



### Delineation of Privileges Department of Neurosurgery

Name: \_\_\_\_\_  
Please print or type

## LEVEL I CORE PRIVILEGES

- Requested (Applicant)                       Recommended approval (Service Chief/Chair)

### Minimum Training and Experience

M.D. or D.O. required. Training in Neurological Surgery including one-year Surgery internship and five years of Neurosurgery (36months of clinical Neurosurgery, 3 months of Neurology, experience in Neuroradiology, Neuropathology, and other allied neurosciences) is required for staff membership. The candidate for staff membership must also have passed Part I of the American Board of Neurological Surgery and/or equivalent certifying body. Because of the minimum practice required before examination and certification by the American Board of Neurological Surgery, the applicant must be either certified or tracking towards certification at the time of appointment.

**Reappointment:** The applicant must demonstrate that he/she has maintained competence during the two-year reappointment cycle with the performance of a minimum of 100 neurosurgical procedures during the reappointment cycle unless specifically approved by the Department Chair and with a letter stating this exception provided to ECCA.

### Scope of Practice/Privileges

Neurological Surgery is a discipline of medicine and the surgical specialty that provides the operative and non-operative management (i.e.; prevention, diagnosis, evaluation, treatment, critical care, and rehabilitation) of disorders of the central, peripheral, and autonomic nervous systems, including their supporting structures and vascular supply. Evaluation and treatment of pathological processes which modify functions or activity of the nervous system and the management of pain is also under the purview of the Neurosurgeon.

By training and experience, neurosurgeons are expected to perform difficult procedures that involve the nervous system as it interacts with the integumentary and musculoskeletal systems, skull, spinal column and spinal cord. They treat congenital and acquired anomalies; extracranial vascular disease; neurotrauma, tumors, intracranial and intraspinal infections; pain, movement, affective and seizure disorders

**Privileges also include the following representative list, but it is not intended to be all-encompassing, but rather to reflect the categories/types of patient problems included in the description of privileges.**

- Admission, evaluation, consultation, diagnosis, treatment, and pre-, intra-, and postoperative neurosurgical treatment to patients of all ages with illnesses, injuries, and disorders of the central and peripheral nervous system, including the supporting structures and the vascular supply.
- Adult hydrocephalus
- Aneurysms

- Angiography
- Anterior cervical disc excision and fusion
- Benign and malignant skull base tumors, including but not limited to: -acoustic neuroma; -chordoma; -epidermoid; -glomus jugulare; -meningioma
- Biopsies: -brain, (open or by needle); -muscle; -nerve
- Blood supply to brain, meninges, and skull; management of
- Brachial plexus - lesions/trauma/compression/tumors/surgery
- Brain abscess
- Brain injury
- Brain tumors – benign and malignant, to include, but not limited to: -astrocytoma; -ependymoma; -glioblastoma; -oligodendroglioma; -meningioma
- Cerebrovascular occlusion
- Cerebrovascular stroke
- Chiari malformations
- Cisternal puncture
- Coma
- Congenital anomalies of the brain and spinal cord
- Cranial and spinal nerves, disorders of, throughout their distribution
- Cranial burr holes
- Cranial nerve compression syndrome, surgery for
- Cranial reconstruction
- Cranial trauma/critical care
- Cranioplasty
- Craniotomy for: -abscess; -aneurysm; -arteriovenous malformation; -trauma; -tumor; -vascular malformations; -verified neoplasms
- Degenerative disorders
- Depressed skull fracture, elevation of
- Epilepsy surgery
- Extracranial carotid and vertebral artery surgery
- Extracranial vascular reconstruction
- Halo, application of
- Hemispherectomies, for seizure control
- Hydrocephalus shunts

- Hypopituitarism
- Implantation of neuro stimulators and intrathecal delivery systems
- Intervertebral disc disease
- Intra- and extra-cranial neurovascular disease
- Intrathecal pump placement/revision/adjustment
- Intracranial hemorrhage
- Intracranial pressure monitor, insertion of
- Kyphoplasty
- Laminectomy
- Meningitis
- Metastatic tumors
- Movement disorders
- Myelography
- Myelomeningocele, repair
- Neoplasms, verified
- Neuroendoscopy
- Pain management, including surgery
- Pediatric neurosurgery
- Percutaneous cordotomy
- Peripheral nerve disorders/injury/tumors; compression, surgery
- Pituitary tumors, including: -endocrine-inactive pituitary adenomas; -hormonally active pituitary adenomas
- Pneumoencephalography
- Radiosurgery – Linac or Gamma Knife in conjunction with Radiation Oncology
- Scoliosis, including surgery
- Seizures including status epilepticus
- Skeletal traction, application of
- Skull base surgery
- Skull lesions including synostosis; benign or malignant tumors; fibrous dysplasia; calcified cephalohematoma/surgery
- Spasticity management, including surgery
- Spinal cord, meninges, and vertebral column, disorders of

- Spinal disorders to include, but not limited to: -abnormalities of intervertebral discs; -abnormalities of nerve roots; -abnormalities of spinal column; -abnormalities of spinal cord/adjacent structures
- Spinal fusions
- Spinal instrumentation for trauma/other spinal disorders, complex
- Spine and spinal cord injury
- Stereotactic/functional neurosurgery
- Subdural taps
- Syringomyelia
- Thoracoscopy for nerve root compression or sympathectomy
- Tracheostomy
- Transoral spine procedures
- Transsphenoidal surgery
- Traumatic brain injury; neurocritical conditions
- Ventricular taps
- Ventriculography
- Ventriculoperitoneal shunt/taps/reprogramming
- Ventriculostomy

## LEVEL II

### ENDOVASCULAR NEUROSURGERY

- Requested (Applicant)                       Recommended approval (Service Chief/Chair)

#### Minimum Training and Experience

All Faculty: Candidates for Level II Endovascular Neurosurgery privileges must have Level I minimum training and experience, and must meet qualifications or be on track to become certified by the American Board of Neurological Surgery (apply within 3 years and obtain certificate within 5 years of completion of training). Candidates for endovascular privileges must also complete the Neurointerventional Endovascular Surgery Fellowship Training Program requirements set forth by the Joint Section of Cerebrovascular Surgery and the American Society of Interventional and Therapeutic Neuroradiology. Due to the length and elective time available in the Neurosurgery Residency, some residents may be able to complete the endovascular training criteria within the confines of the Neurosurgery Residency by enrolling the endovascular training requirements. Must complete 100 diagnostic and/or therapeutic vascular procedures as primary operator and 25 diagnostic and therapeutic carotid artery stenting procedures including cerebral angiography as primary operator.

**FPPE: The first 5 carotid stenting procedures will be proctored by a physician with carotid stenting privileges.**

**Reappointment:** The applicant must demonstrate that he/she has maintained competence during the two-year reappointment cycle with the performance of a minimum of 50 interventional procedures per year of which 25 must be therapeutic interventions. American Journal of Neuroradiology (AJNR) 21:1153-1159, June/July 2000.

### **Scope of Practice/Privileges**

**Neuroradiologic angiography** involves catheterization and injection of contrast into arteries and veins and interpretation of the studies. (This excludes Coronary Angiography)

**Endovascular Neurosurgery** (a.k.a. Neurointerventional Radiology) uses percutaneous radiological techniques for endovascular treatment of neurological disease. Such procedures include, but are not limited to,  
1) Placement of implantable devices (such as detachable coils, balloons, filters, and intracranial or extracranial stents);  
2) Vascular closure devices (such as occlusive balloons, glue and other occlusion matters/devices);  
3) Vascular recanalization techniques (such as chemical/mechanical thrombolysis and balloon angioplasty)  
4) Cerebral vascular malformations (AVMs and cavernous malformations)

Privileges include outpatient, admitting, and inpatient care.

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## **NEUROSURGICAL CRITICAL CARE**

- Requested (Applicant)**                       **Recommended approval (Service Chief/Chair)**

### **Minimum Training and Experience**

All Faculty: Neurosurgical Intensive Care privileges require an M.D. or D.O. with residency training in neurosurgery or neurology. Applicants must be board certified or be board-eligible (with planned completion within two years) in his/her respective field. Applicants from specialties other than Neurosurgery require additional fellowship training in neurosurgical critical care or neurocritical care board certification (or eligibility). Such neurocritical care fellowship training must normally include at least 10 months of training experience in a disease specific neurological critical care unit, and at least 2 months in a medical or surgical critical care unit. The neurointensivist applicant must demonstrate adequate training to complete credentialing in each of the procedures designated within the scope of practice.

**Focused Professional Practice Evaluation (FPPE):** Prospective case review of 10 diagnostic plans and treatment plans; concurrent proctoring for 10 central venous catheter placements and 10 diagnostic bronchoscopies.

**Reappointment:** The applicant must demonstrate maintenance of competency during the two-year reappointment cycle. The neurointensivist must have cared for a minimum of 100 neurocritical care patients during the reappointment cycle.

### **Scope of Practice/Privileges**

**Neurosurgical Critical Care** is a vital component of neurosurgical practice. Neurosurgeons and Neurocritical Care Specialists ("Neurointensivists") provide intensive care to critically ill patients with neurosurgical diseases. Neurointensivists are subspecialty-trained practitioners skilled in the diagnosis and treatment of disorders of the central, peripheral, and autonomic nervous system. Neurointensivists provide multisystem intensive care for neurosurgical and neurological patients in critical medical condition. Practitioners in this field are able to manage cardiovascular disturbances, respiratory failure (including ventilator management), infectious diseases, renal dysfunction, and metabolic, endocrine, and gastrointestinal disorders. Neurointensivists are able to provide supportive perioperative and postoperative clinical evaluation and management to neurosurgery and interventional neuroradiology patients.

Along with critical care management skills, the neurointensivist will have procedural competency in:

- placement of arterial and venous access
- pulmonary artery catheterization
- direct laryngoscopic evaluation and endotracheal intubation
- percutaneous tracheostomy

- thoracentesis and abdominal paracentesis
- chest tube placement
- administration of vasoactive or sedating substances
- lumbar puncture
- placement of lumbar drains
- CSF sampling from shunts or external ventricular drains
- conscious sedation (Requires separate application)
- EEG interpretation
- management and interpretation of ICP and CPP data
- administration of thrombolytics
- external ventricular drain management
- application and management of hypothermia
- bronchoscopy

## EDUCATION PRIVILEGES

### Neurocritical Care Medicine: Basic (Practicing Specialist gaining additional training)

#### Minimum Training and Experience:

A practicing clinician entering the Department of Neurosurgery's Neurocritical Care program at the University of Michigan must have either M.D. or D.O. degree, and have successfully completed residency training in neurosurgery, neurology, internal medicine, anesthesiology, emergency medicine, surgery, pediatric or equivalent certification by the Royal College of Physicians and surgeons of Canada, with age appropriate limitations on physicians with residency training in Medicine or Pediatrics. The physician will be gaining additional training in the field of Neurocritical Care Medicine.

#### Scope of Practice/Privileges:

Within the critical care environment, these clinicians are receiving additional training and therefore are supervised by BC/BE Neurocritical Care Specialists for neurocritical care related activities including admission, work up, diagnosis, progress notes, specialized neurocritical care procedures, consultation, and evaluation & management.

Within the critical care environment, these clinicians may independently perform procedures and provision of non-surgical treatment that would typically be administered for general medical problems, within the scope of their training.

**Focused Professional Practice Evaluation (FPPE):** Due to varied training backgrounds, each new faculty in the Neurocritical Care program will have a minimum of 3 proctored procedures for each independent privilege to be performed.

Independent privileges include the following:

Arterial line placement  
 Central line placement  
 Abdominal paracentesis  
 Thoracentesis  
 Soft tissue and joint aspiration  
 General lumbar puncture  
 Suture of minor lacerations

Requested (Applicant)

Recommended approval (Service Chief/Chair)

**SPECIAL PRIVILEGES**

A separate application is required to apply or reapply for the following Special Privileges:

- Chemotherapy for Non-Oncologists (MC-IP1027E Chemotherapy Authorizing Provider)
- Fluoroscopy (RADI-10100 Fluoroscopy Privileging)
- Hyperbaric Oxygen Therapy (<http://www.med.umich.edu/i/oca/mss/hbot.htm>)
- Laser (OPER-1011 Laser Privileging)
- Robotics (RADI-10102 Privileges for Use of the Robotic Surgical Platform)
- Sedation Analgesia (ANES-28048 Moderate Sedation, ANES-20023 Deep Sedation)

Applications can be found in [MLearning](#) for all these privileges with the exception of Hyperbaric Oxygen Therapy. Please go to [MLearning](#) to access and complete the associated learning module and privileging form. Please contact Medical Staff Services at (734) 647-6865 with any questions.

**TO BE COMPLETED BY APPLICANT:**

I meet the previously stated criteria and request that my application be considered for the privileges as outlined above. I authorize and release from liability, any hospital, licensing board, certification board, individual or institution who in good faith and without malice, provides necessary information for the verification of my professional credentials for membership to the Medical Staff of The University of Michigan Health System.

Applicant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**DEPARTMENT ACTION**

Approval: \_\_\_\_\_ As Requested \_\_\_\_\_ As Modified

Explain any modifications:  
\_\_\_\_\_

I have reviewed and/or discussed the privileges requested and find them to be commensurate with his/her training and experience, and recommend that his/her application proceed.

Justification for approval is based on careful review of the applicant’s education, postgraduate clinical training, demonstrated clinical proficiency and Board Certification or qualifications to sit for the Boards.

Department Chair: \_\_\_\_\_ Date: \_\_\_\_\_

Service Chief: \_\_\_\_\_ Date: \_\_\_\_\_

**CREDENTIALS COMMITTEE ACTION:**

\_\_\_\_\_ Approval as Requested \_\_\_\_\_ Not Approved (please explain) \_\_\_\_\_

Credentials Committee Member: \_\_\_\_\_ Date: \_\_\_\_\_

**EXECUTIVE COMMITTEE ON CLINICAL AFFAIRS ACTION:**

\_\_\_\_\_ Approval as Requested \_\_\_\_\_ Not Approved (please explain) \_\_\_\_\_

Executive Committee on Clinical Affairs – Member: \_\_\_\_\_ Date: \_\_\_\_\_