A DEPARTMENTAL GUIDE FOR RESIDENTS AND FACULTY. CAN BE VIEWED ONLINE ON NEUROSURGERY WEBSITE:

Date updated: 1/13/2016
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Overview of the Residency/Fellowship Training Program

The overall goal of the Department of Neurological Surgery training program at New York University (NYU) School of Medicine is to train highly motivated, confident, and clinically excellent neurological surgeons who are not only skilled in the technical aspects of the specialty but also appreciate the humanistic side of the practice of medicine and the collegiality of their peers. The NYU Neurological Surgery Department is organized into sub-specialty teams that span across the participating institutions with each individual faculty member focused in an area of clinical and research expertise including: vascular/endovascular neurosurgery, tumor and skull base neurosurgery, complex reconstructive and minimally invasive spinal surgery, pediatric neurosurgery, functional neurosurgery, peripheral nerve surgery, adult and pediatric epilepsy surgery, stereotactic radiosurgery, and neurotrauma. Affiliated faculty members from other subspecialties also participate in resident teaching in endovascular neurosurgery (Interventional Neuroradiology), skull base surgery (Neuro-otology), and Neuro-oncology.

Resources and Faculty

The Department trains 2/3 residents per year and performs more than 5000 operative neurosurgical procedures yearly across the 3 participating institutions. The neurosurgical faculty consists of 17 neurosurgeons, 16 of whom are board certified by the American Board of Neurological Surgeons (the other is ABNS board eligible). At Tisch Hospital resources include: 5 state of the art neurosurgical suites are available daily. These OR’s have full microsurgical capabilities. There is also a dedicated combined OR / angiography suite was opened in 6/2011. Additionally, a 2-room digital neuroangiography suite is available to neurosurgery daily in the neuroradiology suite. We have added a new Gamma Knife® PERFEXION unit which has enhanced our capabilities in Stereotactic radiosurgery. We have also added five new Brain Lab Systems, a Stryker Navigation system, and a Stealth O-ARM system in addition to our compass and Cygnus systems that enhance our frame based and frameless Stereotactic surgery and spinal navigation capabilities.

At Bellevue and the Manhattan VA Medical center both have 1 dedicated state of the art neurosurgical suite with full microsurgical capabilities available to the Neurosurgical service on scheduled OR days and for neurosurgical emergency cases. Future plans include the construction of a dedicated neurosurgical operating suite comprised of 8 state of the art OR’s (2 with intraoperative MRI capabilities, and 2 dedicated combined OR/angiography suites, comprising the second floor of the soon to be built Kimmel Pavilion. This facility will also include a brand new neurological intensive care unit, neurological care step-down unit, patient rooms as well as a pediatric hospital within a hospital with dedicated neurosurgical space.

GENERAL CONSIDERATIONS

- The Neurological Surgery Training Program New York University School of Medicine is a 7-year training program comprised of 6 years of clinical neurosurgery (including 1 year of internship, and 1 year as a chief resident), and 1 year of clinical or basic science research.

- The program requires strict adherence to the New York State 405 and ACGME duty hour requirements described in the residency handbook. There is a zero tolerance policy for work hour violations. Each resident is solely responsible for adhering to the duty hour requirements and reporting violations.
o All residents are required to pass the written examination of the American Board of Neurological Surgery prior to becoming Chief Resident and graduating from the training program.

o Residents are evaluated by the faculty at the completion of rotations or quarterly (whichever comes first). The residents provide evaluations of the faculty, facilities and program on an annual basis. Residents are evaluated on the basis of fulfilling the core competencies, operating room skills, and achieving the goals and objectives of the training program that are outlined in this handbook. They are provided direct feedback on their overall performance level during their semi-annual evaluations. They in turn provide direct feedback on the program and the faculty.

o Moonlighting is not permitted by any house staff members of the Department of Neurological Surgery at anytime.

o All residents are required to familiarize themselves with all of the policies and procedures of the NYU School of Medicine GME including those found in the generic NYU House staff manual. This information can be found online at http://gme.med.nyu.edu/ or through the New Innovations. NYU Neurosurgery program specific policies and selected institutional policies are found at the end of the print version of NYU Neurosurgery Resident Manual.

o All residents and faculty must follow the Institutional and HIPAA guidelines regarding patient privacy.
Program Director, Associate Director, Program Manager & Staff and Core Faculty

Senior Administration:
John G. Golfinos, MD – Chairman
Howard Riina, MD – Vice Chairman/Program Director
David Harter, MD – Assistant Professor/Associate Program Director

Program Administration
Ana Goffin-Robles - Program Manager
Laverne Cummings - Program Administrative Assistant
Allison George-Lucas - Program Administrative Assistants
Joe Marino - Business Manager
David Ton - IT Manager

Core Faculty by Sections

Brain Tumors & Skull Base Neurosurgery
John Golfinos, MD – Associate Professor / Director, Brain Tumors
Chandranath Sen, MD – Professor / Director, Skull Base
Erik Parker, MD – Assistant Professor
Dimitris Placantonakis, MD, PhD – Assistant Professor
Benjamin Vallo, MD – Professor (no longer in clinical practice)
Stephen Rush, MD — Clinical Assistant Professor
Douglas Kondziolka, MD – Professor / Vice Chair of Clinical Research/Gamma Knife Director

Spinal & Peripheral Nerve Neurosurgery
Anthony Frempong-Boadu, MD – Associate Professor / Director, Spinal Surgery
Noel Perin, MD – Associate Professor / Director, Minimally Invasive Spinal Surgery
Michael Smith, MD – Assistant Professor
Ramesh Babu, MD – Associate Professor

Cerebrovascular
Howard Riina, MD – Professor / Director, Endovascular Surgery
Jafar Jafar, MD – Professor / Director
Paul Huang, MD – Assistant Professor
Center for Neuromodulation (Deep Brain Stimulation and Neurostimulation for Pain and Headache)
Alon Mogilner, MD, PhD – Associate Professor / Director
Michael Pourfar, MD – Associate Professor

Epilepsy
Werner Doyle, MD – Associate Professor

Pediatric Neurosurgery
Jeffrey Wisoff, MD – Associate Professor / Director
Howard Weiner, MD – Professor
David Harter, MD – Assistant Professor/Associate Program Director

Research
Mitchell Chesler, MD, PhD – Professor
Margaret Rice, MD, PhD – Professor
Dimitris Placantonakis, MD, PhD – Assistant Professor
Hae-Ri Song, MD, PhD – Assistant Professor
Howard Weiner, MD – Professor

Bellevue Hospital
Paul Huang, MD – Assistant Professor / Chief
Stephen Russell, MD – Assistant Professor

Veterans Affairs Medical Center
Donato Pacione MD, PhD – Assistant Professor / Chief
Facilities

FACILITIES - AFFILIATED AND PARTICIPATING INSTITUTIONS:
The NYU residency program provides graduated levels of responsibility in patient evaluation, management and surgery as residents rotate through the various services in the NYU Hospitals Center (Tisch Hospital), Bellevue Hospital Center (BHC), and the New York Harbor Health Care System (VA). At Tisch Hospital, junior and intermediate level residents work under the supervision of experienced neurosurgeons who allow them to assume more and more direct responsibility and surgical opportunities in the care of private patients as they progress through the program. Surgical techniques are learned and standards of care adopted. The Bellevue Hospital Center (BHC) service allows the intermediate level and chief residents more autonomy as they run both the out-patient and the in-patient neurosurgical service and perform all surgical procedures under close faculty supervision. Bellevue exposes residents to emergency patient management and trauma in addition to a large outpatient clinic and elective cases in a large city hospital that is a Level One Trauma Center. A chief resident, under the direct supervision of full time faculty, runs the neurosurgical service at the New York Harbor Health Care System (VA) and functions with increasing autonomy in this primarily elective in-patient and out-patient practice. At Bellevue and the VA, residents employ the methods and standards learned at Tisch Hospital and gain confidence. Over the seven years of the training program, residents progress from supervised patient care providers and surgical assistants to competent practitioners of neurosurgery who can function and operate “independently”.

The NYU Department of Neurosurgery is committed to training excellent Neurosurgeons as our primary goal. However, we want our residents to recognize that our specialty, indeed all fields of medicine, are a work in progress and it is their duty to continue its advancement throughout their careers. Indeed, one of our prime objectives is to encourage residents to pursue academic careers that will enrich the specialty further. However, it is stressed that our field primarily provides service to our fellow man; our efforts must have value to each individual patient and the financial and human cost must always be justified. NYU neurosurgery residents learn how to deal with patients and families in a compassionate and humanistic way. Our residents also learn that patient care is a team effort where each member of the team is equally important in attaining satisfactory patient outcomes. The team includes floor nurses, nurse practitioners, operating room personnel, social workers, case managers, consultants and house staff from other services, their fellow neurosurgical residents, medical students, and their consultant neurosurgeons.
Training Program Curriculum

CHRONOLOGICAL ROTATIONS, TRAINING STRUCTURE AND CURRICULUM

All rotations are required

Year 1: Internship
In the first postgraduate year (PGY-1) residents are required to participate in a neurosurgical internship at New York University. The intern year consists of a Neuroscience block that includes 3 months of neurology and one month each of neuropathology, neuroradiology, and neurosurgery (at Bellevue Hospital Center). The one-month Neurosurgery rotation allows the new residents to become familiar with the day-to-day operation of the NYU neurosurgical service thus allowing them to gain insight into what will be required of them as they progress through the neurosurgical residency. The internship also includes a General Surgery experience that includes adult general surgery, emergency medicine, ICU/Critical care, cardiothoracic surgery, and trauma surgery. Most of these rotations have major critical care experiences as part of the overall internship experience.

Year 2: Clinical Neurosurgery, Neuropathology, Neuroradiology
In the second year of neurosurgery residency (PGY-2), the residents have four three month rotations on four distinct NYU Neurosurgical Services: Tisch Hospital Team 1 (Tumor/Vascular/Skull Base/Functional/Epilepsy Service), Tisch Team 2 (Spine/Peripheral Nerve Services), Bellevue Hospital Center, and New York Harbor Health Care System (VA). The rotations provide neurosurgical ward and critical care experiences in varied neurosurgical practice environments. With close supervision, the residents are introduced to basic ward and operative procedures including CSF diversion (ventriculostomies and shunts), lumbar punctures, traction, simple spine, peripheral nerve procedures and intracranial pressure monitoring.

Year 3: Clinical Neurosurgery, Neuropathology, and Neuroradiology with Graduated Responsibilities
In the third year of neurosurgery residency (PGY-3), the residents rotate with increased levels of both ward, ICU, and operative responsibilities through the same four three month rotations as the PGY 2 year - Tisch (University Hospital) Team 1 (Tumor/Vascular/Skull Base/Functional/Epilepsy Service)), Tisch Team 2 (Spine/Peripheral Nerve Services), Bellevue Hospital, and the New York Harbor Health Care System. The rotations continue to provide neurosurgical ward and critical care experiences in varied neurosurgical practice environments. With close supervision from the chief residents and faculty, the residents are introduced to increasingly complex ward and operative procedures, and outpatient clinics at BHC and the VA (one day/wk), and management of neurosurgical emergencies in the ER and the NICU. This includes both increased responsibility for operative and non-operative patient care.

Year 4: Pediatrics/Epilepsy
The fourth neurosurgery year (PGY4) is divided between six months as the senior resident on the pediatric neurosurgery service at NYU Langone’s Tisch Hospital and six months as the senior resident on the Trauma service at Bellevue Hospital. These rotations provide graduated clinical and operative responsibility with a defined patient population. The six-month rotation period as chief resident on the Pediatric Neurosurgery service with Drs. Wisoff, Weiner, and Harter allows for particularly indepth exposure to the sub-discipline of pediatric neurosurgery through the continuity
of care in the neurosurgical and medical management of these patients. During these six months, the chief is exposed to the full range of operative pediatric neurosurgical disorders, including an extensive experience with pediatric brain tumors, epilepsy and cranial endoscopy. The division has collaborative efforts with the Department of Plastic surgery in the treatment of craniofacial disorders. The trauma experience at the Bellevue Hospital represents a unique neurosurgical experience at one of the busiest trauma centers in New York City.

**Year 5: Research/Elective**
The fifth neurosurgery year (PGY-5) is entirely devoted to a hypothesis-driven basic science research project in order to establish the foundation for an academic or other innovative neurosurgical career or to a dedicated yearlong subspecialty clinical elective. Residents have chosen focused clinical electives in Functional, Endovascular, Radiosurgery, and Complex Spine in the past. The PGY 5 resident takes night call as the primary emergency consult resident and first assistant for the Bellevue Hospital Chief Resident in emergency / trauma cases with graduated levels of operative responsibility. Residents continue to attend neurosurgical didactic conferences and other major Departmental events during this year.

**Year 6: Clinical Neurosurgery (Chief Resident Year #1)**
The sixth neurosurgery year (PGY-6) is divided between two 6-month senior resident rotations on the Tisch Hospital Neurosurgery services: Team 1 (Tumor/Vascular/Skull Base/Functional/Epilepsy Service), and Team 2 (Spinal and Peripheral Nerve Services). These rotations provide the opportunity to manage a clinical service with directed supervision and educational responsibility for junior residents and rotating medical students. Under the supervision of the Neurosurgical Faculty, the resident assumes increasing operative and non-operative patient care responsibility. This includes greater participation in the crucial portion of Neurosurgical operative procedures.

**Year 7: Clinical Neurosurgery (Chief Resident Year #)**
The seventh neurosurgery year (PGY-7) is devoted to 6 months of Chief Residency each at Bellevue Hospital Center and at the New York Harbor Health Care System. The Bellevue chief resident also serves as administrative chief resident for the NYU Neurosurgery Residency Program. With appropriate supervision, these rotations provide the residents with an opportunity to essentially completely direct a clinical service with longitudinal follow-up of all patients from initial consultation (in the clinics or ER) through to postoperative follow-up. The New York Harbor Health Care System is the regional VA Neurosurgical referral center for the tri-state region and Bellevue Hospital is a busy Level -1 trauma center and the jewel of the public hospital system (HHC system) in New York City.
Training Program Schedules

*Instructions: include copies of all schedules where requested. Feel free to add additional schedules if not noted*

Based on 2 residents per year in training total 14

Site 1 New York University Langone Medical Center
Site 2 Bellevue Hospital Center
Site 3 VA Medical Center

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Conferences

Neurosurgery Department Conferences
The Neurosurgery Department holds intra- and interdepartmental teaching conferences throughout the week, with Fridays devoted to conferences from 7:30 a.m. to 3:00 p.m. Elective surgery is not performed on Fridays. In these conferences the emphasis is on resident education, as trainees present clinical problems and are questioned in order to sharpen their decision-making. The format and topics or subject matter is modeled after the oral neurosurgical board examination, thereby ensuring that our residents are well-prepared for this test by the time they finish their training. We offer a well-rounded group of presenters both internal and visiting professors covering areas of subspecialty training and research.

Conference Schedule

Monday 9:00 am Craniofacial Conference 3:30 pm Epilepsy Case Conference

Wednesday 7:30 am Cerebrovascular Conference

Thursday 7:30 am Pituitary Conference (Second Thursdays of the month)

Friday:
7:30 am Spine and Peripheral Nerve Conference
8:00 am Neurosurgery Grand Rounds, (Speakers, Unknowns Morbidity and Mortality)
9:30 am Neuro-Oncology Tumor Board
12 pm Pediatric Neurosurgery Case Conference
1:00 pm Chairman Rounds

Conference Descriptions/Topics

Monday, 9:00 am-Craniofacial Conference. Held weekly in conjunction with the Department of Plastic Surgery, this internationally recognized clinic-conference focuses on children with complicated craniofacial abnormalities.

Monday, 3:30 pm-Epilepsy Case Conference. This is a multidisciplinary conference held to discuss surgical management of patients with treatment-resistant epilepsy.
Location: The conference room at the NYU Comprehensive Epilepsy Center, 223 E. 34th St. in Manhattan. For information, contact Margie Hernandez at 646-558-0801 or Elizabeth Odewale at 646-558-0802.

Wednesday, 7:30 am-Cerebrovascular Conference. This conference is a combined neurosurgery and interventional neuroradiology. Interesting and difficult cases are reviewed and decisions are made regarding the most appropriate management strategies—either craniotomy or endovascular management.

Thursday, 7:30 am-Pituitary Conference (second Thursday of each month). This is a multi-institutional and multi-disciplinary conference of the departments of Neurosurgery, Endocrinology, Neuro-ophthalmology and Radiation Oncology. Interesting cases and difficult clinical problems are presented and their management discussed.
Friday, 8:00 am - Neurosurgery Grand Rounds. This conference is held every Friday from September through June. It is attended by all Neurosurgery faculty, residents, and interested community neurosurgeons. During the first hour, a lecture related to the neurosciences is given by medical school faculty or visiting professors (about five per year). The second hour is devoted to presentation of interesting cases by residents, followed by discussion of their management by residents and faculty. The Grand Rounds on the first Friday of each month is devoted to a discussion of morbidity and mortality occurring at our three teaching hospitals during the prior month. Only medical professionals and trainees are allowed to attend.

Friday, 7:00 am - Spine and Peripheral Nerve Conference. This conference is held every Friday throughout the year under the direction of Dr. Anthony Frempong of Neurosurgery. Pre- and postoperative cases are presented, and residents are asked to interpret imaging studies and discuss management strategies and technical aspects of surgical procedures. In addition to spine cases, one peripheral nerve case is reviewed each week.

Friday, 9:30 am - Neuro-Oncology Tumor Board. This is a multi-disciplinary conference of Neurosurgery, Neuro-Oncology, and Neuropathology. In the conference, brain tumor cases of the prior week are presented, imaging studies are reviewed, and management strategies are planned.

Friday, 12:00 pm - Pediatric Neurosurgery Case Conference. This conference, which takes place over lunch, is led by Dr. Jeffrey Wisoff, Dr. Howard Weiner, and Dr. David Harter of Pediatric Neurosurgery and Dr. Edmond Knopp of Neuroradiology. In the conference, management strategies for patients scheduled for surgery in the upcoming week are discussed with active resident participation.

Friday, 1:00 pm - Chair’s Rounds. A favorite of residents, this conference is held every Friday except during July and August. During the conference, residents present interesting and problem cases from Bellevue Hospital and the Veterans Affairs Medical Center to Neurosurgery Department Chair Dr. John Golfinos for discussion of imaging findings, management, and surgical strategies.
Didactics

Journal Club meets on a monthly basis. Both residents and faculty attend late afternoon meeting over dinner. PGY 5 – residents on research delegate articles to residents for review and discussion. Students doing electives also have availability to present casework or research at this meeting.

Cadaver sections – occur at least four times a year and cover one area of sub-specialty, procedural or based on resident area of interest. They are typically on Fridays, after morning conferences. Are designed and coordinated by section chiefs.

Summer lectures – occur throughout the months of June and July weekly on Fridays at 12pm. Lecture topics are chosen by faculty member and area of specialty.
Goals & Objectives – By Site, Rotation & Clinical year

Progressive Responsibility Of Residents In Each Year And In Each Rotation Neurosurgery PGY-1 - (Residents rotate as Neurosurgery Interns)

The goal of the neurosurgery internship at New York University is to provide residents with an in-depth foundation in the principles and practice of neurosurgery and in the clinical neurosciences that are of fundamental importance to neurosurgery. Residents who have matched in Neurological Surgery in the New York University program are required to participate in a neurosurgical internship at New York University. This internship year consists of rotations under the direction of the neurological surgery-training program in neuroradiology, clinical neurosurgery and neurology. In addition, residents rotate in including experience in adult general surgery, cardiothoracic surgery, ICU/Critical care, emergency medicine, and trauma surgery all with major critical care experience as part of the internship experience. By the end of the internship year the PGY-1 resident should master the following:

1. Patient Care
   a. Perform and document a history and physical examination in a timely manner
   b. Generate a differential diagnosis
   c. Present synthesized and coherent clinical information to more senior members of the medical team
   d. Learn to prioritize clinical care
   e. Recognize when more senior help is needed and readily ask for assistance
   f. Interact with patients and families
   g. Become familiar and comfortable with operating room environment
   h. Learn to perform a thorough neurological exam
   i. Become competent with basic procedures/skills

2. Medical Knowledge
   a. Expand knowledge of fundamentals of neurology
      i. Specific readings
      ii. Department of Neurology didactic lecture series
   b. Expand knowledge of fundamentals of neuroradiology
      i. Specific readings
   c. Neuroradiology lecture/conferences
   d. Expand knowledge of fundamentals of neuro-ophthalmology
      i. Specific readings
   e. Expand knowledge of fundamentals of neuropathology
      i. Specific readings
      ii. Neuropathology lecture/conferences
   f. Expand knowledge of fundamentals of neuroanatomy and neurophysiology
      i. Specific readings
   g. Expand knowledge of fundamentals of critical care
      i. Specific readings
      ii. Recognize medical emergencies
      iii. Basic ventilator management
      iv. Invasive monitoring

3. Practice-based Learning and Improvement
   a. Develop ability to learn from errors
   b. Learn to apply knowledge base to patient management

4. Interpersonal and Communication Skills
a. Learn to be a productive member of surgical service  
b. Understand hierarchy of medical personnel and chain of command  
c. Develop good record keeping skills and habits  
d. Present complex cases succinctly  
e. Communicate effectively with patients

5. Professionalism  
a. Treat others with respect and sensitivity  
b. Accept responsibility  
c. Demonstrate reliability

6. System-based Practice  
a. Develop early awareness of need to practice in an efficient and cost-effective manner

General Surgery Rotations (6 months)

The general surgery rotations are under the direction of Dr. Russell Berman, Residency Program Director for the New York University Department of Surgery in close coordination with the Neurosurgical Program Director. All neurosurgery intern schedules include rotations in adult general surgery, cardiothoracic surgery, ICU/Critical care, emergency medicine, and trauma surgery. These rotations are of great educational value to the future neurosurgeon. The general surgery rotations provide each neurosurgery resident with generous exposure to basic surgical skill set. Upon completion of the general surgery block, each resident is expected to have completed the Goals and Objectives of the specific R1 general surgery rotations as follows:

Adult General Surgery Goals and Objectives for Bellevue Hospital, Tisch Hospital, and VA Hospital

PATIENT CARE

Goals for First (R1) Resident Year:  
Rotation length: 4 weeks

The goals for this rotation are for the R1 resident to gain broad exposure to general surgical patients and to start developing knowledge, skill, and competence in the following:

Objectives for R1 (PGY 1) in General Surgery

Patient Assessment, History and Physical  
1. Perform a complete and thorough history and physical examination as it pertains to the surgical or potentially surgical patient.  
   a. Become adept at reviewing medical records and reports  
2. Integrate diagnostic laboratory and imaging studies into the patient evaluation and diagnostic process.
a. Develop an appreciation for the correct utilization and interpretation of diagnostic imaging and laboratory tests in the workup of the surgical patient.

3. Develop and identify a differential diagnosis and treatment plan for the new surgical patient, or for a new problem that develops in an established patient.

4. Perform review of medications taken at home versus in the hospital as part of the medication reconciliation process.

5. Demonstrate professional and compassionate communication and interactive skills with patients, colleagues, and families, including the morbidly obese patients.

Documentation
6. Perform accurate, complete, legible documentation of the history, physical examination, differential diagnosis and proposed treatment plan.

7. Develop effective medical communication skills and documentation, including the writing of daily progress notes that reflect the SOAP or SBAR acronyms, admission notes, discharge notes, operative notes.

8. Effectively utilize and implement the principles of informed consent and consideration of patient rights, including advanced directives, DNR, and HIPAA rules.

Patient Care and Management
9. Perform basic clinical care skills including phlebotomy, intravenous access, nasogastric tube placement, urinary catheterization.

10. Develop efficient and accurate methods to collect relevant data for rounds.

11. Respond to and learn to manage changes in patient status/emergencies that may occur in the non-intensive care unit patient, including:
   a. Cardiac
      Cardiac arrhythmias
      Myocardial infarctions
      Hemodynamic instability
      Electrocardiogram changes
   b. Neurologic
      Mental status changes
      Knowledge of when and how to activate stroke emergency response team
   c. Fever, Infection, Sepsis
      Workup of fever in the postoperative and non-operative setting
      Interpretation of culture and sensitivity results
      Understand the antibiotic resistance profile in the hospital
      Understand universal precautions
      Understand the importance of hand washing and prevention of nosocomial infections
      Basics of full barrier precautions and sterile technique
      Understand impact of C. difficile on surgical patient
      Recognize onset of sepsis and initiate care
   d. Fluids and Electrolytes
      Intravenous fluid management including replacement and maintenance
      Recognize acid base disorders and management options
      Electrolyte replacement
      Enteral and parenteral nutritional support

12. Identify and routinely apply measures to assure optimal patient care.

13. Participate in Practice-based learning and improvement mechanisms.

14. Obtain an understanding of Systems-based practice, particularly in the private hospital setting.

Perioperative Care and Risk Assessment
15. Identify complications relating to preoperative, operative, postoperative, and nonoperative interventions.
16. Recognize of how complications impact upon the treatment plan and to identify the corrective actions necessary to obtain optimal overall patient outcomes.
17. Perform preoperative cardiac risk assessment and venous thromboprophylaxis risk assessment.
18. Write postoperative orders, perform postoperative checks.

Operative Skills
19. Obtain an understanding of the pathophysiology and surgical anatomy of abdominal wall hernias, biliary tract disease, and neoplastic, inflammatory, and infectious disorders of the gastrointestinal tract and soft tissues.
20. Develop the intraoperative surgical skills necessary for effective treatment of surgical pathology, including the basics of sterile technique, suturing, knot tying, tissue handling, and knowledge of common surgical instrument names.
21. Develop knowledge of surgical site markings and the time out process.
22. Develop knowledge of surgical patient positioning and skin preparation.
23. Understand and develop the skill for the basics of hemostasis.
24. Develop the skills necessary to be an effective first assistant.
25. Develop skills of surgical wound management
   - Infection versus inflammatory reaction
   - Abscess versus sterile fluid collection (seroma or hematoma)
   - Wound packing, Vacuum Assisted Closure dressing
   - Recognition of wound dehiscence, evisceration
26. Develop initial skills in lower and upper endoscopy.

Radiographic Interpretation
27. Recognize common plain radiographic findings in surgical patients including pneumonias, pleural effusions, pneumothorax, free intraperitoneal air, small bowel obstruction.
28. Develop interpretation skills for CT scans and MRIs.

Outpatient Patient Care - A minimum of one half day per week is mandatory
29. Perform an outpatient comprehensive history, physical, and evaluation of the general surgery patient in an office-based setting.
30. Manage outpatient general surgical patients, including referrals to and interaction with other medical specialties, development of care plans, and the appropriate utilization of diagnostic imaging, laboratory, or physiologic studies.

Skills Laboratory
31. Complete the formal R1 skills lab curriculum and competencies for general surgical procedures.
32. Practice the above procedures and skills using advance simulation techniques.

Education
33. Educate medical students in patient care matters and principles of general surgery.
34. Maintain personal study as outlined in Medical Knowledge competency below, including core curriculum textbook readings.
35. Develop skills for searching the medical literature and begin to read articles critically.
36. Perform evaluations on senior residents, faculty, the rotation and the program in an anonymous fashion.
ICU/Critical Care - Rotation Goals and Objectives

Rotation: (R1)
Length: 4 weeks
Summary:
The main goal of this rotation is to provide the R1 Resident an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients in the intensive care setting.

OBJECTIVES:
The objectives of these rotations are to for residents to develop knowledge and skills in:
1. The performance of a thorough and complete basic evaluation including history and physical exam in surgical critical care patients.
2. The preoperative evaluation and preparation.
3. The management of all post operative care including critical care management in high risk patients and those undergoing extensive surgical procedures requiring such care.
4. Formulation of a diagnostic and treatment plan for emergency room and inpatient consultations.
5. Introductory level operative skills.
7. Professional and compassionate communication and interactive skills with patients, colleagues and families.
8. Practice-based learning and improvement.

COMPETENCY BASED GOALS

1. Patient Care
The R1 will begin to learn to provide patient care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health. At the end of the rotation, the R1 will be knowledgeable in and be able to perform:

Critical Care and Management of Shock
- Differentiate types of shock (hemorrhagic, cardiogenic, septic, neurologic) and initiate appropriate therapy
- Insert central venous and arterial catheters and obtain hemodynamic data; interpret data and initiate therapy
- Recognize clinic presentation of a pneumothorax and insert chest tube
- Recognize the indications for blood component therapy and initiate therapy
- Recognize a transfusion reaction and initiate management
- Institute measures to prevent upper GI bleeding in critically ill patients

Coagulation and Anticoagulation
- Choose the appropriate tests for diagnosis of a coagulopathy, and have a working knowledge of factor analysis
- Apply effective preventive measures for DVT and PE
- Initiate and monitor therapeutic anticoagulation and its complications
- Diagnose and manage acute deep venous thrombosis
- Acutely manage a patient with a suspected acute pulmonary embolus, and provide a differential diagnosis
**Applied Cardiac Physiology**
- Recognize rhythm disturbances, myocardial ischemia on EKG
- Assess, formulate a differential diagnosis and initiate therapy for hypotension
- Know and apply appropriate treatment for supraventricular tachycardia
- Treat congestive failure and acute pulmonary edema
- Manage hypertension in a surgical patient. Understand multidrug therapy and the toxic and side effects of antihypertensive drugs.

**Applied Renal Physiology**
- Know the pathophysiology of the development of acute renal failure; the differentiation of prerenal, renal obstructive types of renal failure; and the general concepts of prevention and treatment of ARF
- Recognize and treat simple electrolyte disturbances
- Understand appropriate fluid replacement and balance

**Applied Pulmonary Physiology**
- Know the manifestations – clinical and by laboratory testing – of obstructive pulmonary disease and pulmonary insufficiency, and their surgical perioperative management
- Recognize bronchoconstrictive disorders and their perioperative management

**Applied Nutrition**
- Learn to manage the nutritional needs of a critically ill patient
- Placement of nasogastric tube and Dobhoff feeding tube

**Surgical Skills**
- Develop surgical skills in CPR, CVC placement, arterial catheter placement, and chest tube placement
- Perform first assistant in bedside bronchoscopy, pulmonary lavage, and tracheotomy
- Obtain oropharyngeal control of airway, provide Ambu ventilation and perform orotracheal intubation

**2. Medical Knowledge**
The R1 will begin to demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. At the end of the rotation, the R1 will be knowledgeable in:
- Understand and utilize basic principles of mechanical ventilation
- Recognize clinic presentation of a pneumothorax
- Recognize the indications for blood component therapy and initiate therapy
- Recognize a transfusion reaction and initiate management
- Recognize rhythm disturbances, myocardial ischemia on EKG
- Assess, formulate a differential diagnosis and initiate therapy for hypotension
- Know and apply appropriate treatment for supraventricular tachycardia
- Know the pathophysiology of the development of acute renal failure; the differentiation of prerenal, renal obstructive types of renal failure; and the general concepts of prevention and treatment of ARF
- Know the manifestations – clinical and by laboratory testing – of obstructive pulmonary disease and pulmonary insufficiency, and their surgical perioperative management
- Recognize and treat simple electrolyte disturbances
- Pathology
• Current literature

3. Practice-Based Learning and Improvement
The R1 will begin to attain the ability to investigate and evaluate his/her care of patients, to appraise and assimilate scientific evidence and to continuously improve patient care. R1 residents will:
1. Self-monitor to identify strengths and weaknesses and set goals for learning
2. Incorporate feedback from peers, faculty, patients and ancillary staff for self-improvement
3. Use information technology in patient care
4. Analyze practice and implement improvements

4. Interpersonal and Communication Skills
R1 residents must begin to demonstrate interpersonal and communication skills that facilitate the flow of information between patients, their families and health professionals. R1 residents will:
1. Communicate effectively with patients and families across all socioeconomic and cultural backgrounds
2. Communicate effectively with physicians, other health professionals and health agencies
3. Work effectively in a health care team
4. Act as a consultant
5. Maintain comprehensive, timely and legible medical records

5. Professionalism
The R1 resident will begin to demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles by showing:
1. Compassion, integrity and respect to others notwithstanding race, religion, age, gender or disabilities
2. Responsiveness to patient needs that supersedes self-interest and respects the patient’s privacy and autonomy
3. Accountability to patients, society and the profession

6. Systems-Based Practice
The R1 resident must begin to demonstrate an awareness of and responsiveness to the larger context and system of health care by having the ability to call upon appropriate resources in the system to optimize health care. The resident will:
1. Work effectively in various settings and systems
2. Coordinate patient care within the health care system considering costs and risk-benefit analysis
3. Advocate for quality care within interprofessional teams to enhance safety and improve quality
4. Identify system errors and formulate solutions
5. Be familiar with ethical, socioeconomic and medicolegal issues

Trauma Surgery - Rotation Goals and Objectives

Summary:
The overall goal of rotations on the Bellevue Hospital trauma service is to attain a thorough understanding of the pathophysiology of injury; to gain knowledge and experience in all phases of care of the trauma patient including resuscitation, operative judgment and technique, critical care, and rehabilitation.
Rotation: Bellevue Hospital (R1)
Length: 4 weeks

OBJECTIVES:
The objectives of this rotation are to for residents to develop knowledge and skills in:
1. Participate as a member of the surgical and emergency medicine team in the initial resuscitation of the injured patient and in the subsequent management of the trauma patient during the operative and post-operative phases.
2. Attain proficiency in diagnostic and therapeutic procedures.
3. Formulation of a diagnostic and treatment plan for emergency room and inpatient consultations.
4. Provide optimal patient care.
5. Professional and compassionate communication and interactive skills with patients, colleagues and families.
6. Practice-based learning and improvement.
7. Systems-based practice, particularly within the private hospital setting.

COMPETENCY-BASED GOALS
Medical Knowledge
At the completion of these rotations residents should:
1. Understand emergency airway management including endotracheal intubation, peripheral and central venous access, Swan-Ganz catheter insertion, closed tube thoracostomy, diagnostic peritoneal lavage, wound management, and performance of trauma ultrasonography (FAST).
2. Manage responsibilities such as wound care, nutritional and fluid management and chart documentation.
4. Be able to interpret radiographic findings, EKGs.
5. Learn the fundamental steps of operative management of trauma.

Skills:
R1 should be able to have the below specific skills at the end of this rotation:
1. Understand the principles and limitations of the ultrasound (FAST) and diagnostic peritoneal lavage.
2. Be able to initiate maneuvers to prevent hypothermia in the injured patient.
3. Perform basic wound management, simple suture repair, compression and antibiotic prophylaxis.
4. Interpret blood gases and understand the importance of base deficit.

Patient Care
At the completion of these rotations residents should:
1. Have an understanding of and be able to deliver compassionate care to pediatric patients.
2. Gain experience in delivering information to patients’ family members when appropriate, particular in the pediatric population.
3. Be able to use knowledge and skills learned to enhance care of patients.

Practice-Based Learning and Improvement
At the completion of these rotations residents should:
- Have gained insight into how to locate information relevant to a particular patient’s clinical situation and be able to apply that information to patient care.
• Have a working knowledge of how to access scientific information relevant to a particular patient and be able to assimilate that information and apply to it patient care.
• Be adept at using the available technology to access patient information.

**Interpersonal and Communication Skills**
At the completion of these rotations residents should:
• Understand the importance of effective communication to patients, ancillary staff and colleagues.
• Develop skills to communicate medical information to parents and family members of a pediatric patient.
• Develop skills to communicate with co-workers and colleagues to allow for optimum patient care.

**Professionalism**
At the completion of these rotations residents should:
• Understand the importance of a thorough commitment to carrying out professional responsibilities.
• Demonstrate adherence to ethical principals.
• Show sensitivity to diverse patient populations.

**System-Based Practice**
At the completion of these rotations residents should:
A. Understand the importance of working effectively in the health care delivery, particularly in the private hospital setting.
B. Understand the importance of coordination of patient care within the health care system and demonstrate a working knowledge of this.

**Emergency Medicine - Rotation Goals and Objectives**

**Rotation: Bellevue Hospital (R1)**
**Length: 4 weeks**
**Summary:**
The main goal of this rotation is to provide the R1 Resident an organized experience to enable him/her to acquire the basic knowledge and skills in the evaluation and management of patients presenting to the emergency room with emphasis on patients presenting with general surgery complaints. The R1 Resident should also gain a better appreciation of medical conditions often seen as co-morbidities in surgery patients including diabetes mellitus, hypertension, stroke, congestive heart disease, respiratory distress and myocardial infarction.

**OBJECTIVES**
The objectives of these rotations are to for residents to develop knowledge and skills in:
I. The performance of a thorough and complete basic evaluation including history and physical exam in adult and adolescent patients presenting with trauma (penetrating and blunt).
II. The preoperative evaluation and preparation.
III. Formulation of a diagnostic and treatment plan for emergency room and inpatient consultations.
IV. Introductory level operative skills.
V. Optimal patient care.
VI. Professional and compassionate communication and interactive skills with patients, colleagues and families.
VII. Practice-based learning and improvement.
VIII. Systems-based practice, particularly within the private hospital setting.

COMPETENCY BASED GOALS

I. Patient Care
The R1 will begin to learn to provide patient care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health. At the end of the rotation, the R1 will be knowledgeable in and be able to perform:
1. Primary assessment and appropriate steps to stabilize and treat patients with trauma (penetrating and blunt), respiratory distress, congestive heart failure, metabolic imbalances, myocardial infarction, and chronic pain
2. Establish the acuity level of patients in the ER, establish priorities and define the tasks necessary to manage the patients successfully
3. Monitor, observe, manage and maintain the stability of one or more patients who are at different stages in their work-ups including fundamental lab tests and radiological studies
4. Closure of simple and complex lacerations
5. Recognize and initiate treatment for an acute anaphylactic reaction
6. Develop some familiarity with disaster management
7. Collaborate with physicians and other professionals to evaluate and treat patients, arrange appropriate placement and transfer if necessary, formulate follow-up plan, and communicate effectively with patients, family, and involved health care members.

II. Medical Knowledge
The R1 will begin to demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. At the end of the rotation, the R1 will be knowledgeable in:
1. Acute problems in each organ system
2. Trauma management
3. Acute management of respiratory distress, congestive heart failure, metabolic imbalances, myocardial infarction, and chronic pain
4. Current literature

III. Practice-Based Learning and Improvement
The R1 will begin to attain the ability to investigate and evaluate his/her care of patients, to appraise and assimilate scientific evidence and to continuously improve patient care. R1 residents will:
1. Self-monitor to identify strengths and weaknesses and set goals for learning
2. Incorporate feedback from peers, faculty, patients and ancillary staff for self-improvement
3. Use information technology in patient care
4. Analyze practice and implement improvements

IV. Interpersonal and Communication Skills
R1 residents must begin to demonstrate interpersonal and communication skills that facilitate the flow of information between patients, their families and health professionals. R1 residents will:
1. Communicate effectively with patients and families across all socioeconomic and cultural backgrounds
2. Communicate effectively with physicians, other health professionals and health agencies
3. Work effectively in a health care team
4. Act as a consultant
5. Maintain comprehensive, timely and legible medical records

V. **Professionalism**
The R1 resident will begin to demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles by showing:
1. Compassion, integrity and respect to others not withstanding race, religion, age, gender or disabilities
2. Responsiveness to patient needs that supersedes self-interest and respects the patient’s privacy and autonomy
3. Accountability to patients, society and the profession

VI. **Systems-Based Practice**
The R1 resident must begin to demonstrate an awareness of and responsiveness to the larger context and system of health care by having the ability to call upon appropriate resources in the system to optimize health care. The resident will:
1. Work effectively in various settings and systems
2. Coordinate patient care within the health care system considering costs and risk-benefit analysis
3. Advocate for quality care within interprofessional teams to enhance safety and improve quality
4. Identify system errors and formulate solutions
5. Be familiar with ethical, socioeconomic and medicolegal issues

**Neurology, Neuroradiology, Neuropathology, Neurosurgery**

The neurologic rotations are under the direction of Dr. Saran Jonas, Chief of the Neurology Service at Bellevue Hospital, Drs. Ajax George senior neuroradiologist at the New York University Division of Neuroradiology and Wendy Hotson Chief of the Neuroradiology Service at Bellevue Hospital, Dr. Zag Zag, Director of Neuropathology for the New York University Division of Neuropathology, and Dr. Paul Huang, Chief of the Neurosurgery Service at Bellevue Hospital in close coordination with the Neurosurgical Program Director. These rotations provide the neurosurgery interns with an in depth exposure to basic neurological diagnosis and patient care. They gain experience with a wide range of neurological disorders, including cerebrovascular disease, neurodegenerative conditions, epilepsy, movement disorders, neuromuscular disorders, provides exposure to electroencephalography, electromyography, basics of neuropathology, and neurotrauma.

**Goals and objectives specific to the Neurology rotation include:**

Upon completion of the 3-month neurology block, each resident is expected to have completed the Goals and Objectives of the neurology rotations as follows:
1. Understanding the causal mechanisms of a wide variety of adult neurological diseases
2. Management of acute and chronic neurologic diseases
3. Comprehensive exposure to outpatient management of patients with neurological disease
4. Introduction to pediatric neurology
5. Interpretation of electroencephalograms (EEGs), electromyograms (EMGs), and nerve conduction and other electrophysiological studies
6. Interpretation of cerebrospinal fluid (CSF) and serological tests for neurological conditions
7. Introduction to nerve and muscle biopsies and their interpretation in the diagnosis of
complex neuropathies and myopathies
8. Refinement of neurological examination and history-taking skills
9. Acquire a basic understanding of the neuropathology that underlies neurological
disease
10. Exposure to neurologic research topics

**Neuroradiology**

General Neuroradiology (1 month):
This rotation provides an outstanding didactic experience in a field that is essential to the
practice of neurosurgery. Residents work closely with the members of the neuroradiology
faculty. The neurosurgery resident meets the NYU neuroradiology faculty in the reading
room each morning to participate in the reading of all Neuroradiology studies obtained
during the previous evening and as they occur during the day. The resident will observe
and participate in the interpretation of MRI and CT studies and cerebral angiograms with the
neuroradiology and interventional neuroradiology faculty. The resident is also required to
complete assigned readings in neuroradiology that will greatly enhance this experience.

**Goals and objectives Neuroradiology rotation:**

1. Understand the fundamental principles of current neuroradiological imaging
techniques including MRI, CT, PET, functional MRI, MR perfusion, CT angiography,
CT perfusion and digital subtraction angiography
2. Understand the appropriate, efficient, and cost effective use of imaging studies
3. Become adept in basic interpretation of neuroradiological studies including CT, MRI,
MRA, CTA, MRP, CTP and digital subtraction angiography
4. Understand the role of interventional neuroradiology in diagnosis and treatment of
neurological disease, including endovascular management of neurovascular
problems
5. Become familiar with the relationship between imaging studies and
neuropathological material

**Neuropathology**

Neuropathology (1 month):
This rotation provides an outstanding didactic experience in a field that is essential to the
practice of neurosurgery. Residents work closely with the members of the neuropathology
faculty. The neurosurgery resident meets the NYU neuropathology faculty in the reading
room each morning to participate in the reading of all neuropathology specimens obtained
during the previous day and as they occur during the day including preparing and reading
frozen specimens. The resident will observe and participate in the interpretation of all
pathologic specimen with the neuropathology faculty. The resident is also required to
complete assigned readings in neuropathology and attend adult and pediatric Tumor board
that will greatly enhance this experience.

**Goals and objectives Neuropathology rotation:**

A. Understand practical application of neuropathology to clinical practice
B. Understand the fundamental principles of current neuropathological staining
techniques
C. Understand the appropriate, efficient, and cost effective use of athology modalities
including EM and special stains
D. Become adept in basic interpretation of neuropathological slides
E. Understand the role of neuropathology in the diagnosis, treatment and prognosis of neurological disease
F. Become familiar with the relationship between imaging studies and neuropathological material
G. Expand knowledge of fundamentals of neuroanatomy and neurophysiology
H. Acquire a basic understanding of the neuropathology that underlies neurological disease
I. Gain exposure to neurologic research topics

**Neurosurgery**

**Neurosurgery (1 month):**
The one-month Neurosurgery rotation allows the new residents to become familiar with the day-to-day operation of the NYU neurosurgical service thus allowing them to gain insight into what will be required of them as they progress through the neurosurgical residency. The intern will observe and participate in the neurosurgical cases with the chief resident and the Neurosurgical faculty. They will also be introduced to the outpatient neurosurgery by attending and participating in the neurosurgery clinic at Bellevue Hospital. The resident is also required to attend the SNS basic neurosurgical skills resident boot camp, complete assigned readings in neurosurgery and attend all neurosurgery didactic conferences.

**Goals and objectives of intern Neurosurgery rotation:**
- Perform and document a history and physical examination in a timely manner
- Generate a differential diagnosis
- Present synthesized and coherent clinical information to more senior members of the medical team
- Learn to prioritize clinical care
- Recognize when more senior help is needed and readily ask for assistance
- Interact with patients and families
- Become familiar and comfortable with operating room environment
- Learn to perform a thorough neurological exam
- Become familiar with neurosurgical standard of care and its scientific underpinnings
- Become competent with basic procedures/skills
  - Invasive ICP monitoring
  - Shunt Taps
  - Lumbar Punctures
- Recognize neurosurgical emergencies

**Neurosurgery PGY-2 - (Residents rotate as Junior Residents at Bellevue Hospital Center)**
- Neurosurgery R1 residents must have successfully completed an accredited Neurosurgery internship at NYU in accordance with Neurosurgery RRC guidelines. They must demonstrate competence in all of the general medical and surgical principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism at each stage throughout the training program. They must also demonstrate knowledge of patient rights, including HIPPA and the appropriate use of restraints and seclusion, in accordance with Bellevue Hospitals Center Policy on Restraints and Seclusion. The residency program provides graduated levels of responsibility in patient evaluation, management and surgery as residents rotate through the various neurosurgical services in the medical center. Junior level residents work directly with the Neurosurgical Faculty and chief residents at Bellevue Hospital Center's
very busy neurosurgical trauma and elective services. During these rotations the residents assume more and more direct responsibility and surgical opportunities in the care patients. Surgical techniques are learned and standards of care adopted. By the end of the PGY 2 Neurosurgery year the resident should master the following:

**PATIENT CARE:**
- The residents will learn how to take a neurological history, perform a neurological examination and derive a differential diagnosis.
- Residents will learn to rapidly identify potential surgical risks preoperatively and learn methods to minimize those risks.
- With appropriate supervision, residents will learn to competently perform the following procedures:

  **Procedures**
  - History
  - Physical
  - Neurological Examination
  - Insertion nasogastric tube
  - Lumbar puncture
  - Arterial puncture
  - Insertion IV lines
  - Removal of sutures
  - Insertion of Foley catheter
  - EKG
  - Pelvic examination
  - Incision/drainage of superficial abscess
  - Suturing of lacerations
  - Wound debridement
  - Dressing changes
  - Insertion central venous catheter
  - Insertion Swan-Ganz
  - Emergency tracheotomy
  - Aspirate shunt reservoir
  - Insertion lumbar subarachnoid catheter
  - Twist drill cranietomy for ICP monitor
  - Burr hole for trauma
  - Burr hole/twist drill ventriculostomy
  - Twist drill for SEPS drainage of subdural hematomas
  - Application/insertion cervical traction
  - Suture simple laceration scalp/back
  - Suture complex laceration scalp/back
  - Opening and closure craniotomy incisions
  - Externalize shunts

**MEDICAL KNOWLEDGE:**
- The residents will learn the neurodiagnostic studies available for the evaluation of patients. They will learn the importance of correlative neuroanatomy in interpreting these studies.
- The residents will learn:
  - The anatomy of the brain, spine, peripheral nerves and the bony coverings of each.
  - The physiology of normal brain and normal vasculature.
- The residents will develop competence in the interpretation of neurodiagnostic examinations in disease states. These include: conventional radiographs, cranial and
spinal computed tomography, cranial and spinal magnetic resonance imaging, MR angiography, CT angiography and venograms, cerebral and spinal angiography.

• They will learn critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology. They will discuss:
  • The definition of mild, moderate, and severe brain injury and identify the individual components and scores of the Glasgow Coma Scale and Glasgow Outcome Scale.
  • The clinical and radiologic pathways for clearance of the spine
  • The difference between complete and incomplete spinal injury and demonstrate the ability to accurately complete detailed ASIA grading and category assignment, and the prognosis of neurologic recovery for each.
  • The major patterns of spinal injury (complete, central cord, Brown-Sequard, cauda equina, etc). What mechanisms of injury and spinal column injury are most commonly associated with each? What is the prognosis for recovery for each?
  • The pathophysiology of craniocervical injuries in adults.
  • The pathophysiology of sub-axial spinal column and spinal cord injuries in adults.
  • Fundamental management of patients with head injuries, including intracranial pressure (ICP) monitoring
  • Stabilization and management of trauma to the spine, and spinal cord injury
  • Fundamental ICU care, particularly for multisystem-injured patients
  • Fundamental ER care of acute neurological injuries, including blunt and penetrating injuries and subarachnoid hemorrhage
  • Outpatient management of new and follow-up patients
  • Exposure to pediatric neurosurgical management

• Residents will discuss the indications and potential complications for all neurosurgical procedures. This will be acquired from discussions with faculty and by reading textbooks and the literature. It will be evaluated in didactic case conferences.
• They will learn how to write appropriate admission and medication orders for ward, ICU, and post-operative patients.
• They will discuss specific JCAHO hospital safety regulations.
• They will discuss the importance of timely and accurate medical record keeping including medication reconciliation.
• Knowledge of general medicine and surgical principles as well as the pathophysiology of neurosurgical diseases will be acquired with experience, reading and observation of the practice habits of senior neurosurgeons and non-surgical consultants, and in didactic case conferences.

INTERPERSONAL COMMUNICATION SKILLS:

• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
• They will learn to communicate clearly and promptly with the nursing and support staff in order to obtain the best patient care.
• They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with patients and their families.
• They will also learn to present in weekly didactic case conferences and at Journal Club.

SYSTEMS BASED PRACTICE:
• Residents will learn that patient care is a team effort where each member of the team is equally important in attaining satisfactory patient outcomes. The team includes floor nurses, nurse practitioners, operating room personnel, social workers, case managers, rehabilitation specialists, consultants and house staff from other services, other neurosurgical residents and medical students and consultant neurosurgeons.
• They will learn to coordinate and manage communication between services on co-managed patients.
• They will interact and coordinate the longitudinal care of neurosurgical patients through discussions with Neurosurgical NP’s, Physician Assistants, Psychiatrists, Physical Therapists, Social Workers, and Discharge Planning nurses.
• They will discuss the regulatory issues involved in reporting brain death and non-accidental neurologic injury (especially in the pediatric population).

PRACTICE-BASED LEARNING:
• The resident will learn to analyze his or her own practice for needed improvements.
• They will also learn to use evidence from scientific studies to guide their medical decision-making.
• They will discuss the application of research and statistical methods.
• They will participate in clinical research projects, where appropriate, including participating in the IRB and consent process.
• Residents will attend the Wood’s Hole Neurosurgical Research Course.

PROFESSIONALISM:
• Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, and with nurses and paramedical personnel.
• Residents will learn how to deal with patients and families in a compassionate and humanistic way.
• Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
• Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
• Demonstrate honesty in all professional interactions.
• Residents will maintain timely and accurate medical records.
• Residents will also:
  o Attend all required conferences in a timely fashion.
  o Pre-round on ICU patients and present timely, accurate data to the team.
  o Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  o Provide consultation to the ED and other services in timely fashion.
  o Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  o Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
  o Appear for duty appropriately rested and fit to provide the services required by their patients.
  o Accurately self-report fatigue in situations that may compromise safety and/or
patient care.
  o Must be committed to and responsible for promoting patient safety.
  o Must demonstrate responsiveness to patient needs that supersedes self-interest.
  o Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHODS OF EVALUATION:
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
  o They are required to obtain a passing grade on this examination prior to completing their residency training.
  o They are also expected to improve their percentile performance on the ABNS primary examination each year.
• Resident will also attend weekly didactic conferences and the monthly Journal Club.
• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
• The Neurosurgery Attending Staff reviews Resident Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY-2 - (Residents rotate as Junior Residents on Tisch teams 1 & 2)
• Neurosurgery PGY-2 residents must have successfully completed an accredited PGY-1 year neurosurgical internship. They must demonstrate competence in all of the general medical and surgical principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism at each stage throughout the training program. They must also demonstrate knowledge of patient rights, including HIPPA and the appropriate use of restraints and seclusion. Resident physicians are permitted to conduct face-to-face evaluation of patients in restraints or seclusion and to order patient restraints and seclusion in accordance with New York University Hospitals Center Policy on Restraints and Seclusion. The residency program provides graduated levels of responsibility in patient evaluation, management and surgery as residents rotate through the various neurosurgical services in the medical center. Junior and intermediate level residents work with master neurosurgeons on two distinct adult services at Tisch Hospital: (Tumor/Vascular/Skull Base/Functional/Epilepsy Service) (Spinal/Peripheral Services). They also rotate through the Pediatric/Pediatric Epilepsy services at Tisch Hospital. During these rotations the residents assume more and more direct responsibility and surgical opportunities in the care patients. Surgical techniques are
learned and standards of care adopted. In addition to mastering the procedures outlined below, by the end of the PGY 2 Neurosurgery year the resident should be able to master the following:

PATIENT CARE:
• The residents will learn how to take a neurological history, perform a neurological examination and derive a differential diagnosis
• Residents will learn to rapidly identify potential surgical risks preoperatively and discuss methods to minimize those risks.
• With appropriate supervision, residents will learn to competently perform the following procedures:

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MEDICAL KNOWLEDGE:
• The residents will learn neurodiagnostic studies available for the evaluation of patients. They will learn the importance of correlative neuroanatomy in interpreting these studies
• The residents will discuss:
  o The anatomy of the brain, spine, peripheral nerves and the bony coverings of each.
  o The physiology of normal brain and normal vasculature.
• The residents will develop competence in the interpretation of neurodiagnostic examinations in disease states. These include: conventional radiographs, carotid ultrasonography, cranial and spinal computed tomography, cranial and spinal magnetic
resonance imaging, MR angiography, CT angiography and venograms, cerebral and spinal angiography.

• They will learn critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology. They will discuss:
  o The definition of mild, moderate, and severe brain injury and identify the individual components and scores of the Glasgow Coma Scale and Glasgow Outcome Scale.
  o The clinical and radiologic pathways for clearance of the spine
  o The difference between complete and incomplete spinal injury and demonstrate the ability to accurately complete detailed ASIA grading and category assignment, and the prognosis of neurologic recovery for each.
  o The major patterns of spinal injury (complete, central cord, Brown-Sequard, cauda equina, etc). What mechanisms of injury and spinal column injury are most commonly associated with each? What is the prognosis for recovery for each?
  o The pathophysiology of craniocervical injuries in adults.
  o The pathophysiology of sub-axial spinal column and spinal cord injuries in adults.

• Residents will discuss the indications and potential complications for all neurosurgical procedures. This will be acquired from discussions with faculty and by reading textbooks and the literature. It will also be evaluated in didactic case conferences.

• They will learn how to write appropriate admission and medication orders for ward, ICU, and post-operative patients.

• They will discuss specific JCAHO hospital safety regulations.

• They will learn the importance of timely and accurate medical record keeping including medication reconciliation.

• Knowledge of general medicine and surgical principles as well as the pathophysiology of neurosurgical diseases will be acquired with experience, reading and observation of the practice habits of senior neurosurgeons and non-surgical consultants, and in didactic case conferences.

INTERPERSONAL COMMUNICATION SKILLS:

• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.

• They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.

• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.

• They will learn to communicate clearly and promptly with the nursing and support staff in order to obtain the best patient care.

• They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with patients and their families.

• They will also learn to present in weekly didactic case conferences and at Journal Club

SYSTEMS BASED PRACTICE:

• Residents will learn that patient care is a team effort where each member of the team is equally important in attaining satisfactory patient outcomes. The team includes floor nurses, nurse practitioners, operating room personnel, social workers, case managers,
rehabilitation specialists, consultants and house staff from other services, other neurosurgical residents and medical students and consultant neurosurgeons.

- They will learn to coordinate and manage communication between services on co-managed patients.
- They will interact and coordinate the longitudinal care of neurosurgical patients through discussions with Neurosurgical NP’s, Physiatrists, Physical Therapists, Social Workers, and Discharge Planning nurses.
- They will discuss the regulatory issues involved in reporting brain death and non-accidental neurologic injury (especially in the pediatric population).

PRACTICE-BASED LEARNING:
- The resident will learn to analyze his or her own practice for needed improvements.
- They will also learn to use evidence from scientific studies to guide their medical decision-making.
- They will discuss the application of research and statistical methods.
- They will participate in clinical research projects where appropriate including participating in the IRB and consent process.
- Residents will attend the Wood’s Hole Neurosurgical Research Course.

PROFESSIONALISM:
- Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, but also with nurses and paramedical personnel.
- Residents will learn how to deal with patients and families in a compassionate and humanistic way.
- Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
- Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
- Demonstrate honesty in all professional interactions.
- Residents will maintain timely and accurate medical records.
- Residents will also:
  - Attend all required conferences in a timely fashion.
  - Pre-round on ICU patients and present timely, accurate data to team.
  - Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  - Provide consultation to the ED and other services in timely fashion.
  - Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  - Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
  - Appear for duty appropriately rested and fit to provide the services required by their patients.
  - Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  - Must be committed to and responsible for promoting patient safety.
  - Must demonstrate responsiveness to patient needs that supersedes self-interest.
  - Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHODS OF EVALUATION:
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
  o They are required to obtain a passing grade on this examination prior to completing their residency training.
  o They are also expected to improve their percentile performance on the ABNS primary examination each year.
• Resident will also attend weekly didactic conferences and the monthly Journal Club.
• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
• The Neurosurgery Attending Staff reviews Resident Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY-2 - (Residents rotate as Junior Residents at New York Harbor Health Care System)
• Neurosurgery PGY2 residents must have successfully completed an accredited neurosurgery internship. They must demonstrate competence in all of the general medical and surgical principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism at each stage throughout the training program. They must also demonstrate knowledge of patient rights, including HIPPA and the appropriate use of restraints and seclusion. Resident physicians are permitted to conduct face-to-face evaluation of patients in restraints or seclusion and to order patient restraints and seclusion in accordance with Manhattan VA Hospitals Center Policy on Restraints and Seclusion. The residency program provides graduated levels of responsibility in patient evaluation, management and surgery as residents rotate through the various neurosurgical services in the medical center. Junior and intermediate level residents work with master neurosurgeons at the Neurosurgical Service at the Manhattan VA Medical Center. During these rotations the residents assume more and more direct responsibility and surgical opportunities in the care patients. Surgical techniques are learned and standards of care adopted. In addition to mastering the procedures outlined below, by the end of the PGY 2 Neurosurgery year the resident should be able to master the following:

PATIENT CARE:
• The residents will learn how to take a neurological history, perform a neurological examination and derive a differential diagnosis
• Residents will learn to rapidly identify potential surgical risks preoperatively and discuss methods to minimize those risks.
• With appropriate supervision, residents will learn to competently perform the following procedures:

**Procedures**

- History
- Physical
- Neurological Examination
- Insertion nasogastric tube
- Lumbar puncture
- Arterial puncture
- Insertion IV lines
- Removal of sutures
- Insertion of Foley catheter
- EKG
- Pelvic examination
- Incision/drainage of superficial abscess
- Suturing of lacerations
- Wound debridement
- Dressing changes
- Insertion central venous catheter
- Insertion Swan-Ganz
- Emergency tracheotomy
- Aspirate shunt reservoir
- Insertion lumbar subarachnoid catheter
- Twist drill craniostomy for ICP monitor
- Twist drill for SEPS drainage of subdural hematomas
- Burr hole for trauma
- Burr hole/twist drill ventriculostomy
- Application/insertion cervical traction
- Suture simple laceration scalp/back
- Suture complex laceration scalp/back
- Open and closure craniotomy incisions
- Externalize shunts

**MEDICAL KNOWLEDGE:**

- The residents will learn the neurodiagnostic studies available for the evaluation of patients. They will discuss the importance of correlative neuroanatomy in interpreting these studies.
- The residents will discuss:
  - The anatomy of the brain, spine, peripheral nerves and the bony coverings of each.
  - The physiology of normal brain and normal vasculature.
- The residents will develop competence in the interpretation of neurodiagnostic examinations in disease states. These include: conventional radiographs, carotid ultrasonography, cranial and spinal computed tomography, cranial and spinal magnetic resonance imaging, MR angiography, CT angiography and venograms, cerebral and spinal angiography.
- They will learn critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology. They will learn:
  - The definition of mild, moderate, and severe brain injury and identify the individual components and scores of the Glasgow Coma Scale and Glasgow Outcome Scale.
  - The clinical and radiologic pathways for clearance of the spine.
o The difference between complete and incomplete spinal injury and demonstrate the ability to accurately complete detailed ASIA grading and category assignment, and the prognosis of neurologic recovery for each.
o The major patterns of spinal injury (complete, central cord, Brown-Sequard, cauda equina, etc). What mechanisms of injury and spinal column injury are most commonly associated with each? What is the prognosis for recovery for each?
o The pathophysiology of craniocervical injuries in adults.
o The pathophysiology of sub-axial spinal column and spinal cord injuries in adults.

• Residents will discuss the indications and potential complications for all neurosurgical procedures. This will be acquired from discussions with faculty and by reading textbooks and the literature. It will also be evaluated in didactic case conferences.
• They will learn how to write appropriate admission and medication orders for ward, ICU, and post-operative patients.
• They will discuss specific JCAHO hospital safety regulations.
• They will learn the importance of timely and accurate medical record keeping including medication reconciliation.
• Knowledge of general medicine and surgical principles as well as the pathophysiology of neurosurgical diseases will be acquired with experience, reading and observation of the practice habits of senior neurosurgeons and non-surgical consultants, and in didactic case conferences.

INTERPERSONAL COMMUNICATION SKILLS:
• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
• They will learn to communicate clearly and promptly with the nursing and support staff in order to obtain the best patient care.
• They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with patients and their families.
• They will also learn to present in weekly didactic case conferences and at Journal Club

SYSTEMS BASED PRACTICE:
• Residents will learn that patient care is a team effort where each member of the team is equally important in attaining satisfactory patient outcomes. The team includes floor nurses, nurse practitioners, operating room personnel, social workers, rehabilitation specialists, consultants and house staff from other services, other neurosurgical residents and medical students and consultant neurosurgeons.
• They will learn to coordinate and manage communication between services on co-managed patients.
• They will interact and coordinate the longitudinal care of neurosurgical patients through discussions with Neurosurgical NP’s, Psychiatrists, Physical Therapists, Social Workers, and discharge planning nurses.
• They will learn the regulatory issues involved in reporting brain death and non-accidental neurologic injury (especially in the pediatric population).
PRACTICE-BASED LEARNING:
• The resident will learn to analyze his or her own practice for needed improvements.
• They will also learn to use evidence from scientific studies to guide their medical decision making.
• They will learn the application of research and statistical methods.
• They will participate in clinical research projects where appropriate including participating in the IRB and consent process.
• Residents will attend the Wood’s Hole Neurosurgical Research Course

PROFESSIONALISM:
• Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, but also with nurses and paramedical personnel.
• Residents will learn how to deal with patients and families in a compassionate and humanistic way.
• Maintain professional rapport and comportment with patients, families, nurses, other physician teams and other hospital personnel.
• Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
• Residents will maintain timely and accurate medical records.
• Residents will also:
  o Attend all required conferences in a timely fashion.
  o Pre-round on ICU patients and present timely, accurate data to team.
  o Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  o Provide consultation to the ED and other services in timely fashion.
  o Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  o Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
  o Appear for duty appropriately rested and fit to provide the services required by their patients.
  o Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  o Must be committed to and responsible for promoting patient safety.
  o Must demonstrate responsiveness to patient needs that supersedes self-interest.
  o Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHODS OF EVALUATION:
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
  o They are required to obtain a passing grade on this examination prior to completing their residency training.
  o They are also expected to improve their percentile performance on the ABNS primary examination each year.
• Resident will also attend weekly didactic conferences and the monthly Journal Club.
• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
• The Neurosurgery Attending Staff reviews Resident Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed.
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY3 - (Residents rotate as Intermediate level Junior Residents on Tisch Teams 1 & 2)

Neurosurgery PGY3 residents must demonstrate competence in all principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism, as well as, in all procedures required of a Neurosurgery PGY2 resident prior to progressing to the Neurosurgery PGY3 year. During this year, the residents clinical responsibility increases. The resident will become adept with neurosurgical instruments, operating microscope, navigation systems, and patient positioning. An attending physician supervises all Operating Room procedures performed by residents.

PATIENT CARE:
• Residents will learn important details such as patient positioning and optimal surgical approaches for each procedure. This will be learned from experienced supervising senior neurosurgery house staff and the Neurosurgical faculty.
• They will learn the technical aspects of the operations and will be evaluated by supervising senior neurosurgical house staff and attending staff in the operative theater.
• They are responsible for the basic function of the Neurosurgery services and urgent daytime neurosurgery consultations in the Hospital and in the Emergency Department.
• They must demonstrate with the appropriate supervision the ability to recognize and treat neurosurgical emergencies:
  o Status epilepticus
  o Unstable spine and spinal cord injury
  o Acute shunt malfunction
  o Cerebral Herniation / Increased intracranial pressure
  o Acute intracranial hemorrhage
  o CNS infection
  o Sub-arachnoid hemorrhage / Vasospasm
  o Metabolic Disorders / intoxication / withdrawal (EtOH and Narcotic)
• They will learn to obtain and evaluate proper diagnostic radiological studies.

MEDICAL KNOWLEDGE:
• Residents will learn the necessary elements for a good surgical outcome: proper patient selection, identification and preoperative stabilization of other disease processes which can cause problems in the postoperative period such as
hypertension, cardiovascular disease, pulmonary insufficiency, diabetes, alcoholism, clotting disorders, renal insufficiency, atherosclerosis and endocrinologic dysfunction.

- The residents will be taught to identify and manage emergency situations: epidural hematoma, cerebral herniation, postoperative clot, traumatic spinal cord injury, obstructive hydrocephalus, cerebral ischemia, spinal cord compression, status epilepticus and others. They will also learn the preoperative selection of endovascular neurosurgery candidates as well as the preoperative counseling, preoperative and, postoperative care of endovascular neurosurgery patients.

- They learn this through extensive clinical exposure and didactic question and answer sessions in the multiple conferences offered throughout the academic year.

- With appropriate supervision, residents will learn to competently perform the following procedures:

**Procedures**

- All Neurosurgery PGY2 procedures
- Incision, burr holes and removal of bone flap for craniotomy
- Incision, burr holes and removal of bone flap for sub-occipital craniotomy
- Ventriculoperitoneal shunt
- Ventriculo-pleural shunt
- Ventriculo-atrial shunt
- Closure laminectomy wounds
- Closure anterior cervical fusion wounds
- Laminection for lumbar disc
- Lumbar laminectomy for stenosis
- CSF shunt lumbar
- Carpal tunnel release
- Ulnar nerve release
- Lumbar pedicle screw placement
- Lateral mass screw placement
- Fundamental cerebral and spinal angiography

**INTERPERSONAL and COMMUNICATION SKILLS:**

- They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.

- They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.

- They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.

- They will learn to communicate clearly and promptly with the nursing and support staff in order to obtain the best patient care.

- They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with patients and their families.

- They will also learn to present in weekly didactic case conferences and at Journal Club

**SYSTEMS-BASED PRACTICE:**

- In addition to skills mastered in the PGY2 year, trainees will learn what the delivery of health care costs (daily hospitalization costs, the costs of imaging procedures and laboratory tests, surgical fees, anesthesia charges, etc.).
• They will be taught to practice cost-effective medicine without sacrificing good clinical outcomes.
• The resident will discuss JACHO patient safety standards regarding patient identification, medication order writing, surgical site preparation (including hair removal), peri-operative antibiotic administration, the pre-operative time out site and operative identification procedure, and peri-operative DVT prophylaxis algorithm.
• They will learn effective interaction with the peri-operative nursing and anesthesia personnel in delivering appropriate operative patient care including:
  o Site identification and preparation (as above).
  o Communication of need for modification of anesthetic technique (i.e. neurophysiologic monitoring).
  o Availability of cell saver / blood products.
  o Alert nursing staff of potential for frozen section.
  o Review and correction of peri-operative risk factors and co-morbidities prior to starting procedure (i.e. Alerting electrophysiology of need to interrogate pacemaker or place a magnet).

PRACTICE-BASED LEARNING:
• Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
• Residents will attend the Chicago Neurosurgical Review Course.
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination. They are required to obtain a passing grade on this examination prior to completing their residency training.
• They will participate in clinical research projects where appropriate including participating in the IRB and consent process.

PROFESSIONALISM:
• Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, and with nurses and paramedical personnel.
• Residents will learn how to deal with patients and families in a compassionate and humanistic way.
• Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
• Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
• Demonstrate honesty in all professional interactions.
• Residents will maintain timely and accurate medical records.
• Residents will also:
  o Attend all required conferences in a timely fashion.
  o Pre-round on ICU patients and present timely, accurate data to team.
  o Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  o Provide consultation to the ED and other services in timely fashion.
  o Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  o Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
  o Appear for duty appropriately rested and fit to provide the services required by
their patients.
  o Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  o Must be committed to and responsible for promoting patient safety.
  o Must demonstrate responsiveness to patient needs that supersedes self-interest.
  o Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHOD OF EVALUATION:
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
  o They are required to obtain a passing grade on this examination prior to completing their residency training.
  o They are also expected to improve their percentile performance on the ABNS primary examination each year.
• Resident will also attend weekly didactic conferences and the monthly Journal Club.
• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
• The Neurosurgery Attending Staff reviews Resident Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY3 - (Residents rotate as Intermediate level Junior Residents at Bellevue Hospital Center)
Neurosurgery PGY3 residents must demonstrate competence in all principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism as well as in all procedures required of a Neurosurgery PGY2 resident prior to progressing to the Neurosurgery PGY3 year. During this year, the residents clinical responsibility increases. The resident will become adept with neurosurgical instruments, operating microscope, navigation systems, and patient postioning. An attending physician supervises all Operating Room procedures performed by residents. In addition to mastering the procedures outlined below, the Neurosurgery PGY3 resident must master:

PATIENT CARE:
• Residents will discuss important details such as patient positioning and optimal surgical approaches for each procedure. This will be learned from experienced supervising senior neurosurgery house staff and the Neurosurgical faculty.
• They will learn the technical aspects of the operations and will be evaluated by supervising senior neurosurgical house staff and attending staff in the operative theater.
• They are responsible for the basic function of the Neurosurgery services and urgent daytime neurosurgery consultations in the Hospital and in the Emergency Department.
• They must demonstrate with the appropriate supervision the ability to recognize and treat neurosurgical emergencies:
  o Status epilepticus
  o Unstable spine and spinal cord injury
  o Acute shunt malfunction
  o Cerebral Herniation / Increased intracranial pressure
  o Acute intracranial hemorrhage
  o CNS infection
  o Sub-arachnoid hemorrhage / Vasospasm
  o Metabolic Disorders / intoxication / withdrawal (EtOH and Narcotic)
• They will learn to obtain and evaluate proper diagnostic radiological studies.

MEDICAL KNOWLEDGE:
• Residents will learn the necessary elements for a good surgical outcome: proper patient selection, identification and preoperative stabilization of other disease processes which can cause problems in the postoperative period such as hypertension, cardiovascular disease, pulmonary insufficiency, diabetes, alcoholism, clotting disorders, renal insufficiency, atherosclerosis and endocrinologic dysfunction.
• The residents will be taught to identify and manage emergency situations: epidural hematoma, cerebral herniation, postoperative clot, traumatic spinal cord injury, obstructive hydrocephalus, cerebral ischemia, spinal cord compression, status epilepticus and others. They learn this through extensive clinical exposure and didactic question and answer sessions in the multiple conferences offered throughout the academic year.
• With appropriate supervision, residents will learn to competently perform the following procedures:

  Procedures
  All Neurosurgery PGY2 procedures
  Incision, burr holes and removal of bone flap for craniotomy
  Incision, burr holes and removal of bone flap for sub-occipital craniotomy
  Ventriculo-peritoneal shunt
  Ventriculo-pleural shunt
  Ventriculo-atrial shunt
  Closure laminectomy wounds
  Closure anterior cervical fusion wounds
  Laminectomy for lumbar disc
  Lumbar laminectomy for stenosis
  CSF shunt lumbar
  Carpal tunnel release
  Ulnar nerve release
  Lumbar pedicle screw placement
  Lateral mass screw placement

INTERPERSONAL and COMMUNICATION SKILLS:
• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
• They will learn to communicate clearly and promptly with the nursing and support staff in order to obtain the best patient care.
• They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with patients and their families.
• They will also learn to present in weekly didactic case conferences and at Journal Club

SYSTEMS-BASED PRACTICE:
• In addition to skills mastered in the PGY3 year, trainees will learn what the delivery of health care costs (daily hospitalization costs, the costs of imaging procedures and laboratory tests, surgical fees, anesthesia charges, etc.).
• They will be taught to practice cost-effective medicine without sacrificing good clinical outcomes.
• The resident will discuss JACHO patient safety standards regarding patient identification, medication order writing, surgical site preparation (including hair removal), peri-operative antibiotic administration, the pre-operative time out site and operative identification procedure, and peri-operative DVT prophylaxis algorithm.
• They will learn effective interaction with the peri-operative nursing and anesthesia personnel in delivering appropriate operative patient care including:
  o Site identification and preparation (as above).
  o Communication of need for modification of anesthetic technique (i.e. neurophysiologic monitoring).
  o Availability of cell saver / blood products.
  o Alert nursing staff of potential for frozen section.
  o Review and correction of peri-operative risk factors and co-morbidities prior to starting procedure (i.e. Alerting electrophysiology of need to interrogate pacemaker or place a magnet).

PRACTICE-BASED LEARNING:
• Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
• Residents will attend the Chicago Neurosurgical Review Course.
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination. They are required to obtain a passing grade on this examination prior to completing their residency training.
• They will participate in clinical research projects where appropriate including participating in the IRB and consent process.

PROFESSIONALISM:
• Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, and with nurses and paramedical personnel.
• Residents will learn how to deal with patients and families in a compassionate and humanistic way.
• Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
• Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
• Demonstrate honesty in all professional interactions.
• Residents will maintain timely and accurate medical records.
• Residents will also:
  o Attend all required conferences in a timely fashion.
  o Pre-round on ICU patients and present timely, accurate data to team.
  o Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  o Provide consultation to the ED and other services in timely fashion.
  o Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  o Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
  o Appear for duty appropriately rested and fit to provide the services required by their patients.
  o Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  o Must be committed to and responsible for promoting patient safety.
  o Must demonstrate responsiveness to patient needs that supersedes self-interest.
  o Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHOD OF EVALUATION:
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
  o They are required to obtain a passing grade on this examination prior to completing their residency training.
  o They are also expected to improve their percentile performance on the ABNS primary examination each year.
• Resident will also attend weekly didactic conferences and the monthly Journal Club.
• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
• The Neurosurgery Attending Staff reviews Resident Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed.
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching
conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.

• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY3 - (Residents rotate as Intermediate level Junior Residents at New York Harbor Health Care System (VA))

Neurosurgery PGY3 residents must demonstrate competence in all principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism as well as in all procedures required of a Neurosurgery PGY2 resident prior to progressing to the Neurosurgery PGY3 year. During this year, the residents clinical responsibility increases. The resident will become adept with neurosurgical instruments, operating microscope, navigation systems, and patient positioning. An attending physician supervises all Operating Room procedures performed by residents. In addition to mastering the procedures outlined below, the Neurosurgery PGY3 resident must master:

PATIENT CARE:

• Residents will learn important details such as patient positioning and optimal surgical approaches for each procedure. This will be learned from experienced supervising senior neurosurgery house staff and the Neurosurgical faculty.
• They will learn the technical aspects of the operations and will be evaluated by supervising senior neurosurgical house staff and attending staff in the operative theater.
• They are responsible for the basic function of the Neurosurgery services and urgent daytime neurosurgery consultations in the Hospital and in the Emergency Department.
• They must demonstrate with the appropriate supervision the ability to recognize and treat neurosurgical emergencies:
  o Status epilepticus
  o Unstable spine and spinal cord injury
  o Acute shunt malfunction
  o Cerebral Herniation / Increased intracranial pressure
  o Acute intracranial hemorrhage
  o CNS infection
  o Sub-arachnoid hemorrhage / Vasospasm
  o Metabolic Disorders / intoxication / withdrawal (EtOH and Narcotic)
• They will learn to obtain and evaluate proper diagnostic radiological studies.

MEDICAL KNOWLEDGE:

• Residents will learn the necessary elements for a good surgical outcome: proper patient selection, identification and preoperative stabilization of other disease processes which can cause problems in the postoperative period such as hypertension, cardiovascular disease, pulmonary insufficiency, diabetes, alcoholism, clotting disorders, renal insufficiency, atherosclerosis and endocrinologic dysfunction.
• The residents will be taught to identify and manage emergency situations: epidural hematoma, cerebral herniation, postoperative clot, traumatic spinal cord injury, obstructive hydrocephalus, cerebral ischemia, spinal cord compression, status epilepticus and others. They learn this through extensive clinical exposure and didactic question and answer sessions in the multiple conferences offered throughout the academic year.
• With appropriate supervision, residents will learn to competently perform the following procedures:
Procedures

All Neurosurgery PGY2 procedures
- Incision, burr holes and removal of bone flap for craniotomy
- Incision, burr holes and removal of bone flap for sub-occipital craniotomy
- Ventriculo-peritoneal shunt
- Ventriculo-pleural shunt
- Ventriculo-atrial shunt
- Closure laminectomy wounds
- Closure anterior cervical fusion wounds
- Laminectomy for lumbar disc
- Lumbar laminectomy for stenosis
- CSF shunt lumbar
- Carpal tunnel release
- Ulnar nerve release
- Lumbar pedicle screw placement
- Lateral mass screw placement

INTERPERSONAL and COMMUNICATION SKILLS:

- They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
- They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
- They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
- They will learn to communicate clearly and promptly with the nursing and support staff in order to obtain the best patient care.
- They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with patients and their families.
- They will also learn to present in weekly didactic case conferences and at Journal Club

SYSTEMS-BASED PRACTICE:

- In addition to skills mastered in the R1 year, trainees will learn what the delivery of health care costs (daily hospitalization costs, the costs of imaging procedures and laboratory tests, surgical fees, anesthesia charges, etc.).
- They will be taught to practice cost-effective medicine without sacrificing good clinical outcomes.
- The resident will discuss JACHO patient safety standards regarding patient identification, medication order writing, surgical site preparation (including hair removal), peri-operative antibiotic administration, the pre-operative time out site and operative identification procedure, and peri-operative DVT prophylaxis algorithm.
- They will learn effective interaction with the peri-operative nursing and anesthesia personnel in delivering appropriate operative patient care including:
  - Site identification and preparation (as above).
  - Communication of need for modification of anesthetic technique (i.e. neurophysiologic monitoring).
  - Availability of cell saver / blood products.
  - Alert nursing staff of potential for frozen section.
Review and correction of peri-operative risk factors and co-morbidities prior to starting procedure (i.e. Alerting electrophysiology of need to interrogate pacemaker or place a magnet).

PRACTICE-BASED LEARNING:
- Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
- Residents will attend the Chicago Neurosurgical Review Course.
- Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination. They are required to obtain a passing grade on this examination prior to completing their residency training.
- They will participate in clinical research projects where appropriate including participating in the IRB and consent process.

PROFESSIONALISM:
- Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, and with nurses and paramedical personnel.
- Residents will learn how to deal with patients and families in a compassionate and humanistic way.
- Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
- Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
- Demonstrate honesty in all professional interactions.
- Residents will maintain timely and accurate medical records.
- Residents will also:
  - Attend all required conferences in a timely fashion.
  - Pre-round on ICU patients and present timely, accurate data to team.
  - Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  - Provide consultation to the ED and other services in timely fashion.
  - Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  - Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
  - Appear for duty appropriately rested and fit to provide the services required by their patients.
  - Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  - Must be committed to and responsible for promoting patient safety.
  - Must demonstrate responsiveness to patient needs that supersedes self-interest.
  - Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHOD OF EVALUATION:
- Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
They are required to obtain a passing grade on this examination prior to completing their residency training.
They are also expected to improve their percentile performance on the ABNS primary examination each year.

- Resident will also attend weekly didactic conferences and the monthly Journal Club.
- Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
- The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
- The Neurosurgery Attending Staff reviews Resident Medical Documentation.
- Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed
- The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
- Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
- Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY 4 - (Residents rotate as Senior Residents on Pediatric Neurosurgery and Epilepsy/Functional Neurosurgery)
Neurosurgery PGY4 residents must demonstrate competence in all the competency based principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism as well as in all procedures required of a Neurosurgery PGY3 resident prior to progressing to the Neurosurgery PGY4 year. An attending physician supervises all Operating Room procedures performed by residents and supervises all patient contact. In addition to mastering the procedures outlined below, the Neurosurgery PGY3 resident must master:

**PEDIATRICS**

**PATIENT CARE PEDIATRICS:**
- Perform all of the diagnostic, procedural and communicative skills and competency-based requirements outlined in the previous years, and apply those to the pediatric and the functional/epilepsy patient population.
- With appropriate supervision, residents will learn to competently perform the following procedures in the pediatric patient population:

  **Pediatric Neurosurgical Procedures**
  - Incision, burr holes and removal of bone flap for craniotomy
  - Incision, burr holes and removal of bone flap for sub-occipital craniotomy
  - Ventriculo-peritoneal shunt
  - Ventriculo-pleural shunt
  - Ventriculo-atrial shunt
  - Closure laminectomy wounds
  - Laminectomy for lumbar disc
  - Craniotomy for trauma
Craniotomy for craniofacial repair
Cranioplasty
Laminectomy lumbar
Laminectomy thoracic/cervical
Peripheral nerve repair/decompression
Craniotomy/microsurgical technique for tumor
Craniotomy/microsurgical technique for vascular lesion
Demonstrate the ability to position, prepare and drape pediatric patients, including infants, for insertion of CNS implanted devices (including CSF shunt)
Demonstrate appropriate placement of cranial immobilization devices, including Mayfield pins, in young children

MEDICAL KNOWLEDGE PEDIATRICS:
- Discuss the embryology of congenital CNS malformation.
- Demonstrate the proper performance of a complete and a targeted neurological examination in different age groups and circumstances:
  - Infant
  - Child
  - Adolescent
  - Developmentally delayed patient.
- Demonstrate the ability to obtain and evaluate proper radiological studies in children:
  - MRI brain and spine
  - Cine MRI CSF flow study
  - MRA/MRV
  - CT brain and spine
  - 3D CT skull for synostosis
  - CSF shunt and baclofen pump x-ray series
  - VNS x-ray series.
- Demonstrate ability to manage, with supervision, neurosurgical emergencies in children:
  - Status epilepticus
  - Cerebral herniation
  - CNS infection
  - Unstable spine
  - Severe CNS metabolic abnormality
  - Severe CSF shunt malfunction.
- Demonstrate the ability to evaluate patients for CSF shunt infection and/or failure.
- Demonstrate the ability to evaluate pediatric neurotrauma patients.
- Demonstrate the ability to perform basic bedside and ICU procedures in children:
  - CSF shunt tap
  - ICP monitor
  - Ventriculostomy
  - Lumbar puncture/Lumbar drain placement.
- Discuss the intra- and peri-operative physiology of the premature infant, infant and child.
- Discuss the pathophysiology and management of congenital, post-hemorrhagic, post-infectious, post-traumatic, and myelomeningocele associated hydrocephalus.
- Discuss the tumor biology of CNS malignancy in children.
- Discuss management of myelomeningocele patients in pre-natal, infant, child and adult age groups.
- Discuss the pathophysiology of childhood epilepsies, cortical dysplasia and heterotopia.
- Discuss the appropriate medical, surgical and endoscopic management of obstructive and communicating hydrocephalus.
- Discuss primary and secondary management of tethered spinal cord, including
• Discuss ICU management of severe traumatic brain injury in children
• Discuss the diagnosis and management of non-accidental trauma including notification of the appropriate authorities.
• Discuss the role of surgery in medically refractory epilepsy treatment in children, including resective surgery and VNS.
• Discuss intra-operative and post-operative strategies for resection and adjunctive therapy in medulloblastoma, cerebellar astrocytoma and hypothalamic astrocytoma.
• Discuss appropriate post-traumatic and peri-operative narcotic orders in infants and children.
• Discuss appropriate pain management, sedation agents, doses and the regulatory limits on supervised sedation in pediatric patients.
• Discuss the principles of medical and surgical management of spinal cord injuries common to childhood: SCIWORA and craniocervical injury.
• Discuss and demonstrate the appropriate management for spinal cord and column injury in infants and children including ICU care, bracing, and surgery.
• Discuss the treatment of Chiari I malformation and syringomyelia, including the differential diagnosis of and various direct and indirect surgical treatments for syringomyelia.
• Discuss the management of congenital birth palsies.
• Discuss the medical and surgical management options in severe spasticity and dystonia related to cerebral palsy.
• Discuss the medical and surgical management principles in patients with neurocutaneous disorders, including neurofibromatosis types I and II, hereditary hemorrhagic telangiectasia, and tuberous sclerosis.
• Discuss the medical and surgical management of patients with intracranial and intraspinal cysts.
• Discuss the medical and surgical management of CNS infections and parasitic infection.
• Discuss to write appropriate PICU and post-op orders appropriate for a premature infant, infant, child, and adolescent.
• Demonstrate the ability to participate in the multi-disciplinary management of craniosynostosis patients, including peri-operative planning and management, and postoperative care.

INTERPERSONAL and COMMUNICATION SKILLS:
• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to neurosurgical attendings, and consulting physicians.
• They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians.
• They will present in weekly didactic case conferences and at Journal Club
• Provide accurate detailed sign out for all covering residents.
• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
• Communicate treatment plans effectively with the pediatric house staff and nurses.
• They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with parents and with the patient as is appropriate.
• They will learn to communicate operative information regarding risks benefit and alternatives to parents and patient (as is appropriate) in an effective and compassionate fashion in order to obtain intervention or surgical consent.
SYSTEMS-BASED PRACTICE:

- Trainees will learn what the delivery of health care costs (daily hospitalization costs, the costs of imaging procedures and laboratory tests, surgical fees, anesthesia charges, etc.).
- They will be taught to practice cost-effective medicine without sacrificing good clinical outcomes.
- Discuss specific JCAHO hospital safety regulations that are particularly important in the management of non-verbal, very young, and very low weight patients
- Discuss the appropriate notification procedures upon the diagnosis of non-accidental trauma in the pediatric population.
- Attend pediatric oncology, craniofacial, and spasticity conferences.
- Manage communication between the Pediatric ICU teams and pediatricians for co-managed patients.

PRACTICE-BASED LEARNING:

- Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
- Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination. They are required to obtain a passing grade on this examination prior to completing their residency training.
- They will participate in clinical research projects where appropriate including participating in the IRB and consent process.
- The resident will present at pediatric tumor board and will present the pediatric M&M’s in the monthly M&M conference.
- Residents will learn that their best teachers are their patients. Much can be learned by studying their patients’ symptoms, whether these are relieved by a surgical procedure or other therapy, what benefit they derive from procedures and at what cost and, of course, the long-term follow-up.

PROFESSIONALISM:

- Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, and with nurses and paramedical personnel.
- Residents will learn how to deal with patients and families in a compassionate and humanistic way.
- Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
- Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
- Demonstrate honesty in all professional interactions.
- Residents will maintain timely and accurate medical records.
- Residents will also:
  - Attend all required conferences in a timely fashion.
  - Pre-round on ICU patients and present timely, accurate data to team.
  - Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  - Provide consultation to the ED and other services in timely fashion.
  - Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  - Comply with all GME and Departmental regulations regarding duty hour
restrictions and report personal schedule in timely and accurate fashion.
  
  • Appear for duty appropriately rested and fit to provide the services required by their patients.
  • Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  • Must be committed to and responsible for promoting patient safety.
  • Must demonstrate responsiveness to patient needs that supersedes self-interest.
  • Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHOD OF EVALUATION:

• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
  
  • They are required to obtain a passing grade on this examination prior to completing their residency training.
  • They are also expected to improve their percentile performance on the ABNS primary examination each year.

• Resident will also attend weekly didactic conferences and the monthly Journal Club.

• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.

• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.

• The Neurosurgery Attending Staff reviews Resident Medical Documentation.

• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed.

• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.

• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.

• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

EPILEPSY
PATIENT CARE EPILEPSY:

• Perform all of the diagnostic, procedural and communicative skills and competency-based requirements outlined in the previous years, and apply those to the pediatric and the functional/epilepsy patient population.

• With appropriate supervision, residents will learn to competently perform the following procedures in the functional/epilepsy patient population:

Epilepsy/Functional Neurosurgery Procedures:
  1. Craniotomy for Grid Placement –
  2. Craniotomy for Functional Resection –
  3. Craniotomy for Functional Brain Mapping –
4. Awake Craniotomies: craniotomies under local anesthesia with unique technical considerations for "awake" craniotomies.

5. Burr Holes for Deep Brain Stimulation

6. Burr Holes for Placement of linear electrode arrays and depth electrodes using natural landmarks, frameless and stereotactic frame based techniques for localization and trajectory planning.

7. Multistage Cortical resection for medically refractory epilepsy

8. Vagus Nerve Stimulator Implantation
   a. de novo implantation
   b. removal and revision of the system
   c. rudimentary programming of the stimulation parameters.

9. Laminectomy lumbar/thoracic for implantation of Spinal Cord Stimulators
   a. percutaneous and laminectomy implantation
   b. de novo implantation
   c. revisions and, and removal
   d. rudimentary programming


11. Laminectomy lumbar/thoracic for implantation of Intrathecal Pumps

12. DBS placement for movement disorders

13. All Neurosurgery PGY3 procedures

**MEDICAL KNOWLEDGE EPILEPSY:**

- Discuss the pathophysiology of childhood epilepsies, cortical dysplasia and heterotopia, benign and low-grade neoplasms, and common syndromes that are associated with epilepsy such as Tuberous Sclerosis.
- Discuss the role of surgery in the treatment of medically refractory epilepsy in children and adults.
- Discuss the role of vagus nerve stimulation related to intracranial surgery for epilepsy management.
- Discuss the role of the various diagnostic and therapeutic surgical procedures in light of the various characteristic medically resistant epilepsies.
- To relate the resective and augmentative techniques to the evolving understanding of epilepsy from a functional and physiologic rather than a purely anatomic problem.
- Discuss the relationship of experimental options such as responsive neurostimulation and deep brain stimulation to the current neurosurgical understanding of epilepsy management.
- Discuss the role of and the interpretation in the epilepsy surgery evaluation process in formulating a surgical plan that includes:
  - video EEG monitoring
  - Wada testing
  - functional imaging (fMRI, PET, SPECT, MEG)
  - neuropsychological evaluation and seizure semiology
- Discuss the various surgical approaches, electrode designs and implantation options to be able to sample from the convexity as well as hidden cortical surfaces.
- Discuss post implant care for the implanted patient.
- Discuss electrode removal.
- Discuss complications unique to electrodes.
- Discuss the options and considerations required for anatomic and functional resections in light of functional neurologic consequences.
- Discuss how functional imaging relates to the use of intra-operative functional study.
- Discuss how functional imaging is useful for both for invasive EEG and functional mapping
• Discuss the common complications and risk avoidance issues in the setting for epilepsy surgery but also its appropriateness adapted to special cases of neoplasm associated with seizures or eloquent cortex.
• Discuss the limitations and design of the surgical implantation to maximize efficacy.
• Discuss the theory, limitations, and interpretation of physiologic findings, of the diagnostic-therapeutic staged craniotomy epilepsy surgery, compared and contrasted to the standard single stage procedures such as classic antero-medial temporal lobe resection.
• Discuss procedure design how specific electrodes are located and used to answer important physiologic questions to maximize epilepsy control and minimize functional deficits from resection.
• Design and discuss appropriate resective epilepsy surgical procedure based on interpretation of diagnostic modalities.
• Discuss the relationship to percutaneous implantation of Spinal cord stimulators, the revisions and de novo implantation, and removal, and rudimentary programming.

INTERPERSONAL and COMMUNICATION SKILLS:
• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to neurosurgical attendings, and consulting physicians.
• They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians.
• They will present in weekly didactic case conferences and at Journal Club.
• Provide accurate detailed sign out for all covering residents.
• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
• Communicate treatment plans effectively with the neurology house staff, epilepsy fellows, neurology consultants, and nurses.
• They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with the patient as is appropriate.
• They will learn to communicate operative information regarding risks, benefit and alternatives and expectations to the patient in an effective and compassionate fashion in order to obtain intervention or surgical consent.

SYSTEMS-BASED PRACTICE:
• Trainees will learn what the delivery of health care costs (daily hospitalization costs, the costs of imaging procedures and laboratory tests, surgical fees, anesthesia charges, etc.).
• They will be taught to practice cost-effective medicine without sacrificing good clinical outcomes.
• Attend the multidisciplinary adult and pediatric epilepsy conferences to develop an understanding of how a team reviews, analyzes and then works together to therapeutically manage a functional problem such as epilepsy.
• Manage communication between the ICU team and neurologists for co-managed patients.

PRACTICE-BASED LEARNING:
• Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members. Each epilepsy surgical surgery case is discussed just prior to the
operation in detail by the attending with the resident. Specifically reviewed is the pre-
surgical data, the surgical issues and the surgical nuances pertaining to the
immediate case. How the surgery is designed to supplement the pre-surgical clinical
information or how the functional considerations relate to the intended ablation or
augmentation aspect of the surgery.

• Resident fund of medical knowledge will be evaluated annually by sitting for the
written portion of the ABNS primary examination. They are required to obtain a
passing grade on this examination prior to completing their residency training.

• They will participate in clinical research projects where appropriate including
participating in the IRB and consent process.

• Residents will learn that their best teachers are their patients. Much can be learned
by studying their patients’ symptoms, whether these are relieved by a surgical
procedure or other therapy, what benefit they derive from procedures and at what
cost and, of course, the long-term follow-up.

PROFESSIONALISM:

• Trainees will learn constructive collegiality with faculty, their fellow residents, consultants
and house staff from other specialties and services, but also with nurses and
paramedical personnel.

• Residents will learn how to deal with patients and families in a compassionate and
humanistic way.

• Maintain professional rapport and comportment with patient families, nurses, other
physician teams and other hospital personnel

• Demonstrate respect for patients and colleagues from diverse cultural, ethnic and
religious backgrounds

• Demonstrate honesty in all professional interactions

• Residents will learn that their best teachers are their patients. Much can be learned
by studying their patients’ symptoms, whether these are relieved by a surgical
procedure or other therapy, what benefit they derive from procedures and at what
cost and, of course, the long-term follow-up.

METHOD OF EVALUATION:

• Resident fund of medical knowledge will be evaluated annually by sitting for the written
portion of the ABNS primary examination.

• They are required to obtain a passing grade on this examination prior to
completing their residency training.
They are also expected to improve their percentile performance on the ABNS primary examination each year.

- Resident will also attend weekly didactic conferences and the monthly Journal Club.
- Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
- The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
- The Neurosurgery Attending Staff reviews Resident Medical Documentation.
- Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed.
- The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
- Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
- Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY 5 (Residents rotate as Senior Residents at all Three Institutions or on elective/research)

The PGY 5 neurosurgery resident year is primarily an elective one in which the resident can choose to pursue neuroscience research or a directed intense neurosurgical subspecialty experience. Past residents have had concentrated experiences in Functional neurosurgery, Spinal neurosurgery, Endovascular neurosurgery, and Radiosurgery. The resident is expected to pass the ABNS primary examination during this year and to produce at least one manuscript for presentation at a national meeting and eventual publication. The R4 resident takes night call as the primary emergency trauma consult resident and first assistant for the Bellevue Hospital Chief residents in emergency/trauma cases with graduated levels of operative responsibility. Neurosurgery PGY 5 residents must demonstrate competence in all principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism as well as in all procedures required of a Neurosurgery PGY4 resident prior to progressing to the Neurosurgery PGY5 year. Surgical techniques are learned and standards of care adopted. An attending physician supervises all Operating Room procedures performed by residents. In addition to mastering the procedures outlined below, the Neurosurgery PGY5 resident must master:

**PATIENT CARE:**
- They will demonstrate competence in performing operative procedures neatly and carefully, respecting tissue planes and preserving normal structures.
- Residents will master all prior items on this graduated level of responsibilities and program goals handout and with appropriate supervision, residents will learn to competently perform the following procedures:

**Procedures**
- Craniotomy for trauma
- Craniotomy for tumor
- Craniotomy for craniofacial repair
Cranioplasty
Stereotatic biopsies and resections
Laminectomy lumbar
Laminectomy thoracic/cervical
Anterior cervical approach to spine
Peripheral nerve repair/decompression
Carotid endarterectomy
Craniotomy/microsurgical technique for tumor
Craniotomy/microsurgical technique for vascular lesion
Transsphenoidal pituitary surgery
Skull base craniotomy for tumor
Extracranial / Intracranial vascular bypass surgery
Transthoracic decompression of the spine
Retroperitoneal decompression of the spine
Complex spinal reconstruction for tumor/trauma
All Neurosurgery R3 procedures

MEDICAL KNOWLEDGE:
• The resident will master the knowledge applicable to the chosen area of research and clinical expertise during this elective year.
• The resident will also demonstrate under appropriate supervision the ability to master the evaluation and care of operative and non-operative neurosurgical emergencies.

INTERPERSONAL and COMMUNICATION SKILLS:
• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians in an accurate and timely fashion.
• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
• They will learn to communicate clearly and promptly with the nursing and support staff in order to obtain the best patient care.
• They will learn to communicate patient information, care plans, and prognosis effectively and compassionately with patients and their families.
• They will organize Journal Club including selecting and assigning the articles.
• They will also learn to present in weekly didactic case conferences.

SYSTEMS-BASED PRACTICE:
• Residents will be prepared for the regulatory and financial aspects of a clinical practice when they finish their residency. Residents will learn what it costs to run a practice and be cognizant of such information as: the mechanics of billing and collection, diagnostic and billing codes, Medicare and Medicaid regulations, etc.
• As trainees become more mature it will be important for them to realize that we have very few answers in neurological surgery. There will always be better ways of helping our patients: more efficient, less invasive, less morbid procedures, alternative therapies, better instrumentation, translational research, etc. In our program we stress to residents, as they become young neurosurgeons that during their subsequent careers they must strive leave the field better than they found it. During their residency they must question the validity of every procedure we do,
especially in terms of cost/benefit and patient outcome. Residents are encouraged to be creative and use facilities that are available throughout the institution for development of instrumentation, software development, statistical analysis and basic science collaboration.

PRACTICE-BASED LEARNING:
- Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
- They will participate in clinical research projects where appropriate including participating in the IRB and consent process.
- Residents will be involved in clinical prospective and retrospective follow-up studies and will learn the necessary data acquisition and analysis tools so that they can continue their investigations during their training and throughout their careers.
- Residents will learn that neurosurgery is not insular. Reading the literature in our field as well as other disciplines will spawn ideas for the improvement of our techniques and practices. Development of web pages and sharing knowledge with colleagues in other countries by means of the Internet increases the excitement of and enriches our field.
- Participation at national meetings is encouraged. Post-residency fellowships overseas are also encouraged and contacts made with foreign colleagues support these. Trainees will realize early on that neurosurgery is international.
- Senior residents will teach, and mentor students and their junior residents, do clinical and basic science research throughout their residency and are encouraged to pursue an academic career upon completion of their training.
- Residents will learn that their best teachers are their patients. Much can be learned by studying their patients’ symptoms, whether these are relieved by a surgical procedure or other therapy, what benefit they derive from procedures and at what cost and, of course, the long-term follow-up

PROFESSIONALISM:
- Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, but also with nurses and paramedical personnel.
- Residents will learn how to deal with patients and families in a compassionate and humanistic way.
- Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
- Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
- Demonstrate honesty in all professional interactions.
- Residents will maintain timely and accurate medical records.
- Residents will also:
  o Attend all required conferences in a timely fashion.
  o Pre-round on ICU patients and present timely, accurate data to team.
  o Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  o Provide consultation to the ED and other services in timely fashion.
  o Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  o Comply with all GME and Departmental regulations regarding duty hour
restrictions and report personal schedule in timely and accurate fashion.
  o Appear for duty appropriately rested and fit to provide the services required by their patients.
  o Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  o Must be committed to and responsible for promoting patient safety.
  o Must demonstrate responsiveness to patient needs that supersedes self-interest.
  o Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHOD OF EVALUATION:
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination.
  o They are required to obtain a passing grade on this examination during this year of their residency training.
  o They are also expected to improve their percentile performance on the ABNS primary examination each year.
• Resident will also attend weekly didactic conferences and the monthly Journal Club.
• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 75% of all mandatory resident conferences.
• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
• The Neurosurgery Attending Staff reviews Resident Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed.
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY 6 (Residents rotate as Senior Residents at Tisch Hospital on Teams 1 & 2)
Neurosurgery PGY6 residents must demonstrate competence in all principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism as well as in all procedures required of a Neurosurgery PGY5 resident prior to progressing to the Neurosurgery PGY6 year. The PGY6 resident works directly as the primary assistant for the attending neurosurgeons on all operations performed at the Tisch Hospital. The PGY6 resident is also primarily responsible, with attending supervision, for the in-patient care and evaluation of neurosurgical patients at Tisch Hospital. At Tisch Hospital, senior level residents work with master neurosurgeons on two distinct adult services; (Tumor/Vascular/Skull Base/Functional/Epilepsy Service) (Spine/Peripheral Services). During these rotations the residents assume more and more direct responsibility and surgical opportunities in the care of private patients. Surgical techniques are learned and
standards of care adopted. An attending physician supervises all Operating Room procedures performed by residents. In addition to mastering the procedures outlined below, the Neurosurgery R5 residents must master:

**PATIENT CARE:**
- They will demonstrate competence in performing operative procedures neatly and carefully, respecting tissue planes and preserving normal structures. They will master the use of physiologic mapping techniques and neuronavigation (frame based and frameless) as adjuncts to surgery.
- Residents will master all prior items on this graduated level of responsibilities and program goals handout and with appropriate supervision, residents will learn to competently perform the following procedures:

**Procedures**
- Craniotomy for trauma
- Craniotomy for tumor primary and metastatic
- Craniotomy for craniofacial repair
- Cranioplasty
- Frame Based and Frameless Stereotactic biopsies and resections
- DBS and motion disorders surgery
- Carotid endarterectomy
- Craniotomy/microsurgical technique for tumor
- Craniotomy/microsurgical technique for vascular lesion (aneurysm and AVM)
- Transsphenoidal pituitary surgery
- Endoscopic surgery for tumor and CSF diversion (3rd Ventriculostomy)
- Skull base craniotomy for tumor
- Craniotomy for posterior fossa surgery
- Extracranial / Intracranial vascular bypass surgery
- Serve as primary interventionalist for all INR cases, including highly complex procedures
- Carotid Endarterectomy
- Fundamental procedures in Interventional Neuroradiology (including treatment of aneurysms, arteriovenous malformations and fistulas, cranial and spinal tumor embolizations, and carotid occlusive disease)
- Cranio cervical decompressive surgery
- Laminectomy lumbar for tumor (intra and extra dural)
- Laminectomy thoracic/cervical for decompression and resection of tumors (intradural –inc. intramedullary- and extra dural)
- Peripheral nerve repair/decompression
- Anterior cervical approach to spine inc. transoral
- Anterior spinal instrumentation
- Anterolateral spinal instrumentation
- Transthoracic decompression of the spine
- Retroperitoneal decompression of the spine
- Transpedicular and extracavitary decompression of the spine
- Cranio-cervical reconstruction
- Complex spinal reconstruction for tumor/trauma/deformity
- Anterior and posterior spinal osteotomies for deformity
- Posterior spinal instrumentation (cranio-cervical-thoracolumbar-sacral-pelvic)
- All Neurosurgery R3 procedures

**MEDICAL KNOWLEDGE:**
- Discuss the appropriate management of low back pain and spondylosis prior to surgical
consideration, including PT, epidural steroids, pain management, etc.

- Discuss appropriate pre-operative smoking cessation protocols.
- Discuss ASA anesthetic risk classes and appropriate pre-operative anesthesia evaluation.
- Discuss cardiac ischemia risk assessment and reduction prior to surgery.
- List the principal factors that influence successful wound healing.
- Discuss the appropriate use of bracing in the evaluation of lumbar spondylolisthesis/instability.
- Discuss management protocols for patients on either anti-platelet or anti-coagulant therapy for various indications prior to spinal or cranial surgery.
- Review the signs, symptoms and pathophysiology of common syndromes of degenerative spinal disorders such as radiculopathy, myelopathy, instability and neurogenic claudication.
- Identify the common syndromes of spinal cord injury.
- Discuss the biomechanics of the craniocervical junction, cervical and thoracolumbar spine
- Discuss the definition of spinal instability and recognize the radiographic signs of congenital, degenerative, neoplastic and traumatic spinal instability.
- Identify the classical brain stem ischemic syndromes.
- Explain the concepts of cerebral blood flow, cerebral autoregulation, ischemic thresholds, intracranial pressure and cerebral perfusion pressure.
- Recognize the common causes of brain ischemic states.
- Discuss the epidemiology, physiology and underlying pathophysiology of ischemic brain injury, including concepts of critical therapeutic window.
- Recognize the common causes of intracranial, subarachnoid and intraspinal hemorrhage.
- Recognize the typical clinical course of patients with ischemic and hemorrhagic stroke, including peak risk intervals for edema, vasospasm and re-bleeding.
- Discuss the cutting edge practice of Interventional Neuroradiology.
- Discuss the differential diagnosis of ring-enhancing intracranial masses.
- Discuss the various tumors that may arise in the cerebellopontine angle.
- Discuss the classification schemes, anatomic location, cell of origin, clinical presentation, age at presentation, molecular biology and natural history of common intrinsic brain neoplasms.
- Discuss the pathophysiology of Parkinson’s disease and essential tremor.
- Discuss the benefits and limitations of frame-based stereotactic procedures versus frameless stereotactic procedures.
- Discuss the classification of trigeminal facial pain and its therapeutic implications.
- Demonstrate an understanding of the anatomy, physiology, pathophysiology and presentation of peripheral nerve disease.

INTERPERSONAL and COMMUNICATION SKILLS:
- They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination to senior residents, neurosurgical attendings, and consulting physicians.
- They will learn how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians.
- They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
- They will present in weekly didactic case conferences and at Journal Club.
SYSTEMS-BASED PRACTICE:

- Residents will be prepared for the regulatory and financial aspects of a clinical practice when they finish their residency. Residents will learn what it costs to run a practice and be cognizant of such information as: the mechanics of billing and collection, diagnostic and billing codes, Medicare and Medicaid regulations, etc.
- As trainees become more mature is will be important for them to realize that we have very few answers in neurological surgery. There will always be better ways of helping our patients: more efficient, less invasive, less morbid procedures, alternative therapies, better instrumentation, translational research, etc. In our program we stress to residents, as they become young neurosurgeons that during their subsequent careers they must strive leave the field better than they found it. During their residency they must question the validity of every procedure we do, especially in terms of cost/benefit and patient outcome. Residents are encouraged to be creative and use facilities that are available throughout the institution for development of instrumentation, software development, statistical analysis and basic science collaboration.

PRACTICE-BASED LEARNING:

- Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
- They will participate in clinical research projects where appropriate including participating in the IRB and consent process.
- Residents will be involved in clinical prospective and retrospective follow-up studies and will learn the necessary data acquisition and analysis tools so that they can continue their investigations during their training and throughout their careers.
- Residents will learn that neurosurgery is not insular. Reading the literature in our field as well as other disciplines will spawn ideas for the improvement of our techniques and practices. Development of web pages and sharing knowledge with colleagues in other countries by means of the Internet increases the excitement of and enriches our field.
- Participation at national meetings is encouraged. Post-residency fellowships overseas are also encouraged and contacts made with foreign colleagues support these. Trainees will realize early on that neurosurgery is international.
- Senior residents will teach, and mentor students and their junior residents, do clinical and basic science research throughout their residency and are encouraged to pursue an academic career upon completion of their training.
- Residents will learn that their best teachers are their patients. Much can be learned by studying their patients’ symptoms, whether these are relieved by a surgical procedure or other therapy, what benefit they derive from procedures and at what cost and, of course, the long-term follow-up.

PROFESSIONALISM:

- Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, but also with nurses and paramedical personnel.
- Residents will learn how to deal with patients and families in a compassionate and humanistic way.
- Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
• Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
• Demonstrate honesty in all professional interactions.
• Residents will maintain timely and accurate medical records.
• Residents will also:
  o Attend all required conferences in a timely fashion.
  o Pre-round on ICU patients and present timely, accurate data to team.
  o Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
  o Provide consultation to the ED and other services in timely fashion.
  o Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
  o Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
  o Appear for duty appropriately rested and fit to provide the services required by their patients.
  o Accurately self-report fatigue in situations that may compromise safety and/or patient care.
  o Must be committed to and responsible for promoting patient safety.
  o Must demonstrate responsiveness to patient needs that supersedes self-interest.
  o Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

METHOD OF EVALUATION:
• Resident will present at weekly didactic conferences and the monthly Journal Club.
• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 90% of all mandatory resident conferences.
• The senior residents who report directly to the attending surgeons will also evaluate the junior residents.
• The Neurosurgery Attending Staff reviews Resident Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed.
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, a senior resident (as is appropriate), and the Neurosurgical NP’s evaluate all residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
• Residents are promoted each year based on demonstration of competent performance of all requirements as outlined above.

Neurosurgery PGY 7)(Resident rotates as Chief Residents at Bellevue Hospital Center for 6 months)
Over the six previous years of the training program, residents progress from supervised patient care providers and surgical assistants to competent practitioners who can function and operate independently with faculty acting as back-up. Neurosurgery PGY7 residents must demonstrate competence in all principles of patient care, medical knowledge,
interpersonal & communication skills, and professionalism as well as in all procedures required of a Neurosurgery PGY6 resident prior to progressing to the Neurosurgery R6 year. An attending physician supervises all Operating Room procedures performed by residents. The PGY7 neurosurgical experience offers the residents a unique experience that is duplicated in very few programs in the country. During this year the residents with strict attending supervision get the opportunity to run very busy diverse neurosurgical practices with the emphasis placed on the evaluation and management of neurosurgical patients from the “start to finish.” This includes an extensive outpatient practice where the PGY7 resident has the primary responsibility to evaluate and manage all out patient neurosurgical problems including emergencies and transfers from other institutions. This also includes the pediatric patient population. This year allows the residents a seamless transition into the world of a fully independent practicing neurosurgeon. The PGY7 resident sits in with the attendings at Bellevue hospital when purchasing decisions are made for the clinics and the operating room. They interface with the other services as the primary neurosurgical contact. These interactions are all done with close attending supervision but it does allow for the sense of autonomous decision-making. In particular;

The Bellevue Hospital chief resident, who consults with full time faculty, runs the neurosurgical service and functions at the level of a fully trained neurosurgeon in this primarily elective practice. The rotation allows the resident more autonomy as they run the neurosurgical service and performs all surgical procedures under close faculty supervision. Bellevue exposes residents to out patient, emergency patient, and trauma patient management in addition to a large elective caseload in a large city hospital. The chief resident with attending supervision employs the methods and high standards learned at Tisch Hospital and gains confidence, enabling he or she to become a competent independent neurosurgical practitioner.

PATIENT CARE:

• Chief resident will teach, and mentor students and their junior residents, do clinical and basic science research throughout their residency and are encouraged to pursue an academic career upon completion of their training.
• Chief resident will manage all ICU and ward neurosurgical patients and obtain consultations.
• Formulate treatment plans for neurosurgical patients utilizing the best available evidence based studies.
• Discuss the appropriate use of peri-operative and chronic anti-coagulation in patients with cerebrovascular disease.
• With appropriate supervision, residents will learn to competently perform the following procedures:
  o Craniotomy for anterior circulation aneurysm
  o Craniotomy for AVM
  o Craniotomy for tumor:
    o Carotid endarterectomy
    o Transsphenoidal hypophysectomy
  o Skull base repair of CSF leak
  o Combined surgery for cranial base tumor resections and reconstruction
• Demonstrate an understanding of indications for surgical intervention for neurological diseases.
• Provide in-patient neurosurgical consultation with faculty supervision.
• Provide outpatient neurosurgical clinic care at Bellevue with faculty supervision.
• Independently perform all Neurosurgery PGY5 and PGY6 procedures with appropriate faculty supervision.
• Demonstrate the ability to recognize and treat complications related to neurosurgical diseases and procedures, including cerebral vasospasm, CSF leak, stroke, seizure, metabolic disorder, etc.
• Determine discharge readiness and direct discharge planning.
• By the end of this year, the Chief Resident will demonstrate competence in independently performing (under faculty supervision) all of the common neurosurgical procedures performed by contemporary neurological surgeons in the United States.
• The Chief Resident will master all items on the program goals handout and demonstrate the ability to perform independently and competently as a neurological surgeon.

MEDICAL KNOWLEDGE:
8. Discuss the relevant surgical anatomy of the brain, spine, peripheral nerves and the bony coverings of each, particularly as they relate to diagnosis, surgical approaches, and treatment of neurosurgical diseases.
9. Discuss the pathophysiology of aneurysmal subarachnoid hemorrhage, cerebral vasospasm and communicating hydrocephalus after SAH.
10. Discuss and discuss the bleeding risk according to aneurysm type, location, and family history and Hunt-Hess classification.
11. Describe the pathophysiology, classification (typological, anatomical and surgical grade) and bleeding risk of arteriovenous malformations.
12. Discuss and discuss the pathophysiology of carotid stenosis, TIA, RIND, stroke, reperfusion syndrome, and chronic cerebral ischemia.
13. Identify threshold levels for flow-related cerebral ischemia in gray and white matter for electrical dysfunction and irreversible neuronal death and describe the various available methodologies for measuring or clinically estimating cerebral blood flow.
14. Discuss and discuss the pathophysiology of neoplastic diseases of the nervous system and its coverings.
15. Learn and discuss the differential diagnosis of skull base tumors presenting in various locations/compartments and the associated clinical presentations (with particular attention to associated cranial nerve deficits).
16. Learn and discuss current theory in adjuvantive neuro-oncology care.
17. Learn and discuss the physiology and pathophysiology of the hypothalamic-pituitary endocrine axis and the associated diagnostic findings in pituitary tumor patients and patients with other sellar and supra-sellar lesions.

• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination. They are required to obtain a passing grade on this examination prior to completing their residency training.
• Residents will master all items on this graduated level of responsibilities and program goals handout prior to completing residency training. Thus allowing them to be competent independent practitioners of Neurosurgery. This handout is given to all residents and reviewed with them annually.

INTERPERSONAL and COMMUNICATION SKILLS:
• They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination neurosurgical attendings, and consulting physicians.
• Discuss how to evaluate, work up and treat patients in the outpatient clinic setting.
• Discuss how to effectively communicate with patients and their families regarding the patient's diagnosis, condition, need for intervention (or not), and the risks, benefits, and alternatives of it.
• They will discuss how to effectively communicate with patients and their families regarding bad news including poor outcome, death, and brain death.
• They will discuss how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians.
• They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
• They will present in weekly didactic case conferences and at Journal Club.
• They will communicate with social work, rehabilitation specialists, and discharge planning nurses to coordinate the follow-up and long term care of their patients.
• Communicate with post-operative patients in the outpatient clinics regarding their progress, prognosis, activity level, and return to work status.

SYSTEMS-BASED PRACTICE:
• Coordinate the pre-operative clearance and scheduling of all surgical patients.
• Schedule the appropriate consulting surgeons and OR equipment in order to ensure ability to perform the appropriate procedure.
• Present all out patient clinic patients to the attendings during the weekly outpatient teaching rounds including pertinent positives and negatives and treatment plan.
• Coordinate the out patient work up of all potential surgical patients and ensure appropriate follow up for non-surgical patients.
• Residents will be prepared for the regulatory and financial aspects of a clinical practice when they finish their residency. Residents will discuss what it costs to run a practice and be cognizant of such information as: the mechanics of billing and collection, diagnostic and billing codes, Medicare and Medicaid regulations, etc.
• As trainees become more mature is will be important for them to realize that we have very few answers in neurological surgery. There will always be better ways of helping our patients: more efficient, less invasive, less morbid procedures, alternative therapies, better instrumentation, translational research, etc. In our program we stress to residents, as they become young neurosurgeons that during their subsequent careers they must strive leave the field better than they found it. During their residency they must question the validity of every procedure we do, especially in terms of cost/benefit and patient outcome. Residents are encouraged to be creative and use facilities that are available throughout the institution for development of instrumentation, software development, statistical analysis and basic science collaboration.

PRACTICE-BASED LEARNING:
• Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
• Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination. They are required to obtain a passing grade on this examination prior to completing their residency training.
• They will participate in clinical research projects where appropriate including participating in the IRB and consent process.
• Residents will be involved in clinical prospective and retrospective follow-up studies and will learn the necessary data acquisition and analysis tools so that they can continue their investigations during their training and throughout their careers.
• Residents will learn that neurosurgery is not insular. Reading the literature in our field as well as other disciplines will spawn ideas for the improvement of our techniques and practices. Development of web pages and sharing knowledge with
colleagues in other countries by means of the Internet increases the excitement of and enriches our field.

• Participation at national meetings is encouraged. Post-residency fellowships overseas are also encouraged and contacts made with foreign colleagues support these. Trainees will realize early on that neurosurgery is international.

• Senior residents will teach, and mentor students and their junior residents, do clinical and basic science research throughout their residency and are encouraged to pursue an academic career upon completion of their training.

• Residents will learn that their best teachers are their patients. Much can be learned by studying their patients’ symptoms, whether these are relieved by a surgical procedure or other therapy, what benefit they derive from procedures and at what cost and, of course, the long-term follow-up.

PROFESSIONALISM:

• Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, but also with nurses and paramedical personnel.

• Residents will learn how to deal with patients and families in a compassionate and humanistic way.

• Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel

• Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds

• Demonstrate honesty in all professional interactions

• Residents will learn how to “run” an operating room including instructing staff and anesthesia colleagues in an effective and professional manner.

METHOD OF EVALUATION:

• Resident will present at weekly didactic conferences and the monthly Journal Club.

• Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 90% of all mandatory resident conferences.
• The Neurosurgery Attending Staff reviews the residents Medical Documentation.
• Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed
• The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 ACGME competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
• Faculty members, and the Neurosurgical NP’s evaluate the residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
• Residents are graduated at the end of this year based on demonstration of competent performance of all requirements as outlined above and based on a clear demonstration that they have become competent independent practitioners of Neurosurgery.

Neurosurgery PGY 7 (Residents rotate as Chief Residents at the New York Harbor Health Care System (VA) for 6 months)

Over the six previous years of the training program, residents progress from supervised patient care providers and surgical assistants to competent practitioners who can function and operate independently with faculty acting as back-up. Neurosurgery PGY7 residents must demonstrate competence in all principles of patient care, medical knowledge, interpersonal & communication skills, and professionalism as well as in all procedures required of a Neurosurgery PGY6 resident prior to progressing to the Neurosurgery PGY7 year. An attending physician supervises all Operating Room procedures performed by residents. The PGY7 neurosurgical experience offers the residents a unique experience that is duplicated in very few programs in the country. During this year the residents with strict attending supervision get the opportunity to run very busy diverse neurosurgical practices with the emphasis placed on the evaluation and management of neurosurgical patients from the “start to finish.” This includes an extensive outpatient practice where the PGY7 resident has the primary responsibility to evaluate and manage all out patient neurosurgical problems including emergencies and transfers from other institutions. This also includes the pediatric patient population. This year allows the residents a seamless transition into the world of a fully independent practicing neurosurgeon. The PGY7 resident sits in with the attendings at the Veterans hospital when purchasing decisions are made for the clinics and the operating room. They interface with the other services as the primary neurosurgical contact. These interactions are all done with close attending supervision but it does allow for the sense of autonomous decision-making. In particular;

The Chief resident consults with full time faculty, runs the neurosurgical service at the New York Harbor Health Care System (VA) in this primarily elective practice. At the VA, the chief resident supervises and mentors junior resident, and medical students. The rotation allows the resident more autonomy as they run the neurosurgical service and perform all surgical procedures under close faculty supervision. They gain exposure at the VA to out patient, emergency patient management in addition to a large elective caseload at a regional Neurosurgical referral hospital. The chief resident with attending supervision employ the methods and high standards learned at Tisch Hospital and gain confidence, enabling them to become competent independent neurosurgical practitioners.

PATIENT CARE:
• Chief residents will teach, and mentor students and their junior residents, do clinical and basic science research throughout their residency and are encouraged to pursue an academic career upon completion of their training.
• Chief residents will manage all ICU and ward neurosurgical patients and obtain consultation.
• Formulate treatment plans for neurosurgical patients utilizing the best available evidence based studies.
• Discuss the appropriate use of peri-operative and chronic anti-coagulation in patients with cerebrovascular disease.
• With appropriate supervision, residents will learn to competently perform the following procedures:
  o Craniotomy for anterior circulation aneurysm
  o Craniotomy for AVM
  o Craniotomy for tumor:
  o Carotid endarterectomy
  o Transphenoidal hypophysectomy
  o Skull base repair of CSF leak
  o Combined surgery for cranial base tumor resections and reconstruction
• Demonstrate an understanding of indications for surgical intervention for neurological diseases.
• Provide in-patient neurosurgical consultation with faculty supervision.
• Provide outpatient neurosurgical clinic care at the New York Harbor Health Care System with faculty supervision.
• Independently perform all Neurosurgery PGY5 and PGY6 procedures with appropriate faculty supervision.
• Demonstrate the ability to recognize and treat complications related to neurosurgical diseases and procedures, including cerebral vasospasm, CSF leak, stroke, seizure, metabolic disorder, etc.
• Determine discharge readiness and direct discharge planning.
• By the end of this year, the Chief Resident will demonstrate competence in independently performing (under faculty supervision) all of the common neurosurgical procedures performed by contemporary neurological surgeons in the United States.
• The Chief Resident will master all items on the program goals handout and demonstrate the ability to perform independently and competently as a neurological surgeon.

MEDICAL KNOWLEDGE:
18. Discuss the relevant surgical anatomy of the brain, spine, peripheral nerves and the bony coverings of each, particularly as they relate to diagnosis, surgical approaches, and treatment of neurosurgical diseases.
19. Discuss the pathophysiology of aneurysmal subarachnoid hemorrhage, cerebral vasospasm and communicating hydrocephalus after SAH.
20. Discuss and discuss the bleeding risk according to aneurysm type, location, and family history and Hunt-Hess classification.
21. Describe the pathophysiology, classification (typological, anatomical and surgical grade) and bleeding risk of arteriovenous malformations.
22. Learn and discuss the pathophysiology of carotid stenosis, TIA, RIND, stroke, reperfusion syndrome, and chronic cerebral ischemia.
23. Identify threshold levels for flow-related cerebral ischemia in gray and white matter for electrical dysfunction and irreversible neuronal death and describe the various available methodologies for measuring or clinically estimating cerebral blood flow.
24. Learn and discuss the pathophysiology of neoplastic diseases of the nervous system and its coverings.
25. Learn and discuss the differential diagnosis of skull base tumors presenting in various locations/compartments and the associated clinical presentations (with particular attention to associated cranial nerve deficits).
26. Learn and discuss current theory in adjunctive neuro-oncology care.
27. Learn and discuss the physiology and pathophysiology of the hypothalamic-pituitary endocrine axis and the associated diagnostic findings in pituitary tumor patients and patients with other sellar and supra-sellar lesions.
   • Residents will master all items on this graduated level of responsibilities and program goals handout prior to completing residency training. Thus allowing them to be competent independent practitioners of Neurosurgery. This handout is given to all residents and reviewed with them annually.

INTERPERSONAL and COMMUNICATION SKILLS:
   • They will learn how to communicate the pertinent positives and negatives of a general medical and neurological examination neurosurgical attendings, and consulting physicians.
   • They will discuss how to evaluate, work up and treat patients in the out patient clinic setting.
   • They will discuss how to effectively communicate with patients and their families regarding the patient’s diagnosis, condition, need for intervention (or not), and the risks, benefits, and alternatives of it.
   • They will also discuss how to effectively communicate with patients and their families regarding bad news including poor outcome, death, and brain death.
   • They will discuss how to communicate critical interpretation and correlation of clinical and neurodiagnostic (imaging) examinations based on a sound knowledge of neurology and neuropathology to senior residents, neurosurgical attendings, and consulting physicians.
   • They will learn to be competent in communicating with team members in the hand-over process in order to minimize errors during transitions of care.
   • They will present in weekly didactic case conferences and at Journal Club.
   • They will communicate with social work, rehabilitation specialists, and discharge planning nurses to coordinate the follow-up and long term care of their patients.
   • Communicate with post-operative patients in the outpatient clinics regarding their progress, prognosis, activity level, and return to work status.

SYSTEMS-BASED PRACTICE:
   • Coordinate the pre-operative clearance and scheduling of all surgical patients.
   • Schedule the appropriate consulting surgeons and OR equipment in order to ensure ability to perform the appropriate procedure.
   • Present all out patient clinic patients to the attendings during the weekly outpatient teaching rounds including pertinent positives and negatives and treatment plan.
   • Coordinate the out patient work up of all potential surgical patients and ensure appropriate follow up for non-surgical patients.
   • Residents will be prepared for the regulatory and financial aspects of a clinical practice when they finish their residency. Residents will discuss what it costs to run a practice and be cognizant of such information as: the mechanics of billing and collection, diagnostic and billing codes, Medicare and Medicaid regulations, etc.
   • As trainees become more mature is will be important for them to realize that we have very few answers in neurological surgery. There will always be better ways of helping our patients: more efficient, less invasive, less morbid procedures, alternative therapies, better instrumentation, translational research, etc. In our
program we stress to residents, as they become young neurosurgeons that during their subsequent careers they must strive leave the field better than they found it.

- During their residency they must question the validity of every procedure we do, especially in terms of cost/benefit and patient outcome. Residents are encouraged to be creative and use facilities that are available throughout the institution for development of instrumentation, software development, statistical analysis and basic science collaboration.

**PRACTICE-BASED LEARNING:**

- Residents will learn to critically analyze the literature and presentations at meetings. Journal articles and conference presentations are discussed between residents and faculty in formal “Journal Clubs”, in conferences and in day-to-day discussions with faculty members.
- Resident fund of medical knowledge will be evaluated annually by sitting for the written portion of the ABNS primary examination. They are required to obtain a passing grade on this examination prior to completing their residency training.
- They will participate in clinical research projects where appropriate including participating in the IRB and consent process.
- Residents will be involved in clinical prospective and retrospective follow-up studies and will learn the necessary data acquisition and analysis tools so that they can continue their investigations during their training and throughout their careers.
- Residents will learn that neurosurgery is not insular. Reading the literature in our field as well as other disciplines will spawn ideas for the improvement of our techniques and practices. Development of web pages and sharing knowledge with colleagues in other countries by means of the Internet increases the excitement of and enriches our field.
- Participation at national meetings is encouraged. Post-residency fellowships overseas are also encouraged and contacts made with foreign colleagues support these. Trainees will realize early on that neurosurgery is international.
- Senior residents will teach, and mentor students and their junior residents, do clinical and basic science research throughout their residency and are encouraged to pursue an academic career upon completion of their training.
- Residents will learn that their best teachers are their patients. Much can be learned by studying their patients’ symptoms, whether these are relieved by a surgical procedure or other therapy, what benefit they derive from procedures and at what cost and, of course, the long-term follow-up.

**PROFESSIONALISM:**

- Trainees will learn constructive collegiality with faculty, their fellow residents, consultants and house staff from other specialties and services, but also with nurses and paramedical personnel.
- Residents will learn how to deal with patients and families in a compassionate and humanistic way.
- Maintain professional rapport and comportment with patient families, nurses, other physician teams and other hospital personnel.
- Demonstrate respect for patients and colleagues from diverse cultural, ethnic and religious backgrounds.
- Demonstrate honesty in all professional interactions.
- Residents will maintain timely and accurate medical records.
- Residents will also:
  - Attend all required conferences in a timely fashion.
  - Pre-round on ICU patients and present timely, accurate data to team.
- Participate in discussion of ethical dilemmas related to care delivery, consent, and life support in severely injured patients.
- Provide consultation to the ED and other services in timely fashion.
- Demonstrate dress, grooming and behavior consistent with institutional and departmental guidelines.
- Comply with all GME and Departmental regulations regarding duty hour restrictions and report personal schedule in timely and accurate fashion.
- Appear for duty appropriately rested and fit to provide the services required by their patients.
- Accurately self-report fatigue in situations that may compromise safety and/or patient care.
- Must be committed to and responsible for promoting patient safety.
- Must demonstrate responsiveness to patient needs that supersedes self-interest.
- Must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

- Residents will learn how to “run” an operating room including instructing staff and anesthesia colleagues in an effective and professional manner.

**METHOD OF EVALUATION:**
- Resident will present at weekly didactic conferences and the monthly Journal Club.
- Conference attendance and participation will be reviewed and discussed with the resident. They are required to attend at least 90% of all mandatory resident conferences.
- The Neurosurgery Attending Staff reviews the residents Medical Documentation.
- Resident academic productivity regarding published abstracts, meeting presentations, and published manuscripts, awards, etc. are also reviewed.
- The resident will also be evaluated on their attainment of these goals and objectives as well as on their performance in conferences on a quarterly basis through written evaluation of all 6 ACGME competencies (see resident evaluations) and verbal feedback from the Chairman and Program Director.
- Faculty members, and the Neurosurgical NP’s evaluate the residents after each rotation. They are evaluated on all 6 competencies (see resident evaluations). Their attendance and performance in didactic teaching conferences and their case logs are also reviewed. The Chairman and Program Director review these evaluations and give verbal feedback to the residents on a quarterly basis.
- Residents are graduated at the end of this year based on demonstration of competent performance of all requirements as outlined above and based on a clear demonstration that they have become competent independent practitioners of Neurosurgery.

**Policies**

All GME Policies can be found here: [http://gme.webdev.nyumc.org/policies-procedures/policies](http://gme.webdev.nyumc.org/policies-procedures/policies).

*(Instructions: The GME policies on the above link can be referenced, but specific program policies must exist for certain policies as noted in the following pages. GME Policies are often revised. After it has received final approval, a revised GME policy must be included in the Program Manual and the previous policy removed.)*
Advancement Policy

I. Summary of Policy

NYULMC is committed to meaningful and enriching educational experiences for its House Staff Officers. This includes assurance that these House Staff Officers have the appropriate credentials to work in a clinical setting and remain gainfully employed while assuring meaningful education, personal health and safety for patients. In order to uphold these standards the NYU Office of GME has created the Advancement Policy for House Staff Officers in ACGME Accredited and Non-ACGME Accredited Programs which outlines the promotion requirements for each House Staff Officer to advance to the next progressively higher training level.

II. Definitions (if applicable)

- **House Staff Officer** - a physician who is enrolled in an accredited or non-accredited NYU School of Medicine Training Program for a clinical specialty or subspecialty this includes all Residents and Clinical Fellows.

- **ACGME** – Accreditation Council for Graduate Medical Education

- **Sponsoring Institution** – NYU School of Medicine

- **Office of GME** – Office of Graduate Medical Education

- **Administrative LOA** - administrative leave of absence entails **no credit** for training and **no compensation** as the Resident or Fellow is not permitted to work during this Leave of Absence.

- **House Staff Officer** – Trainees in specialty and subspecialty programs, whether or not ACGME-accredited.

- **USMLE STEP 3** – The United States Medical Licensing Examination is a three-step examination for medical licensure in the United States and is sponsored by the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME). The Composite Committee, appointed by the FSMB and NBME, establishes policies for the USMLE program. Membership includes representatives from the FSMB, NBME, Education Commission for Foreign Medical Graduates (ECFMG), and the American public.

- **COMLEX-USA Exam** - Developed by the National Board of Osteopathic Medical Examiners, COMLEX-USA is the new sequential three-level examination process for osteopathic medical licensure in the United States. The examination process is interdisciplinary and highly clinical, with even basic science components tested within a clinical context.

III. Policy
Advancing House Staff Officer Reappointment Criteria (Institutional and Program)

- **Goals and Objectives:** Advancement is dependent upon meeting all criteria delineated in above Goals and Objectives for each PGY year and level of training. Promotion to next level of training is also at the discretion of the Clinical Competency Committee and based on satisfaction of Milestones for a particular rotation or area of sub-specialty training. Resident will be notified of any areas of concern at semi-annual meetings with sufficient time to address concerns prior to any consideration of remediation or possibility of delay in advancement.

- **Evaluation:** Advancing House Staff Officer Reappointment is dependent upon satisfactory demonstration of clinical competence and professional standards as determined by verbal and written evaluation by the Faculty [and the Office of GME]. Unsatisfactory house staff officer evaluations can result in remediation, probation, and suspension from duties or termination of appointment as a house staff officer. A full description of NYULMC’s ‘Evaluation for Residents and Fellows Policy’ and ‘Corrective Action and Disciplinary Policy for House Staff’ can be viewed at on the GME website,¹ under the “Policies and Procedures” section.

- **Advancement Checklist:** Each Advancing House Staff Officer eligible to be promoted to the next progressively higher training level or transferring to another training program within NYULMC will receive an electronic Advancement Checklist in New Innovations prior to their respective advancement date. House Staff Officers are required to complete the Advancement Checklist before they will be allowed to advance to the next training level. The requirements for advancement include completion of the following items:
  - E-Learning Compliance Modules
  - House Staff Contract

- **USMLE Step 3 or COMLEX-USA Exam:** All House Staff Officers with M.D. degrees must take USMLE Step 3 or COMLEX-USA Exam prior to advancing to their final year of residency. House Officers with a D.O. degree may take either the USMLE exams (Steps 1, 2 & 3) or the COMLEX-USA exams (Levels 1, 2 & 3) – i.e. Medicine residents must take USMLE Step 3 before advancing to their third (3rd) year of

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¹ Gme.med.nyu.edu
residency; Surgery residents before advancing to their fifth (5th) year of residency. A full description of NYU Licensure Policy and USMLE requirements can be viewed at the GME website, under the “Policies and Procedures” section. Foreign National Graduates are required to take and pass USMLE Step 3 to be eligible for an H1B Visa.

- **Licensure:** A valid New York State medical license is required for all house staff in a non-accredited training program (or limited permit if the Fellow is not eligible for a License). (Note: Failure to take and/or pass USMLE Step 3 does not determine “eligibility.” See “Licensure Requirements for House Staff,” Sections V and VI.) This license must be obtained before training can begin and must remain valid throughout the duration of the training program. The Resident agrees to abide by NYU’s Licensure Policy in addition to the New York State licensure requirements for physicians in training, which can be found at: [http://www.op/nysed.gov](http://www.op/nysed.gov). NYU’s policy on licensure is more restrictive than that of New York State. A full description of NYU Licensure Policy can be viewed at on the GME website, under the “Policies and Procedures” section.

**VI. Policy Enforcement**

1. **Failure to receive satisfactory evaluations.**

   If a House Staff Officer receives unsatisfactory evaluations and fails to remediate, they may be subject to a delayed advancement date and corrective and/or disciplinary action may be taken as outlined in the ‘Corrective Action and Disciplinary Policy for House Staff’ which can be viewed at on the GME website, under the “Policies and Procedures” section.

2. **Failure to complete the Advancement Checklist.**

   The Office of GME will track the submission of all documents and completion of all processes to obtain the status of House Staff Officer advancement and satisfaction of all checklist items. If a House Staff Officer fails to complete all requirements of the advancement checklist by the set due date, they will be required to petition the GME office for an extension of the deadline, with the support of the program director, in order to continue training without interruption.

3. **Failure to take USMLE Step 3 or COMLEX-USA Exam.**

   If a House Staff Officer fails to take USMLE Step 3 or COMLEX-USA prior to advancing to the last year of his/her residency, they will be placed on an Administrative LOA. A House Staff Officer placed on an unpaid Administrative LOA is not permitted to train and therefore cannot receive training credit or be paid for the time out on leave.
4. Failure to pass USMLE Step 3 or COMLEX – USA.

If a House Staff Officer takes the exam and fails, he/she should be placed on Remediation; however, they may be promoted and continue training.

5. Failure to Obtain or Renew a License (Non-ACGME Accredited Programs).

A resident or fellow who fails to maintain a valid NYS License (or limited permit) may not continue training. A resident or fellow who does not renew the valid NYS License (or limited permit) will be placed on an Administrative LOA. There are NO EXCEPTIONS.
Case Log Policy & Procedure

We adhere to the Case log guidelines of the Review Committee for Neurological Surgery as follows:

Resident Role:

Resident surgical procedures must be entered into the ACGME Case Log System. Residents must indicate their major role in each case: Assistant Resident Surgeon, Senior Resident Surgeon, or Lead Resident Surgeon. The definitions for these roles are:

- **Assistant resident surgeon**: includes positioning, sterile preparation, placement of monitoring devices, microscope preparation, participation in the initial (opening) or final (closing) portions of the case, and/or assisting the resident or staff surgeon(s)
- **Senior resident surgeon**: may include aspects of the above, and must include participation in the surgical procedure between opening and closing
- **Lead resident surgeon**: may include aspects of the above, and must include participation in the critical portion of the case

To claim a case, a resident must scrub in for the procedure (i.e., scrub hands, use sterile gloves, with or without gown). There can be several residents per case, but each resident may claim only one role per case (Assistant, Senior, or Lead). There can be only one Lead Resident Surgeon per case, but the Assistant and Senior Resident roles are not limited in number per case. Only those cases completed in the role of Senior Resident Surgeon or Lead Resident Surgeon will count towards the required minimum Case Log numbers. However, the Review Committee expects that the Case Log data will demonstrate increasing participation and progressive responsibility.

Credit:

Each resident may enter one or more CPT codes per case, but may claim credit for only one CPT code per case. If more than one resident participated in the same case, each resident may claim the same CPT code for credit for that case as appropriate, as long as the claimed roles are not the same, except for the Assistant Resident Surgeon role. For example, one Assistant Resident Surgeon may claim a CPT code for credit when participating in the initial (opening) portion of the case, while another Assistant Resident Surgeon may claim the same CPT code for credit when participating in the final (closing) portion of the same case. See critical care guidelines below for further information.

Patient Type:

- The Review Committee defines a pediatric patient as one who is less than 18 years old at the time of the procedure.
- An adult patient is defined as one who is 18 years or older at the time of the procedure.
- A pediatric patient who is 18 years or older at the time of a follow-up procedure must be logged as an adult patient.

Specific Coding Guidelines:

- Airway Management: The requirement for 10 procedures in this defined case category can be met by multiple procedures, including intubation, tracheostomy, thoracentesis, tube thoracostomy, and bronchoscopy. Bundling of CPT codes
occasionally prevents a granular description of a procedure that is of interest to the Review Committee and central to neurological surgery education. Simple intubation, now bundled with anesthesia or critical care provision, is an example. Residents should search under DC26 (airway management) for the following code: 31575 (laryngoscopy, flexible fiberoptic; diagnostic)

Though direct laryngoscopy is only a component of intubation and may not be performed fiber-optically, coding intubation in this manner will ensure appropriate credit.

Critical Care: Residents are required to log 90 care critical procedures. Residents can pair one or more of these minor procedure codes with the primary code for a major procedure for a particular patient care episode. For example, if a resident intubates a patient, places a central line, and participates in a lumbar fusion, he or she may log a primary code for airway management as one case, a primary code for central line placement as a separate case, and a primary code for the lumbar fusion as a third case. Other elements of the spine surgery must still be included as secondary codes within the lumbar suffusion case.

Review Committee Expectations:
Residents graduating in 2014-2015 are expected to demonstrate compliance with all minimum numbers, except for the critical care (DC20-28) and endovascular (DC3b) procedures. Beginning with the 2015-2016 academic year, all program graduates are expected to demonstrate compliance with all minimum numbers without exception.

Monitoring of Case Logs:
Programs must monitor the accurate and timely entry of cases into the system. As part of monitoring resident progress towards developing competence in surgical skills, cumulative operative experience reports should be generated from the Case Log System and reviewed with each resident as part of his or her semiannual review. Program Administration completes monitoring of all resident Case Logs on a monthly basis. Reports are gathered and sent to Program Director on an as needed basis. Program Administration also monitors Case Log Minimum Requirements notifies Program Director of any concerns or areas where resident may need fulfill or be on track to fulfilling requirements.

A variety of Case Log reports are available in the system, each providing useful information for monitoring.

Code Summary Report
This report provides the number of times each CPT code is entered into the Case Log System by a program’s residents. Filtering by specific CPT code, resident year, attending, participating site, etc. can provide useful information on surgical activity in the program that might, for example, be used to make targeted changes in rotation schedules, curriculum, faculty assignments, etc. This report can be especially helpful in monitoring the procedures that do not count towards the minimums. Choosing non-tracked codes on the area drop-down menu will show the CPT codes that have been entered but that will not count on the Minimums Report. These codes can be easily reviewed to determine if the resident miscoded something that should be adjusted, or if it really was a minor procedure that doesn’t fit into the Review Committee minimum requirements.

Minimums Report
To track resident progress toward achieving minimum numbers, a separate report
should be generated for each resident using the default settings (“credit” should be “primary”). Note that the cases reported in the Assistant role do not count for credit; subtract this number from the total to calculate the accumulated cases that count toward the required minimum numbers.

Resident Activity Report

This is a summary report that provides total number of cases, total number of CPT codes, last procedure date, and last update date for each resident or for a selected resident. This report is a quick way to keep tabs on how frequently residents are entering their cases. For example, if the program requires residents to enter cases each week, the report can be run weekly; a resident that has not entered a case within the past week would be quickly identified.

Resident Brief Report

This report lists the procedure date, case ID, CPT code, institution, resident role, attending, and description for each case for each selected resident.

Resident Experience Report by Role

This report is very similar to an expanded version of the Minimums Report. It is formatted the same way, but omits the required minimum number for each defined case category, while including procedures that do not have a minimum number required.

Resident Experience Report by Year

This report summarizes the number of cases for each defined case category for each of the seven post-graduate (PG) years. It provides a quick way to see which procedures are most common for each PG year. Like the Code Summary Report, the Resident Experience Report by Year will provide useful information for monitoring surgical activity in the program, and could be used to determine if changes to curriculum rotation schedules, etc., are needed.

Resident Full Detail Report

All information for each case entered into the Case Log System is displayed in this report, making it most useful for getting an in-depth view of a resident’s surgical experience during a defined period. For example, this report could be generated for each resident for the preceding six-month period and used as part of the semi-annual evaluation meeting with the program director or designated faculty mentor. The use of filters is therefore recommended.

Tracked Procedures for Specialty by Category

This report generates the CPT codes mapped to each defined case category as well as the CPT codes that are available but not tracked.

The use of filters allows a program to get specific information to use for targeting needed program improvements. For example, selecting a specific institution would provide data on that institution’s contribution to the surgical activity in the program. If the institution was added with the goal of providing functional procedures, the program could determine if this goal was being met. Similarly, the number of pediatric patients contributed by each
institution could be tracked using the patient type filter. Programs are encouraged to incorporate these tools as part of their program improvement activities. program improvement activities.
Concerns and Complaints Policy (Institutional and Program)

NYU School of Medicine
Issuing Department: Graduate Medical Education
Effective Date: 09/16/2011
Reissue Date: 04/01/2013
House Staff Officer Concerns or Complaints

I. Summary of Policy

The NYU School of Medicine is committed to maintaining an environment that is supportive and conducive to learning. As such, open communication with House Staff Officers is of utmost importance. In the event that an individual would like to discuss or report a concern or complaint, there are numerous opportunities for residents to do so, either directly or anonymously.

II. Applicability of the Policy

This policy applies to all House Staff Officers in GME residency or fellowship training programs at NYU. Escalation Policy and diagram in Supervision Policy should also be referenced.

III. Definitions (if applicable)

A. GME – Office of Graduate Medical Education
B. GMEC – Graduate Medical Education Committee
C. CIR – Committee of Interns and Residents - Bellevue Hospital
D. DIO – Designated Institutional Official
E. Program Director – Medical director of GME specialty or sub-specialty training program
F. HSC - House Staff Council
G. HSPSC – House Staff Patient Safety Council

IV. Procedure

A. House Staff Council (HSC) The ACGME Institutional Requirements state that the a Sponsoring Institution and its programs must provide an environment in which residents may raise and resolve issues without fear of intimidation or retaliation. One forum that is required to provide this environment is an organization and/or forum for House Staff Officers to communicate, exchange information, and discuss and address House Staff Officer issues. The House Staff Council provides such a forum, and is comprised of representatives from each training program. The Council meets monthly, and all House Staff Officers are invited to attend, or are encouraged to express their comments or concerns to the House Staff Council representative from his/her program to speak on his/her behalf. House Staff Council leadership is in regular contact with the DIO, and through him, the Vice Dean and Dean/CEO. The House Staff Council executive board can be emailed at HSCExecutiveBoard@nyumc.org.
B. **House Staff Patient Safety Council** – Any issues or concerns related to quality and/or patient safety can also be brought to the House Staff Patient Safety Council (HSPSC). The HSPSC is comprised of NYU House Staff Officers who have an interest in quality and safety. House Staff Officers are welcome to bring concerns about patient safety or quality issues to this council, or, can ask the HSPSC representative from his/her program to speak on his/her behalf. To contact the House Staff Patient Safety Council, please contact the Office of GME.

C. **Annual Program Review** – The Annual Program Review, required by the ACGME and performed annually by Program leadership must include House Staff Officer representation from the program and must also include a review of written evaluations of the program, by the House Staff Officers. The Annual Program Review provides time for House Staff Officers to report any issues or concerns they may have with the training program and/or faculty. These issues or concerns will subsequently be reviewed by the Associate Dean for GME and the Senior Director of the Office of GME.

D. **Compliance Hotline (NYUHC/Tisch Hospital)** – A Compliance Hotline (1-866- NYU-1212) is also available to all members of the institution to allow for the confidential, anonymous reporting of activities that are contrary to hospital and School of Medicine regulations and policies such as violations of resident duty hours, and form of harassment, HIPAA violations, etc. Residents are reminded of and encouraged to use this Hotline on a regular basis.

E. **Compliance Hotline (Bellevue Hospital Center)** – A Medical Resident Hotline is also available through Bellevue Hospital Center intranet (http://intranet.bellevue.org/) Click directly on Resident Hotline Online Issues Form. The submission form will be forwarded to pertinent department Administrators, Chief’s of Service, Medical Director and others in an effort to facilitate the resolution of the issues.

F. **Incident/Error Reporting:** House Staff Officers should report sentinel events, adverse events, and/or close calls. Reporting such events is the responsibility of all House Staff Officers, and will increase the focus on improving patient safety, help develop changes that result in improved outcomes, and increase our reporting of adverse events and our awareness of patient safety issues.

   a. **At NYULMC:** House Staff Officers are encouraged to use the Patient Safety Net (PSN) when working at an NYULMC facility. The PSN is web-based application that allows users to electronically report events. Anyone can enter an event using the PSN, and these events can be reported anonymously. The PSN Icon can be found on every clinical desktop, or it can be acess by navigating to The Link, selecting “web applications” on the right hand side of the screen, and clicking on “PSN for front line reporter.”

   b. **At the Manhattan VA:** House Staff Officers can report events using a web-based reporting system, called Electronic Patient Event Reporing (ePER), reporting system, called Electronic Patient Event Reporing (ePER).

   c. **At Bellevue:** To report events, please go to the Bellevue Hospital Center (BHC) Intranet, and click on the “Patient Safety Hotline” link on the right-hand side of the screen. Please follow all prompts.

G. **Residents on Bellevue Payroll** – When residents rotate onto the Bellevue Hospital pay line, they are also represented by a union, the CIR,² that has additional
avenues for the redress of grievances within its policies developed through collective bargaining.

H. **Program Director and/or DIO** – Residents may also contact their Program Director, DIO/Associate Dean for Graduate Medical Education, and/or the Office of Graduate Medical Education to discuss any issues of concern.

Reviewed: 9/1/2011
Supercedes: 12/14/2004
Originally Adopted: 12/14/2004
Approved by: Graduate Medical Education Committee
NYU Neurosurgery Clinical Supervision Chart

Chairman

Program Director

Service Chief/Site Director/Division Director*

General Faculty

Physician Extenders (PA, NP)

Chief Resident

Consultants and/or primary service faculty, fellows, and residents

Junior Residents

Interns

* = Service Chief at Tisch, Site Director at Bellevue and VA, Division Director for Peds
Corrective Action and Disciplinary Policy

NYU Hospitals Center
Issuing Department: Graduate Medical Education
Effective Date: 05/01/2008
Reissue Date: 08/01/2013
Corrective Action and Disciplinary Policy for House Staff

I. Summary of Policy

The Accreditation Council for Graduate Medical Education (ACGME) requires a written set of policies and procedures for House Staff Officer evaluation and for implementing corrective and/or disciplinary action when a House Staff Officer’s performance fails to meet required standards. This includes the criteria for any adverse action, such as placing a resident/fellow on probation or terminating a House Staff Officer whose performance is unsatisfactory. The procedures are designed to be fair to House Staff Officer, patients under care, and the training program and are applicable to all House Staff Officers in training at New York University School of Medicine (“NYU”) or any affiliated training sites.

All further references in this document to House Staff Officer shall include residents and fellows.

II. Applicability of the Policy

This policy applies to all House Staff Officers, including those in ACGME and non-ACGME-accredited specialty and subspecialty programs

III. Definitions

ACGME – Accreditation Council for Graduate Medical Education

CPH – Committee on Physicians’ Health of the Medical Society of the State of New York

Director – Director of Residency or Fellowship training program

GME – Office of Graduate Medical Education

NYU – New York University School of Medicine

OPMC – NYS Office of Professional Medical Conduct

IV. Policy

A. Performance Deficiencies

Upon receipt of satisfactory evaluations and compliance with all other terms of the House Staff Policies and Procedures, each House Staff Officer should expect to continue to the next level of training to program completion. If, however, a House Staff Officer’s performance is unsatisfactory, the Director shall notify the House Staff Officer of that conclusion, both verbally and in writing, as soon as it is determined and initiate appropriate corrective and/or disciplinary action, as provided
in Section IV.A.1., Written Warning with Remediation. In the ordinary course, corrective and/or disciplinary action should be imposed progressively, beginning with a written warning with plan for remediation and proceeding to probation and dismissal from the program if performance does not improve. In some cases, as outlined in Section IV.A.3, summary suspension may be appropriate. Prior to initiating any corrective and/or disciplinary action, the Director must consult with the Associate Dean for Graduate Medical Education and the Senior Administrative Director for NYU GME. In addition, the Director must inform all relevant Hospital Medical Directors of any disciplinary action initiated against the House Staff Officer under this Section IV.

1. Written Warning with Remediation: In the event that a House Staff Officer’s performance is unsatisfactory and summary suspension is not appropriate, the Director, after consultation with the NYU GME, shall issue a written warning to the House Staff Officer, which must include a detailed plan for remediation. Copies of the written warning with remediation and all subsequent administrative documentation relating to this corrective action shall be maintained in the Director’s and the NYU GME files.

   a. The written warning may include documentary evidence, such as letters of complaint, attendance logs, reports from the licensure board, and other relevant documents and materials.

   b. The remediation period must be defined in the remediation plan.

   c. The plan for remediation must include directives for additional supervision and specific instructions with clear measurable educational goals and performance expectations.

   d. The plan should provide for regular feedback from the Director (or Director’s designee) to the House Staff Officer.

   e. In determining the appropriate plan of remediation, the Director shall decide which action to take based on numerous factors, such as the nature and severity of the deficiency giving rise to the need for corrective action, the potential impact on patient health or safety, the impact of the House Staff Officer’s conduct on the program or the facility, the likelihood that the deficiency can or shall be successfully remediated, and the degree of notice and opportunity to cure that the House Staff Officer has previously received.

   f. At the end of the remediation period, the following may occur:

      i. Termination of remediation, with a statement provided to the House Staff Officer stating that the conditions of remediation were satisfactorily resolved and there is no present need for further corrective action. Copies of such statement shall be maintained in the Director’s and the NYU GME files;

      ii. Continuation of remediation, provided the House Staff Officer has performed satisfactorily on a significant portion of his/her plan of remediation and the Director agrees to the assignment of an additional term of remediation. Continued remediation shall be approved for a specified period of time, with a redefinition of the problems and procedures to be followed in order to satisfy this additional term of remediation in accordance with this Section IV;

      iii. Imposition of a term of probation as specified under Subsection 2, Probation, of this section; or

      iv. Other appropriate action, up to and including termination of the House Staff
Officer's participation in the residency or fellowship program in accordance with Section IVA.5., Dismissal.

2. Probation - Following a summary suspension or the unsuccessful completion of a plan of remediation or as deemed necessary due to one or more recurring performance deficiencies after prior remediation periods, the Director or his/her designee shall place the House Staff Officer on probation, provided the House Staff Officer's continuation in the program does not constitute a serious threat to the welfare or safety of patients, employees, or other staff members or to the integrity of the program, as follows:

a. The Director or his/her designee shall meet with the House Staff Officer and present a written notice, drafted in conjunction with the NYU GME, stating:

   i. the term of probation (ordinarily not to exceed six months);

   ii. the reasons for probation (i.e., the House Staff Officer's specific actions or deficiencies that led to the recommendation for probation); and

   iii. the conditions of probation (i.e., what the House Staff Officer shall be expected to do differently and the specific measures the department will take to provide the House Staff Officer the opportunity to achieve these goals). Copies of the written notice and all subsequent administrative documentation relating to this disciplinary action shall be maintained in the NYU GME files. Copies of the written instance also shall be forwarded to all relevant Hospital Medical Directors. The written notice shall advise the House Staff Officer of the right to appeal the decision of probation as provided in Section IV.B., Appeals.

b. At the end of the probationary period, the following may occur:

   i. Termination of probation, with notice provided to the House Staff Officer stating that the conditions of probation were satisfactorily resolved and there is no present need for further probation. Copies of such statement shall be maintained in the Director's and the NYU GME files and forwarded to all relevant Hospital Medical Directors;

   ii. Continuation of probation for an additional specified period of time with a written redefinition of the problems and procedures to be followed in order to satisfy this additional term of probation in accordance with this Section IV.A.2.; or

   iii. Termination of the House Staff Officer's participation in the residency or fellowship program in accordance with Section IVA.5., Dismissal.

c. A decision to place a House Staff Officer on probation may require reporting to the appropriate State agency, as discussed in Section IV.C., Reporting.

3. Summary Suspension - A House Staff Officer may be summarily suspended from participation in the residency/fellowship training program by the Director, the Department Chair, a Hospital Medical Director, or the Dean of the School of Medicine or
his/her designee a) if the House Staff Officer’s actions or his/her continued participation in the program may constitute a threat to the welfare or safety of patients, employees, or other staff members or to the integrity of the program; or b) if his/her license or permit is suspended or revoked. When a House Staff Officer is summarily suspended from the program, the following procedures shall be followed:

a. The Director, in conjunction with the NYU GME, shall provide the House Staff Officer with written confirmation of his/her suspension. The notice shall specify the deficiencies that gave rise to the suspension, the term of the suspension, and any conditions that might be imposed for resuming participation in the residency/fellowship program after the period of suspension. Copies of this notice shall be maintained in the Director’s and the NYU GME files. Copies shall also be forwarded to all relevant Hospital Medical Directors. Credit for GME training shall not be given to a House Staff Officer during a period of suspension. No compensation is earned or paid to a House Officer during a period of suspension, but health insurance and professional liability insurance coverage is maintained.

b. The House Staff Officer shall be advised in writing of the right to appeal the suspension as provided in Section IV.B., Appeals.

c. The House Staff Officer shall be advised in writing regarding the program’s policy with respect to whether, upon return from suspension, any academic or clinical work and/or additional time will need to be made up, and/or completion of training extended due to the suspension period.

d. At the end of the suspension period, the Director, in conjunction with the NYU GME, shall notify the House Staff Officer in writing as to what further action, if any, is to be taken. Copies of this notice shall be maintained in the Director’s and the NYU GME files. Copies shall also be forwarded to all relevant Hospital Medical Directors. One of the following may occur:

i. Termination of suspension, with a statement provided to the House Staff Officer stating that such suspension occurred and there is no present need for additional disciplinary action;

ii. Termination of suspension and placement of the House Staff Officer on probation as specified under Subsection 2. Probation, of this section; or

iii. Termination of the House Staff Officer’s participation in the residency or fellowship program, in accordance with Section IV.A.6., Dismissal.

e. A decision to suspend requires reporting to the appropriate State agency, as discussed in Section IV.C., Reporting.

4. Denial of Academic Credit:
If a House Staff Officer fails to make up work missed during a summary suspension; does not satisfactorily complete remedial work during a probationary period; misses a significant component of the academic program during leave from the program; or has otherwise failed to make sufficient academic progress, the Director may require the House Staff Officer repeat all or part of the academic year’s work.

5. Dismissal:

a. The Director shall recommend the House Staff Officer’s dismissal from the program to the Department Chair or Dean or his/her designee, if the House Staff Officer has:

i. Misrepresented credentials upon which s/he had been accepted into the
program;

ii. Engaged in conduct that threatens the welfare or safety of patients, employees, or other staff members or the integrity of the residency or fellowship training program, or if his/her license or limited permit is revoked or suspended;

b. Failed to meet standards for academic, clinical, or professional conduct/performance, as set forth in the NYU Office of GME “Evaluation Policy for Graduate Medical Education,” after summary suspension, probation or having received written warning with opportunity to remediate.

i. The process of dismissal shall be initiated by recommendation of the Director to the Department Chair after consultation with the NYU GME. The Department Chair shall make the final decision to dismiss in consultation with the Director and/or the Dean or his/her designee and shall record the recommendation and the reasons thereof in writing.

ii. The House Staff Officer shall receive notice of dismissal from the Department Chair with a copy of the recommendation for dismissal and the reasons thereof. S/he also shall receive notice of his/her right to appeal, as provided in Section IV.B., Appeals. Notice of the recommendation for dismissal and all subsequent administrative documentation relating to this disciplinary action shall be maintained in the Director’s and the NYU GME files. A copy of the notice of dismissal shall be forwarded to all relevant Hospital Medical Directors.

iii. If the House Staff Officer does not request a hearing, the recommendation for dismissal shall be final and effective as of the date of receipt by the House Staff Officer, and the decision to dismiss shall not be subject to further review, in accordance with Section IV.B., Appeals.

iv. If a House Staff Officer is dismissed before the completion of his/her academic year, the Director shall determine the number of month’s credit to be given the House Staff Officer for that academic year.

v. A decision to dismiss requires reporting to the appropriate State agency, as provided in Section IV.C., Reporting.

B. Appeals

1. Neither the decision to place a House Staff Officer on a plan of remediation nor the plan of remediation itself is appealable.

2. The decision to summarily suspend, place on probation, not advance, deny academic credit, or dismiss a House Staff Officer is appealable, as follows:

   a. The House Staff Officer must submit a written request for a hearing to his/her Department Chair within seven calendar days after his/her receipt of written notice of an appealable adverse decision or recommendation. If no request is submitted within such seven-day period, the Director’s decision shall become final and not subject to further review.
b. The Dean or his/her designee in consultation with the Department Chair shall appoint an ad hoc Appeals Committee. The Appeals Committee shall consist of two attending physicians, each of whom hold faculty appointments in the New York University School of Medicine, and two House Staff Officers, none of whom have had prior direct involvement in the proceedings with respect to the House Staff Officer.

c. The Appeals Committee shall be charged to review and make a recommendation to the Dean or his/her designee on the following issues:

i. Was the decision of the department or division made substantially in compliance with the procedures set forth in the Corrective Action and Disciplinary Policy for House Staff Officers?

ii. Was the decision of the department or division made arbitrarily and capriciously or in bad faith or in violation of anti-discrimination or other laws or regulations?

iii. It is not the role of the Appeals Committee to substitute its academic judgment for the academic judgment of the department or division. If the Appeals Committee determines the answer to a) is yes and the answer to b) is no, the Appeals Committee should uphold the decision of the department or division. If the Appeals Committee determines that the department has failed to substantially comply with the procedures of the Corrective Action and Disciplinary Policy for House Staff Officers or that the decision of the department was made arbitrarily and capriciously or in bad faith or in violation of anti-discrimination or other laws or regulations, the Appeals Committee shall make an appropriate recommendation for remedy or reversal.

d. The Appeals Committee shall hold a hearing in a timely fashion. The House Staff Officer shall receive at least three calendar days’ prior notice of the hearing. Such notice shall include a statement of reasons(s) for the department or division’s decision to summarily suspend, place on probation, not advance, deny academic credit or dismiss the House Staff Officer. The Director, the NYU GME, and all relevant Hospital Medical Directors shall receive copies of the notice.

e. The Appeals Committee shall make rules it deems necessary to assure prompt, fair, and expeditious handling of the appeal. The Committee shall be permitted to have legal counsel present during the hearing. The rules of law relating to the examination of witnesses or presentation of evidence shall not apply. Any relevant matter upon which responsible persons may rely on the conduct of serious affairs may be considered.

f. The Appeals Committee shall conduct interviews and review documents, including medical records, as the Appeals Committee deems necessary or helpful in its conduct of the investigation. A recording of all interviews shall be made. The Appeals Committee may require a physical and/or mental evaluation of the House Staff Officer in any case where the Appeals Committee has reason to consider the physical or mental competency of the House Staff Officer. Appropriate consultants shall carry out such evaluation, and a report of the evaluation shall be forwarded to the House Staff Officer as well as to the Appeals Committee.
g. The Appeals Committee shall be authorized to recommend that the charges or proposed disciplinary action raised against the House Staff Officer be modified.

h. The physical presence of the House Staff Officer for whom the hearing has been scheduled shall be required. Failure to appear without good cause shall be deemed a waiver of the House Staff Officer’s right to the hearing provided in this section, shall be considered an acceptance of an adverse decision, and is final.

i. At the hearing the House Staff Officer may elect to be accompanied or represented by an attorney or other persons of his or her choice. The role of this representative shall be limited to providing advice and counsel to the House Staff Officer; and addressing the members of the Appeals Committee. The role of the representative shall not include the questioning of witnesses. The Appeals Committee may, in its discretion, further define, expand, or limit the role of any such representative.

j. The House Staff Officer (or his/her representative) shall have the right to present the House Staff Officer's position to the Appeals Committee, together with such other documentation as the House Staff Officer may wish. The House Staff Officer may suggest witnesses who have information relevant to the Appeals Committee to determine if the witnesses will be interviewed.

k. Following the hearing, the Appeals Committee shall submit to the Dean or his/her designee a written report and recommendation, which may include a recommendation that the proposed charges or disciplinary action be modified. The House Staff Officer and the Director, the NYU GME, and all relevant Hospital Medical Directors shall receive copies of the report for their files.

l. The Dean or his/her designee shall issue a final written decision within seven (7) calendar days after receipt of the Appeals Committee’s report. The House Staff Officer and the Director, the NYU GME, and all relevant Hospital Medical Directors shall receive copies of the decision for their files.

m. The Appeals Committee shall forward the record of its proceedings and interviews to the Dean. The proceedings and records of the Appeals Committee and the Dean’s decision shall be, so far as possible, confidential, but shall be retained as an institutional record.

n. The decision of the Dean or his/her designee is final and, therefore, not subject to further appeal.

C. Reporting

1. Whenever the Director takes any action under Subsections IV.A.2, 3, 4 or 5, Performance Deficiencies, s/he shall notify the Associate Dean for Graduate Medical Education, the Senior Administrative Director for NYU GME, and all relevant Hospital Medical Directors of the action taken and the circumstances surrounding it, as well as the ultimate disposition of the matter.

2. Hospitals are required, under § 405.3 (e), Codes, Rules and Regulations of New York State, to report to the OPMC any denial, suspension, restriction, termination, or curtailment of training, employment, association, or professional privileges or the denial of certification of completion of training of any physician licensed or registered by
the New York State Department of Education for reasons related in any way to any of the following

a. Alleged mental or physical impairment, incompetence, malpractice, misconduct, or endangerment of patient safety or welfare;

b. Voluntary or involuntary resignation or withdrawal of association or of privileges with the Hospital to avoid the imposition of disciplinary measures; and

c. The receipt of information concerning a conviction of a misdemeanor or felony. The report must be made in writing to OPMC, with a copy to the appropriate area administrator of

the New York State Office of Health Systems Management, within 30 days after the taking of such action, and must include:

i. The name and address of the individual;

ii. The profession and license number;

iii. The date of the Hospital's action;

iv. A description of the action taken; and

v. The reason for the Hospital's action or the nature of the action or conduct which led to the resignation or withdrawal and the date thereof.

3. In cases involving unlicensed physicians practicing under a limited permit or serving in a clinical fellowship or residency, the Hospital must report to the New York State Education Department Office of Professional Discipline.

4. All licensed health professionals, including physicians, are required by state law to report colleagues whom they suspect may be guilty of misconduct as defined in New York State law. Failure to report suspected instances of misconduct is, in itself, misconduct. For physicians and House Staff Officers affiliated with a hospital, the report can be made to the hospital’s Chief Medical Officer, who will then inform OPMC; in the case of a House Staff Officer, the report may be made to the Program Director, the DIO, the Senior Administrative Director for NYU GME, and/or all relevant Hospital Medical Directors. If the colleague is not affiliated with a hospital, a report can be made to the county medical society, which will be responsible for reporting to OPMC. If a health professional is uncertain whether specific actions or behaviors constitute misconduct, the practitioner. Once advice is provided, the health professional who requested the advice is required to follow it.

5. Practitioners suspected of having problems with alcohol, drugs, or mental illness, but whose ability to practice is not impaired, may be reported to the Committee on Physicians’ Health of the Medical Society of the State of New York (CPH). All calls are confidential. CPH identifies, refers to treatment and monitors impaired physicians. The program is voluntary and participation is confidential. The names of physicians participating in the program are not shared with OPMC without a participant’s approval unless there is a failure to comply with treatment recommendations. A physician whose medical performance may be impaired, however, also must be reported to OPMC. The law does not exempt physicians from their duty to report colleagues practicing with a suspected impairment to OPMC because they have reported to CPH.
6. Nothing in this policy relieves the institution of its obligations to report incidents of possible professional misconduct under applicable laws and regulations. The results of drug or alcohol testing and matters related thereto shall be kept confidential except to the extent necessary to implement this policy.

7. A Warning and Plan for Remediation need not be reported.

**Originally Adopted:** 2/11/2003 (Evaluation, Corrective Action, and Discipline Policy)

**Supersedes:** 05/08

**Approved by:** Graduate Medical Education Committee
Disaster Policy and Emergency Preparedness

NYU School of Medicine
Issuing Department: Graduate Medical Education
Effective Date: 05/16/08
Reissue Date: 04/2013

Disaster Policy

I. Policy Purpose

To define the basic procedures and assigned responsibilities to efficiently and effectively reconstitute and restructure the resident training experience following a disaster or a set of significant events, and/or interruption inpatient care. NYU SoM strives to provide a stable educational environment for House Staff Officers and to provide guidelines for administrative continuity and maintenance of the critical teaching mission of the NYU SoM.

When disasters occur elsewhere we will attempt to take on displaced residents from other programs when feasible. In order to credential House Staff displaced due to natural or other disasters. The GME may accept a modified list of credentials, agreed upon by the DIO, the Director, and the Senior Administrative Director of GME of the host institution. Under all circumstances, it is the responsibility of the GME to credential displaced House Staff.

II. Applicability of the Policy

All Trainees, including those in ACGME and non-ACGME accredited specialty and subspecialty program.

III. Definitions (if applicable)

A. NYUHC – NYU Hospitals Center
B. NYU SoM – New York University School of Medicine
C. GMEC – Graduate Medical Education Committee
D. GME – Office of Graduate Medical Education
E. ACGME – Accreditation Council for Graduate Medical Education
F. DIO – ACGME Designated Institutional Official
   G. Disaster – An event or set of events causing significant alteration to the residency experience at one or more residency programs.
   H. Director – Medical director of ACGME-accredited or non-accredited specialty or subspecialty program.
I. House Staff Officer – Trainees in specialty and subspecialty programs, whether or not ACME-accredited.

V. Responsibilities

A. GMEC’s Responsibilities

1. The GMEC is responsible for assuring that all graduate medical education programs and Directors are aware of and comply with this policy and for monitoring program-specific contingency planning for a disaster or interruption in patient care.

B. SoM’s Responsibilities
1. All SoM sponsored graduate medical education Directors are responsible for implementing this policy as it pertains to program-specific disaster contingency planning and to communication with the Office of Graduate Medical Education, ACGME, and House Staff Officers regarding temporary and/or permanent transfers.

C. **DIO and GME Responsibilities**

1. The SoM Designated Institutional Official to the ACGME and the SoM Graduate Medical Education Program staff are responsible for working with disaster-affected programs and Directors to reconstitute or reconfigure the educational experience for residents and clinical fellows.

IV. **Procedure (Updated to include internal program policy)**

1. Prior to or during a disaster or interruption in patient care, under the direction of its Chairman, Program Director and in collaboration with Program Administration, will undertake all reasonable measures to ascertain the whereabouts of its trainees and ensure their safety. If trainees are in immediate danger, the Director, in collaboration with the DIO and Office of GME, will coordinate all reasonable measures available to the SoM to remove trainees from harm and return them to safety.

Immediately after a disaster or interruption in patient care, each graduate medical education program affected by the disaster or interruption, under the direction of its Director, and in collaboration with the DIO and the Office of Graduate Medical Education, will also undertake all reasonable measures to ascertain the whereabouts of its trainees and ensure their safety.

2. Communication: Consistent with the NYU Emergency Operations Plan, information concerning disaster operations can be found at www.med.nyu.edu. The Office of Graduate Medical Education will serve as an information clearinghouse for House Staff Officers and Program Directors during a disaster. In the event that the NYU website or email is not available, alternate means of communication such as cell phones, personal emails may be used, including social media. In addition, the Department of Neurosurgery keeps an internal emergency disaster contact sheet that is updated on a regular basis. All resident are provided with emergency contact information and will be contacted or asked to report to Program Director.

3. As soon as possible after the disaster or interruption in patient care, the DIO will notify the ACGME of the nature and details of the disaster or the interruption. The Executive Director of ACGME with consultation of the ACGME Executive Committee and the Chair of the Institutional Review Committee will decide if the disaster report warrants a declaration of disaster by the ACGME. Should the ACGME declare a disaster, a notice will be posted on the ACGME website, with information relating to the ACGME response to the disaster. The DIO will monitor this information and maintain ongoing communications with the ACGME.

4. Following declaration of a disaster or an interruption in patient care, the DIO, and Office of Graduate Medical Education, working with the GMEC, and other SoM administration will work to restructure, reconfigure or reconstitute the educational experience for trainees enrolled in SoM sponsored graduate medical education programs affected by the disaster or interruption, as quickly as possible.

5. Within ten days after a declaration of disaster is issued by the ACGME, the DIO or his/her designee will contact the ACGME to discuss the due dates that the ACGME will establish for each affected program to: Submit proposed program reconfigurations for
6. **Transfer**

a. If the DIO determines that the SoM sponsored graduate medical education program(s) affected by the disaster or interruption in patient care cannot be restructured or reconstituted to provide an adequate educational experience for House Staff Officers, or if the program cannot be restructured or reconstituted within an appropriate time frame to allow House Staff Officers to complete their training program requirements within the standard time required for certification within their specialty, then the DIO working in collaboration with the Director(s), the Office of Graduate Medical Education, and SoM administration will:

   i. Arrange temporary transfers to other programs/institutions until such time as the training program can provide an adequate educational experience for each of its House Staff Officers.

   ii. Cooperate in and facilitate temporary/permanent transfers to other programs/institutions. Programs/institutions will make the keep/transfer decision expeditiously so as to maximize the likelihood that each resident will timely complete the training year.

   iii. A Memorandum of Understanding (MOU) will be created for each rotating Institution our trainees are being displaced to.

b. Inform each transferred trainee of the minimum duration of his/her temporary transfer, and continue to keep each trainee informed of the minimum duration. If and when a program decides that a temporary transfer will continue to and/or through the end of a training year, it must so inform each such transferred trainee.

c. During the period of time that NYU trainees spend in temporary transfer at the host program, NYU and affiliates will continue to provide salary, travel, and benefits to the trainee, consistent with applicable law.

7. SoM trainees, who, as a result of the disaster or interruption in patient care, temporarily transfer to other training programs, will be provided by their Directors with a best estimate of the duration of time that relocation to the host program will be necessary. Should the time at the host program need to be extended, the House Staff Officers will be notified by their Director(s) using written or electronic means, indicating the estimated duration of the extension.

8. The DIO will be the primary institutional contact with the ACGME and the Institutional Review Committee Executive Director regarding disaster plan implementation and communication regarding specific graduate medical education needs within SoM. The DIO will call or email the Institutional Review Committee Executive Director with information and/or requests for information as specified in the ACGME Policies and Procedure manual. Communications from Directors to the ACGME will be directed by phone or email to the appropriate Review Committee Executive Director. Communications from residents/clinical fellows to the ACGME also will be directed to the appropriate Review Committee Executive Director.

9. Individual NYU sponsored graduate medical education programs will take responsibility for establishing contingency plans and procedures to address continuation of program leadership, evacuation planning, relocation, program recovery, maintenance of communication and working with affiliates in the event of a disaster or interruption in patient care.
10. Individual NYU sponsored graduate medical education programs will, to the extent permitted by available resources and program personnel, protect the academic and training files of residents or clinical fellows from loss or destruction by disaster.

11. **Administrative Support**

   a. All temporary Disaster Relief rotations to other institutions must be maintained in New Innovations.

   b. In the event of a disaster, communication between the Senior Administrative Director of Graduate Medical Education, the DIO, Chief Medical Officers of NYU Tisch Hospital and the affiliate institutions, General Counsel, and the Vice Dean of Human Resources will be initiated to mobilize House Staff. During a disaster House Staff can obtain current information on the NYU Emergency Management website: [http://nyumc.net/nyu/include.jsp?nav=em&url=/emergency_info/command_center_info.htm](http://nyumc.net/nyu/include.jsp?nav=em&url=/emergency_info/command_center_info.htm) as well as the Employee Emergency Information Hotline: 212-263-2002.

12. **Displaced Residents From Other Programs**

   a. If salary and support will continue to be provided by home institution, then the House Staff will only need to submit the following:

      i. In-Elective Form, Request, and Agreement

      ii. House Staff Application

      iii. Proof of approval of Director & DIO from host institution

   b. If the House Staff is to be employed in addition to the above, the necessary employment paperwork must be submitted, following the credentialing checklist of SoM.

   c. If the displaced House Staff was in the accredited program at their home institution, the corresponding accredited program at SoM must request ACGME permission to temporarily host displaced House Staff.
**Duty Hour Policy**

It is the policy the Department of Neurological Surgery at New York University Medical Center to fully comply with New York State 405 Regulations and with ACGME policy on work hours for post-graduate trainees (i.e. residents and fellows). The program director, site directors, and clinical service chiefs are accountable for ensuring strict compliance with all work hours policies. The GME Committee receives periodic reports on work hour compliance as part of the QA process. Duty hours are defined as all clinical and academic activities related to the educational program: patient care, both inpatient and outpatient, administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities, time spent off site engaging in at home call activities, and scheduled academic activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site. The NYU-Department of Neurological Surgery fully supports the Resident Work Hour Limitations established by New York State 405 Regulations, the Neurological Surgery Residency Review Committee and the ACGME with the following requirements:

**Maximum Hours of Work per week:**

- Resident Duty hours are limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call and at home call activities.

- Residents are 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.

**Maximum Duty Length Periods are as follows:**

- 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.

- We encourage residents 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 suggested.

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

- Residents are 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 site directors and the program director. The program director reviews each submission of additional service, and tracks both individual resident and program-wide episodes of additional duty.

**Moonlighting is strictly prohibited** by the NYU Department of Neurological Surgery (See enclosed moonlighting policy and sign off sheet)

Minimum Time Off between Scheduled Duty Periods is as follows:

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

- Intermediate-level residents (PGY 2-5) 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 (PGY 6 -7) 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. The site directors and the program director strictly monitor circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by residents in their final years of education.

Maximum Frequency of In-House Night Float:

NYU Department of Neurological Surgery **does not participate in In-House 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”.

- Verbal inquires are made by the, site directors, and clinical service chiefs, or by The program director regarding if the At-home call was so taxing as to preclude rest or reasonable personal time for the resident. If this is the case resident is instructed to return home (car fare is provided) and not to return until the next schedule duty period at which point they are re-evaluated.

Our department in accordance has implemented procedures to relieve a postgraduate trainee due to fatigue (see Fatigue Policy). Stress and fatigue can be either self-reported or observed by other trainees, or responsible attending staff. All of our residents and faculty are required to take on line training modules to enable them to recognize undue stress or fatigue in themselves or others. Adequate backup through qualified physician extenders or supervising attending physicians is always available and is utilized as needed to assure that patient care is not jeopardized by resident stress or fatigue. A stressed or fatigued resident is instructed to return home (car fare is provided) and not to return until the next schedule duty period at which point they are re-evaluated.

The facilities afforded the residents at NYU are there to ensure an appropriate environment for learning and providing patient care. This includes food service capabilities during assigned duty hours and suitable on-call rooms suitable for each resident on night duty in the hospital.

**Monitoring of Duty Hours**

Monitoring of compliance with the New York State 405 Regulations and with ACGME policy on work hours for post-graduate trainees (i.e. residents and fellows) is conducted by the Department of Neurological Surgery on a monthly basis through the distribution, collection, and evaluation of duty hours by all of our residents at all of our participating institutions. The site directors and program director on a monthly basis review the duty hours. Duty hours are submitted for institutional review on a bi-annual basis (for enter months April and October) with plans of correction instituted for any violations. They are reviewed as a component of the resident’s professionalism during the resident semi-annual reviews. The program expects 100% compliance from all House Staff.

All duty hours violations should be reported immediately to the site directors or the program director. If need be, they can be reported anonymously to the compliance hotlines as below:

**How To Report Duty Hour Violations at NYU:**

An anonymous NYULMC Compliance Hotline has been established and is available 24 hours a day 7 days a week. For questions or concerns, faculty and staff can call the multilingual hotline and obtain a tracking number. Issues and concerns are forwarded to the Office of Compliance for follow-up. **The Compliance Hotline number is (866)-NYU-**
How To Report Duty Hour Violations at Bellevue:
The Bellevue Resident Hot line can be found on the Bellevue Intranet Home Page. This hotline is completely anonymous.

On the left hand side:
1. Select "Patient Safety Hotline"
2. Then, go to the "blue" section
3. Select either one of the following:
4. Select either one of the following:
   "Patient related issue"
   "Resident related issue"
   "Supply related issue"
   "Other"
5. Fill in the fields as prompted.
6. A self-selected password is required so you can follow-up on the response to your complaint.

Duty Hours, Fatigue or “Workplace”


**EVALUATION POLICY**

The NYU Department of Neurosurgery Residency Program evaluates all faculty and trainees using an objective assessment of competence in the 6 ACGME competencies of patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice (see in depth definitions below). Our evaluations are performed using the New Innovations system. Written feedback is provided for the residents during the semi-annual review with the program Director, though New Innovations feedback to residents whenever an evaluation is completed. The Clinical Competency Committee receives feedback on an semi-annualized basis during faculty review meetings conducted with the Chair of the Department.

The residents are evaluated based on their competent achievement of the goals defined for their current rotation. These criteria are set forth in the Program Rotational Goals and Responsibilities document found in the resident hand book and online on our program website. Both the residents and faculty are aware of the evaluation criteria at the start of the rotation and these criteria are made available to the evaluators when they commence the evaluation process. Timely evaluations are assured through the New Innovations system which automatically sends reminders to evaluators until the evaluations are completed, which is currently set on a quarterly basis. The program coordinator gets compliance reports and can send out individual reminders via email to anyone that has not completed an evaluation in a timely manor. All residents are provided access to evaluations via New Innovations in a de-identified format and feedback discussed at both semi-annual review meetings.

The residents are evaluated by the faculty at the completion of their rotations or during as is appropriate. On an annualized basis peers and other professional staff evaluate them in a 360’ fashion. The evaluations of resident performance must be accessible for review by the resident, in accordance with institutional policy (copies of the competency based evaluations are included as an appendix). In particular:

**Formative Resident Evaluation**

The faculty will evaluate resident performance in a timely manner during each rotation or and document this evaluation at completion of the rotation assignment.

These evaluations:
- Provide objective assessments
- Use multiple evaluators (e.g., faculty, peers and other professional staff)
- Document progressive resident performance improvement appropriate to educational level provide each resident with documented semiannual evaluation of performance with feedback.

**Summative Evaluation**

The program director must provide a summative evaluation for each resident upon completion of the program that become part of the resident’s permanent record maintained by the institution, and must be accessible for review by the resident in accordance with institutional policy.
This evaluation:
  o Document the resident’s performance during the final period of education
  o Verify that the resident has demonstrated sufficient competence to enter practice without direct supervision

Faculty Evaluation
At least annually, the program and residents must evaluate faculty performance as it relates to the educational program. This evaluation must include at least annual written fully confidential evaluations by the residents.

These evaluations include a review of the faculty’s
  o Clinical teaching abilities
  o Commitment to the educational program
  o Clinical knowledge
  o Professionalism
  o Scholarly activities

Program Curriculum and Improvement Evaluation
The program must document a formal, systematic evaluation of the curriculum at least annually. Residents and faculty must have the opportunity to evaluate the program confidently and in writing at least annually, and the program must use the results of residents’ assessments of the program together with other program evaluation results to improve the program.

The program must monitor and track each of the following areas:
  o Resident performance
  o Faculty development
  o Graduate performance, including performance of program graduates on the certification examination
  o Program quality

The results are presented to the Clinical Competency Committee in a de-identified aggregate form. The Program Coordinator can produce a compliance report but cannot identify the individual evaluators in anyway. If deficiencies are found, the program should prepare a written plan of action to document initiatives to improve performance in the areas listed in section. The action plan should be reviewed and approved by the teaching faculty and documented in meeting minutes.

ACGME Competencies
The residency program must require its residents to obtain competence in the six areas listed below to the level expected of a new practitioner. Programs must define the specific knowledge, skills, behaviors, and attitudes required, and provide educational experiences as needed in order for their residents to demonstrate the following:
  o Patient care that is compassionate, appropriate, and effective for the treatment of health programs and the promotion of health;
  o Medical Knowledge about established and evolving biomedical, clinical, and cognate sciences, as well as the application of this knowledge to patience care;
  o Practice-based learning and improvement that involves the investigation and
evaluation of care for their patients, the appraisal and assimilation of scientific
evidence, and improvements in patient care;
  o Interpersonal and communication skills that result in the effective exchange of
information and collaboration with patients, their families, and other health
professionals;
  o Professionalism, as manifested through a commitment to carrying out
professional responsibilities, adherence to ethical principles, and sensitivity to
patients of diverse backgrounds;
  o **Systems-based practice**, as manifested by actions that demonstrate an
  awareness of and responsiveness to the larger context and system of health
care, as well as the ability to call effectively on other resources in the system to
provide optimal health care. (see
Fatigue Mitigation Policy

NYU School of Medicine  
Issuing Department: Graduate Medical Education  
Effective Date: 09/16/2011  
Reissue Date: 04/01/2013  
Alertness Management/Fatigue Mitigation

I. Policy

Purpose

In 2010, the Accreditation Council for Graduate Medical Education (ACGME) set new standards for House Staff Officer well-being based on recommendations made by the Institute of Medicine (IOM). One of the new standards was the need to set more specific requirements for alertness management and fatigue mitigation strategies designed to ensure continuity in both patient care and resident safety.

II. Applicability of the Policy

Applies to House Staff Officers enrolled in all NYU Hospitals Center specialty and sub-specialty training programs.

III. Definitions (if applicable)

A. GME – Office of Graduate Medical Education  
B. ACGME – Accreditation Council for Graduate Medical Education  
C. IOM- Institute of Medicine

IV. Policy

A. The GME Training Program must:

   a. Educate all faculty members and House Staff Officers to recognize the signs of fatigue and sleep deprivation
      i. At minimum, this education must be given to all faculty and house staff via the Sleep Alertness and Fatigue Education in Residency (SAFER) module.
   b. Educate all faculty members and House Staff Officers in alertness management and fatigue mitigation processes;
      ii. All House Staff officers and Program Faculty, must complete the SAFER online tutorial on Sleep Alertness and Fatigue Management.
   c. Adopt fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning, such as naps or back-up call schedules.

B. Each program must have a formal process to ensure continuity of patient care in the event that a House Staff Officer may be unable to perform his/her patient care duties. This process must be communicated to program trainees and faculty.

C. The sponsoring institution must provide adequate sleep facilities and/or safe transportation options for House Staff Officers who may be too fatigued to safely return home.
ALERTNESS MANAGEMENT/FATIGUE MITIGATION MONITORING POLICY
– Back up plan

New York University Neurosurgery Program, in compliance with the New York State Department of Health Regulations and ACGME program requirements, requires that all residents be monitored for signs of fatigue. It is the responsibility of the Program Director, site directors, and clinical service chiefs to monitor the on-call and assignment schedules of all post graduate trainees to ensure that residents are receiving ample time for rest, in compliance with NYS and ACGME duty hour regulations. Our program educates all of our faculty and residents about the signs and symptoms of fatigue and methods of fatigue mitigation to manage the potential negative effects of fatigue on patient care and learning by using the Sleep, Alertness, and Fatigue Education in Residency [SAFER] on line educational resources found on the NYU GME website
Sleep, Alertness, and Fatigue Education in Residency (SAFER).

Any post-graduate trainee who is experiencing fatigue should immediately notify his/her program of his/her state of fatigue. Likewise, when a program director, site directors, or clinical service chiefs, or chief residents determine or identify that a resident is too fatigued to perform his/her duties effectively, the program director will arrange for the resident to be temporarily relieved from all on-call and clinical duties. Adequate backup through qualified physician extenders or supervising attending physicians is always available and is utilized as needed to assure that patient care is not jeopardized by resident stress or fatigue and to ensure continuity of patient care in the event that a resident may be unable to perform his/her patient care duties. Adequate sleep facilities options are provided for fatigued residents but, in general a stressed or fatigued resident is instructed to return home (car fare is provided) and not to return until the next schedule duty period at which point they are re-evaluated. It is the responsibility of the Program Director / designee to notify the appropriate individuals of the change in the on-call and clinical assignment schedule.

As stated in the duty hours policy, all duty hours violations should be reported immediately to the site directors or the program director. If need be, they can be reported anonymously to the compliance hotlines as listed above.
Impairment Policy

NYU Hospitals Center

Issuing Department: Graduate Medical Education
Effective Date: 09/01/2013
Policy Name: Impairment Policy for Residents and Fellows

I. Summary of Policy

The Accreditation Council for Graduate Medical Education (ACGME) requires a written policy and procedure for addressing resident and fellow impairment. The procedures are designed to be fair to residents/fellows, patients under care, and the training program and are applicable to all residents/fellows in training at New York University School of Medicine (“NYU”).

All further references in this document, to residents shall include fellows.

II. Definitions

ACGME – Accreditation Council for Graduate Medical Education
CPH – Committee on Physicians’ Health of the Medical Society of the State of New York
Director – Director of Residency or Fellowship training program

GME – Office of Graduate Medical Education

NYU – New York University School of Medicine

OPMC – NYS Office of Professional Medical Conduct

House Staff Officer - a physician who is enrolled in an accredited or non-accredited NYUSoM Training Program for a clinical specialty or subspecialty this includes all Residents and Clinical Fellows.

III. Physician Impairment

If, at any time, the Director has reasonable cause to suspect that a resident’s behavior is altered because of a physical or mental impairment or the use of drugs, narcotics, or alcohol, the resident shall, at the Director’s request, submit to a physical and/or mental examination by a nurse practitioner and/or physician(s) acceptable to the NYU Hospitals Center Employee Health Service.

Reasonable cause shall include, but not be limited to:

- unsatisfactory, excessive, or deteriorating attendance record;
- unexplained absences;
- missed appointments,
- declining productivity or other unsatisfactory performance,
• accosting, striking, or assaulting an employee, patient, or visitor other than in self-defense;
• returning to work following participation in a drug or alcohol rehabilitation program or leave of absence;
• unkempt appearance, poor hygiene; trembling, slurred speech; bloodshot or bleary eyes;
• complaints or allegations of impairment by anyone interacting with the house staff officer;
• arguments, bizarre behavior;
• irritability, depression, mood swings, irresponsibility;
• poor memory, poor concentration;
• unexplained accidents or injuries to self;
• neglect of family, isolation from friends;
• DWI arrest, DUI violations, or any other arrest involving drugs or alcohol;
• financial and/or legal problems;
• unavailability by pager, phone or email;
• unexplained rounding at irregular times;
• loss of interest in professional activities, social or community affairs;
• neglect of patients, incomplete charting, or neglect of other clinical or academic responsibilities;
• inappropriate treatment or dangerous orders;
• excessive prescription writing;
• unusually high doses or wastage noted in drug logs;
• noticeable dependency on alcohol or drugs to relieve stress;
• intoxication at social events or odor of alcohol on breath while on duty; or
• any other behavior which suggests that the employee may be unfit for work or which may be reasonably attributable to the use of drugs, narcotics, or alcohol.

The Director shall, prior to making such request, consult with the NYU GME. The purpose of the examination(s) shall be to determine if the resident is free from health impairments which pose potential risk to patients or personnel or which may interfere with the performance of the resident's clinical duties. The examination shall include, but not be limited to, a breathalyzer, urinalysis, blood, and/or other similar tests to determine if drugs, narcotics, and/or alcohol are in the resident's system. Upon requesting a fitness for duty examination, the Director must explain to the house staff officer that failure to undergo such examination when requested shall be grounds for immediate suspension and/or dismissal from the training program in accordance with the provisions of Corrective Action and Disciplinary Policy Section IV.A.4, Summary Suspension, and Section IV.A.5, Dismissal.

Pending and following medical evaluation, the resident may be placed on a medical leave of absence, administratively referred for further evaluation and recommended treatment, and/or subject to disciplinary action up to and including termination of the residency in accordance with The Corrective Action and Disciplinary Policy. The Director shall consult with the NYU GME prior to any decisions regarding medical leave of absence, treatment referral or disciplinary action.

IV. Reporting
Hospitals are required to report to the New York State Office of Professional Medical Conduct (OPMC) whenever any of the following actions are taken for reasons related in any way to alleged mental or physical impairment: denial, suspension, restriction,
termination, or curtailment of, or voluntary or involuntary resignation or withdrawal from, 
training, employment, association, or professional privileges, or the denial of certification of 
completion of training.

All licensed health professionals, including physicians, are required by state law to 
report colleagues whom they suspect may be practicing while impaired. Failure to report is, 
in itself, professional misconduct. For attending physicians, the report can be made to the 
hospital’s chief medical officer, who must then inform OPMC; in the case of residents and 
fellows, the report should be made to the Program Director or the Senior Administrative 
Director for NYU GME, who must then inform OPMC.

Physicians suspected of having problems with alcohol, drugs, or mental illness, but 
whose ability to practice is not impaired, may be reported to the Committee on 
Physicians’ Health of the Medical Society of the State of New York (CPH). All calls are 
confidential. CPH identifies, refers to treatment, and monitors impaired physicians. 
The program is voluntary and participation is confidential. The names of physicians 
participating in the program are not shared 
with OPMC without a participant’s approval unless there is a failure to comply with 
treatment recommendations. A referral to CPH does not exempt physicians from 
their duty to report colleagues practicing with a suspected impairment to OPMC.

Nothing in this policy relieves the institution of its obligations to report incidents of 
possible professional misconduct under applicable laws and regulations. The results of 
drug or alcohol testing and matters related thereto shall be kept confidential except to 
the extent necessary to 
implement this policy.
Moonlighting Policy

New York University Department of Neurological Surgery Neurosurgery Residency

Moonlighting Policy

The NYU Residency Program in Neurological Surgery DOES NOT allow moonlighting under any circumstances.

I ________________________, have seen, read, and agree to abide by the moonlighting policy as outlined above.

Signed by ___________________________ Date ___________________________
PGY Level ______

Signed by ___________________________ Date ___________________________
Program Director
On-call Policy

Maximum Frequency of In-House Night Float:

NYU Department of Neurological Surgery does not participate in In-House 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”.

- Verbal inquires are made by the, site directors, and clinical service chiefs, or by The program director regarding if the At-home call was so taxing as to preclude rest or reasonable personal time for the resident. If this is the case resident is instructed to return home (car fare is provided) and not to return until the next schedule duty period at which point they are re-evaluated.

- Refer to Supervision and Escalation Policy for other considerations.

Out-rotation/Elective Policy

NYU School of Medicine
Issuing Department: Graduate Medical Education
Effective Date: 04/21/11
Reissue Date: 04/2013
Out-Elective Policy and Procedure

I. Policy Purpose

Over the course of a House Staff Officer’s post-graduate training, s/he may be permitted a program-specific number of electives. Accordingly, the Resident/Fellow may request authorization to explore a clinical or research experience not available through the New York University School of Medicine/NYU Hospitals Center system (“NYUHC”) by seeking approval for an Out-Elective.

II. Applicability of the Policy
House Staff Officer’s enrolled in ACGME-accredited specialty and sub-specialty programs

III. Definitions (if applicable)

A. ACGME – Accreditation Council for Graduate Medical Education

B. Agreement – Out-Elective Program Letter of Agreement

C. Director – NYU Director of Residency Training

D. House Staff Officer - a physician who is enrolled in an Accredited or non-Accredited

E. NYUSoM Training Program for a clinical specialty or subspecialty this includes all Residents and Clinical Fellows.

F. GME – Office of Graduate Medical Education

G. Host Institution - The site of approved clinical study undertaken outside the NYU System. A Host Institution can be a hospital, a private practice office, or any other clinical entity.

H. SOM - New York University School of Medicine

I. NYUHC - NYU Hospitals Center

J. Out-Elective - A program of study that is arranged on an individual basis and hosted by an institution that is outside the NYU System (as defined in this Section II). Out-Electives must be authorized by the NYU GME and be consistent with Residency Review Committee requirements.

K. Request – Out-Elective Request Form

L. Standing Rotation - A Standing Rotation is a required component of a residency-training program that takes place at a hospital or other setting where NYU has an institutional affiliation agreement. This policy does not pertain to Standing Rotations.

M. Supervisor – Host Institution faculty responsible for the supervision and evaluation of an NYU Resident/Fellow.

IV. Policy

The Accreditation Council for Graduate Medical Education (“ACGME”) requires that Out- Electives a) be based on a clear educational rationale; b) have clearly stated learning objectives and activities; and c) provide resources not otherwise available within the House Staff Officer’s training program. In addition, Out-Electives must be of sufficient length to ensure a quality educational experience and should provide sufficient opportunity for continuity of care. Exceptions to those requirements must be justified an approved by the Out-Elective Subcommittee of the GMEC.

Out-Electives must be selected with the advice and approval of the House Staff Officer’s NYU Director of Residency Training (“Director”), who will base his/her recommendation on the House Staff Officer’s academic standing and factors which include whether or not the Out-Elective:

- Is available within the NYUHC;
- Enriches, but not replaces, the Resident/Fellow’s core experiences;
• Enhances the residency experience; and
• Provides sufficient and appropriate supervision to the Resident/Fellow.

When House Staff Officer’s education occurs outside NYU, NYU continues to have responsibility for the quality of that educational experience and must retain authority over the House Staff Officer’s activities.

In this document, references to Resident/Fellows are limited to NYU Resident/Fellows enrolled in ACGME-accredited specialty and sub-specialty programs.

V. Procedure

A. Initial Considerations - While it is within the Director’s discretion to grant initial approval for Out-Elective study to a Resident/Fellow in his/her program, under normal circumstances acceptable justification should include affirmation that the proposed training experience is not available within NYU.

B. Additional Acceptable Justification - The Director may, however, consider requests that:

• Provide defined educational opportunities specific to the House Staff Officer’s career goals;
• Are deemed valuable to NYU; or
• Are humanitarian in nature.

C. Requirements.

1. Good Academic Standing - A House Staff Officer must be in good academic standing, as evidenced by his/her performance evaluations.

2. PGY Year. - A House Staff Officer must be a PGY-2 or higher to be eligible for an Out-Elective.

D. Compensation and Malpractice Insurance Coverage - Arrangements for the House Staff Officer’s compensation and malpractice insurance coverage during the Out-Elective must be in place (see Sections IV, Medical Licensure and Malpractice Coverage, and V, Financial Considerations, in this document).

E. Program-Specific Guidelines - The Director will establish general Out-Elective guidelines for his/her program consistent with this Out-Elective Policy and Procedure.

F. Selection of Out-Elective - A House Staff Officer interested in pursuing an Out-Elective must select an area of interest and a location for such training. The House Staff Officer then must contact the supervising attending physician at the prospective Host Institution and obtain an informal promise of commitment from him/her.

G. Completion of the Out Elective Request Form.

1. House Staff Officer’s Responsibility. The House Staff Officer must initiate the application process at NYU by completing an Out-Elective Request Form, available online at the GME Website under Policies and Procedures. The Request form must be signed and approved by the Host Institution Supervisor. The House Staff Officer must submit the completed form to his/her Director for approval and signature.

2. Director’s Responsibility. The Director must approve or deny the House Staff Officer’s Request in writing:

   a. Denial. If the Director denies the House Staff Officer’s Request, the Director will
return the form to the Resident/Fellow so indicating. A copy of the denied Request will be maintained in the House Staff Officer’s department file. The decision of the Director is final and not subject to appeal.

b. Approval. In cases where the Director approves the Request, he/she will complete the appropriate area of the form, initiate an Out-Elective Program Letter of Agreement (“Agreement”), and submit a summary statement summarizing the elective and addressing the following criteria:
   - The educational value of the experience
   - Unique value the experience provides

c. Submission. Submit all documents to the NYU Office of GME (three months prior to the scheduled out-elective). The elective will then need the approval of the Out-Elective Subcommittee of the GMEC, which meets quarterly.

d. NYU GME’ Responsibility. The NYU Office of GME will forward the completed and signed Request and Agreement to the Out-Elective Subcommittee for final execution.

H. Notification - Once the Request and Agreement are fully executed, the NYU Office of GME will notify the Director and the Resident/Fellow of the final approval in writing.

I. Recordkeeping - Copies of the approved Request and Agreement will be sent to the House Staff Officer and maintained in the files of the NYU Office of GME. The original Request and Agreement will be maintained in the Resident/Fellow’s department file.

J. Evaluation - The Director must ensure that an evaluation of the House Staff Officer’s performance is obtained from the Supervisor or his/her designee at the end of the Out-Elective. The Director or his/her designee also should meet with the Resident/Fellow at the conclusion of the Out-Elective to discuss the experience and the evaluation with him/her.

K. Continuity Experience - For those programs that have continuity requirements, continuity experience must receive priority over other responsibilities and may be interrupted only for vacations and outside rotations located at too great a distance to allow Resident/Fellows to return. Periods of interruption may not exceed the limits set by the Position Control Board.

VI. Medical Licensure and Malpractice Coverage

A. Medical Licensure - It is the responsibility of the House Staff Officer to understand and follow the applicable state licensure rules for House Staff Officer in Graduate Medical Education (“GME”) programs in the state in which s/he will be training. Many states require, at minimum, a training certificate to be issued by their state’s medical board prior to the commencement of any clinical activities; this requirement may include certain institutions within New York State.

B. Malpractice Coverage - Malpractice coverage provided to House Staff Officer by NYU is effective only within the standard clinical training program as defined within current affiliation and/or program agreements; therefore, the Resident/Fellow has the primary responsibility for ensuring that a malpractice policy, provided by either the Host Institution or by the NYU Insurance Office, is in force to cover his/her Out-Elective activities.

It is the policy of NYU School of Medicine that House Staff Officer who elect to participate in an out-elective contact the Host Facility to ensure that the Host Facility will provide professional liability insurance through a qualified professional liability insurance carrier or through self insurance to cover the Resident/Fellows as applicable in their activities at the Host Facility.
If the Host Facility elects not to cover the House Staff Officer and if the out-ele

tive is needed to complete ACGME requirements for the training program, the Resident/Fellow may request that the NYU Insurance Office authorize malpractice coverage for the out-ele

tive. The House Staff Officer will not be covered by NYU malpractice insurance during an out-ele

tive in the absence of a written malpractice insurance coverage authorization from the NYU Insurance Office.

Revised/Effective: 03/15/13
Reviewed:
N/A Supersedes:
7/18/08
Originally adopted: 09/09/03
I. Summary of Policy

The ACGME Common Program Requirements state the following with regard to professionalism in Graduate Medical Education:

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:
IV.A.5.e).(1) compassion, integrity, and respect for others;
IV.A.5.e).(2) responsiveness to patient needs that supersedes self-interest;
IV.A.5.e).(3) respect for patient privacy and autonomy;
IV.A.5.e).(4) accountability to patients, society and the profession; and,
IV.A.5.e).(5) sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

II. Policy Purpose

In addition to policies and expectations set by other organizations and institutions (such as the ACGME, AAMC, Joint Commission, and hospital policies), this policy sets the professionalism expectations of House Staff Officers and faculty in Graduate Medical Education at NYU.

III. Applicability of the Policy

This policy applies to all House Staff Officers at NYU in the department of Neurosurgery. Additionally, when applicable, this policy sets expectations for program directors and faculty.

IV. Definitions (if applicable)

A. House Staff Officer - a physician who is enrolled in an accredited or non-accredited NYUSoM Training Program for a clinical specialty or subspecialty this includes all Residents and Clinical Fellows.

V. Policy

A. Professionalism

a. Responsibilities: All House Staff Officers are expected to:
   i. Adhere to all policies of Office of GME, NYULMC, HHC, VA, and any other policies that apply to House Staff Officers or the institution/location at which they are working.

b. In the Curriculum
i. In the Common Program Requirements, the ACGME states that evaluation and teaching of professionalism “is most effective when done in the context of patient care and related activities, (e.g., conducting QI projects, leading a team, presenting M&M, reflections on practice, conversation with mentor.” Program Directors and faculty must ensure the integration of professionalism into all possible aspects of the curriculum.

ii. Programs must incorporate education about the appropriate scenarios in which a House Staff Officer should ask for help. Each program must determine appropriate escalation procedures. These escalation procedures must be provided to House Staff Officers.

iii. Programs must incorporate education about error reporting procedures for all locations at which House Staff Officers will work.

iv. House Staff Officers must be appropriately educated about retaliation, how to recognize retaliatory actions, and the appropriate methods for dealing with such.

c. Evaluations and Feedback: Evaluations must be completed, as stipulated in the ACGME requirements and the NYU Evaluation Policy for Graduate Medical Education. In addition:

i. Both the evaluator and the individual being evaluated are expected to respect diversity of opinion.

ii. House Staff Officers must be open to accepting evaluations and feedback on their performance in all areas of training, and incorporate evaluations and feedback into their practice.

d. Error Reporting, Concerns, and Complaints: House Staff Officer are at the front line of patient care, and are expected to report any errors or incidents using the appropriate methods. This practice is essential to patient care and quality improvement, and should be encouraged. In addition:

i. House Staff Officers are expected to submit any concerns or complaints as defined by the “House Staff Officer Concerns or Complaints” Policy. The appropriate mechanisms for submitting such information at each institution are available in this policy.

ii. If a situation or concern does not need to go through the formal processes listed above, House Staff Officers should approach their supervisor, the next highest ranking individual if the issue involved the supervisor, the Office of GME, and/or the Associate Dean of Graduate Medical Education.

iii. Programs are responsible for educating House Staff Officers about the error reporting methods at each hospital. Please refer to the “In the Curriculum” section of this policy.

iv. Programs must ensure that error reporting mechanisms are available to House Staff Officers at all times.

e. Quality Improvement and Patient Safety: House Staff Officers are expected to:
i. Participate in quality improvement and patient safety projects during their time of training.

ii. House Staff Officers are expected to be aware of quality improvement initiatives that are taking place at the hospitals in which they work. When possible and appropriate, House Staff Officers should actively participate in these initiatives.

iii. Programs are responsible for providing the appropriate education to House Staff Officers about institutional/hospital quality improvement initiatives.

B. Retaliation

a. In order to provide all House Staff Officers with a culture of safety, and to ensure that they feel comfortable reporting errors and providing feedback, asking for help, and reporting lapses in professionalism by colleagues, any and all retaliatory actions taken against a House Staff Officer should be escalated to his/her supervisor, or the next highest ranking individual in the event that the House Staff Officer’s supervisor is involved. Such incidents can also be reported directly to the Office of GME, and the Associate Dean of Graduate Medical Education.

C. Unprofessional Behavior and Remediation

a. Any lapses in professionalism will be handled according to the “Corrective Action and Disciplinary Policy for House Staff Officers.” There is zero tolerance policy for any unprofessional behavior both in and out of the hospital.

D. Review of Lapse in professionalism (Program Policy)

a. Any lapse in professional misconduct will be carefully reviewed as required by our Clinical Competency Committee and is part of semi-annual Milestone curriculum and review. Any correspondence or incident reports related to lapse in professional is filed by Program Administration and may be used in review of Professionalism Milestones.
Recruitment and Selection Policy
Our Standards and Requirements

Applications for NYU’s Neurosurgery Residency Training Program are processed through the National Residency Matching Program (NRMP) and the Electronic Residency Application Service (ERAS). A central application process has allowed for a streamlined approach to securing a residency position.

Written or e-mailed applications will not be considered. More information about ERAS may be obtained by visiting the AAMC website.

All requested documents will be reviewed by the Department of Neurosurgery House Staff Selection Committee, and selected candidates will be invited for an interviews and tour of our medical campus. Due to the large number of applications received each year via ERAS, not all qualified candidates can be accommodated with interviews and tours. We ask for your understanding in this regard. Interviews generally take place in the latter part of the year, from November through January.

Appointments to the neurosurgery residency program are made through the National Residency Matching Program (NRMP) and commence before July 1 of each academic year.

Qualifications and requirements for consideration include:
- MD or DO from LMC accredited Medical School
- Completion of at least USMLE Step 1
- Three letters of Recommendation not including Dean’s Letter
- Current CV and personal statement on file.
Supervision and Scope of Practice Policy (including Escalation)

Supervision of Residents
In the clinical learning environment, each patient must have an identifiable, appropriately credentialed and privileged attending physician who is ultimately responsible for that patient’s care. At Tisch Hospital it is the admitting faculty member. At Bellevue Hospital and at the Manhattan VA Medical center it is the on call faculty member/admitting faculty member or the Site Director.

This information should be available to residents, faculty members, consulting faculty and residents, the nursing staff, and patients.

Residents and faculty members must inform patients of their respective roles in each patient’s care.

Levels of Supervision
The program must demonstrate that the appropriate level of supervision is in place for all residents who care for patients. Supervision may be exercised through a variety of methods.

Some activities require the physical presence of the supervising faculty member. For many aspects of patient care, the supervising physician may be a more advanced resident or fellow. Other 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 may include post-hoc review of resident-delivered care with feedback as to the appropriateness of that care. In these instances the Clinical Competency Committee will review of care delivered or any issues that arise.

To ensure oversight of resident supervision and graded authority and responsibility, the program must use the following classification and levels of supervision:

Level 1
Direct Supervision – the supervising physician is physically present with the resident and patient.

Level 2
Indirect Supervision:

- 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.

- 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.

Level 3
Oversight – The supervising physician is available to provide review of procedures or encounters with feedback provided after care is delivered.

The program director and faculty members assign the privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident.

The program director evaluates each resident’s abilities based on the specific criteria set forth in the departments Program Goals and Rotational Responsibilities document. When available, evaluation should be guided by specific national standards-based criteria.

Faculty members functioning as supervising physicians should delegate portions of care to residents, based on the needs of the patient and the skills of the residents.

Senior residents or fellows should 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.

The program provides guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty members, such as the transfer of a patient to an intensive care unit, or end-of-life decisions (see the supervisory flow chart below).

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, PGY-1 residents should be supervised either directly or indirectly with direct supervision immediately available. For every progression in level, curriculum, performance and over technical ability are considered prior to change or revision in SOP.

Faculty supervision assignments should be 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.

The specific overview of resident supervision and graded authority and responsibility using the classifications of supervision is found in our departmental Scope of Practice document (included), which is available online on New Innovations. This document is reviewed and updated as required by institutional policy by our Clinical Competency Committee.

**Escalation Policy**

Diagram below details procedure for escalation of issues regarding supervision, grievances, work hours or any other resident concerns.
NYU Neurosurgery Clinical Supervision Chart

Chairman

Program Director

Service Chief/Site Director/Division Director*

General Faculty

Physician Extenders (PA, NP)

Chief Resident

Consultants and/or primary service faculty, fellows, and residents

Junior Residents

Interns

* = Service Chief at Tisch, Site Director at Bellevue and VA, Division Director for Peds
Transitions of Care

NYU School of Medicine
Issuing Department:
Graduate Medical Education
Effective Date: 04/2013
Reissue Date: 11/2013
Transitions of Care and Handoff Policy for House Staff Officers

I. Summary of Policy

The ACGME Common Program Requirements state:

- Programs must design clinical assignments to minimize the number of transitions of patient care.
- Sponsoring Institutions and programs must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety.
- Programs must ensure that residents are competency in communicating with team members in the hand-over process.
- The sponsoring institution must ensure the availability of schedules that inform all members of the health care team of attending physicians and residents currently responsible for each patient’s care.

The ACGME Institutional Requirements state the Sponsoring Institution must:

- facilitate professional development for core faculty members and residents/fellows regarding effective transitions of care; and, (Core)
- ensure that participating sites engage residents/fellows in standardized transitions of care consistent with the setting and type of patient care.

II. Policy Purpose

The purpose of this policy is to ensure that all House Staff Officers and Program Directors are aware of the importance of safe and effective transitions of care. This policy aims to meet the requirements of the ACGME Institutional and Common Program Requirements with respect to transitions of care.

III. Applicability of the Policy

This policy applies to all House Staff Officers in ACGME accredited training programs at NYULMC.

IV. Policy

Transitions of Care/Handoff Standards – The policies that are developed by each individual program must be sure that transitions of care occur in a standardized fashion that is customized to both service and setting. Handoffs must be accurate and up to date and should be both written and verbal and occur at a consistent time and location. Handoffs should include, at minimum, the following information/components:

a. Patient identifiers: Name, medical record number, date of birth
b. Admission information: Admitting physician, date and time of admission, resident physician, reason for admission, advance care plan
c. Patient Summary: Brief summary of hospital course if applicable, exam findings, lab results, any clinical changes since admission, including changes in level of patient care and severity of issue(s)
d. Active issues: Current diagnosis, status, condition of patient, recent events.
e. Contingency plans (“If…/…then”)
f. Family contacts
g. Discharge plans/instructions: Any discharge information given to patient, anticipated discharge information. This should include discharge instructions to other facilities or levels or care.
h. Anticipated action/changes: Expected tests or procedures.
i. Any changes in responsible attending physician and/or nurse
j. Tasks to do: Explicit list of items to be done with instructions
k. “Check for Understanding”: All transitions of care must be fortified with a “check-back” to ensure that the receiver of information correctly understands all information that has been provided.

B. Office of GME Responsibilities

a. The Sponsoring Institution must monitor programs to ensure that each program has a handoff/transitions of care policy that applies specifically to their specialty. These policies must be submitted to the Office of GME at least annually and whenever requested.

b. The Sponsoring Institution must have the appropriate mechanisms in place to allow all appropriate parties access to the schedule of physicians and House Staff Officers to allow for safe and effective transitions of care. In addition, these schedules should clearly delineate the responsible physician and/or House Staff Officer for a given patient at any time, to ensure that proper care and oversight is provided for each patient.

c. The Office of GME will monitor the entry of schedules into New Innovations to ensure that House Staff Officer and faculty schedules are entered.

d. The Office of GME will grant view-only access of these schedules to necessary parties, such as nurses who are working alongside House Staff Officers in caring for a patient.

C. Training Program Responsibilities

a. Each program just have its own policy for transitions of care/handoff (see below). These policies must address any specialty-specific tasks necessary for a safe and effective transition of care. These policies should address, but are not limited to:
   i. The accepted standard for transitions of care within the department or program
   ii. Expectations for following the Transition of Care Policy
   iii. Course of Action in the event that a House Staff Officer violates this policy
   iv. Instructions on how the program intends to educate all House Staff Officers on how to perform appropriate and safe transitions of care.
   v. The required level of supervision for transitions of care for different levels of trainees and/or patient care.

b. All schedules and call-schedules must be made available to nurses, attendings, and other House Staff Officers through New Innovations or other appropriate methods.

c. The Training program must ensure that the schedules of House Staff Officers minimizes
the number of transitions of patients to maintain patient safety and continuity of care, and also allow House Staff Officers to comply with ACGME and New York State Duty Hour regulations.

V. Related Policies (if applicable)
A. Duty Hour Policy for House Staff Officers
B. Alertness Management/Fatigue Mitigation

NEUROSURGERY PROGRAM TRANSITIONS OF CARE POLICY

In accordance with institutional policy that all programs must design clinical assignments to minimize the number of transitions in patient care, the department of Neurosurgery has adopted the follow policy for transitions of care. We acknowledge that the sponsoring institution and program must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety.

1. Our program will ensure that residents are competent in communicating with team members in the hand-over process.
2. The sponsoring institution must ensure the availability of schedules that inform all members of the health care team of attending physicians and residents currently responsible for each patient’s care.
3. Competence or adherence to this policy in monitored during every sign out to attending or chief resident supervising. Considerations are delineated and taken into consideration during formal evaluation periods or on a quarterly basis. The Clinical Competency Committee also reserves the right to review any concerns in adherence to transition of care.

All patient orders, results, medications, progress and consult notes are located in our EMR systems at the various sites and all patients must have a medication reconciliation when they are transferred between care settings or services at all of our institutions. This helps to alleviate opportunities for loss of information and continuity during transitions of care. Ultimately as is designated in our supervision policy the attending physician is responsible for the care of any individual patient. We do however recognize that transitions of care occur between house staff as the come on and off shifts in order to minimize the these effects our program encourages the following steps to minimize transitions, errors during transitions, and to maximize patient care:

Designate a quiet space where transitions of care occur. This room should:
- Include computers so residents can access medical information using the hospital EMR
- Allow for private uninterrupted discussions about each individual patient
  - At Langone Medical Center/Tisch Hospital transition of care discussions should take place in the Chiefs office or in the 12-floor conference room.
  - At Bellevue Hospital transition of care discussions should take place in the resident office in suite 7S.
  - At the VA Medical Center transition of care discussions should take place in the resident office.

Reduce interruptions during transition of care.
- The chief or senior resident on the service resident leads the transition of care process
Residents to avoid distractions caused by pagers, phone calls, and other tasks.
If an interruption occurs, residents should begin the discussion of the patient over again. Use computerized templates (route sheets/lists) for all transitions of care.

- These Electronic templates that are generated from the hospital EMR system and have pre-populate patient information, such as:
  a. Patient name
  b. Medical record number
  c. Date of birth
  d. Room number
  e. Date of admission
  f. Primary diagnosis
  g. Attending physician of record
Residents should review every patient during the transition of care.

- Verbally identify each patient
- List the major medical issues and the to-do list the covering practitioner needs to complete.
- Avoid nonstandard abbreviations.
- State all of the anticipated problems that may arise.
- The receiver should be an active listener, take notes, and should verify all of the items on the to-do list to ensure that they understood everything
- Verify that they know the contact information of the attending physician of record

Identify sick patients upfront.

- If the patient is sick or the team is particularly concerned, the giver should say that at the beginning of the patient’s transition of care
- This helps to ensure that the physician receiving the information understands the seriousness of the situation and asks the appropriate questions.
- If appropriate the team should see these patients together at the conclusion of the sign out discussions.

Explain the rationale. Expectations:

- Residents handing off patients to another physician should explain their rationale for each management plan.
- Use if-then scenarios during transitions of care.
- Focus the discussion on contingencies (e.g., if patient reacts this way, do X; if patient reacts that way, do Y)
- Give the receiving physicians a clear understanding of what they should consider doing during their shift.
- Empower givers and receivers.
- Both parties should feel comfortable enough to ask the other practitioner to slow down or elaborate

All House Staff Officers will be educated on how to perform appropriate and safe transitions of care.

- As a PGY1 – included in part of professionalism curriculum as a first year in the program, Residents will be educated on proper TOC procedures by senior residents and supervising attending’s at each site.
- They will be educated on the appropriate times of day that all handoff’s should be completed by and provided. List of patients on service should be run in the am and pm or at beginning or end of a shift.
- Service chiefs on at each site will communicate any changes to this schedule.
- Lists will evaluated based inclusion of above criteria in EMR templates. They will also evaluated based on timeliness and accuracy of information.
- It is an expectation that by competition of PGY 1 year, all trainees have learned procedures as stipulated by this policy. This is part of a trainees professionalism score.

The required level of supervision for transitions of care for different levels of trainees and/or patient care.

- All PGY 1 and junior residents will have direct supervision from service chiefs.
- Service Chiefs will report any and all issues that arise from TOC to supervising attending on service.
- The site directors, service chiefs, and program director will periodically monitor, observe and evaluate these transitions to ensure compliance with the above.
- Evaluation will also take place as part of their quarterly evaluations and as needed on the fly evaluations for a service.
Course of Action in the event that a House Staff Officer violates this policy
  o  In the event that a resident or fellow violates this policy, a written and or verbal warning will be issued by the program director to resident.
  o  Failure to provide the expected transition of care will be documented in resident file and discussed as part of semi-annual and milestone review
  o  Where a consistent problem exists, the resident or fellow will held to the Corrective and Disciplinary Action Policy included in this manual.
Terms and Conditions of Employment Policy

NYU School of Medicine
Issuing Department: Graduate Medical Education
Effective Date: 09/14/2012
Reissue Date: 03/29/2013
Terms and Conditions of Employment

I. Summary of Policy

The first condition for appointment is successful completion of the credentialing and employment processes. House Staff Officers must be able to furnish all required credential documents and be legally employable. All House Staff Officers are required to undergo and pass a drug toxicology screening, pre-employment background check, and fingerprint investigation prior to beginning work.

II. Definitions (if applicable)

A. GME – Office of Graduate Medical Education
B. CIR – Committee of Interns and Residents
C. LOA – Leave of Absence
D. NYULMC – New York University Langone Medical Center (including New York University School of Medicine, Tisch Hospital, Rusk Institute and Hospital for Joint Disease)
E. House Staff Officer – In this document, all references to House Staff Officers include trainees in specialty and subspecialty programs, whether or not ACGME-accredited.

III. Policy

A. Financial Support - The educational stipend for 2013-2014, based upon the level of postgraduate training, and subject to all applicable withholdings, is shown in the table below.

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>NYU BASE RATE (effective 1/1/11)</th>
<th>Bellevue Salary (effective 10/26/09, including meal stipend)</th>
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<tr>
<td>PGY 8</td>
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<td>$ 76,577</td>
</tr>
</tbody>
</table>
**Effective July 1, 2011**

**B. Licensure** - NYULMC policy on licensure is more restrictive than that of New York State.

A full description of the Licensure Policy can be viewed on the GME website, under the “Policies and Procedures” section.

a. For House Staff Officers in ACGME-accredited programs:

i. A valid NYS Medical License (or limited permit if not eligible for license) may be required by individual program.

ii. For all House Staff Officers entering NYU-sponsored, ACGME-approved post-graduate training programs, licensure is not required by New York State Law, because House Staff Officers fall under the “resident” exception of New York State Education Law 6526(1).

iii. A valid NYS Medical License is required for Moonlighting (refer to Moonlighting policy).

iv. This is a lengthy process and House Staff Officers are encouraged to submit their application early.

b. For House Staff Officers in Non-ACGME Accredited Programs

i. House Staff Officers in a non-ACGME accredited program MUST have a valid New York State License or a limited permit. House Staff Officers may not begin training without a license (or limited permit) and are required to maintain licensure for the entire training period.

ii. House Staff Officers may obtain a limited permit in lieu of a license if:

1. He/she does not meet citizenship requirements.

2. He/she is an American citizen who graduated from a foreign medical school but does not have three years of post-graduate training. The limited permit will be acceptable until the trainee becomes eligible for a license and the license application can be processed.

**C. USMLE Step 3** - All House Staff Officers must take USMLE Step 3 (or COMLEX-USA for DO’s) prior to beginning their final year of residency, and must provide acceptable documentation of such. This will include applicant House Staff Officers that are entering their final year in a NYU sponsored Residency Training program. Foreign National Graduates are required to take and pass USMLE Step 3 to be eligible for an H1B Visa. A full description of the Licensure Policy can be viewed on the GME website, under the “Policies and Procedures” section.

**D. Payroll/Union** - There are two separate major payroll systems: NYULMC (Tisch, VA and Hospital for Joint Diseases) and Bellevue Hospital Center. House Staff Officers are initially placed on one of the two payrolls as determined by their program and, for the sake of parity, will rotate between the Bellevue and NYULMC payrolls throughout their training period. The payroll changes occur no more frequently than at yearly intervals. When a House Staff Officer rotates between hospital payrolls, their benefits change with the rotation, but coverage is always
continuous. House Staff Officer health benefits are fully covered at all times during the payroll switch. While on Bellevue payroll, House Staff Officers are required to join the union, Committee of Interns and Residents (CIR). If you have any concerns regarding benefits coverage or any related pay issues, please feel free to discuss them during your interview or at anytime. For further information you may also contact the NYU Office of Graduate Medical Education at 212-263-5506.

E. Vacation – House Staff Officers are entitled to four weeks paid vacation per annum. Such vacation shall be taken at a time in agreement with the provisions of the vacation policy of the Residency Training Program and the annual rotation schedule. Vacation time is not accruable and will not be paid out if not taken during a given academic year.

F. Leave – House Staff Officers are entitled to medical, family, personal, and educational leaves. A full description of the Time-Off and Leave of Absence Policy can be viewed on the GME website, under the “Policies and Procedures” section. Credit toward completion of the Residency Training Program requirements, with respect to leave time, shall be determined by the program’s individual policy on the effect of taking a LOA on completion of the program.

G. Professional Liability Insurance - The House Staff Officer shall be provided with professional liability insurance coverage for the duration of training. Such coverage shall provide legal defense and protection against awards from claims reported or filed after the the scope of the Residency Training Program. Such insurance coverage does not extend to outside employment, such as moonlighting.

H. Medical and Disability Insurance - Medical and disability insurance benefits will be made available to the House Staff Officers in accordance with the medical and disability insurance employee benefits of NYULMC or Bellevue Hospital Center depending on which institution has the House Staff Officers on its payroll at the time. The medical and disability insurance benefits are described in the new employee orientation materials of each hospital.


J. Housing Information – Applications and updated housing information will be provided in the packets mailed after the Match, to each new resident and clinical fellow. Applications and information can be downloaded from http://redaf.med.nyu.edu/housing. Housing priority is given to PGY-1 and PGY-2 House Staff Officers relocating from out-of-town. However, after a random lottery, most House Staff Officers will not receive a housing offer through NYU due to limited availability. New residents not offered housing may re-apply and go on a waiting list.

All NYULMC students and staff may access the off-campus housing website http://redaf.med.nyu.edu/och. That site includes relocation information, including a link to CitiHabitats, a real estate agency which discounts its commissions for NYU affiliates. If current House Staff Officers log in with the Kerberos I.D. and password, they can access information on a lease guaranty program.

K. Meals and Laundry – Both Bellevue and NYULMC include an annual meal allowance of $2,900, included in the annual salaries stated above. Lab coats and scrubs are supplied and laundered by the hospitals for House Staff Officers.

Copy of Contract - A sample copy of the House Staff Training Program Contract and the House Staff Manual are available for review on the GME website.

L. Book and Conference Stipend Reimbursement – The Book and Conference stipends were instituted to help offset expenses incurred during the trainees Academic Year by House Staff
in relation to purchase of medical equipment or Conference presentation/attendance. The Book and Conference Policy can be found at: http://gme.med.nyu.edu/policies-procedures/policies.

M. Infection Control Requirement - Those required to complete an infection control training course are:

a. All House Staff Officers who are PGY-4 and higher

b. House Staff Officers who train at affiliated institutions which require infection control training.

N. Background Information - Several conditions must be met before a House Staff Officer can begin training:

a. Toxicology screening: This is done no more than five weeks before the start date

b. Background investigation: You must supply your social security number, driver's license (when applicable), and previous addresses for the past seven years.

c. New York State’s Child Abuse Registry (SCR): House Staff Officers who will have contact with the pediatric population must successfully clear this investigation. House Staff Officers in the following programs must complete the SCR during the hiring process:

   i. Child & Adolescent Psychiatry
   ii. Psychiatry
   iii. Psychiatry – Addiction
   iv. Psychiatry – Forensic
   v. Psychiatry – Forensic (non-ACGME)
   vi. Psychiatry – Geriatric Psychiatry
   vii. Psychiatry – Psychiatry/Neurology
   viii. Psychiatry – Psychosomatic Medicine
   ix. Psychiatry – Public Psychiatry
   x. Psychiatry – Reproductive Psychiatry – Women’s Mental Health

d. Fingerprinting: All House Staff Officers who rotate through the VA Hospital will be fingerprinted. House Staff Officers on the Bellevue Hospital payroll must be fingerprinted and a second background check is conducted by the New York City Health and Hospitals Corporation. The associated fee (currently $94.25) for fingerprinting at Bellevue Hospital will be taken out of the House Staff Officer’s first paycheck.

O. Residency Closure/Reduction. The Director will inform the House Staff Officer of any adverse accreditation actions taken by the ACGME against the House Staff Officer’s training program or of any decisions by NYU to reduce the size of or to close the training program within a reasonable period after such action is taken. In the event of a training program reduction or closure, NYU either will allow the House Staff Officer to complete his/her training at NYU or will assist the House Staff Officer in enrolling in an ACGME accredited program that will allow the House Staff Officer to continue his/her training.

Reviewed: 01/23/2014
Supersedes: 3/25/2011
Originally Adopted: 1/2/2001
Time-off and Effect of Taking LOA Policy (Institutional and Program Policy)

Summary of Policy

The New York University Langone Medical Center is committed to meaningful and enriching educational experiences for its House Staff Officers. This includes accruing any time taken off voluntarily or otherwise, adhering to strict NYULMC regulations so as not to preclude the successful completion of post-graduate medical training.

Please note: If a House Staff Officer require a Leave that totals more than 90 days in an academic year, eligibility for return to the training program will be dependent upon financial and academic position availability.

Applicability of the Policy

All NYU School of Medicine House Staff Officers, and Foreign National Physicians in ACGME and non-ACGME-accredited specialty and subspecialty training programs

Definitions (if applicable)

a. ACGME – Accreditation Council for Graduate Medical Education

b. Office of GME – Office of Graduate Medical Education

c. HHC – NYC Health and Hospitals Corporation

d. NYULMC – New York University Langone Medical Center (including New York University School of Medicine, Tisch Hospital and Hospital for Joint Disease)

e. LOA – Leave of Absence

f. Medical Disability – “serious health condition”: illness, injury or impairment that involves either: 1) inpatient care or 2) continuing treatment by a health care provider.

“Continuing treatment” includes incapacity resulting in an absence of more than 3 days. It also includes permanent or long-term illness and their treatments; incapacity or treatment for a chronic serious health condition; and multiple treatments for restorative surgery or condition that would cause incapacity of more than three days.

a. CPH – Committee for Physician Health

b. EHS – NYULMC Employee Health Services

c. HCP – Health Care Provider

d. Director – the Program Director of Residency or Fellowship Training

e. Resident: All further references in this document to residents and/or House Staff Officers shall include fellows.
A. Responsibilities

a. **Specialty Board** - Each specialty board maintains a policy specifying the maximum amount of time a House Staff Officers may be absent during each year of training; the House Staff Officers will not receive credit toward program completion for any leave period in excess of that maximum. The House Staff Officers will be required to make up excess time missed before he or she will be eligible for promotion within or completion of the program and before the specialty board will allow the House Staff Officers to take the board examination. American Board of Neurological Surgery – defers to each program to determine the effect of leave of absence on any changes to length of training program. As per RRC for neurological surgery – 84 mths of training is required for a trainee to graduate, as such we defer to these guidelines in determinations of effect of leave.

b. **Director of Residency Training** - The Director is responsible for approving, monitoring, and reporting leaves of absence in compliance with the Medical Center policy and specialty board requirements, including maintaining a record of the leave time used by each House Staff Officers each year. In addition, it is the program director's responsibility to provide the House Staff Officers with a written policy concerning the effect of leaves of absence on satisfying the criteria for completion of training. The Program Director must also issue a formal written letter to the House Staff Officer and the GME Office outlining the conditions of the LOA, expected return date, and anticipated impact on training requirements. The Director must notify the Office of GME whenever a House Staff Officers is absent from training for more than three consecutive days. A copy of all LOA records must be forwarded to the Office of GME. The Office of GME will provide a template letter explaining the terms and conditions of the LOA and the conditions for return to the program and extension of training or promotion dates. The Director must complete and sign the letter and send it to the House Staff Officer, with copies sent to Senior Director of the Office of GME.

The Program Director cannot access a House Staff Officers’ medical records or confer with the House Staff Officers’ Health Care Provider (HCP) to certify a medical condition. Certification of a medical condition can only be requested from the HCP by the department designated Leave Administrator (who must be someone other than the Program Director) the Office of GME or EHS.

The Director is discouraged from discussing details of a House Staff Officer's Leave with the HCP. If the Director is contacted by the HCP, the HCP should be encouraged to contact the designated department Leave Administrator, EHS, or the House Staff psychiatrist. The PD should maintain appropriate contact with the House Staff Officer and monitor all LOA end dates for purposes of scheduling the return to training. The PD must ensure appropriate return to work clearance documentation is submitted by the House Staff Officer or an extension is requested and documentation.

The Office of GME may not ask HCPs for additional information beyond that required by the Physician Health Certification form. HCPs are allowed, but not required, to provide a diagnosis as part of the certification.
c. **House Staff Officer** - The House Staff Officer must request time away from his or her training program at the earliest date possible to allow time for the Director to arrange coverage in the House Staff Officer's absence. The House Staff Officer must submit corroborating documentation as required or requested to receive approval for time off (whether paid or unpaid) and, where applicable, to receive authorization to return to his or her training program. The House Staff Officer is responsible for keeping the training program informed of his or her return to work status.

B. **Family Medical Leave Act of 1993 (FMLA)**\(^1\) - For more information about the FMLA, please visit: [http://www.dol.gov/whd/fmla/](http://www.dol.gov/whd/fmla/). Please also view the NYULMC Policy regarding FMLA, which is located in “Section 7: Benefits” of the Human Resources Policy and Procedure Manual.\(^2\)

i. **Basic Leave Entitlement** - A covered employer must grant an eligible employee up to a total of 12 work-weeks of unpaid leave during any 12-month period for one or more of the following reasons:

   i. For the birth and care of a newborn child of the employee within one year of birth;
   
   ii. For placement with the employee of a son or daughter for adoption or foster care, within one year of placement;
   
   iii. To care for a spouse, son, daughter, or parent with a serious health condition;
   
   iv. To take medical leave when the employee is unable to work because of a serious health condition.
   
   v. For any qualifying exigency related to the employee’s spouse, son, daughter, or parent who is a covered military member or on “covered active duty.”
   
   vi. Additional Info - Spouses employed by the same employer are limited in the amount of family leave they may take for the birth and care of a newborn child, placement of a child for adoption or foster care, or to care for a parent who has a serious health condition to a combined total of 12 weeks. Leave for birth and care, or placement for adoption or foster care, must conclude within 12 months of the birth or placement.\(^3\)

b. **Military Family Leave Entitlements** - A covered employer must grant an eligible employee up to a total of 26 work-weeks of unpaid leave for Military Caregiver Leave or 12 workweeks of unpaid leave for Qualifying Exigency Leave. Spouses employed by the same employer are limited to a combined total of 26 work-weeks in a “single 12-month period” if the leave is to care for a covered service member with a serious injury or illness.

   i. Military Caregiver Leave - A covered employer must grant an eligible employee up to a total of 26 workweeks of unpaid leave during a “single 12-month period” to care for a covered service member with a serious injury or illness.
   
   A covered service member is a current member of the Armed Forces, including a member of the National Guard or Reserve, who is undergoing medical treatment, recuperation, or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list, for a serious injury or illness.
   
   A serious injury or illness is one that was incurred by a service member in the line of duty on active duty that may render the service member medically unfit to perform the duties of his or her office, grade, rank, or
rating.

The “single 12-month period” for Military Caregiver Leave begins on the first day the employee takes leave for this reason and ends 12 months later, regardless of the 12 month period established by the employer for other types of FMLA leaves.

ii. Qualifying Exigency Leave - A covered employer must grant an eligible employee up to a total of 12 workweeks of unpaid leave (during the normal 12-month period established by the employer for FMLA leave) for qualifying exigencies for a servicemember that has been notified of an impending call or order to active duty, in support of a contingency operation.

A servicemember must be the employee’s spouse, son, daughter, or parent who is in the National Guard or Reserves. Under the terms of the statute, qualifying exigency leave does not extend to military members of the Regular Armed Forces.

C. Qualifying exigencies include:  

Issues arising from a covered military member’s short notice deployment (i.e., deployment on seven or less days of notice) for a period of up to seven days from the date of notification;

i. Military events and related activities, such as official ceremonies, programs, or events sponsored by the military or family support or assistance programs and informational briefings sponsored or promoted by the military, military service organizations, or the American Red Cross that is related to the active duty or call to active duty status of a covered military member;

ii. Certain childcare and related activities arising from the active duty or call to active duty status of a covered military member, such as arranging for alternative childcare, providing childcare on a non-routine, urgent, immediate need basis, enrolling or transferring a child in a new school or day care facility, and attending certain meetings at a school or a day care facility if they are necessary due to circumstances arising from the active duty or call to active duty of the covered military member;

iii. Making or updating financial and legal arrangements to address a covered military member’s absence;

iv. Attending counseling provided by someone other than a health care provider for oneself, the covered military member, or the child of the covered military member, the need for which arises from the active duty or call to active duty status of the covered military member;

v. Taking up to 15 days of leave to spend time with a covered military member who is on short-term temporary, rest and recuperation leave during deployment;

vi. Attending to certain post-deployment activities, including attending arrival ceremonies, reintegration briefings and events, and other official
ceremonies or programs sponsored by the military for a period of 90 days following the termination of the covered military member’s active duty status, and addressing issues arising from the death of a covered military member;

vii. Any other event that the employee and employer agree is a qualifying exigency.

Certification Requirements - Employers may require that an employee’s request for military family leave be supported by an appropriate certification. An employer may require that:

• Leave for a qualifying exigency be supported by a copy of the covered military member’s active duty orders and certification providing the appropriate facts related to the particular qualifying exigency for which leave is sought, including contact information if the leave involves meeting with a third party;

• Leave to care for a covered servicemember with a serious injury or illness be supported by a certification completed by an authorized health care provider or by a copy of an Invitational Travel Order (ITO) or Invitational Travel Authorization (ITA) issued to any member of the covered servicemember’s family.

D. Paid Time-Off Benefits
a. Adoption/Parental Leave
   i. Paid Time Off – One day per event / non-accruable (Not when on Bellevue Payroll)

   ii. Eligibility - The House Staff Officer is eligible for this benefit immediately after employment begins, with approval from his or her Director.

   iii. Additional Info - The House Staff Officer will receive his or her regular pay for one working day to adopt a child or for the birth of his or her child (Paternity Leave). See also sections IV.C. (Disability), IV.H. (Vacation), IV.B. (FMLA), and V.B. (Personal) for additional information applicable to pregnancy and new parenthood.

b. Bereavement
   iv. Immediate Family:

      1. Paid Time Off – Three days maximum per event / non-accruable

      2. Eligibility - The House Staff Officer is eligible for this benefit immediately after employment begins, with approval from his or her Director.

      3. Additional Info - The House Staff Officer will receive his or her regular pay for up to three working days in the event of the death of a parent, spouse, same gender domestic partner, child, brother, sister, mother/father-in-law (except while on Bellevue Payroll), or grandparent. The House Staff Officer must take bereavement days consecutively and within a reasonable time from the date of the death or funeral. Bereavement days may not be split or postponed.
ii. Other Relatives:
   1. Paid Time Off – One day maximum per event / non-accruable (except when on Bellevue Payroll)

   2. Eligibility - The House Staff Officer is eligible for this benefit immediately after employment begins, with approval from his or her Director.

   3. Additional Info - The House Staff Officer will receive his or her regular pay for up to one working day in the event of the death of a relative other than the relatives referenced above. The House Staff Officer must take the bereavement day within a reasonable time from the date of the relative’s death or funeral; it may not be postponed (except while on Bellevue Payroll.)

   c. Disability
      i. Paid Time Off –
      1. **NYU Payroll** - 90 days maximum of sick bank time per academic year.
      2. **Bellevue Payroll** - Medical leave is unlimited provided the House Staff Officer remains enrolled in the training program and will be granted when satisfactory documentation is provided.

      v. Eligibility - The House Staff Officer is eligible for this benefit immediately after employment begins. For the purpose of this document, a House Staff Officer is considered disabled when, due to his or her own illness, injury, pregnancy, or childbirth, the House Staff Officer’s treating physician has determined that he or she is unable to work. A Health Certification Form must document a qualified LOA. The form should complete the Physician Health Certification Form.

      vi. Additional Info – The House Staff Officer must provide medical documentation for absences in excess of three days to the Office of GME or the Director. Failure to provide medical documentation may result in denial of sick pay. Recertification from the HCP may be requested every 30 days or less. For continuous or open-ended conditions it may be requested every six months.

      House Staff Officers on NYU payroll will receive his or her regular pay for up to 90 working days in the event that he or she is certified as disabled. Any time taken due to injury or illness in excess of the 90-day allowance will be paid in accordance with the Medical Center disability benefit plan. In order to access the sick leave bank, the House Staff Officer must inform their Program Coordinator of their medical absence.

      The Program Coordinator will inform the Office of GME of the last day worked. The Office of GME will submit the Disability request forms to NYULMC Benefits Department, or provide the Program Coordinator with a copy of the Bellevue FMLA application. The House Staff Officer must submit documentation of medical necessity as requested, to NYULMC Benefits Department or Bellevue Benefits Department.
NYU will replenish the House Staff Officer's sick leave bank on July 1 of each year, or, if off cycle, upon completion of the House Staff Officer’s academic year, of which the House Staff Officer is in training at NYU.

| iv. **Maternity Leave:** A House Staff Officer who gives birth to a child is eligible for Maternity Leave. Maternity Leave is defined as a combination of:

1. **Disability Leave** — Paid sick time/disability leave for the period of time the House Staff Officer is considered disabled;

2. When possible and only if the House Staff Officer is still able to perform the essential functions of his/her program, the Department may make reasonable accommodations for a House Staff Officer’s disability. Such accommodation may include modifying the House Staff Officer’s responsibilities or schedule. The House Staff Officer must submit to her Director documentation of medical necessity in order to be paid sick time during disability leave.

3. **Family Medical Leave Act of 1993 (FMLA)** — Runs concurrent with
   i. Disability Leave, beginning the first day out;

4. **Vacation Time** — The House Staff Officer cannot forfeit future vacation time in order to “make up” missed clinical time for board eligibility. House Staff Officers can request to have up to two weeks remaining in their vacation bank after depletion of their sick time; however, approval is at the discretion of the Director.

5. **Personal Leave** — The period of time beyond the first 12 weeks of leave, beginning on the last day of work. Permission to grant leave beyond the first 12 weeks of absence from training will be at the discretion of the Director.

*See also sections IV.C.a. (Adoption/Parental Leave), IV.C.h. (Vacation), V.A. (FMLA), and IV.D.a. (Personal) for additional information applicable to pregnancy and new parenthood.*

v. **Returning from a Disability Leave** — In order to recommence training, the House Staff Officer must submit appropriate and acceptable medical clearance from the treating physician to the NYU Office of GME. If the House Staff Officer is receiving Disability pay, documentation of medical clearance should be provided to the NYULMC Benefits Department or Bellevue Benefits Department.

House Staff Officers returning from a Maternity Leave must submit to the NYU Office of GME documentation of clearance to return to work from the treating physician. The Director, the Physician Health Certification form is required, if the House Staff Officer experienced major complications during the Maternity Leave or required longer than the routine LOA.

House Staff Officers returning from a Disability Leave (other than a Maternity leave) must have their HCP complete a Physician Health Certification form, and if necessary receive clearance from the CPH. Documentation of fitness for return to
d. Educational/Conference
   i. Paid Time Off – Three days maximum per annum / non-accruable with Departmental permission.

   ii. Eligibility - The House Staff Officer is eligible for this benefit immediately after employment begins, at the discretion of the Resident’s Director.

   iii. Additional Info - Educational/conference leave is an optional benefit that is granted at the discretion of the House Staff Officer’s Director. The Director will approve or deny leave based on factors including, but not limited to, the appropriateness and value of the workshop, conference, or seminar to the House Staff Officer's assignment and responsibilities as well as Medical Center staffing needs.

e. Jury Duty
   i. Paid Time Off – 10 days maximum per event / non-accruable When on Bellevue payroll, the House Staff Officer will receive $40 for the first three days of jury duty service instead of their regular salary. After which time, if on Bellevue payroll, regular salary will be paid.

   ii. Eligibility - The House Staff Officer is eligible for this benefit immediately after employment begins, with approval from his or her Director.

   iii. Additional Info – If on NYU payroll the House Staff Officer will receive his or her regular pay for up to 10 days when summoned for jury duty. The House Staff Officer must submit the appropriate documentation to his or her Director in order to continue to receive regular pay while serving as a juror.

f. Marriage
   i. Paid Time Off – Three days maximum per event / non-accruable - Not available when on Bellevue payroll.

   ii. Eligibility – The House Staff Officer is eligible for this benefit immediately after employment begins, with approval from his or her Director.

      a. Additional Info – The House Staff Officer will receive his or her regular pay for up to three days for his or her marriage. The House Staff Officer must take marriage days consecutively and in association with the date of the event.

g. Military
   i. Paid Time Off – When on Bellevue payroll, two weeks maximum per event /
non-accrueable. See HHC Operating Procedure 20-15 and Extended Military Leave Policy.

ii. Paid Time Off – When on NYU payroll, the House Staff Officer will receive his or her regular pay for up to two weeks if he or she is called for military duty. The House Staff Officer must submit to his or her Director written documentation of notice to serve in order to be paid during this time. In cases where the House Staff Officer’s orders require him or her to be absent from training for more than two weeks, the House Staff Officer should refer to the NYU Revised Interim Policy for Military Service, effective March 15, 2002, available from the Human Resources Department, 212-404-3857

iii. eligibility – The House Staff Officer is eligible for this benefit immediately after employment begins, with approval from his or her Director.

h. Vacation

i. Paid Time Off – Four weeks per academic year / non-accrueable

ii. Eligibility – The House Staff Officer is eligible for this benefit immediately after employment begins, with approval from his or her Director.

iii. Additional Info – Subject to limitations established by the House Staff Officer’s specialty board, Residency Review Committee, and/or training program, the House Staff Officer is eligible for four weeks of vacation time per academic year. (A week is defined according to the program’s rotation schedule) The Medical Center will replenish the House Staff Officer’s vacation bank on July 1 of each year, or, if ‘off cycle’, upon the completion of the House Staff Officer academic year, of which the House Staff Officer is in training at NYU. Vacation time cannot be carried over to the following academic year; House Staff Officers will not be paid in lieu of taking vacation; and any unused vacation time will not be payable upon termination, provided the House Staff Officer has been permitted to take vacation time. The House Staff Officer cannot forfeit future vacation time in order to “make up” missed clinical time for board eligibility. NYU does not permit forfeiture of vacation without prior approval of the GME Office and documentation in writing with the consent of the resident/fellow.

| D. Unpaid Time-Off Benefits |

a. Personal Leave of Absence

i. Unpaid Time – A Personal Leave of Absence may be granted at the discretion of the Director.

ii. Eligibility – The House Staff Officer is eligible for an unpaid personal leave of absence after employment begins, with prior approval from the Director.

Additional Info – House Staff Officers will be required to use Vacation time during a Personal leave and subsequently take unpaid time. House Staff Officers can request to have up to two weeks remaining in their vacation bank; however, approval is at the discretion of the Director. In the event that the House Staff Officer exhausted his or her paid time off, this leave will be without pay. See also section III.A. (Specialty Board) for
additional relevant information.

iii. Returning from a Personal Leave – At the time a Personal Leave is granted, a written agreement must be established regarding the length of the Leave and circumstances for re-entry to the program. Re-entry into the program may include the House Staff Officers being re-credentialed by the Office of GME.

iv. Completion of Training: Completion of the Neurosurgery training program must be determined in accordance with requirements set by the American Board of Neurosurgery for board certification in neurological surgery. The ABNS currently requires 72 months for those graduating prior to June 2017, for those graduating after 84 months is requirement for graduation of ACGME-accredited Neurosurgical training. In addition, all case category requirements and/or minimums must be met in full for graduation.

v. Leave of absence beyond sick days and vacation time may be required to be made up. The amount of time to be made up will be determined on an individual basis at the discretion of the department chair, program director and neurosurgery clinical competency committee.

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**Book & Conference Fund**

**NYU School of Medicine**

*Issuing Department: Graduate Medical Education*

*Effective Date: 08/09/11*

*Reissue Date: 4/2013*

*Book and Conference Stipend Reimbursement Policy*

**I. Policy Purpose**

The Book and Conference Stipends were instituted to help offset expenses incurred during the trainees Academic Year (July 1st thru June 30th) by House Staff in relation to purchase of medical equipment or Conference presentation/attendance.

**II. Applicability of the Policy**

House Staff Officers who are assigned to an HJD, VA or Tisch Hospital pay line are eligible for one or both of these stipends. House Staff Officers assigned to a Bellevue pay line are eligible for one or both of these stipends thru CIR.

Effective July 1, 2008 House Staff Officers assigned to a State pay line will be eligible for Book Stipend reimbursement. House Staff Officers on the State line must be PGY 2 or below to be eligible for the $600.00 reimbursement.

Eligibility begins with the date training begins and the stipend amounts are non accruable. House
Staff Officers in non-ACGME programs not funded by a Hospital pay line or whose salary is 100% funded by a grant, are not eligible for these stipends.

III. Definitions

A. **ACGME** – Accreditation Council for Graduate Medical Education

B. **GME** – Office of Graduate Medical Education

C. **CIR** – Committee of Interns and Residents

D. **PEP** – CIR Professional Education Plan

E. **HHC** – Health and Hospitals Corporation

IV. Policy

**NYU LANGONE MEDICAL CENTER STIPEND:**

A. **Book Stipend** – NYU Book Stipend follows CIR established guidelines set for the PEP for eligible reimbursable expenses.

1. **Eligibility** – All House Staff Officers assigned to a HJD, VA or Tisch Hospital pay line. House Staff assigned to a State line that are PGY 2 or below.

2. **Reimbursement** – Up to $600.00 per academic year for qualified academic expenses:

   a. Medical Books
   b. Medical Audio or Video Tapes
   c. Medical Compact Discs
   d. Work-Related Medical Equipment
      i. Personal digital assistants (PDAs or "Palm Pilots") are work-related medical equipment and reimbursable.
      ii. Items that can be used only for work/medical purposes, such as the Pocket PDR®, are reimbursable.
      iii. Smartphone, BlackBerry, Treo’s and i-Phone that have available medical software are reimbursable.
      iv. Items, other than PDAs, that can be used generally, that is either for work/medical purposes, or personal/non-work purposes, such as computers, laptops, cameras, or most software, are not reimbursable.
   e. Dues for Medical Specialty Societies
   f. Subscriptions for Medical Specialty Journals
   g. Medical License Application Fees
   h. Medical License Examination Fees
   i. Specialty Board Examination Fees

B. **Conference Stipend** – NYU Conference Fund follows CIR established guidelines for HHC Conference Fund for eligible reimbursable expenses.

1. **Eligibility**
   a. All residents to be used anytime during their basic residency program.
   b. Extra Year Chief Residents who have finished their basic residency.
   c. Fellows in subspecialty training programs.
2. **Reimbursement**

   a. $1,500.00 maximum benefit during basic residency. Department will reimburse any balance of costs if and only if resident presents any original work or research at a conference or meeting.

   b. $1,500.00 maximum each year for Fellows or Extra Year Chiefs.

**BELLEVUE HOSPITAL CENTER STIPEND**

House Staff on Bellevue Hospital are part of the HHC and are eligible for the Book and Conference Fund through their membership with CIR.

**V. Procedure**

**NYU LANGONE MEDICAL CENTER REIMBURSEMENT PROCESS:**

A. **HJD, VA and Tisch, and State Hospital**

1. To apply for reimbursement, House Staff Officers should complete the NYU Hospitals Center Book & Conference Reimbursement Form. This form is to be submitted to the Program's Residency Coordinator with the corresponding original receipts. (House Staff Officer, be sure to provide your mailing address on the form.)

2. As requests are reviewed by the department, the Coordinator then enters or updates the data on the Book Stipend Tracking spreadsheet and the Book Stipend Submission template. The completed template should then be submitted via email to the applicable GME Training Program Specialist for review. Once it is approved, the GME Training Program Specialist will submit it to NYU Payroll Services mailto:FinanceServiceCenter@nyumc.org for processing.

3. Conference Reimbursement requests are reviewed by the department and the Coordinator enters the data on the NYU Medical Center - Hospital for Joint Diseases Conference Fee Travel Expense Reimbursement Form to be submitted to Accounts Payable for payment.

4. **Program Coordinators may not add individuals to the Book or Conference reimbursement roster.** Please contact the Office of GME if an individual is missing from the reimbursement roster or to check eligibility status.

5. House Staff Officers should contact the Program Coordinator with any questions.

6. **NYU Finance process for reimbursement must be followed:**

**BELLEVUE HOSPITAL CENTER STIPEND PROCESS**

1. To apply for reimbursement for the PEP or HHC Conference Fund, House Staff Officers should complete the PEP Reimbursement Form and/or the Conference Expense Reimbursement Form and submit to the CIR for processing.

   The CIR/SEIU Professional Education Plan (PEP) Reimbursement Claim Form can be found at: [http://www.cirseiu.org/pep/](http://www.cirseiu.org/pep/)
Patient Safety/Quality Improvement Resources, Expectations & Curriculum

I. Program Evaluation Committee meetings – a portion of each meeting will be designated to discuss ongoing issues with patient safety. At these meetings we will identify issues with reporting systems as well as disseminate new information regarding patient communication, safety and new modules available in the tool-box. In addition to going over milestone evaluations, we use these meetings as opportunities to discuss issues with supervision, Scope of practice, TOC and professionalism. In particular, we have highlighted potential areas where professionalism is in question and developed methods to educate our residents on these issues. We are also assessing our residents on these key areas at these meetings.

II. All residents, in collaboration with one of our faculty members will continually develop a quality improvement instrument in the form of a database that will monitor and track patient mortality and morbidity. The aim is to produce data that can be used to aide surgical decision-making and improve patient care outcomes. Residents are encouraged to participate in advanced data analysis to develop clinical research projects and publications on findings. It is our programs goal to not only improve the overall quality of our systems of care but in doing so also encourage our residents to participate in research and data gathering that will contribute to the promotion of effective and evidenced based care. In regards to reducing health care disparities, analysis of case numbers and areas of deficiency will assist in identifying areas for improvement. For example, we have recently begun an analysis of surgical morbidity in the elderly.

III. Transition of care process - is continuously being reviewed. Chair also meets with the residents during chair rounds, to discuss ongoing issues on the floors.

IV. QA committee - was established by our chair. Dr. Donato Pacione will be spearheading. They will occur on quarterly basis. GME and hospital wide initiatives will be discussed. Representation from the PD, Program Manager/coordinator and going forward a PGY4 will be provided. The QPS goals were discussed and methods to disseminate to our residents developed. Minutes are available upon request.

V. 360 evaluations - are being utilized as methods for continuous development. Each resident will complete these on a quarterly basis for not each other but themselves. Information from 360 is being incorporated into the milestone meetings and Program Manager responsible for highlighting areas of deficiency.
VI. Portfolios - will be rolled out to all residents in AY 2015. In addition to reporting scholarly activity, the program will be collecting the data from projects for its own database of ongoing projects related to quality and safety.
Clinical Competency Committee Description (CCC)/ Program Evaluation Committee Description (PEC)

Department of Neurosurgery
Clinical Competency Committee/Program Evaluation Committee

Members: Drs. Golfinos, Riina, Frempong, Wisoff, Kondziolka, Sen, Mogilner, Harter and Huang

Rotating Members: PGY7s – designated each year and NP/PA chosen by other PEC/CCC faculty members

Mission of our PEC/CCC is to uphold the educational requirement of our specialty and ensure that our trainees are mastering the skills required for independent practice. Committee will:

1. Review all RRC Program Requirements/ Expectations
2. Discuss all Program related issues including but not limited to: Evaluations and Process, curriculum, rotations, changes to program, interview process, ACGME accreditation issues/topics, and internal GME and hospital requirements for all trainees.
3. All academic affairs of department as they relate to program
   a. Review all resident evaluation data completed by faculty
   b. Prepare and ensure the reporting of Milestones evaluations
   c. Make recommendations to PD for resident progress, including promotion, remediation and dismissal.
5. Monitor and track faculty development
6. Monitor and track graduate performance (incl. ABNS certification)
7. Identification of areas to improve
8. Development of action plan
9. Review of action plan activities and documentation of results

On an annual basis the PEC will meet to review and approve the below agenda:

**Agenda for Annual Program Review Meeting**

The Annual Program Review (APR) Meeting(s) minutes should demonstrate Review and/or Documentation of at least the following items:

1. **Attendance**, including at least
   a. Program Director (AOC Recommendation)
   b. Chair and/or Division Chief (AOC Recommendation)
   c. Program Coordinator (AOC Recommendation)
d. One trainee from the program CPR V.C.1.(1) (Core)
e. Three faculty members (i.e. PEC) CPR V.C.1.a.(1) at least two program faculty members (Core)

2. Program Outcomes
   a. Trainee Performance
      i. Determined by Clinical Competence Committee and measured by milestones (This is not discussion of individual trainee performance) CPR V.C.2.a. (Core)
      ii. In-Training Examination(s)
   b. Graduate Performance CPR V.C.2.C. (Core)
      i. Board or certifying examination results
      ii. Additional qualifications/certifications by governing groups/associations
      iii. Post-graduation placement
   c. Program Quality CPR V.C.2.d. (Core)
      i. Review of program’s accreditation status (AOC Recommendation)
      ii. ACGME/RRC communications, including citations, concerns and accreditation letters (AOC Recommendation)
      iii. ACGME surveys CPR V.C.1.a.(3)d (Detail)
          1. Fellow Survey
          2. Faculty Survey
      iv. Internal program surveys CPR V.C.1.a.(3).d (Detail) & V.C.1.2.d.(1) (Detail)
          1. Fellows Evaluation of Program
          2. Faculty Evaluation of Program
      v. Scholarly activities CPR IV.B (Core)
      vi. In-Training Examination(s)

2. Program Curriculum CPR V.C.2 (Core)
3. Program Resources Inst. Req. II.B.1 &2 (Core)
4. Faculty Development Programs/Activities CPR V.C.2.b. (Core)
5. Progress on CLER initiatives Inst. Req. III.B (Core)
   a. Patient Safety
   b. Quality Improvement (including identification and narrowing of healthcare disparities)
   c. Supervision (including scope of practice)
   d. Professionalism
   e. Duty Hours and Fatigue Mitigation
   f. Transitions of care

6. Progress on previous improvement plan CPR V.C.2.e (Core)
   This should be the role of the PEC, reporting to the PD
7. New Program Improvement Plan with timeline CPR V.C.3. (Core)
   a. What will be improved and how?
   b. How will improvement be monitored and measured?
Scholarly Activity Expectations for Residents and Faculty:
I. Starting with the 2015-2016 AY all residents will need to demonstrate at least 2 publications. This can be in the form of Peer-reviewed publications, Abstracts/Presentations/Posters, or Book Chapters. Progress on this policy will be reviewed at semi-annual assessments. The CCC (Clinical Competency Committee) will also be reviewing all resident scholarly activity.

II. As part of Scholarly Activity Expectation, all residents and faculty must provide an updated CV with all scholarly activity and appropriate sections. The NIH format or NYU format are highly encouraged. Program manager will request CV on a semi-annual basis for compliance and reporting purposes.

III. Grand Round Presentations – Presenting at Grand Rounds is part of professional development. As such, as PGY 6’s and 7’s must present at least one topic of interest each year. Scheduling of this presentation must be coordinated with Program Manager. All faculty are also highly encouraged to participate in presenting at Grand Rounds on a yearly basis.

IV. Journal Club – all residents are expected to participate regularly in Journal Club. Abstracts and publications are distributed a week prior to Journal Club for review by residents. It is their responsibility to review and be prepared for discussion and Q and A. Faculty are strongly encouraged to attend all Journal Club Meetings.

V. CME offerings by Department – all residents and faculty are guaranteed registration, free of charge, to any and all CME offerings coordinated by the Department of Neurosurgery. This includes the annual Neurosurgery Symposium in December and Gamma Knife courses. Program Manager will distribute emails and schedules on a regular basis.

VI. Reporting of Scholarly Activity
Once a year, ACGME will distribute faculty and resident scholarly activity templates. Program manager will inform faculty and residents of need to provide information for template. Faculty and residents should completed template in a timely manner or at minimum provide updated CV. PMIDs for all publications should also be included. For any questions, please contact program administration.
Evaluation of the resident/fellow by the faculty (by each learning experience)
General Competency Evaluation used for every rotation for every resident. (see example below)
## RESIDENT GENERAL COMPETENCIES EVALUATION BY FACULTY

### INTERPERSONAL AND COMMUNICATION SKILLS

#### Relational

<table>
<thead>
<tr>
<th>Skill</th>
<th>Requires development</th>
<th>Obtains &amp; documents</th>
<th>Obtains with barriers</th>
<th>Quantifies complex risk/benefit</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informed consent</td>
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<td>Breaking bad news</td>
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<td>Procedural pause</td>
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<td>Advance directive</td>
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<tr>
<td>Hand offs</td>
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<td></td>
<td></td>
<td>Did not observe</td>
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<tr>
<td>Critical event management</td>
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<td></td>
<td></td>
<td></td>
<td>Did not observe</td>
</tr>
</tbody>
</table>

#### Interpersonal communications – patients and families

<table>
<thead>
<tr>
<th>Skill</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal communications – physicians &amp; healthcare workers</td>
<td></td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
</tbody>
</table>

#### Interpersonal communications – consultative role

<table>
<thead>
<tr>
<th>Skill</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicates effectively with patients and families from varied cultural and socioeconomic backgrounds</td>
<td></td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
</tbody>
</table>

#### Technology

<table>
<thead>
<tr>
<th>Skill</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

Evaluator

[Evaluator Name]
[Evaluator Status]
| Uses EMR & PACS for timely clinical reporting | Requires development | Satisfactory | Did not observe |
| Creates accurate, safe EMR orders | Requires development | Satisfactory | Did not observe |
| Completes accurate timely operative notes | Requires development | Satisfactory | Did not observe |
| Respects HIPAA protections for PII | Requires development | Satisfactory | Did not observe |

Narrative comments

Remaining Characters: 5.000

**PROFESSIONALISM**

**Compassion**

| Demonstrates caring patient interactions | Requires development | Satisfactory | Did not observe |
| Respects cultural and socioeconomic differences | Requires development | Satisfactory | Did not observe |
| Acts as a mentor, role model and safe/effective supervisor | Requires development | Satisfactory | Did not observe |

**Clinical ethics**

| Requires development | Describes principles | Identifies and manages challenges | Manages complex challenges | Did not observe |
| Puts patients' needs above self-interest | Requires development | Satisfactory | Did not observe |

**Accountability**

| Requires development | Satisfactory | Did not observe |
| Punctual for rounds and patient care duties | Requires development | Satisfactory | Did not observe |
| Manages fatigue | Requires development | Satisfactory | Did not observe |
| Appropriate attire & demeanor | Requires development | Satisfactory | Did not observe |
| Reliable and industrious | Requires development | Satisfactory | Did not observe |

| Requires development | Prioritizes daily activities | Prioritizes unanticipated events | Did not observe |
### Accountability
- Requires development
- Recognizes limits
- Assumes ownership
- Leads team
- Did not observe

### Personal Health
- Requires development
- Manages personal health
- Responds to impairment in others
- Did not observe

### Seeks and accepts criticism, strives to improve
- Requires development
- Manages personal health
- Responds to impairment in others
- Did not observe

### Narrative comments

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### Systems-Based Practice

#### Economics
- Requires development
- Identifies practice variation & costs
- Implements efficient resource use
- Implements systematic efficiency
- Did not observe

#### Systems Based Practice

- Medical errors and near misses
  - Requires development
  - Defines
  - Avoids using protocols and checklists
  - Reports, analyzes and corrects systems
  - Did not observe

- Care Coordination
  - Requires development
  - Discharge arrangements
  - Interfacility/interdisciplinary coordination
  - Improves care system
  - Did not observe

- Interdisciplinary teams
  - Requires development
  - Works effectively
  - Coordinates
  - Loads
  - Did not observe

### Narrative comments

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### Practice-Based Learning and Improvement

#### Lifelong Learning
- Knowledge
  - Requires development
  - Identifies limits/gaps
  - Sets goals and adopts activities
  - Utilizes data for systematic improvement
  - Did not observe

- Participates in team-based clinical teaching
  - Requires development
  - Informal patient and student teaching
  - Teaches colleagues in formal settings
  - Did not observe

#### Research
- Requires development
- Satisfactory
- Did not observe

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https://www.new-tenov.com/EvaluationForms/EvaluationFormsHost.as_dPLAI/LO9ao0jZXXchZmvOnastPSrplazedPSYkEH/vQwX5C7rRyn/HrzEliwz  Page 3 of 4
Evaluation for each learning experience in area of sub-specialty training
(Patient Care and Medical Knowledge)

Critical Care
## Evaluation and Work-Up

<table>
<thead>
<tr>
<th>Task</th>
<th>Requires Development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performs comprehensive history in a critically ill patient</td>
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<tr>
<td>Performs an appropriately comprehensive medical examination in a critically ill patient</td>
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</tr>
<tr>
<td>Performs an appropriately comprehensive and targeted neurological examination in a critically ill patient</td>
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<tr>
<td>Work-up of a patient with pulmonary disease or infection</td>
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<tr>
<td>Work-up of a patient with cardiac arrhythmia</td>
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<tr>
<td>Management of critically ill patient</td>
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<tr>
<td>Coma Management</td>
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<tr>
<td>Brain Death Diagnosis</td>
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<tr>
<td>Interprets diagnostic imaging for critically ill patients</td>
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<td></td>
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<tr>
<td>Work-up for neurological deterioration</td>
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</tbody>
</table>

### Narrative comments

Remaining Characters: 5,000
### PARQ

<table>
<thead>
<tr>
<th>Performs PARQ counseling for families of critically ill patients regarding ventilatory support</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Performs accurate analysis of prognosis in polytrauma patients</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

**Narrative comments**

Remaining Characters: 5,000

### TECHNICAL SKILLS

<table>
<thead>
<tr>
<th>Manages airway and performs endotracheal intubation</th>
<th>Requires development</th>
<th>Initial Airway Management</th>
<th>Endotracheal Intubation</th>
<th>Manages Difficult/Emergency Airways</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Inserts arterial and central venous catheters</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

**Narrative comments**

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### ICU MANAGEMENT

**Care plan**

<table>
<thead>
<tr>
<th>Implements appropriate, safe, disease specific EMR orders</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Communicates care plan appropriately</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

**Complications**

<table>
<thead>
<tr>
<th>Diagnoses and manages complications (e.g. hypovolemic or spinal shock, CSF leak)</th>
<th>Requires development</th>
<th>Recognizes &amp; Initiates Workup</th>
<th>Manages with Assistance</th>
<th>Manages with Supervision</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

**Narrative comments**

Remaining Characters: 5,000

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Vascular
<table>
<thead>
<tr>
<th>EVALUATION AND WORK-UP</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performs comprehensive history in a patient with vascular neurosurgical disease (e.g., ischemic or hemorrhagic stroke)</td>
<td></td>
<td></td>
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<tr>
<td>Performs an appropriately comprehensive medical examination in a patient with vascular neurosurgical disease (e.g., ischemic or hemorrhagic stroke)</td>
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<tr>
<td>Performs an appropriately comprehensive and targeted neurological examination in a patient with vascular neurosurgical disease (e.g., ischemic or hemorrhagic stroke)</td>
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<tr>
<td>Work-up of a patient with vascular neurosurgical disease (e.g., ischemic or hemorrhagic stroke, aneurysm, AVM)</td>
<td>Requires development</td>
<td>Initiates Work-up</td>
<td>Formulates Treatment Plan</td>
</tr>
<tr>
<td>Interprets CT and MR imaging for vascular neurosurgery patients</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Interprets cerebral angiograms</td>
<td></td>
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<tr>
<td>Narrative comments</td>
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PARQ

<table>
<thead>
<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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<tbody>
<tr>
<td>Performs PARQ counseling for vascular neurosurgical procedures including</td>
<td></td>
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</table>
diagnostic angiography

Performs accurate risk analysis and PARQ counseling for complex or risky procedures (e.g. surgery or endovascular therapy for AVM or aneurysm)

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<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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Narrative comments

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**TECHNICAL SKILLS**

*Can perform components of routine procedures (e.g. pterional craniotomy, diagnostic catheter angiography) competently*

<table>
<thead>
<tr>
<th>Positioning, set-up, preparation and draping</th>
<th>Observer</th>
<th>Assistant Surgeon</th>
<th>Surgeon with staff assist</th>
<th>Surgeon with staff</th>
<th>Observer</th>
<th>Did not observe</th>
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<tr>
<th>Approach</th>
<th>Observer</th>
<th>Assistant Surgeon</th>
<th>Surgeon with staff assist</th>
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<tr>
<th>Key portion</th>
<th>Observer</th>
<th>Assistant Surgeon</th>
<th>Surgeon with staff assist</th>
<th>Surgeon with staff</th>
<th>Observer</th>
<th>Did not observe</th>
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<th>Closure and transfer to recovery or critical care</th>
<th>Observer</th>
<th>Assistant Surgeon</th>
<th>Surgeon with staff assist</th>
<th>Surgeon with staff</th>
<th>Observer</th>
<th>Did not observe</th>
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*Can perform components of complex procedures (e.g. CEA, aneurysm clipping, AVM) competently*

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<th>Positioning, set-up, preparation and draping</th>
<th>Observer</th>
<th>Assistant Surgeon</th>
<th>Surgeon with staff assist</th>
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*Can perform components of advanced procedures (e.g. aneurysm coiling, AVM embolization, EC–IC bypass) competently*

<table>
<thead>
<tr>
<th>Positioning, set-up, preparation and draping</th>
<th>Observer</th>
<th>Assistant Surgeon</th>
<th>Surgeon with staff assist</th>
<th>Surgeon with staff</th>
<th>Observer</th>
<th>Did not observe</th>
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<th>Assistant Surgeon</th>
<th>Surgeon with staff assist</th>
<th>Surgeon with staff</th>
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### Narrative

**PERI-OPERATIVE CARE**

**Post-operative management plan**

<table>
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<tr>
<th></th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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<tbody>
<tr>
<td>Implements appropriate, safe, disease specific EMR orders</td>
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<tr>
<td>Communicates care plan appropriately</td>
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</table>

**Complications**

<table>
<thead>
<tr>
<th></th>
<th>Requires development</th>
<th>Recognizes &amp; Initiates Workup</th>
<th>Manages with Assistance</th>
<th>Manages with Supervision</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes and manages complications</td>
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**Narrative comments**

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**Pediatrics**
<table>
<thead>
<tr>
<th>EVALUATION AND WORK-UP</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performs comprehensive and age appropriate history in a pediatric neurosurgical patient</td>
<td></td>
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<tr>
<td>Performs an appropriately comprehensive and age appropriate medical examination in a pediatric neurosurgical patient</td>
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<tr>
<td>Performs an appropriately comprehensive, age appropriate and targeted neurological examination in a pediatric neurosurgical patient</td>
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<tr>
<td>Work-up of a pediatric patient with a neurosurgical disorder</td>
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<tr>
<td>Adapts standard treatment plans to special circumstances (e.g. previous surgery, developmental delay, coagulopathy)</td>
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<tr>
<td>Interprets diagnostic imaging for pediatric patients including age related variations</td>
<td></td>
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<tr>
<td>Evaluates CSF shunt function</td>
<td></td>
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</tr>
<tr>
<td>Recognizes and initiates notification and evaluation of non-accidental trauma</td>
<td></td>
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</tr>
<tr>
<td>Diagnoses brain death accurately in infants and children</td>
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</tbody>
</table>
# Narrative comments

**Remaining Characters: 5,000**

## PARQ

Performs PARQ counseling for pediatric patients undergoing neurosurgical procedures

<table>
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<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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<tbody>
<tr>
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Performs accurate risk analysis for complex or risky procedures

<table>
<thead>
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**Narrative comments**

**Remaining Characters: 5,000**

## TECHNICAL SKILLS

*Can perform components of routine procedures (e.g. CSF shunt, baclofen pump, Chiari decompression) competently*

<table>
<thead>
<tr>
<th>Positioning, set-up, preparation and draping</th>
<th>Observer</th>
<th>Assistant</th>
<th>Surgeon with staff</th>
<th>assist</th>
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<table>
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<th>assist</th>
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*Can perform components of complex procedures (e.g. brain tumor resection, synostosis repair, tethered cord release, ventricular endoscopy, indirect vascular bypass, craniotomy for epilepsy) competently*

<table>
<thead>
<tr>
<th>Positioning, set-up, preparation and draping</th>
<th>Observer</th>
<th>Assistant</th>
<th>Surgeon with staff</th>
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<th>Did not observe</th>
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<table>
<thead>
<tr>
<th>Closure and transfer to recovery or critical care</th>
<th>Observer</th>
<th>Assistant</th>
<th>Surgeon with staff</th>
<th>assist</th>
<th>Surgeon with staff</th>
<th>observer</th>
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</table>

Programs shunt valves and taps shunts

<table>
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<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
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<tbody>
<tr>
<td>○○</td>
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</table>
### PERI-OPERATIVE CARE

#### Post-operative management plan

<table>
<thead>
<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Implements appropriate, safe, age and disease specific EMR orders</strong></td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Communicates care plan appropriately</strong></td>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
</tbody>
</table>

#### Complications

<table>
<thead>
<tr>
<th>Requires development</th>
<th>Recognizes &amp; Initiates Workup</th>
<th>Manages with Assistance</th>
<th>Manages with Supervision</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recognizes and manages complications in pre-verbal and older children</strong> (e.g., hematoma, infection, device malfunction, acute mental status decline)</td>
<td><img src="image7.png" alt="Image" /></td>
<td><img src="image8.png" alt="Image" /></td>
<td><img src="image9.png" alt="Image" /></td>
<td><img src="image10.png" alt="Image" /></td>
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**Narrative comments**

**Remaining Characters: 5,000**

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**Spine**
### Evaluation and Work-Up

<table>
<thead>
<tr>
<th>Performs comprehensive history in a patient with a spinal disorder</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performs an appropriately comprehensive medical examination in a patient with a spinal disorder</td>
<td>Requires development</td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
<tr>
<td>Performs an appropriately comprehensive and targeted neurological examination in a patient with a spinal disorder</td>
<td>Requires development</td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
<tr>
<td>Work-up of medical comorbidities in pre-operative spinal surgery patients</td>
<td>Requires development</td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
<tr>
<td>Work-up of a patient with a degenerative spinal disorder (e.g., myeloradiculopathy, cervical and lumbar degenerative disease)</td>
<td>Requires development, Initiates Work-up</td>
<td>Formulates Treatment Plan</td>
<td>Formulates Plan for Patient with Co-morbidities</td>
</tr>
<tr>
<td>Work-up of a patient with a traumatic spinal disorder (e.g., spinal column fracture, spinal cord injury)</td>
<td>Requires development, Initiates Work-up</td>
<td>Formulates Treatment Plan</td>
<td>Formulates Plan for Patient with Co-morbidities</td>
</tr>
<tr>
<td>Work-up of a patient with a neoplastic spinal disorder (e.g., spinal column tumor)</td>
<td>Requires development, Initiates Work-up</td>
<td>Formulates Treatment Plan</td>
<td>Formulates Plan for Patient with Co-morbidities</td>
</tr>
<tr>
<td>Interprets diagnostic studies (e.g., imaging, EMG) for patients with a spinal disorder</td>
<td>Requires development</td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
<tr>
<td>Initiates management of a patient with an acute spinal cord injury</td>
<td>Requires development</td>
<td>Satisfactory</td>
<td>Did not observe</td>
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</table>
### Narrative comments

Remaining Characters: 5,000

### PARQ

Performs PARQ counseling for patients with a spinal disorder

<table>
<thead>
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<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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</thead>
<tbody>
<tr>
<td>○○</td>
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</tbody>
</table>

Performs accurate risk analysis for complex or risky procedures

<table>
<thead>
<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
</tr>
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<tbody>
<tr>
<td>○○</td>
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</tr>
</tbody>
</table>

Narrative comments

Remaining Characters: 5,000

### TECHNICAL SKILLS

Can perform components of routine procedures (e.g. lumbar or cervical laminectomy, lumbar discectomy) competently

**Positioning, set-up, preparation and draping**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
  ○○ ○○ ○○ ○○ ○○ ○○

**Approach**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
  ○○ ○○ ○○ ○○ ○○ ○○

**Key portion**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
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**Closure and transfer to recovery or critical care**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
  ○○ ○○ ○○ ○○ ○○ ○○

Can perform components of complex procedures (e.g. ACDF, posterior lumbar fusion, spinal cord tumor resection, fracture stabilization) competently

**Positioning, set-up, preparation and draping**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
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**Approach**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
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**Key portion**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
  ○○ ○○ ○○ ○○ ○○ ○○

**Closure and transfer to recovery or critical care**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
  ○○ ○○ ○○ ○○ ○○ ○○

Can perform components of advanced procedures (e.g. thoracolumbar or craniocervical reconstruction, reconstruction after infection, vertebral tumor resection) competently

**Positioning, set-up, preparation and draping**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
  ○○ ○○ ○○ ○○ ○○ ○○

**Approach**

- Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe
  
  ○○ ○○ ○○ ○○ ○○ ○○
### Key portion

<table>
<thead>
<tr>
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<th>Assistant Surgeon with staff</th>
<th>Assist Surgeon with staff observer</th>
<th>Did not observe</th>
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### Closure and transfer to recovery or critical care

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### Safely positions patients for spinal procedures

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### Performs cervical traction/reduction

<table>
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### Narrative comments

Remaining Characters: 5,000

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### PERI-OPERATIVE CARE

#### Post-operative management plan

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<th>Satisfactory</th>
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<th>Satisfactory</th>
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### Communicates care plan appropriately

#### Complications

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<th>Manages with Assistance</th>
<th>Manages with Supervision</th>
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### Narrative comments

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Tumor
## Resident Patient Care Evaluation by Faculty - Tumor

### Evaluation and Work-up

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<th>Task</th>
<th>Requires Development</th>
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</thead>
<tbody>
<tr>
<td>Performs comprehensive history in a patient with a brain or spinal cord tumor</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Performs an appropriately comprehensive medical examination in a patient with a brain or spinal cord tumor</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Performs an appropriately comprehensive and targeted neurological examination in a patient with a brain or spinal cord tumor</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Work-up of a patient with a brain or spinal cord tumor</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Adapts standard treatment plans to special circumstances (e.g., previous surgery, anticipated neurological morbidity)</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Interprets diagnostic imaging for patients with a brain or spinal cord tumor</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Work-up for neurological deterioration</td>
<td>√</td>
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### Narrative Comments

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### PARQ

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<tbody>
<tr>
<td>Performs PARQ counseling for patients with a brain or spinal cord tumor</td>
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<td>√</td>
<td>√</td>
</tr>
<tr>
<td>TECHNICAL SKILLS</td>
<td>Requires development</td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
<tr>
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</tr>
<tr>
<td>Performs accurate risk analysis for complex or risky procedures</td>
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<td></td>
</tr>
<tr>
<td>Narrative comments</td>
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<th>Did not observe</th>
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<tbody>
<tr>
<td><strong>TECHNICAL SKILLS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can perform components of <strong>routine</strong> procedures (e.g. resection of non-eloquent glioma or metastasis, stereotactic biopsy) competently</td>
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<td></td>
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<tr>
<td>Positioning, set-up, preparation and draping</td>
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<td>assist Surgeon with staff</td>
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<tr>
<td>Approach</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Key portion</td>
<td>Observer</td>
<td>Assistant Surgeon with staff</td>
<td>assist Surgeon with staff</td>
</tr>
<tr>
<td>Closure and transfer to recovery or critical care</td>
<td>Observer</td>
<td>Assistant Surgeon with staff</td>
<td>assist Surgeon with staff</td>
</tr>
<tr>
<td>Can perform components of <strong>complex</strong> procedures (e.g. resection of eloquent glioma, ventricular or posterior fossa tumor) competently</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Positioning, set-up, preparation and draping</td>
<td>Observer</td>
<td>Assistant Surgeon with staff</td>
<td>assist Surgeon with staff</td>
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<tr>
<td>Approach</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Key portion</td>
<td>Observer</td>
<td>Assistant Surgeon with staff</td>
<td>assist Surgeon with staff</td>
</tr>
<tr>
<td>Closure and transfer to recovery or critical care</td>
<td>Observer</td>
<td>Assistant Surgeon with staff</td>
<td>assist Surgeon with staff</td>
</tr>
<tr>
<td>Manages unexpected intra-operative events (sinus bleeding, cerebral edema)</td>
<td>Requires development</td>
<td></td>
<td></td>
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<tr>
<td>Narrative comments</td>
<td></td>
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<th>Did not observe</th>
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<tbody>
<tr>
<td>Post-operative management plan</td>
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<td></td>
</tr>
<tr>
<td>Implements appropriate, safe, disease specific EMR orders</td>
<td>Requires development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicates care plan appropriately</td>
<td>Requires development</td>
<td>Satisfactory</td>
<td>Did not observe</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------</td>
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</tr>
<tr>
<td>Complications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognizes and manages complications (e.g. hematoma, infection, seizure, hydrocephalus)</td>
<td>Requires development</td>
<td>Recognizes &amp; Initiates Workup</td>
<td>Manages with Assistance</td>
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<tr>
<td>Narrative comments</td>
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### RESIDENT PATIENT CARE EVALUATION BY FACULTY - TRAUMA

**EVALUATION AND WORK-UP**

<table>
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<tr>
<th>Description</th>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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<tbody>
<tr>
<td>Performs comprehensive history in a trauma patient (e.g., coma, polytrauma)</td>
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<tr>
<td>Performs an appropriately comprehensive medical examination in a trauma patient (e.g., coma, polytrauma)</td>
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<tr>
<td>Performs an appropriately comprehensive and targeted neurological examination in a trauma patient (e.g., coma, polytrauma)</td>
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<tr>
<td>Work-up of a trauma patient (e.g., coma, severe TBI)</td>
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<tr>
<td>Manages polytrauma</td>
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<tr>
<td>Adapts standard treatment plans to special circumstances (e.g., medical comorbidity, coagulopathy)</td>
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<tr>
<td>Interprets diagnostic imaging in trauma patients (e.g., coma, polytrauma)</td>
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<tr>
<td>Work-up for altered neurological examination</td>
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**Narrative comments**

**Remaining Characters: 5,000**
### PARQ

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<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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<tbody>
<tr>
<td>Performs PARQ counseling for trauma patients undergoing neurosurgical intervention</td>
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<tr>
<td>Performs accurate risk analysis for complex or risky procedures</td>
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</table>

**Narrative comments**

Remaining Characters: 5,000

### TECHNICAL SKILLS

**Can perform components of routine procedures (e.g. burr hole, craniotomy for hematoma or penetrating injury) competently**

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<th>Positioning, set-up, preparation and draping</th>
<th>Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe</th>
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<tr>
<td>Approach</td>
<td>Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe</td>
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<tr>
<td>Key portion</td>
<td>Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe</td>
</tr>
<tr>
<td>Closure and transfer to recovery or critical care</td>
<td>Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe</td>
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</tbody>
</table>

**Can perform components of complex procedures (e.g. repair of vascular injury or CSF fistula, posterior fossa hematoma) competently**

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<thead>
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<th>Positioning, set-up, preparation and draping</th>
<th>Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe</th>
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</thead>
<tbody>
<tr>
<td>Approach</td>
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</tr>
<tr>
<td>Key portion</td>
<td>Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe</td>
</tr>
<tr>
<td>Closure and transfer to recovery or critical care</td>
<td>Observer Assistant Surgeon with staff assist Surgeon with staff observer Did not observe</td>
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</table>

Selects cranial trauma patients appropriate for operative intervention

Organizes emergency surgical team, prepares for emergency cranial surgery with cervical precautions

Implements intra-cranial pressure monitoring

Requires development | Satisfactory | Did not observe |
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<tr>
<td>Places ICP Monitor</td>
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<tr>
<td>Places EVD</td>
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<td></td>
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<tr>
<td>Manages Ventricular Drainage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not observe</td>
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</tbody>
</table>
**Peri-operative Care**

### Post-operative management plan

<table>
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<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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</thead>
</table>

**Implements appropriate, safe, age and disease specific EMR orders**

<table>
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<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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</table>

**Communicates care plan appropriately**

<table>
<thead>
<tr>
<th>Requires development</th>
<th>Satisfactory</th>
<th>Did not observe</th>
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</table>

### Complications

<table>
<thead>
<tr>
<th>Requires development</th>
<th>Recognizes &amp; Initiates Workup</th>
<th>Manages with Assistance</th>
<th>Manages with Supervision</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

**Recognizes and manages complications (e.g. hematoma, seizure, sepsis, monitor drift)**

<table>
<thead>
<tr>
<th>Requires development</th>
<th>Recognizes &amp; Initiates Workup</th>
<th>Manages with Assistance</th>
<th>Manages with Supervision</th>
<th>Did not observe</th>
</tr>
</thead>
</table>

**Narrative comments**

Remaining Characters: 5,000
Exercise sound clinical judgment

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Clinical teaching skills

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Participation in conference

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Provides feedback to residents about their performance

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Ethical/moral conduct

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Relationship to nurses and peers

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Professionalism

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Role model

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Fund of knowledge

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A

Interest in teaching – ward

1 = Poor  2  3  4  5  6  7  8  9 = Excellent  N/A
Interest in teaching – OR
1 = Poor  2 =  3 =  4 =  5 =  6 =  7 =  8 =  9 = Excellent  N/A

Ability to teach
1 = Poor  2 =  3 =  4 =  5 =  6 =  7 =  8 =  9 = Excellent  N/A

Availability
1 = Poor  2 =  3 =  4 =  5 =  6 =  7 =  8 =  9 = Excellent  N/A

Interpersonal Communication
1 = Poor  2 =  3 =  4 =  5 =  6 =  7 =  8 =  9 = Excellent  N/A

Integrity
1 = Poor  2 =  3 =  4 =  5 =  6 =  7 =  8 =  9 = Excellent  N/A

Overall Evaluation
1 = Poor  2 =  3 =  4 =  5 =  6 =  7 =  8 =  9 = Excellent  N/A

What were the strengths of this faculty member’s teaching ability

Remaining Characters: 5,000

What were the weaknesses of this faculty member’s teaching ability

Remaining Characters: 5,000

What suggestions would you give this faculty member to improve his/her teaching ability

Remaining Characters: 5,000

Return to Questionnaire List

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Multiple Evaluators (peers, patient, self, etc)

(Instructions: Include samples of the evaluation)
<table>
<thead>
<tr>
<th>PROFESSIONALISM</th>
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<tbody>
<tr>
<td><strong>Compassion</strong></td>
</tr>
<tr>
<td>Demonstrates caring patient interactions</td>
</tr>
<tr>
<td>Respects cultural and socioeconomic differences</td>
</tr>
<tr>
<td>Acts as a mentor, role model and safe/effective supervisor</td>
</tr>
<tr>
<td><strong>Clinical ethics</strong></td>
</tr>
<tr>
<td>Puts patients’ needs above self-interest</td>
</tr>
<tr>
<td><strong>Accountability</strong></td>
</tr>
<tr>
<td>Punctual for rounds and patient care duties</td>
</tr>
<tr>
<td>Manages fatigue</td>
</tr>
<tr>
<td>Appropriately attires &amp; demeanor</td>
</tr>
<tr>
<td>Reliable and industrious</td>
</tr>
<tr>
<td><strong>Prioritization</strong></td>
</tr>
<tr>
<td><strong>Accountability</strong></td>
</tr>
<tr>
<td><strong>Personal health</strong></td>
</tr>
<tr>
<td>Seeks and accepts criticism, strives to improve</td>
</tr>
</tbody>
</table>
### SYSTEMS-BASED PRACTICE

**Economics**

- Requires development
- Identifies practice variation & costs
- Implements efficient resource use
- Implements systematic efficiency
- Did not observe

**Systems based practice**

- Requires development
- Defines
- Avoids using protocols and checklists
- Reports, Analyzes and corrects systems
- Did not observe

**Medical errors and near misses**

- Requires development
- Discharge arrangements
- Inter-facility/Interdisciplinary coordination
- Improves care systems
- Did not observe

**Care coordination**

- Requires development
- Discharge arrangements
- Inter-facility/Interdisciplinary coordination
- Improves care systems
- Did not observe

**Interdisciplinary teams**

- Requires development
- Works effectively
- Coordinates
- Leads
- Did not observe

### PRACTICE-BASED LEARNING AND IMPROVEMENT

**Lifelong learning**

**Knowledge**

- Requires development
- Identifies limits/gaps
- Sets goals and adopts activities
- Utilizes data for systematic improvement
- Did not observe

**Participates in team based clinical teaching**

- Requires development
- Teaches patients and students in informal settings
- Teaches colleagues in formal settings
- Did not observe

### MEDICAL KNOWLEDGE

**General attributes**

- Has strong knowledge of basic and clinical neurosciences
  - Requires development
  - Satisfactory
  - Did not observe

---

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Semi-Annual Evaluation (by the Program Director)

(Instructions: Include samples of the evaluation)
Semi Annual Eval of Resident

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

Evaluator

[Evaluator Name]
[Evaluator Status]

Collection of data, synthesis of data, clinical judgment Service
1 - Poor 2 3 4 5 6 7 8 9 - Excellent N/A

Fund of fundamental surgical basic science and clinical knowledge; application of knowledge to solution of clinical problems
1 - Poor 2 3 4 5 6 7 8 9 - Excellent N/A

CONFERENCE ATTENDANCE (%)
Spine Conference
Grand Rounds
Vascular Conference
Morbidity and Mortality

Remaining Characters: 5,000

Notes, summaries and operative reports are complete, concise and completed on time; Presentations at Morbidity and Mortality Conference demonstrate mechanism of complication and ways to prevent complications in the future.
1 - Poor 2 3 4 5 6 7 8 9 - Excellent N/A

Establishes rapport with patients and families; Communicates effectively with nurses, colleagues, consultants and other members of care team; Oral presentations are organized and succinct; Effectively teaches students and junior residents
1 - Poor 2 3 4 5 6 7 8 9 - Excellent N/A

Demonstrates initiative in caring for patients; Accepts appropriate level of responsibility; Is honest and reliable; Demonstrates empathy and compassion; Works as a member of a team; Has acceptable professional appearance
1 - Poor 2 3 4 5 6 7 8 9 - Excellent N/A

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Page 1 of 2
Summative Evaluation (by the Program Director)

Is a Narrative letter provided at the end of program and forwarded to American Board of Neurological Surgery.
August 07, 2013

American Board of Neurological Surgery
245 Amity Road, #208
Woodbridge, CT 06525

Attention: Mary Louise Spencer

RE: [Blank], M.D.

Dear Directors of the Board:

I am writing this letter as a narrative summary of [Blank], M.D.'s residency in neurological surgery at the NYU Langone Medical Center/New York University School of Medicine. [Blank] entered the neurological surgery postdoctoral training program in 2006 and began his training as an intern in the department of surgery at the New York University School of Medicine, NYU Langone Medical Center. The following year in 2007, he became a resident in the department of neurological surgery and continued until his graduation as chief resident on July 01, 2013. [Blank] performed extremely well during his training period, receiving above average/outstanding evaluations from the faculty throughout his training. During his training, he published seven peer review papers.

Following graduation, [Blank] has joined the faculty of the New York University School of Medicine, Department of Neurological Surgery.

I believe that [Blank] is qualified to practice competently and independently as a neurological surgeon, and I recommend him without reservation for the ABNS oral examination and eventual ABNS certification.

If I can be of any further assistance to the board in regard to [Blank], please do not hesitate to contact me.

Sincerely,

[Signature]

Howard A. Rilins, M.D.
Professor of Neurological Surgery, Neurology and Radiology
Vice Chairman, Clinical Affairs
Director, Neurological Surgery Residency Training Program
Department of Neurological Surgery

Department of Neurosurgery
530 First Avenue, SKY Suite 6R, New York, NY 10016 • tel 212.263.5382 • fax 212.263.8684 • howard.rilins@nyumc.org
Evaluation of the program by the resident/fellow

(Instructions: Include samples of the evaluation)

<table>
<thead>
<tr>
<th>Quality of Inpatient Teaching - Tish</th>
<th>1 = Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 = Average</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9 = Outstanding</th>
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<th>3</th>
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<th>5 = Average</th>
<th>6</th>
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<th>3</th>
<th>4</th>
<th>5 = Average</th>
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<th>7</th>
<th>8</th>
<th>9 = Outstanding</th>
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<th>5 = Average</th>
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Quality of Outpatient Clinic Teaching - VA

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A

Comments

Resident Teaching Conference

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A

Comments

Neurosurgery M&M

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A

Cerebrovascular Conference

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A

Spine Conference

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A

Neuro Tumor Board

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A

Neurosurgery Rotation: Tisch-Case Mix

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A

Neurosurgery Rotation: Tisch-Case Load

1 = Poor  2  3  4  5 = Average  6  7  8  9 = Outstanding  N/A
Evaluation of the program by the faculty

Same as program evaluation for residents. See above
Neurosurgical Residency Training

All post-graduate training described below must be acquired as a resident in a neurological surgery training program or programs accredited by the Accreditation Council for Graduate Medical Education (ACGME). It must be under the ultimate direction and control of the resident’s neurosurgery Program Director.

A. **Residents Who Began Training Prior to July 1, 2009**
   - PGY-1, Twelve months of fundamental clinical skills
     - 12 month surgical internship in an institution accredited by the ACGME, or
     - 6 months in surgical disciplines and 6 months of other clinical disciplines under the Program Director of an ACGME accredited neurosurgical residency; up to 3 months of neurosurgery and 3 months of neurology may be included.
   - Sixty months of neurosurgical residency training in ACGME accredited programs under the direction of a neurosurgical Program Director. This must consist of:
     - 36 months of core clinical neurosurgery, including 12 months as chief resident; at least 24 months must be spent in one program.
     - 3 months of clinical neurology; this may be done during the PGY-1, although that does not shorten the required length of training.
     - 21 to 24 months (depending on when neurology is done) of electives, i.e.: neuropathology, neuroradiology, research, and/or more neurosurgery, possibly in areas of special interest such as complex spine surgery, endovascular, or pediatric neurosurgery, and/or clinical and non-clinical neurosciences.

B. **Residents Who Began Training between July 1, 2009, and June 30, 2013**
   - Seventy-two months of neurosurgical residency training in ACGME accredited programs under the direction of a neurosurgical Program Director. This must consist of:
     - 42 months of core clinical neurosurgery, including 12 months as chief resident; at least 21 months must be spent in one program.
     - PGY-1 must include a minimum of 3 months of fundamental clinical skills training (critical care, trauma and other rotations as designated by the Program Director); it may include up to 6 months of neurosurgery that will count toward the 42 months required.
     - 3 months of clinical neurology taken during the first 3 years of training, preferably during the PGY-1.
     - 24 months of electives, i.e.: neuropathology, neuroradiology, research, and/or more neurosurgery, possibly in areas of special interest such as complex spine surgery, endovascular, or pediatric neurosurgery, and/or clinical and non-clinical neurosciences.

C. **Residents Who Began Training after June 30, 2013**
   - Eighty-four months of neurosurgical residency training in ACGME accredited programs under the direction of a neurosurgical Program Director. This must consist of:
     - 54 months of core clinical neurosurgery, including
       - 12 months as chief resident during the last two years of training (PGY-6 or 7); 21 months must be spent in one program.
       - 3 months of basic neuroscience (e.g., neurology, neuro-otology, neuroradiology, neuropathology) taken in the first 18 months of training.
       - 3 months of critical care relevant to neurosurgery patients taken in the first 18 months of residency.
o 6 months of structured education in general patient care (e.g.: trauma, general surgery, orthopedic surgery, otolaryngology, plastic surgery, etc.).
• 21 months must be spent in one program.
o 30 months of electives, i.e.: neuropathology, neuroradiology, research, and/or more neurosurgery, possibly in areas of special interest such as complex spine surgery, endovascular, or pediatric neurosurgery, and/or clinical and non-clinical neurosciences.
o Outside rotations of 6 to 12 months at an ACGME accredited program may be counted towards the core 54 months of neurosurgery training. The program director must request credit from the ABNS prior to the rotation.
o Credit towards the 30 months of elective time may be requested by a program director for prior educational experiences, such as a PhD degree in a relevant subject, clinical rotations other than fellowships obtained at non-ACGME accredited programs, and neurosurgical training completed outside of the U.S., particularly if the resident is certified in that country. Written requests submitted by the program director to the ABNS must contain a complete description of the experience and justification of the request.
o The Board will evaluate ACGME case log data as a measure of the breadth of resident experience at the completion of residency training.

Training of any type, including research, done in institutions outside of the parent program and its affiliated hospitals will not count toward meeting these requirements unless credit is requested in writing from the Board prospectively by the Program Director and approved in writing. As of July 1, 2013, rotations of 6 to 12 months in other ACGME accredited neurosurgical programs may be granted clinical neurosurgery credit that will count toward the required 54 months; otherwise credit is elective only. The ABNS may also grant elective credit for training in non-ACGME accredited U.S or foreign centers on an individual basis when undertaken with the advice and approval of the Program Director. Approval for training periods of less than three months will not ordinarily be granted since they are of questionable educational value.

Training devoted to neuroscience education, critical care, or other disciplines related to neurosurgery may also be acquired as a full time resident in ACGME accredited training programs (such as general and orthopedic surgery) that are in the same institution as the resident’s neurosurgery program. This training does not need the Board’s approval as long as it remains under the ultimate direction and control of the resident’s neurosurgery Program Director.

Upon petition from a resident’s Program Director, the Board may grant elective credit for training done before entering an accredited neurosurgery program if the resident had substantially more than the prerequisite training in general surgery, neurology, or the basic neurological sciences at acceptable institutions. If the training resulted in a PhD in a neuroscience field, one year of elective credit will be given. Neurosurgery residency training completed abroad, particularly if it concluded with certification in that country, may also merit retroactive elective credit if the ABNS is petitioned by the Program Director. Credit is not automatic. It must be requested by the Program Director and approved in writing by the Board.

Training by preceptorship does not fulfill these requirements. Furthermore, no credit is given for training done by fellows or other individuals not enrolled as residents tracking toward certification in ACGME accredited neurosurgery programs. Resident training cannot be obtained during repeated short intervals in a number of institutions. These provisions in no way alter the basic minimum requirements.
Leaving or Transferring from a Residency Program  Should a resident leave a training program, the Director must send a letter to the ABNS stating the credit for training in both time and category that has been successfully completed. Should the individual enter a new neurosurgery program, the new Program Director may honor that credit depending on his or her direct appraisal of the resident’s professional and educational progress. That Program Director must then write to the Board stating how much credit will be accepted.

Information on transferring residents is handled in the same manner as above. Both the original and new Program Directors must submit training information in writing to the ABNS prospectively.

Primary Examination/In Service Exam  The ABNS Primary Examination is an important step in the certification process. It is available to all residents in ACGME accredited neurosurgery programs and is designed to evaluate candidates’ knowledge and provide direction for continued learning. The ABNS prepares the 375 question online examination with the guidance of the National Board of Medical Examiners (NBME). Most questions are multiple choice covering information on the basic sciences, critical care, fundamental clinical skills, imaging, neuroanatomy, neurobiology, neurology, neuropharmacology, neurosurgery, pathology and other disciplines deemed suitable and important. It is given each year on the middle Saturday of March at most U.S. neurosurgical residencies. The ABNS and RRC require residents to pass the Examination for credit toward certification before completing training. Many Program Directors require passage before the chief year.

Neurosurgeons who completed residency training in ACGME accredited programs may take the Primary Examination as often as they wish. Individuals who entered Canadian neurosurgery programs prior to July 16, 1997 may also take it. ABNS Rules and Regulations do not allow it to be offered to fellows or medical school students, etc.

Change to policy as of October 2015

ABNS online exams are scheduled in March of every year. For all who wish to take exam for credit or not; they must notify program administration to complete your registration. All residents who have already passed by comfortable margin can take exam for credit. As a PGY 1 it is optional, however strongly encouraged to take if you plan on studying and should not be used for practice alone. If you have any questions about your requirements for taking this exam please speak to Dr. Harter or Dr. Riina.

Licensure

All residents must apply for limited permit or permanent NYS license prior to their PGY 6 year. Copy of license should be provided to Program Manage and GME House Staff Affairs Office. USMLE step 3 is required for licensure.
Fitness for Duty

I. Policy Purpose

All staff members (all NYUMC employees, including House Staff Officers and other employed medical staff members), are expected to report to work fit for duty. Individuals who report to work impaired can undermine the productivity of the Medical Center’s workforce and create a serious threat to themselves or the welfare of patients, staff, and visitors. The Medical Center, therefore, adopts the following policy and procedures to ensure that staff members are fit for duty.

II. Definitions (if applicable)

A. Fitness for Duty refers to the ability of a staff member to perform the essential functions of his or her job without an impairment that may pose a potential risk to patients, a direct threat to the safety of the individual staff member or to others in the workplace, and/or interfere with the performance of his or her duties, with or without a reasonable accommodation. There are primarily three categories of impairment associated with Fitness for Duty:

a. Impairment associated with the use or the suspicion of use of alcohol or illegal drugs;

b. Impairment associated with behavior that may pose a direct threat to the employee or to others in the workplace; and

c. Impairment caused by a medical condition, including mental health, and/or the use of medication for that condition

III. Policy

A. Suspected Alcohol and/or Illegal Drug Use

a. Procedures During Regular Business Hours for House Staff Officers: If any House Staff Officers are suspected of being impaired while at work, the program director should contact the NYU Office of GME, in accordance with the Corrective Action And Disciplinary Policy For House Staff Officers. The Office of GME will refer the House Staff Officer to the NYUMC Employee Health Service (EHS). The EHS clinician shall examine the individual to determine if he or she is working under the influence of alcohol and/or an illegal drug. The exam may include, but not necessarily be limited to, toxicology testing of blood or other body fluids. House Staff Officers who refuse to undergo such examination may be suspended and/or dismissed from the training program in accordance with the Corrective Action And Disciplinary Policy For House Staff Officers.

After the EHS evaluation the House Staff member will be placed on paid medical Leave of Absence ("LOA"), in accordance with the Corrective Action And Disciplinary Policy For House Staff
Officer, pending the results of the evaluation for alcohol or substance abuse. As part of this process, the House Staff Officer will be evaluated by a physician designated by the Institution. After proper evaluation and consultation with the House Staff member and the Office of GME, the designated physician may refer the individual to the Committee for Physician Health of the New York Medical Society (CPH) or another medical provider. The House Staff Officer may be asked to complete consents for release of relevant information to applicable parties such as the designated physician, EHS, and the Office of GME. Staff unwilling to comply with the treatment recommendations of the designated physician will be reported to the Office of GME and the House Staff Officer will be subject to disciplinary action as defined in the Corrective Action And Disciplinary Policy For House Staff Officers.

b. Procedures During Non-Business Hours For House Staff Officers - If a House Staff Officer requires assessment during hours when EHS is closed, he/she should be accompanied by their respective department leadership to the Emergency Department of NYU Hospitals Center or Bellevue for an assessment. Refusal to participate in the evaluation for alcohol or substance abuse will be deemed an admission of usage and may subject the individual to suspension and/or dismissal. If the individual is immediately assessed as unable to work, he/she will be released from work pending the results of the evaluation. The department leadership individual who accompanied the House Staff Officer to the ER should notify EHS and Office of GME of the incident to ensure proper collaboration and follow-up utilizing procedures as described above.

c. Procedures During Regular Business Hours For All Other Staff - Staff members who report to work appearing to be under the influence of alcohol and/or illegal drugs will not be allowed to work. Employee Relations should be consulted and the employee immediately referred to the EHS. The EHS clinician shall evaluate the individual to determine if he or she is working under the influence of alcohol and/or an illegal drug. Evaluation may include, but not necessarily be limited to, toxicology testing of blood or other body fluids. Refusal to participate in the toxicology screening will be deemed an admission of usage and the staff member will be immediately suspended, pending further investigation, and will be subject additional disciplinary action up to and including termination.

At the time of the EHS evaluation, the individual will be released from work (without pay) pending the results of the evaluation for alcohol or substance abuse. EHS will notify the appropriate department leadership and Employee Relations of the decision to remove the individual from the workplace. As part of this process and after proper evaluation and consultation with the staff member, the Clinical Director of Employee Health Service may refer the individual to another provider or the organization’s Faculty and Staff Assistance Program (FASAP) provider, which will provide assessment and referral for treatment and case management. The staff member may be asked to complete consents for release of relevant information to applicable parties such as EHS, and the Employee Relations Department. Staff unwilling to comply with the treatment recommendations will be reported and may be discharged from employment.

d. Procedures During Non-Business Hours For All Other Staff - If a staff member requires assessment during hours when EHS is closed, he/she should be accompanied by their respective department leadership to the NYU Hospitals Center Emergency Department for an assessment. Refusal to participate in the evaluation for alcohol or substance abuse will be deemed an admission of usage and the staff member will be subject to suspension and/or termination. If the individual is immediately assessed as unable to work, he/she will be released from work pending the results of the evaluation. The staff member’s department leadership should notify EHS and Employee Relations of the incident to ensure proper collaboration and follow-up utilizing procedures as described above.

B. Impairment Associated with Behavior that Poses a Direct Threat to Safety in the Workplace

a. Procedures For House Staff Officers - House Staff Officers who exhibit inappropriate or unusual behavior presenting a direct threat to themselves or others in the workplace will be
referred to the designated physician for evaluation. If the designated physician determines that the individual’s behavior poses a direct threat to his or her health and safety, or to the health and safety of others in the workplace, he/she may be referred to EHS for testing, to CPH, or to another medical provider for further assessment; such evaluations will become part of the individual’s confidential health record. The NYU Medical Center Security Department should be contacted as necessary for assistance in handling any House Staff Officers posing such a threat to health or safety. For House Staff Officers exhibiting behavior that is an imminent threat to health and safety in the workplace, and if inappropriate or unusual behavior occurs during hours when the designated physician is unavailable, department leadership shall escort the House Staff Officer to the NYU Hospitals Center or Bellevue Emergency Department for an assessment. If the individual is immediately assessed as unable to work, he/she will be released from work pending the results of the evaluation. The House Staff Officer’s department leadership should also notify EHS and the Office of GME of the incident to ensure proper collaboration and follow-up utilizing procedures as described above. The NYU Medical Center Security Department should be contacted as necessary for assistance in handling any staff members posing such a threat to health or safety.

b. Procedures For All Other Staff - Staff members who exhibit inappropriate or unusual behavior presenting a direct threat to themselves or others in the workplace will be referred to EHS for evaluation. If EHS determines that the individual’s behavior poses a direct threat to his or her health and safety, or to the health and safety of others in the workplace, he/she shall be referred by EHS to the FASAP (1-800-833-8707) for further assessment. Such evaluations will become part of the individual’s confidential health record. The NYU Medical Center Security Department should be contacted as necessary for assistance in handling any staff members posing such a threat to health or safety. For staff exhibiting behavior that is an imminent threat to health and safety in the workplace, and if inappropriate or unusual behavior occurs during hours when EHS is closed, department leadership shall escort the staff member to the NYU Hospitals Center Emergency Department for an assessment. If the individual is immediately assessed as unable to work, he/she will be released from work pending the results of the evaluation. The staff member’s department leadership should notify EHS and Employee Relations of the incident to ensure proper collaboration and follow-up utilizing procedures as described above. The NYU Medical Center Security Department should be contacted as necessary for assistance in handling any staff members posing such a threat to health or safety.

C. Impairment Caused by a Medical Condition, Including Mental Health - A staff member may be asked to submit to a medical examination or some other form of disability-related inquiry when the department leadership has a reasonable belief, that the individual’s ability to perform the essential functions of his or her job is impaired by a medical condition, including mental health and/or the use of medication for that condition. The results of the medical examination and/or psychiatric evaluation will become part of the staff member’s confidential health record.

a. Procedures for House Staff Officers - Department leadership must contact the Office of GME for guidance prior to making a disability-related inquiry or requiring a physical examination or psychiatric evaluation. The Office of GME will review each request for a medical examination or to make a disability-related inquiry on a case-by-case basis. A referral to the designated physician or CPH may be appropriate for evaluation of House Staff Officers, who may be impaired due to a mental health condition and/or the use of medication for that condition.

b. Procedures for All Other Staff - Department leadership must contact Employee Relations for guidance prior to making a disability-related inquiry or requiring a physical examination or psychiatric evaluation. Employee Relations will review each request for a medical examination or to make a disability-related inquiry on a case-by-case basis. A referral to FASAP (1-800-833-8707) may be appropriate for evaluation of staff members, who may be impaired due to a mental health condition and/or the use of medication for
that condition

D. Fitness to Return to Work

a. Procedures for House Staff Officers - CPH or an individual treating physician will advise the designated physician and the Office of GME when the House Staff Officer being monitored has been deemed able to return to work with or without a reasonable accommodation. If accommodation is requested, the Employee Relations office should be involved. The individual will be required to provide documentation of the clearance to return to work from the treating facility/physician or CPH. If the House Staff Officer was on a temporary leave due to treatment for alcohol or illegal drug abuse, that individual will be required to provide documentation to the designated physician showing either completion of treatment and/or ongoing treatment, depending on the circumstances of the leave. The designated physician will review and verify the source of all fitness for duty documentation submitted by the House Staff Officer. The designated physician will then consult with the individual’s Program Director and the Office of GME regarding the individual’s ability to return to work to perform the essential functions of his or her job with or without a reasonable accommodation. For those clearances involving the treatment for alcohol or drug abuse, the House Staff Officer may be required to submit to random alcohol and/or drug toxicology screening following their return to work, which will be performed at an appropriate facility with the recommendation of the designated physician. In addition, the individual’s compliance with their treatment program will be monitored until treatment is completed.

b. Procedures for Other Staff - FASAP or an individual treating physician will advise EHS and Employee Relations when the staff member being monitored has been deemed able to return to work with or without a reasonable accommodation. If accommodation is requested, the Employee Relations office should be involved. The individual will be required to provide documentation of the clearance to return to work from the treating facility/physician or FASAP. If the staff member was on a temporary leave due to treatment for alcohol or illegal drug abuse, that individual will be required to provide documentation to EHS showing either completion of treatment and/or ongoing treatment, depending on the circumstances of the leave. The EHS clinician will review and verify the source of all fitness for duty documentation submitted by the staff member. The EHS clinician will then consult with the individual’s department leadership and the Employee Relations representative regarding the individual’s ability to return to work to perform the essential functions of his or her job with or without a reasonable accommodation.

E. Assistance Agencies:

a. Faculty and Staff Assistance Program (FASAP), provided by Corporate Counseling Associates 1-800-833-8707 (24/7).

b. Committee for Physician Health 1-800-338-1833.
Mandated Online modules for House Staff
*(Subject to change if additional modules are required by the institutions)*

<table>
<thead>
<tr>
<th>Module Name</th>
<th>Location</th>
<th>Audience</th>
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<tbody>
<tr>
<td>Sleep Alertness and Fatigue Education in Residency (SAFER)</td>
<td>iDevelop</td>
<td>ALL House Staff</td>
</tr>
<tr>
<td>House Staff Orientation Module</td>
<td>iDevelop</td>
<td>ALL house staff. Level 1 Checklist item for incoming house staff.</td>
</tr>
<tr>
<td>NYU Compliance: Code of Conduct</td>
<td>iDevelop</td>
<td>ALL house staff. Level 1 Checklist item for incoming house staff.</td>
</tr>
<tr>
<td>NYU Compliance: HIPAA</td>
<td>iDevelop</td>
<td>ALL house staff. Must be completed annually.</td>
</tr>
<tr>
<td>Bellevue: HIPAA</td>
<td>BH PeopleSoft</td>
<td>ALL house staff. Must be completed annually.</td>
</tr>
<tr>
<td>NYU Compliance: Professional Compliance</td>
<td>iDevelop</td>
<td>ALL house staff. Level 1 Checklist item for incoming house staff.</td>
</tr>
<tr>
<td>NYU Compliance: Effective Compliance</td>
<td>iDevelop</td>
<td>ALL house staff. Must be completed annually.</td>
</tr>
<tr>
<td>Surgery Team Training (5 Module Series)</td>
<td>iDevelop</td>
<td>For all surgical house staff</td>
</tr>
<tr>
<td>Emergency Management: Intro to Emergency Management</td>
<td>iDevelop</td>
<td>ALL house staff. Must be completed annually.</td>
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<td>Emergency Management: Med Sled</td>
<td>iDevelop</td>
<td>ALL house staff. Must be completed annually.</td>
</tr>
<tr>
<td>Emergency Management: EHHS Fire &amp; Emergency Procedures</td>
<td>iDevelop</td>
<td>ALL house staff. Must be completed annually.</td>
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</tbody>
</table>
NYULMC Medical Library

Visit the NYU Medical Library on atNYULMC under Popular Links.
http://central.nyumc.org/shared/lib/Pages/Home.aspx
On Call Rooms

GENERAL INFORMATION

Apartments 1A and 2G (rooms 2G2 & 2G3) are used for temporary overnight lodging for House Staff and Physical Medicine and Rehab personnel. Apartment 1A is an individual studio apartment. Apartment 2G is a three-bedroom suite. Each room within the 2G apartment is identified with “1”, “2” or “3” on the door.

Room 1A – For House Staff personnel lodging ONLY.

Room 2G-1 -- For Physical Medicine and Rehab personnel lodging ONLY.

Room 2G-2 – For House Staff personnel lodging ONLY.

Room 2G-3 – For House Staff personnel lodging ONLY.

Physical Med & Rehab administrative staff will monitor key issuance, tracking and control for their personnel using 2G1. Security does not have a role or responsibility in this.

The keys for rooms 1A, and 2G-2 and 2G-3 will be dispensed by Greenberg Hall Security staff. Keys are tracked and monitored by the Graduate Medical Educational (GME) office.

KEYS

There are three rings located at the Greenberg Security Desk (Post 22). The aluminum plate will state either “APT 1A”, “APT 2G – 2” or “APT 2G – 3”. For “APT 2G – 2” and “APT 2G – 3”, the key ring will have two keys. One key will be to enter the apartment; the other key is for the room. Gender will not play a role in how the keys are distributed.

PROCEDURE

There will be a listing of authorized house staff in a binder at the GBH security desk, which is updated monthly. The keys will be issued on a first-come, first-served basis. The intent is for one-night stays under normal circumstances. Security will not monitor length of stays.

DO NOT LEAVE ANY PATIENT INFORMATION OR PERSONAL ITEMS BEHIND WHEN YOU LEAVE THE ROOM FOR THE NIGHT/DAY.

The procedure is as follows:

• A House Staff member will request a key to the apartment from the security officer in the Greenberg Hall Lobby.

• The security officer will inspect the member’s valid ID badge and cross reference it against the House Staff list provided by the GME office. The badge must state “House Staff”. “Visiting House Staff” are not authorized to use these rooms.

• Once validated, a line entry will be completed in the On-Call House Staff Lodging Record form; the key will then be issued.

• Weekdays at noon-time (1200 hrs) Monday-Friday, the GBH security officer will place a call to the GME office (212-263-5506) stating the status of the two sets of keys. The office is closed weekends/holidays.
• If a key has not been returned, the GME office will be responsible to contact the House Staff member(s) to retrieve/obtain outstanding keys.

• If a key is not available when a House Staff member desires a room, the security officer will advise the requestor that the room(s) are taken / not available and have them contact the GME office if there is an urgent need for use of the room.

• If there are any problems during the shift, the security officer will contact a security supervisor at 212.263.5120 (24 hours).

ADDITIONAL ON-CALL ROOMS AVAILABLE -

Additional Residency Info

Lab coats and scrubs:

Lab coats- ordered via an outside vendor. Please contact Allison George-Lucas ext. 3-6416 in Bellevue office for sizing and for placing an order.

Scrubs – Bellevue provides scrubs for all residents. The Scrub room is located on level C room W16. You can contact India Johnson for application for scrub cards at 212-562-4079

Pagers and Cell phones:

Cell phones- The primary means of communication is cell phone. You will be asked to provide this upon beginning of the program. The institution does offer discounts if phones are purchased via the NYU computer store.

Pagers – Long-range pagers are provided by the institution upon becoming an intern. Distributed the first week of residency. They are property of the Telecommunications office. Any issues related to the pagers should be directed to telecom or MCIT.

Email:
Only NYUMC email will be allowed for official hospital and residency business. The MCIT department upon arrival provides email addresses. Your Kerberos ID is your login for most all NYUMC applications. Any issues with email or Kerberos ID should be directed to MCIT support desk ext 3-6868 or by placing a request online at http://servicecatalog.nyumc.org/sc/login.asp

Call Rooms:
Resident calls rooms at all three institutions are available for all night calls. Residents are responsible for maintaining rooms in an orderly fashion. All residents will be provided with a code and/or key for all call rooms.
Committee Participation for House Staff

House Staff are encouraged to participate in various committees (listed below).

**House Staff Leadership Committee**

The House Staff Leadership Committee has been newly formed by merging the Combined House Staff Committee and the House Staff Council to serve as a forum for the house staff to consolidate and voice their concerns. The committee also serves a new role as a meeting for house staff to present program activity in each of the CLER focus areas. It is a meaningful forum for house staff to interact with one another and hospital leadership in a structured way, and within the context of NAS/CLER. The members have an important role in providing feedback from programs in terms of progress, and reporting problems and new ideas. A member will also Report to the Medical Board for BH and TH. House Staff members are peer-selected residents from each core program who are voted in and appointed by the Chair of the House Staff Leadership Committee. Additional House Staff representatives may attend committee meetings as non-voting members; provide information, advice and feedback.

The Committee meets quarterly with hospital leadership and members of the GMEEC.

New members are elected annually. Please be in touch with your Program Director, Coordinator, or Chiefs if you are interested in participating!

**House Staff Patient Safety Council**

The House Staff Patient Safety Council at the NYU School of Medicine was established in June 2012. Dr. Michael Wajda (Anesthesiology Residency Program Director, Vice Chairman of Education and Associate Professor of Anesthesiology) is the Council's faculty advisor. The House Staff Patient Safety Council is comprised of house staff who are committed to quality improvement and patient safety throughout the institution. The hospital administration and GME Office are very interested in having residents directly engaged in patient safety and quality improvement activities, and are all fully supportive of our Council. Four executive leaders are elected by fellow house staff at a HSC meeting in the beginning of the year.

New members are elected annually. Please be in touch with your Program Director, Coordinator, or Chiefs if you are interested in joining the council!
**Additional Important Information (ID’s, Linen)**

(Information on pagers, lab coats & scrubs and Institution ID Badges is included below. Please add any other information that you feel is important for your House Staff.)

**Identification Badges**

There are at least three IDs that House Staff will need and potentially more, depending on the sites at which you will be working. The three are: NYULMC, Bellevue and the VA (Manhattan). Your program will help you determine if any additional ID badges are needed.

**NYULMC ID badges**

NYU Langone Medical Center policy requires all employees to wear an identification badge while on Medical Center property.

Identification badges are distributed by the NYULMC Security Office.

**Location:**

550 First Avenue, Room 182
Medical Science Building (MSB) – follow the yellow pathway

**Phone:**

212-263-5038

**Bellevue ID badges**

If you will be working at Bellevue Hospital, you MUST obtain a Bellevue ID badges. To do so, you may go to the Bellevue Hospital Police Office.

**Location:**

462 First Avenue, Room GD-17
Monday-Friday: 7:00am – 5:00pm
Closed: Noon-1:00pm

**Phone:**

212-562-2345

**Veterans Affairs Medical Center (Manhattan Campus) ID badge**

Obtaining of this ID badge requires the completion of appropriate security forms which vary depending upon your access requirements. These may include a Special Agency Check (electronic fingerprint scanning) and National Agreement Check & Inquiry.

**MCIT Telecommunications**

As an NYULMC Resident/Fellow, you will be assigned a personal long-range alpha/text pager capable of being activated via telephone, email or SMS text. Your personal pager will accompany you throughout your training years at NYULMC.
If you have questions about your pager please contact the Telecommunications Department.

Location: Greenberg Hall, 545 First Avenue
         Level SC-1, Room 129

Hours: Monday-Friday: 9:00am – 5:00pm

Phone: 212-263-1120

**Linen Services**

Long white coats and scrubs are available to all members of the House Staff via machines located on the floors. You can retrieve your scrub code for these machines at the Linen Services Room. You must present your NYULMC ID badge when picking up or exchanging your linens.

Location: 550 First Avenue, 4th floor, Room 401 (across from the A elevator)

Hours: Monday-Friday: 6:30am – 4:00pm
       Closed: 10:00am – 11:30am for inventory

Phone: 646-754-6209 (outside hospital)
       Extension 73134 (inside hospital)

Machine Locations: Tisch Hospital: Floors 2, 5, 8 & 11
                   HCC: Floors 2 & 14
Useful Links & Resources

(Instructions: Information has been populated below. Feel free to add any additional links/resources that may be helpful to your House Staff)

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<thead>
<tr>
<th>Department</th>
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<tr>
<td>NYU Benefits</td>
<td>212-404-3787</td>
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<tr>
<td>NYU Payroll</td>
<td>212-404-4200</td>
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<td>NYU Employee Health</td>
<td>212-263-5020</td>
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<td>NYU Security</td>
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<td>NYU MCIT</td>
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<td>NYU Linens</td>
<td>646-754-6209</td>
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<tr>
<td>NYU Telecommunications</td>
<td>212-263-1120</td>
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<tr>
<td>NYU Malpractice</td>
<td>646-501-3047</td>
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<td>Bellevue HR</td>
<td>212-562-6283</td>
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<td>Bellevue Payroll</td>
<td>212-562-4406</td>
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<td>Bellevue Benefits</td>
<td>212-562-8218</td>
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<td>Bellevue Clinical Systems</td>
<td>212-562-4797</td>
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<td>Bellevue Security</td>
<td>212-562-2345</td>
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<tr>
<td>CIR (Union)</td>
<td>212-356-8100</td>
</tr>
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</table>

ACGME:
http://www.acgme.org/acgmeweb/

ACGME Webinars:

New York Medical License:
http://www.op.nysed.gov/prof/med/medlic.htm