Objectives for the Subspecialty Rotation in Neuroanesthesia:

Knowledge	Tool	Criteria
1.of anatomy and physiology of the brain and cerebral circulation.	a. Verbal evaluation by supervisor. b. Exam.	a. To the satisfaction of the supervisor. b. Score of >70%
2. of pathology and pathophysiology of brain and spinal cord, including space occupying lesions (SOL). Neurologic evaluation including Glasgow coma scale	a. Verbal evaluation by supervisor. b. Exam.	a. To the satisfaction of the supervising attending. b. Score of >70%.
3. of positioning for neurosurgery, positioning trauma, and anesthetic concerns.	a. Verbal evaluation by supervisor. b. Checklist evaluation	a. To the satisfaction of the supervising attending. b. Score of >90%.
4. of physiology cerebral blood flow, CMRO2, pharmacokinetics and pharmacodynamics of anesthetic agents.	a. Verbal evaluation by supervisor. b. Exam.	a. Mandatory attendance at rotation lectures b. Score >70%
5. of neurological monitoring and anesthetic concerns.	a. Verbal evaluation by supervisor. b. Exam	a. To the satisfaction of the supervising attending. b. Score >70%
6. of acute spinal cord injuries	a. Verbal evaluation by supervisor in PBLD format. b. Exam	a. To the satisfaction of the supervising attending. b. Score >70%
7. of TIVA and drugs used in deliberate hypotension.	a. Verbal evaluation by supervisor. b. Exam.	a. To the satisfaction of the supervising attending. b. Score >70%
8. Neuroradiologic interevention	Chart stimulated recall oral exam	Satisfactory rating or greater
9. of cerebrovascular disease (cerebral aneurysm and AVM) and Hunt's classification	a. Verbal evaluation by supervisor. b. Exam.	a. To the satisfaction of the supervising attending. b. Score of >70%.

Patient Care	Tool	Criteria
1-performs pre-anesthesia / analgesia evaluation at least 30 min prior to arrival of patient to the OR and has knowledge of patient's position.	a. Chart stimulated recall b. Evaluation of live performance	a. To the satisfaction of supervising attending b. Achieves target time >90% of cases

2-formulates an analgesic / anesthetic plan for both non-emergent and emergent care, which can be updated as the patient condition changes periodically	Presentation to supervising attending	Ten cases to the satisfaction
3-performs minimum of ten anesthetics for elective and emergent craniotomies; two in neuroradiology suite; five spinal surgery cases; and five patients in prone position.	Recorded in resident's electronic log.	Achievement of targeted case requirements
4-performs a minimum of five timely and effective arterial catheterizations; five cases for TIVA.	a. Global evaluation of live performance b. Recorded in resident's electronic log	a. Achievement of 15 minutes in 78% of case by last week of rotation
5-performs all post operative evaluations unless on the weekend wherein responsibly hands out the postop cards to the on call team.	a. Recorded in resident's electronic log. b. Chart review	Collection of the postop cards by the supervisor with >90 % performance
6- anticipates the postoperative analgesic needs of the neurosurgical patient with timely awakening of comfortable patient with appropriate immediate postoperative management	a. Random daily chart reviews by the supervising attending b. Evaluation of live performance	a. Eight charts with >90% accuracy charting orders and follow-up

Professionalism	Tool	Criteria
Understands the special needs and concerns of patients in the setting of a major trauma center which may include lack of available preop history; drug addicted and/or alcoholic; and/or a comatose patient.	Evaluation of live performance by supervising attending	To satisfaction of supervising attending, utilizing criteria set forth in the Handbook for Neuroanesthesia Rotation