a CME event sponsored by the COM must comply with the guidelines established by the COM's Continuing Medical Education office.

Off-Site Food/Entertainment

COM faculty, residents, staff and students may not accept food or meals sponsored by or provided by industry representatives or vendors at off-site locations. This includes events with an educational component (e.g. journal club) unless this event has been approved by the CME office. Industry funding may not be accepted for departmental meetings, retreats or social events. Dinners or entertainment sponsored by and paid for by industry representatives or vendors for a small group of select individuals at national meetings/conferences is not permitted.

COM faculty, residents, staff and students may attend educational events during national meetings/conferences where food is provided by or sponsored by industry representatives or vendors provided such events adhere to ACCME standards.

G. Travel to Meetings/Honoraria for Attendance

COM faculty, residents, staff and students are not permitted to accept travel funds or payment from industry representatives or vendors to attend a meeting or conference. Industry representatives or vendors requesting to support the educational mission of the COM may provide an unrestricted grant, which will be placed in a central fund and monitored/distributed by the COM Industry Academic Relations committee.

H. Ghostwriting

COM faculty, residents, staff and students are not permitted to allow their professional presentations, books, articles, reports or other materials, oral or written, to be by written by another party or by an industry representative.

I. Scholarships/Fellowships

COM faculty, residents, staff and students may not accept scholarships or fellowships to support training initiatives from industry representatives or vendors. Industry representatives or vendors requesting to support the educational mission of the COM may provide an unrestricted grant, which will be placed in a central fund and monitored/distributed by the COM Industry Academic Relations committee. There shall be no quid pro quo associated with such funding.

J. Outside Employment/Consulting

COM faculty, residents and staff may engage in outside employment, consulting, and other similar activities in addition to their COM employment provided such activities do not conflict with the employee's duties and responsibilities to the COM and to the University of Florida. Such activities also must be permitted under state law and University of Florida policies. For such activity to be approved, the COM faculty, resident and staff must provide evidence that such activities further the educational mission of the COM in exchange for any remuneration being provided.

Outside employment and consulting activities of COM faculty, residents and staff are of concern to the University of Florida and may be disallowed if they result in conflicts with the employee's duties, responsibilities, and obligations to the COM.

K. Purchasing

COM faculty, residents, staff and students engaged in the purchase of equipment, supplies, etc. are subject to the provisions of the University of Florida's regulation regarding the disclosure of outside activities, financial interests and conflict of interest.

COM department chairs and immediate supervisors are responsible for informing employees that the University of Florida requires that an approved Disclosure of Outside Activities and Financial Interests form be attached to each applicable Requisition to Purchase from an enterprise in which an employee has material financial or managerial interest. If there is a requisition prepared to purchase from an enterprise in which an employee has a material interest, the employee with the interest cannot approve the requisition. If the purchase is allowed under state law, the approval of the employee's supervisor will be required when an outside interest exists regardless of whether the proposed purchases fall under the sole source, emergency, or special purchasing categories.

L. Monitoring

The COM will establish an "Industry Academic Relations" committee to provide oversight and enforcement of the provisions of the COM's Policy on Industry Conflicts of Interest/Industry Academic Relations.

M. Disclosure and Notification

COM faculty, residents and staff wishing to engage in activities outside the COM have an obligation to disclose and receive approval prior to engaging in these activities and to assure that such activities do not infringe upon an employee's responsibilities and obligations to the COM and to the University of Florida. Each employee is responsible for complying with the rules and laws concerning outside activities and financial interests.

COM faculty, residents and staff engaging in outside activities must take reasonable precautions to ensure that the outside employer or other recipient of services understands that he or she is engaging in the activities as an individual and not on behalf of the COM or the University of Florida. An employee may not use the University's resources, including its name or addresses, without express written approval from a COM administrator designated by the University of Florida President to approve such use.

The disclosure of outside activities and financial interests are to be reported on the University of Florida's form titled Disclosure of Outside Activities and Financial Interests, which is to be reviewed by the department chair or immediate supervisor and forwarded to the dean or director as necessary for authorization. This form should be completed and filed prior to such time as the outside activity or financial interest begins and at the beginning of each contractual year of employment. If a material change in the information presented occurs during the contractual year, a new form must be submitted. All paperwork associated with continuing outside employment/activity must be renewed on a fiscal-year basis.

College of Medicine faculty who present formal lectures to students or residents of the University of Florida must disclose any and all possible conflicts, financial interests or personal relationships with industry at each presentation.

Annual Reporting

Prior to the end of each academic year, COM faculty and staff reporting the disclosure of outside activities and financial interests during the year shall report the total financial compensation received for such activities. Financial compensation shall be reported using three categories of compensation: $0 to $5,000, $5,001 to $10,000, and $10,001 and greater.

COM faculty, residents and staff who have no outside activities or financial interests to report are required to provide an annual attestation to that effect.

N. Penalties and Enforcement

All COM faculty, residents and staff are subject to the constitution and laws of the state of Florida, and the rules, regulations and policies of the Florida Board of Governors and the University of Florida Board of Trustees.

COM faculty, residents, staff and students who fail to abide by the provisions of the COM's Policy on Industry Conflicts of Interest/Industry Academic Relations are subject to appropriate

administrative or disciplinary action.

O. Education

COM directors, department chairs and immediate supervisors are responsible for informing and educating employees in their respective work units about the COM and the University of Florida's policy on disclosure of outside activities and financial interests, and for ascertainingthat an employee's COM and University of Florida responsibilities are not being abrogated by the activity after it has been disclosed.

COM directors, department chairs and immediate supervisors are responsible for providing new employees with the information regarding outside activities and conflict of interest. COM directors, department chairs and immediate supervisors also are responsible for reviewing the disclosure and notifying the employee whether or not the activity may be conducted. If not, the reasons for not allowing the activity must be provided. If the activity is allowed with conditions, the administrator shall state the conditions under which the activity may be pursued. Authorization also may be required by Research and Graduate Education if the activity involves waiving any rights to intellectual property.

P. Effective Date and Approval

This policy was approved by the College of Medicine Executive Committee and is effective June 18, 2009.

Approved:

Michael L. Good, M.D.

Interim Dean, College of Medicine

Folke H. Peterson Dean’s Distinguished Professor

Attachment 16:

PRIMARY CARE /NEUROLOGY PROVIDER AGREEMENT

6/20/11

Purpose: To develop a seamless consultation process in the NF/SG Veterans Health System to ensure appropriate referrals, delivery of safe, effective and timely care to veteran patients, and to improve clinic efficiency.
The objectives of this agreement are:

- Implement a set of principles that define referring-consulting provider relationships and responsibilities of referring-consulting providers.
- Maintain meaningful and timely referrals for the benefit of patients and referring-consulting providers.
- Providers function collaboratively as part of an interdisciplinary team to achieve positive patient outcomes.

Guiding Principles of Referring-Consulting provider Relationships:

- Referring-Consulting providers have an obligation to use health resources appropriately and prudently.
- Referring providers should obtain consultation when they feel a need for assistance in caring for a patient. If a patient requests a referral when the provider does not believe it is indicated, the provider should discuss his/her clinical reasoning with the patient, seek out underlying concerns and anxieties, and create a mutually agreed upon plan of action consistent with the patients desires and professional judgment.

Procedures:

- Service contracts will establish consult protocols that delineate appropriate diagnoses, conditions, ongoing management problems and objectives that are indications for specialty referrals. These protocols will also include criteria that would identify inappropriate conditions and diagnosis for referral and criteria for return to primary care.
- A system be developed for non-visit (email and telephone) contact with specialty services outlining when and how as well as "do's and don'ts" involved.

Joint Responsibilities of Referring and Consulting Providers:

- Establish mutually agreed upon critical pathways and practice guidelines to achieve a health care delivery system that is responsive to reasonable cycle times.
- Explore system failures and institute improvements using root cause analysis.

Evaluating Quality of Care and Referral Decisions:

- Audit 10% of consults from primary care to the specialty care providers and specialty service consult responses. Determine trends, projections, and cause and effect assessment (monthly X 3 and then quarterly).
- Resource conservation and waste reduction analysis should include:

- Number of consults made.
- Timelines- Specialty Clinic Consult requested, appointment and completion of consult.
- Appropriateness of consult.
- Completion of diagnostic workup required for consult.
- Patient and provider (both Primary care and Specialist) satisfaction with consultative process.

- Analysis and problem solving to evaluate outcomes and improve consultative process that will drive future goal setting for performance improvement.