#### **Application for Subspecialty Certificate**

(for a subspecialty new to the Boards Community)

Upon completion, please forward this application for a new or modified subspecialty certificate to Richard Hawkins, MD, ABMS President and Chief Executive Officer, in care of David B. Swanson, PhD, at dswanson@abms.org. If you need any assistance with the completion of this application, please contact Paul Lawlor, Manager, Program Review and services, at plawlor@abms.org.

#### **Sponsoring Boards**

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Addenda included at end of application describe specialty-specific modifications (as applicable).

#### 1. Provide the name of the proposed new or modified subspecialty certification:

#### Neurocritical Care

#### 2. State the purpose of the proposed new or modified subspecialty certification in one paragraph or less:

The medical subspecialty of Neurocritical Care is devoted to the comprehensive multisystem care of the critically ill patient with neurological diseases/conditions. Like other intensivists, the neurointensivist usually assumes the primary care role for his or her patients in the intensive care unit. In order to do so, a neurointensivist must acquire the knowledge and skills to manage both the neurological and critical care aspects of care. The neurointensivist acts to harmonize the care of patients by taking responsibility for various integrated elements of ICU care that might otherwise be provided by multiple subspecialists. The ultimate goal of neurocritical care is to provide optimal care to a unique patient population that simultaneously requires synergistic expert management of acute nervous system and critical care aspects of care. The published literature indicates that our patients are best served when cared for by physicians with sub-specialized training that addresses both these areas. It is not the intent of this subspecialty to prevent physicians from other specialties, including neurosurgery, anesthesia, and emergency medicine, from caring for their patients in intensive care units who have neurologic conditions even if those units are staffed by neurointensivists. In fact it is critical and expected that practioners of this subspecialty fully engage the specialists or subspecialists caring for their patients in intensive care units who have neurological conditions and collaborate with them in the best interests of the patients even those units staffed by neurointensivists. This is particularly true of patients with neurological diseases who have undergone surgical procedures or who may need surgical procedures.

3. Document the professional and scientific status of this special field by addressing (a) through (e) below.

3a. In the space provided, please describe how the existence of a body of scientific medical knowledge underlying the proposed new or modified subspecialty area is in large part distinct from, or more detailed than, that of other areas in which certification is offered:

Specialty training in the neurosciences addresses a broad and rapidly expanding body of knowledge. With the growth of diagnostic and therapeutic options in the clinical neurosciences it became clear that additional subspecialty training was required to master them. In recent years, subspecialty certification in Neurology has been established in Brain Injury Medicine, Clinical Neurophysiology, Endovascular Surgical Neuroradiology, Epilepsy, Neurodevelopmental Disabilities, Neuromuscular Medicine, Pain Medicine, Sleep Medicine, and Vascular Neurology [ACGME website]. Neurological Surgery is developing Recognition of Focused Practice in Pediatric Neurosurgery and Central Nervous System Endovascular Surgery.

The explosive growth and maturation of the subspecialty of Neurocritical Care, the unique population served and the specialized skill set required to serve that population have set the framework for this application to offer subspecialty certification in Neurocritical Care. The advent of mechanical ventilation and expanded interest in management of brain injured patients historically bonded critical care and clinical neurosciences providers. As understanding of secondary neurological injury and advanced therapies were developed, it was apparent that clinicians who have an understanding of the underlying neurological disease processes (e.g. stroke, Guillain-Barre syndrome, myasthenia gravis, traumatic brain injury, and status epilepticus) and specialized expertise in critical care are best equipped to provide comprehensive integrated multisystem care to critically ill patients with nervous system disorders. Expertise in Neurocritical Care includes the procedural and cognitive skills needed for standard forms of ICU monitoring and management (i.e., cardiovascular hemodynamic monitoring and mechanical ventilation) as well as specialized forms of neurological monitoring (i.e. intracranial pressure and continuous EEG monitoring) and interventions.

The body of scientific medical knowledge that defines Neurocritical Care continues to rapidly develop. Journals such as Neurology, Critical Care Medicine, Journal of Neurosurgery, and Neurosurgery established subsections devoted to neurocritical care. The Neurocritical Care Society created a dedicated journal, Neurocritical Care, devoted specifically to the growing body of scientific knowledge in this subspecialty area. It has been published since 2004 with Springer with an impact factor of 2.488. It ranks 17th out of 33 journals in the discipline of critical care medicine and 87th out of 193 journals in the discipline of neurology. There are 2 volumes with 6 issues annually and it is directed towards neurointensivists, neurologists, neurosurgeons, medical and surgical intensivists, anesthesiologists, emergency physicians, and critical care nurses treating patients who are critically ill due to nervous system disorders. The first textbook dedicated to the field was published in 1983. As of this year 127 neurocritical care texts are available on Amazon.com.

Neurointensivists have a knowledge base tailored to the specific needs of their patients. The NCS has worked extensively with other neurological, neurosurgical, and critical care societies to develop guidelines to address the unique needs of this population including multi-modality brain monitoring, critical care management of subarachnoid hemorrhage, management of status epilepticus, insertion and management of external ventricular drains, venous thrombosis prophylaxis, and reversal of anticoagulation in intracranial hemorrhage.

A Neurocritical Taxonomy Code was recently approved by the National Uniform Claim Committee (NUCC). This code defines Neurocritical Care as the subspecialty that "is devoted to the comprehensive, multisystem care of the critically ill neurological patient." Like other intensivists, the neurointensivist generally assumes the primary role for coordinating the care of patients in the ICU, including both the neurological and medical management of the patient. They must also provide consultative services for these patients as requested within the health system.

# 3b. Explain how this proposed new or modified subspecialty addresses a distinct and definable patient population, a definable type of care need or unique care principles solely to meet the needs of that patient population:

Patients with neurological conditions who are critically ill require physicians who are knowledgeable in the examination, evaluation and options for care of both the primary neurological condition as well as the associated critical care conditions. Integrating the management of these conditions may require approaches that differ from those of the general critical care population and require a physician with dual training to appropriately manage them. These physicians not only provide direct care, but also lead and train a team of physician extenders, nurses, pharmacists, and other professionals who are aware of the specific needs of the neurological critically ill patient.

# **3c.** To provide COCERT with information about the group of physicians concentrating their practice in the proposed new or modified subspecialty area, please indicate the following:

#### **3ci.** The current number of such physicians (along with the source(s) of the data):

Data on the number of physicians concentrating their practice in Neurocritical Care come from the database of the NCS and the number of Neurocritical Care Diplomates listed on The United Council of Neurological Subspecialties (UCNS) website and the Society of Neurological Surgeons' Committee on Advanced Subspecialty Training (CAST) website. UCNS and CAST are nonprofit organizations that accredit training programs (fellowships) in neurological and neurosurgical subspecialties and award certification to physicians who demonstrate their competence in these subspecialties. Since 2007 the UCNS has certified over 1240 physicians to practice in Neurocritical Care. CAST has only been certifying individuals since 2013, and in this time has certified 109 physicians as neurointensivists from various disciplines including neurosurgery, neurology, critical care, general surgery/trauma, and anesthesiology.

#### **3**cii. The annual rate of increase of such physicians in the past decade (along with the source(s) of the data):

In 2007, the UCNS certified 100 candidates. In 2008, 114 Diplomates; 2010, 174 Diplomates; 2011, 165 Diplomates; 2013, 520 Diplomates; 2015, 168 Diplomates [Source: UCNS website].

NCS membership has grown from 485 in 2006 to 2,078 in 2016. Of those, 926 are US physicians, 121 Neurocritical care fellows and 177 international physicians. Until recently the NCS membership database did not record primary specialty, however, since then, 436 have identified themselves as Neurologists.

Attendance at the NCS annual meeting has grown from 210 in 2006 to 980 in 2016 [Source: NCS administrative office]. The SNS CAST certification process has been in place for approximately four years, with 109 individuals certified over that time period.

# **3**ciii. The current geographic distribution of this group of physicians, its projected spread in the next five (5) years, and an explanation of how you arrived at this projection:

Physician members of the NCS and the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Neurotrauma and Critical Care JSNTCC) come from all 50 states and Puerto Rico. Review of job listings available on the internet indicate a shift in offerings from large cities to smaller ones.

# 3d. For COCERT, please identify the existing national societies, the principal interest of which is in the proposed new or modified subspecialty area:

The American Academy of Neurology- Critical Care and Emergency Neurology section: Founded in 1948, the AAN represents 30,000 neurologists and neuroscience professionals dedicated to promoting the highest quality patient centered neurologic care. The section on Critical Care and Emergency Neurology currently has 805 members [Source: AAN Executive Office].

The Society of Critical Care Medicine: Neuroscience Section - Established in 1970, the SCCM is the largest non-profit medical organization dedicated to promoting the practice of critical care. It has over 16,000 members in more than 100 countries with a mission to secure the highest quality care for all critically ill and injured patients. There are 1,623 members of the section. Data on specialty was not available from the SCCM. [Source: SCCM executive office])

The Society for Neuroscience in Anesthesiology and Critical Care (SNACC)- Established in 1973, SNACC has a mission to advance the art and science of the care of the neurologically impaired patient through education, training and research in perioperative neuroscience. As of December 2016, the SNACC has 637 members [SNACC executive office. The JSNTCC had 2530 members as of 2016. The mission of the JSNTCC is to provide a forum for education and research on trauma and critical care of the nervous system; coordinate activities and programs relating to trauma, critical care, and sports medicine for the parent organizations and other societies, committees and agencies; represent the parent organizations, at their discretion, at any organization or group on matters relating to trauma, critical care by other individuals, groups, and/or agencies. [Source: JSNTCC website: http:// www.neurotraumasection.org/about].

Neurosurgeons in the United States are represented by the following organizations, all of which are supportive of this NCC proposal: The American Association of Neurological Surgeons- 10,960; Congress of Neurological Surgeons - 9,000; American Board of Neurological Surgery- 4616 active neurosurgeons; Joint Section on Trauma and Critical Care - 2530 active members.

#### 3di. Indicate the existing national societies' size and scope, along with the source(s) of the data:

see above

#### 3dii. Indicate the distribution of academic degrees held by their members, along with the source(s) of the data:

NCS: MD, DO, PhD, RN, CNS, APRN, PharmD [Source: NCS website] AAN: MD, DO, PhD [Source: AAN website] SCCM: MD, DO, PhD, RN, CNS, RRT, PharmD, RD, RDN, DMD [Source: SCCM website] SNACC: MD, DO, PhD [Source: SNACC website] JSNTCC; MD, PHD (Source: AANS, CNS, ABNS websites) SNS: MD, PHD (Source: SNS Website)

# 3diii. Indicate the relationship of the national societies' membership with the proposed new or modified subspecialty area:

The CCEN section of the AAN, the NCS and SNACC were the sponsoring organizations that petitioned the UCNS for Neurocritical Care to become a subspecialty member of the UCNS with accredited fellowships and certification for individuals. They also support the current application to seek certification from the ABMS. JSNCC and SNS CAST contain neurosurgeons practicing critical care, and these members and their societies' leadership support recognition of this subspecialty area.

**3e.** For the entities described below, please provide the number of those who have a primary educational effort devoted to the proposed new or modified subspecialty area, along with their geographic locations and the source(s) of the data:

#### **3ei. Medical schools:**

All 149 neurology and 106 neurosurgery accredited residency programs in the United States include a neurocritical care core curriculum component that complies with the ACGME's RRC requirements [ACGME website]. The academic status of the Neurocritical Care educational programs varies among the institutions. Some are contained within the Department of Neurology, others in Departments of Neurosurgery and others in service lines that involve several

specialties.

#### 3eii. Hospital departments:

Most moderate and large sized hospitals have several intensive care units, each focusing on a different patient population such as cardiac, pediatric, surgical, trauma, and medical patients. Historically, critically ill patients with nervous system pathologies were admitted to medical or other subspecialty ICUs. With the evolution of the field of Neurocritical Care a rapidly increasing number of both academic and private hospitals have established dedicated Neuro ICUs. Many of these Neuro ICUs offer training opportunities to residents and fellows in neurocritical care.

#### **3eiii. Divisions:**

In the majority of the academic programs, neurocritical care is developed as its own Division. In some programs, it is housed under stroke and Neurocritical Care joint divisions or Neurotrauma and Critical Care joint divisions. A few programs are under the auspices of the trauma division, critical care division, or the department of neurosurgery.

#### **3eiv. Other (please specify):**

# 4. Please list the number and names of institutions providing residency and other acceptable educational programs in the proposed new or modified subspecialty area:

All neurology residency programs in the United States are required to include a neurocritical care core curriculum component.

Currently there are 61 UCNS-accredited fellowships, all of which train Neurologists: [Source: UCNS website Jan 2, 2017]

- 1. Baylor College of Medicine
- 2. California Pacific Medical Center
- 3. Cedars-Sinai Medical Center
- 14. Cleveland Clinic Foundation
- 5. Detroit medical Center/Wayne State University
- 6. Duke University
- 7. Emory University Hospital
- 8. Henry Ford Hospital
- 9. Hofstra Northwell School of Medicine
- 1 0. Johns Hopkins University School of medicine
- 11. Loyola University Medical Center
- 12. Massachusetts General Hospital
- 13. Mayo Clinic College of Medicine, Rochester
- 14. Mayo Clinic Florida
- 15. Medical College of Wisconsin
- 16. Medical University of South Caroline
- 17. Mercy Hospital at Buffalo
- 18. Mount Sinai Medical Center
- 19. New York Presbyterian Hospital
- 20. Northwestern University Feinberg School of Medicine
- 21. Ochsner Health System
- 22. Oregon Health and Science University
- 23. Rush University Medical Center
- 24. Seton Hall University School of Health and Medical Sciences
- 25. Stanford University Medical Center
- 26. SUNY Upstate Medical University

- 27. The Ohio State University
- 28. Thomas Jefferson University Hospital
- 29. Tufts Medical Center
- 30. United Health Services Hospitals-Wilson Medical Center
- 31. University Hospitals Case Medical Center
- 32. University of Alabama Birmingham
- 33. University of California Davis Medical Center
- 34. University of California, Los Angeles
- 35. University of California San Diego Health System
- 36. University of California San Francisco
- 37. University of California Irvine
- 38. University of Chicago
- 39. University of Cincinnati
- 40. University of Colorado Hospital
- 41. University of Kansas School of Medicine
- 42. University of Maryland
- 43. University of Massachusetts Medical School/UMass Memorial
- 44. University of Miami/Jackson Memorial Hospital
- 45. University of Michigan
- 46. University of Minnesota Medical School
- 47. University of Mississippi Medical Center
- 48. University of North Carolina at Chapel Hill
- 49. University of Pennsylvania
- 50. University of Pittsburgh Medical Center
- 51. University of Southern California
- 52. University of Tennessee College of Medicine
- 53. University of Texas Health Science Center at Houston
- 54. University of Texas Health Science Center San Antonio
- 55. University of Texas Southwestern Medical Center
- 56. University of Utah Hospital
- 57. University of Virginia
- 58. University of Washington School of Medicine, Graduate Medical Education
- 59. University of Wisconsin Hospital and Clinics
- 60. Washington University
- 61. Yale-New Haven Hospital

SNS CAST has accredited 22 neurocritical care training programs focused on the training of neurosurgeons [Source: SNS website: https://www.societyns.org/pdfs/NCC.pdf]

- 1. Baylor College of Medicine
- 2. Brigham & Women's Hospital
- 3. Hofstra North Shore-LIJ School of Medicine
- 4. Houston Methodist
- 5. Mayo Clinic
- 6. Penn State University
- 7. Rush University Medical Center
- 8. Thomas Jefferson University
- 9. University Hospitals-Ohio
- 10. University of Colorado
- 11. University of Miami
- 12. University of Michigan
- 13. University of New Mexico
- 14. University of Texas, San Antonio

- 15. University of Wisconsin-Madison
- 16. Indiana University
- 17. University of Pittsburgh 18. UT-Houston 19. UCSF 20. Emory 21. SUNY-Syracuse 22. U Rochester

#### 4a. Indicate the total number of trainee positions available currently (along with the source(s) of the data):

According to the UCNS, there were 137 training positions available in 2016. There are currently 22 SNS accredited training programs with a minimum of 16 positions available annually.

#### 4b. Provide the number of trainees completing the training annually (along with the source(s) of the data):

According to UCNS, the number of neurology programs and neurology trainees in the last 5 years are:

Year- Number of Programs- Number of Neurologists

2012 - 45 programs - 36 neurologists

2013 - 49 programs - 38 neurologists

2014 - 52 programs - 45 neurologists

2015 - 56 programs - 52 neurologists

2016 - 61 programs - 66 neurologists

#### 4c. Describe how the numbers of training programs and trainees are adequate to:

#### 4ci. Sustain the area of subspecialization:

Currently the number of training slots offered by UCNS and SNS (161) exceeds the number of applicants (50-60/year). Although there may be a reduction of programs initially following ACGME-accreditation, we anticipate that there will be a gradual increase in the number of programs to graduate increasing numbers of fellows in NCC.

# 4cii. Allow for a sustained critical mass of trainees necessary for trainee testing validity and training program accreditation:

The number of applicants for training in Neurocritical Care has steadily grown. The approval of ABMS certification will only serve to enhance interest in the field.

# 5. Please provide the number and type of additional educational programs that may be developed based on this proposed new or modified subspecialty area. Please indicate how you arrived at that number:

We anticipate that there may be an initial reduction in the number of programs.

# 6. Please provide responses to (a) through (d) below regarding the duration and curriculum of existing programs:

#### 6a. The goals and objectives of the existing programs:

#### A. Patient Care

Subspecialty fellows are expected to provide patient care that is compassionate, appropriate, and effective for the promotion of health, prevention of illness, treatment of disease, and care at the end of life.

1) Fellows must be able to gather accurate, essential information from all sources, including medical interviews, physical examinations, medical records, and diagnostic/therapeutic procedures.

2) Fellow must be able to make informed recommendations about preventative, diagnostic, and therapeutic options and interventions that are based upon sound clinical judgment, scientific evidence, and patient preference.

3) Fellow must develop, negotiate, and implement effective patient management plans and integrate patient care.

4) Fellow must be able to perform the diagnostic and therapeutic procedures considered essential to the practice of Subspecialty with competency.

#### B. Medical Knowledge

Subspecialty fellows are expected to demonstrate knowledge of established and evolving biomedical and clinical sciences, and the application of their knowledge to patient care and the education of others.

1) Fellow must apply an open-minded, analytical approach to acquisition of new knowledge.

2) Fellow must access and critically evaluate current medical information and scientific evidence, including evidence based practice guidelines pertaining to Subspecialty.

3) Fellow must be able to develop a clinically applicable knowledge of the basic and clinical sciences that underlie the practice of Subspecialty.

4) Fellow must be able to apply this knowledge to clinical problem solving, clinical decision-making, and critical thinking.

#### C. Practice-Based Learning and Improvement

Subspecialty fellows are expected to be able to use scientific evidence and methods to investigate, evaluate, and improve patient care practices.

1) Fellow must be able to identify areas for improvement and implement strategies to enhance knowledge, skills, attitudes, and processes of care.

2) Fellow must be able to analyze and evaluate practice experiences and implement strategies to continually improve the quality of patient practice.

3) Fellow must be able to develop and maintain a willingness to learn from experience to improve the system or processes of care.

4) Fellow must be able to use information technology or other available methodologies to access and manage information, support patient care decisions, and enhance both patient and physician education.

5) Fellow must be able to gain information and experience from ongoing educational conferences, e.g., multidisciplinary patient conferences and journal clubs.

#### D. Interpersonal and Communication Skills

Subspecialty fellows are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of the health care team.

1) Fellow must be able to provide effective and professional consultation to other physicians and health care professionals, and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.

2) Fellow must be able to use effective listening, nonverbal, questioning, and narrative skills to communicate with patients and families.

3) Fellow must be able to interact with consultants in a respectful, appropriate manner.

4) Fellow must be able to maintain comprehensive, timely, and legible medical records.

#### E. Professionalism

Subspecialty fellows are expected to demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice methods, an understanding and sensitivity to diversity, and a responsible attitude toward their patients, their profession, and society.

1) Fellow must be able to demonstrate respect, compassion, integrity, and altruism in relationships with patients, families, and colleagues.

2) Fellow must be able to demonstrate sensitivity and responsiveness to the gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors and disabilities of patients and professional colleagues.

3) Fellow must be able to adhere to principles of confidentiality, scientific/academic integrity, and informed consent.

4) Fellow must be able to recognize and identify deficiencies in peer performance.

F. Systems-Based Practice

Subspecialty fellows are expected to demonstrate both an understanding of the contexts and systems in which subspecialty care is provided, and the ability to apply this knowledge to improve and optimize patient care.

1) Fellow must be able to understand, access, and utilize the resources, providers, and systems necessary to provide optimal care.

2) Fellow must be able to understand the limitations and opportunities inherent in various practice types and delivery systems, and develop strategies to optimize care for the individual patient.

3) Fellow must be able to apply evidence-based, cost-conscious strategies to prevention, diagnosis, and disease management.

4) Fellow must be able to collaborate with other members of the health care team to assist patients in dealing effectively with complex systems and to improve systemic processes of care.

# 6b. The expected competencies that will distinguish this subspecialist from other subspecialists in the areas of cognitive knowledge, clinical and interpersonal skills, professional attitudes and practical experience:

The subspecialist will require competency in critical care neurosciences in addition to standard critical care skills and knowledge. They are distinguished from other clinical neuroscientists by their expertise in critical care and from intensivists by their expertise in diverse neurological and neurosurgical pathologies. These additional skills not only include cognitive and procedural aspects, but also skills in coordinating the multi-disciplinary nature of the care required by the unique population served. Additionally, they must be competent in managing patients in an ICU environment which requires skills in patient triage, allocation of resources, and clarification of goals of care.

#### 6c. The scope of practice:

Neurocritical Care is a specialty which encompasses a broad clinical practice spanning general and neurological critical care. The core skill set includes implementation and management of neurological, ventilatory, circulatory, nutritional, renal, hepatic, and metabolic support. Furthermore, fellows should develop a foundation in critical care systems, teambased care, and the use of protocol based care where indicated. Finally, fellows should be introduced to scholarly activity in neurocritical care.

# 6d. The body of knowledge and clinical skills required and whether it is broad enough to require at least 12 months of training:

#### Program Content - Cognitive Skill Set

Acquisition of the following cognitive skills by trainees can be accomplished through the use of any of a number of techniques, including supervised direct patient care, didactic sessions, journal clubs, or literature reviews.

#### I. Neurological Disease States: Pathology, Pathophysiology, and Therapy

The following are specific diseases, conditions, and clinical syndromes commonly managed by a neurointensivist:

- A. Cerebrovascular Diseases
- 1. Infarction and ischemia
- Massive hemispheric infarction
- Basilar artery occlusion and stenosis
- Carotid artery occlusion and stenosis
- Crescendo TIAs
- Occlusive vasculopathies (Moya-Moya, sickle cell)
- Spinal cord infarction
- 2. Intracerebral hemorrhage
- Supratentorial

- Cerebellar
- Brainstem
- Intraventricular
- 3. Subarachnoid hemorrhage aneurysmal and other Vascular malformations
- Arteriovenous malformations
- AV fistulas
- Cavernous malformations
- Developmental venous anomalies
- 4. Dural sinus thrombosis
- 5. Carotid-cavernous fistulae
- 6. Cervical and cerebral arterial dissections
- B. Neurotrauma
- 1. Traumatic brain injury
- "Diffuse axonal injury"
- Epidural hematoma
- Subdural hematoma
- Skull fracture
- Contusions and lacerations
- Penetrating craniocerebral injuries
- Traumatic subarachnoid hemorrhage
- 2. Spinal cord injury
- Traumatic injury (transection, contusion, concussion)
- Vertebral fracture and ligamentous instability
- C. Disorders, Diseases, Seizures, and Epilepsy
- 1. Seizures and epilepsy
- Status epilepticus (SE) Convulsive
- Non-convulsive (partial-complex and "subtle" secondarily generalized SE) Myoclonic
- 2. Neuromuscular diseases
- Myasthenia gravis
- Guillain-Barre syndrome
- ALS
- Rhabdomyolysis and toxic myopathies
- Critical illness myopathy and neuropathy
- 3. Infections
- Encephalitis (viral, bacterial, parasitic)
- Meningitis (viral, bacterial, parasitic)
- Brain and spinal epidural abscess
- 4. Toxic-metabolic disorders
- Neuroleptic malignant syndrome/malignant hyperthermia
- Serotonin syndrome
- Drug overdose and withdrawal (e.g., barbiturates, narcotics, alcohol, cocaine, acetaminophen).
- Temperature related injuries (hyperthermia, hypothermia)
- 5. Inflammatory and demyelinating diseases
- Multiple sclerosis (Marburg variant, transverse myelitis)
- Neurosarcoidosis
- Acute disseminated encephalomyelitis (ADEM)
- CNS vasculitis
- Chemical or sterile meningitis (i.e. posterior fossa syndrome, NSAID induced)
- Central pontine myelinolysis
- Others
- 6. Neuroendocrine disorders

- Pituitary apoplexy
- Diabetes insipidus (including triple phase response)
- Panhypopituitarism
- Thyroid storm and coma
- Myxedema coma
- Addisonian crisis
- D. Neuro-oncology
- 1 . Brain tumors and metastases
- 2. Spinal cord tumors and metastases
- 3. Carcinomatous meningitis
- 4. Paraneoplastic syndromes

#### E. Encephalopathies

- 1. Eclampsia, including HELLP Syndrome
- 2. Hypertensive encephalopathy
- 3. Hepatic encephalopathy
- 4. Uremic encephalopathy
- 5. Hypoxic-ischemic and anoxic encephalopathy
- 6. MELAS

#### F.Clinical syndromes

- 1.Coma
- 2. Herniation syndromes with monitoring & ICP
- 3. Elevated intracranial pressure and Intracranial hypotension/hypovolemia
- 4. Hydrocephalus detection & treatment
- 5. Cord compression
- 6. Death by neurologic criteria, end of life issues, and organ donation
- 7. Vegetative state
- 8. Dysautonomia (cardiovascular instability, central fever, hyperventilation)
- 9. Reversible posterior leukoencephalopathy
- 10. Psychiatric emergencies (psychosis)
- G. Perioperative Neurosurgical Care
- H. Pharmacotherapeutics
- II. General Critical Care: Pathology, Pathophysiology, and Therapy
- A. Cardiovascular Physiology, Pathology, Pathophysiology, and Therapy
- 1. Shock (hypotension) and its complications (vasodilatory and cardiogenic)
- 2. Myocardial infarction and unstable coronary syndromes
- 3. Neurogenic cardiac disturbances (ECG changes, stunned myocardium)

4. Cardiac rhythm and conduction disturbances; use of antiarrhythmic medications; indications for and types of

pacemakers

- 5. Pulmonary embolism
- 6. Pulmonary edema: cardiogenic versus noncardiogenic (including neurogenic)
- 7. Acute aortic and peripheral vascular disorders (dissection, pseudoaneurysm)
- 8. Recognition, evaluation and management of hypertensive emergencies and urgencies

9. Calculation of derived cardiovascular parameters, including systemic and pulmonary vascular resistance, alveolararterial gradients, oxygen transport and consumption

#### B. Respiratory Physiology, Pathology, Pathophysiology and Therapy

- 1. Acute respiratory failure
- Hypoxemic respiratory failure (including ARDS)
- Hypercapnic respiratory failure
- Neuromuscular respiratory failure
- 2. Aspiration
- 3. Bronchopulmonary infections
- 4. Upper airway obstruction
- 5. COPD and status asthmaticus, including bronchodilator therapy
- 6. Neurogenic breathing patterns (central hyperventilation, Cheyne-Stokes respirations)
- 7. Mechanical ventilation
- Positive pressure ventilation (BIPAP)
- PEEP, CPAP, inverse ratio ventilation, pressure support ventilation, pressure control, and non- invasive ventilation
- Negative pressure ventilation
- Barotrauma, airway pressures (including permissive hypercapnia)
- Criteria for weaning and weaning techniques
- 8. Pleural Diseases
- Empyema
- Massive effusion
- Pneumothorax
- 9. Pulmonary hemorrhage and massive hemoptysis
- 10. Chest X-ray interpretation
- 11. End tidal C02 monitoring
- 12. Sleep apnea
- 13. Control of breathing

#### C. Renal Physiology, Pathology, Pathophysiology and Therapy

- 1. Renal regulation of fluid and water balance and electrolytes
- 2. Renal failure: Prerenal, renal, and postrenal
- 3. Derangements secondary to alterations in osmolality and electrolytes
- 4. Acid-base disorders and their management
- 5. Principles of renal replacement therapy
- 6. Evaluation of oliguria and polyuria
- 7. Drug dosing in renal failure
- 8. Management of rhabdomyolysis
- 9. Neurogenic disorders of sodium and water regulation (cerebral salt wasting and SIADH).
- D. Metabolic and Endocrine Effects of Critical Illness
- 1. Enteral and parenteral nutrition
- 2. Endocrinology
- Disorders of thyroid function (thyroid storm, myxedema coma, sick euthyroid syndrome)
- Adrenal crisis
- Diabetes mellitus

Ketotic and hyperglycemic hyperosmolar coma Hypoglycemia

- 3. Disorders of calcium and magnesium balance
- 4. Systemic Inflammatory Response Syndrome (SIRS)
- 5. Fever, thermoregulation, and cooling techniques
- E. Infectious Disease Physiology, Pathology, Pathophysiology and Therapy
- 1. Antibiotics
- Antibacterial agents
- Antifungal agents
- Antituberculosis agents
- Antiviral agents

- Antiparasitic agents
- 2. Infection control for special care units
- Development of antibiotic resistance
- Universal precautions
- Isolation and reverse isolation
- 3. Tetanus and botulism
- 4. Hospital acquired and opportunistic infections in the critically ill
- 5. Acquired Immune Deficiency Syndrome (AIDS)
- 6. Evaluation of fever in the ICU patient
- 7. Central fever
- 8. Interpretation of antibiotic concentrations, sensitivities
- F. Physiology, Pathology, Pathophysiology and therapy of Acute Hematologic Disorders
- 1. Acute defects in hemostasis
- Thrombocytopenia, thrombocytopathy
- Disseminated intravascular coagulation
- Acute hemorrhage (GI hemorrhage, retroperitoneal hematoma)
- Iatrogenic coagulopathies (warfarin and heparin induced)
- 2. Anticoagulation and fibrinolytic therapy
- 3. Principles of blood component therapy (blood, platelets, FFP)
- 4. Hemostatic therapy (vitamin K, aminocaproic acid, protamine, factor VIIa)
- 5. Prophylaxis against thromboembolic disease
- 6. Prothrombotic states

G. <u>Physiology</u>, <u>Pathophysiology</u> and <u>Therapy</u> of Acute Gastrointestinal (GI) and <u>Genitourinary</u> (GU) <u>Disorders</u>

- 1. Upper and lower gastrointestinal bleeding
- 2. Acute and fulminant hepatic failure (including drug dosing)
- 3. Ileus and toxic megacolon
- 4. Acute perforations of the gastrointestinal tract
- 5. Acute vascular disorders of the intestine, including mesenteric infarction
- 6. Acute intestinal obstruction, volvulus
- 7. Pancreatitis
- 8. Obstructive uropathy, acute urinary retention
- 9. Urinary tract bleeding
- H. Immunology and Transplantation
- 1. Principles of transplantation (brain death, organ donation, procurement, maintenance of organ donors, implantation)
- 2. Immunosuppression, especially the neurotoxicity of these agents
- I. General Trauma and Burns
- 1. Initial approach to the management of multisystem trauma
- 2. Skeletal trauma including the spine and pelvis
- 3. Chest and abdominal trauma blunt and penetrating
- 4. Burns and electrical injury
- J. Monitoring
- 1. Neuromonitoring
- 2. Prognostic, disease severity and therapeutic intervention scores
- 3. Principles of electrocardiographic monitoring
- 4. Invasive hemodynamic monitoring
- 5. Noninvasive hemodynamic monitoring
- 6. Respiratory monitoring (airway pressure, intrathoracic pressure, tidal volume, pulse oximetry, dead space,

compliance, resistance, capnography)

- 7. Metabolic monitoring (oxygen consumption, carbon dioxide production, respiratory quotient)
- 8. Use of computers in critical care units for multimodality monitoring

#### K. Administrative and Management Principles and Techniques

- 1. Organization and staffing of critical care units
- 2. Collaborative practice principles, including multidisciplinary rounds and management
- 3. Emergency medical systems in prehospital care
- 4. Performance improvement, principles and practices
- 5. Principles of triage and resource allocation, bed management
- 6. Medical economics: health care reimbursement, budget development
- L. Ethical and Legal Aspects of Critical Care Medicine
- 1. Death and dying
- 2. Forgoing life-sustaining treatment and orders not to resuscitate
- 3. Rights of patients, the right to refuse treatment
- 4. Living wills, advance directives; durable power of attorney
- 5. Terminal extubation and palliative care
- 6. Rationing and cost containment
- 7. Emotional management of patients, families and caregivers
- 8. Futility of care and the family in denial
- M. Principles of Research in Critical Care
- 1. Study design
- 2. Biostatistics
- 3. Grant funding and protocol writing
- 4. Manuscript preparation
- 5. Presentation preparation and skills
- 6. Institutional Review Boards and HIPAA
- Ill. Procedural Skills
- A. General Neuro-Critical Care
- 1. Central venous catheter placement; dialysis catheter placement
- 2. Pulmonary artery catheterization
- 3. Management of mechanical ventilation, including CPAP/BiPAP ventilation
- 4. Administration of vasoactive medications (hemodynamic augmentation and hypertension lysis)
- 5. Maintenance airway and ventilation in nonintubated, unconscious patients
- 6. Interpretation and performance of bedside pulmonary function tests
- 7. Direct laryngoscopy
- 8. Endotracheal intubation
- 9. Shunt and ventricular drain tap for CSF sampling
- 10. Performance and interpretation of transcranial Doppler
- 11. Administration of analgosedative medications, including conscious sedation and barbiturate anesthesia
- 12. Interpretation of continuous EEG monitoring
- 13. Interpretation and management of ICP and CPP data
- 14. Jugular venous bulb catheterization
- 15. Interpretation of Sjv02 and Pbt02 data
- 16. Management of external ventricular drains
- I 7. Management of plasmapheresis and IVIG
- 18. Administration of intravenous and intraventricular thrombolysis
- 19. Interpretation of CT and MR standard neuroimaging and perfusion studies and biplane contrast neuraxial angiography

- 20. Perioperative and postoperative clinical evaluation of neurosurgical and interventional neuroradiology patients
- 21. Performance of lumbar puncture and interpretation of cerebrospinal fluid results
- 22. Induction and maintenance of therapeutic coma and hypothermia

# 7. Please provide a projection and the methodology used for the projection of the annual cost of the required special training:

Trainees are typically paid an annual stipend equivalent to that of their appropriate year of post-graduate training, which will vary depending upon their primary specialty, and is determined by their respective institutions. Training period will be two years for those who are board eligible or certified in neurology, anesthesiology, or emergency medicine. Training period will be one year of dedicated neurocritical care training for those who have completed an ACGME-accredited neurosurgery residency program or who have completed ACGME-accredited subspecialty training in another critical care area (e.g., anesthesia, surgery, medicine). For those completing an ACGME-accredited neurosurgery program, the extra year of dedicated NCC training may be obtained during elective time within the residency program as allowed by the ACGME-Neurosurgery RRC.

# 7a. As the sponsoring Member Board, do you have, or access to, the resources to conduct a regular certification and MOC program in this specialty?

Yes

7b. Do you plan to ask for ACGME accreditation for this new program?

Yes

7c. If these programs are not accredited by the ACGME, please document the accrediting body for this program and whether you have the resources to review these programs in a fashion comparable to ACGME.

N/A

8. Please outline the qualifications required of applicants for certification in the proposed new or modified subspecialty area, as it pertains to the following:

#### 8a. Possession of an appropriate medical degree or its equivalent:

Doctor of Medicine or Doctor of Osteopathy

#### 8b. General certification by an approved primary specialty Board:

Yes, must complete primary specialty Board certification.

#### 8bi. Will diplomates from other ABMS Member Boards be allowed to apply for this subspecialty certificate?

Yes X No

# If "yes," but only specific ABMS Member Board diplomates would be allowed to apply for this subspecialty certificate, please list those Member Boards:

Currently only diplomates from co-sponsoring boards may be eligible to apply for this subspecialty certificate. However, other ABMS Member Boards may potentially join in co-sponsorship of the subspecialty certificate in the future.

· American Board of Anesthesiology

- American Board of Emergency Medicine
- American Board of Psychiatry and Neurology
- American Board of Neurological Surgery

**If "yes," would you require diplomates to maintain their primary certificate?** *Please see addenda for specialty specific responses* 

8c. Completion of specified education and training or experience in the subspecialty field:

Please see addenda for specialty specific responses

#### 8d. Additional qualifications:

#### Proposed Eligibility Criteria for Neurocritical Care Practice Pathway

The Member Boards involved in the subspecialty of Neurocritical Care (ABPN, ABNS, ABA, and ABEM) must be able to obtain independent verification of the physician's clinical competence in Neurocritical Care (NCC). Applicants for the subspecialty of NCC must either be certified in NCC by the UCNS or CAST, have completed a "fellowship" in NCC (UCNS, CAST, or other non-accredited fellowship), or have documented one of the following:

- An average of at least 17% of their post-training **clinical practice** time spent in the practice of NCC (at least 7 hours per week) for the past 6 years,\* or
- An average of at least 25% of their post-training **clinical practice** time spent in the practice of NCC (at least 10 hours per week) for the past 4 years,\* or
- An average of at least 33% of their post-training **clinical practice** time spent in the practice of NCC (at least 13 hours per week) for the past 3 years,\* or
- An average of at least 50% of their post-training **clinical practice** time spent in the practice of NCC (at least 20 hours per week) for the past 2 years,\* or
- An average of at least 25% of their total post-training professional time spent in the practice of NCC (at least 10 hours per week) for the past 4 years.\*\*

\* This calculation is based on an average work week of 40 hours. Physicians whose total practice exceeds 40 hours per week may still use the 40 hours number as the denominator of their % calculation.

\*\* This approach specifically applies to academic program directors, administrators, or researchers, and provides them a pathway to qualification.

The Member Boards involved in the subspecialty of NCC recognize two distinct types of NCC: Care of individuals who are critically ill primarily due to neurological disorders and care of critically ill patients who also have significant neurological disorders. The intention of the Member Boards involved in the subspecialty of NCC is to include in the NCC certification process physician diplomates who have significant experience caring for either, or both, of these patient groups.

The practice pathway represents a means to enter the rigorous NCC examination system that will focus on acute care, general critical care, critical care neurology, and critical care for neurosurgery patients. The practice pathway will not confer NCC certification. The practice pathway recognizes that some physicians obtain practice experience in Neuroscience Intensive Care Units. However, because many institutions do not have dedicated Neuroscience Intensive Care Units and provide care for patients with neurological disorders in Intensive Care Units with other designations, the practice pathway will allow individuals with sufficient NCC practice experience who care for patients in these Intensive Care Units to enter the exam

system.

For the purpose of NCC practice pathway eligibility, clinical practice in emergency departments, stroke units, rehabilitation units, or operating rooms will not be acceptable. For the purpose of NCC practice pathway eligibility, clinical practice must involve scheduled time caring for patients with neurocritical care problems when the physician has no other noncritical care clinical responsibility (e.g., care provided in an emergency department, office, clinic, operative setting).

The Member Boards participating in the subspecialty of NCC will also seek independent verification of NCC practice and competence of those candidates applying for NCC certification under the practice pathway. Member Boards will accept this verification from one of the following individuals: the program director of the Neurocritical Care fellowship program affiliated with the hospital where the physician spends the majority of his or her NCC clinical time, medical director of the Neurocritical Care Intensive Care Unit, the Chief of Neurocritical Care in that hospital, the physician's department chair, the hospital Chief of Staff or Chief Medical Officer, or the Vice-President of Medical Affairs.

# 9. Please describe how candidates for certification in the proposed new or modified subspecialty area will be evaluated. In your response, include a description of the method(s) of evaluation (e.g., written, oral, simulation) and the rationale behind the method(s) used in the evaluation process:

The directors of accredited Neurocritical Care (NCC) programs will evaluate the knowledge and skills of candidates who apply for training in the subspecialty of NCC. Similarly, these program directors must attest to the NCC fellow's satisfactory completion of the specific ACGME-accredited program. The specific NCC knowledge base will be evaluated by an ABPN-administered multiple-choice test given via computer. This examination will have a content outline that reflects the specific core competencies inherent to the state of the art practice knowledge base attained during this specific training. The content outline and specific examination questions will be developed by an ABPN-administered committee with representation from all the ABMS Member Boards participating in the subspecialty.

# 10. For (a) through (d) below, please project the need for and the effect of the proposed new or modified subspecialty certification on the existing patterns of subspecialty practice. Please indicate how you arrived at your response.

#### 10a. How the Member Board will evaluate the impact of the proposed new or modified subspecialty certificate:

#### 10ai. On its own primary and subspecialty training and practice:

Approval of a certification for the subspecialty in Neurocritical Care will result in more focused and optimal treatment of patients with serious neurologic disorders. The Neurointensivist will have a unique combination of skill sets in both acute neurological disease and critical care medicine.

Costs reductions are realized when patient evaluations are done rapidly by knowledgeable practitioners resulting in rapid and effective therapeutic interventions and mitigating ineffective treatments.

#### 10aii. On the primary training and practice of other Member Boards:

ABPN will solicit feedback from the other Member Boards who choose to become involved in a multidisciplinary subspecialty of neurocritical care.

# 10b. The *value* of the proposed new or modified subspecialty certification on practice, both existing and long-term (in health care, *value* is typically defined as *quality* divided by *cost*), specifically:

#### 10bi. Access to care (please include your rationale):

Expanding the number of practitioners will allow more institutions to provide specialized neurocritical care services which should increase patient access to this type of care. Quality of care for patients with neurocritical care problems should increase when they have access to physicians with specialized training in neurocritical care, and the cost of care may well come down due to the delivery of more efficient and effective care. The net effect of increased quality and decreased cost should be greater value of services.

#### 10bii. Quality and coordination of care (please include your rationale):

The presence of a Neurocritical Care Training Program and its faculty will have positive effects on the quality and coordination of care provided in the training institution to patients with neurocritical care problems. These positive effects will be due to the fact that more expert therapy will be readily available and more multi-disciplinary cooperation will also be available when physicians trained in neurocritical care are present to coordinate care involving physicians of several specialties and allied health professionals.

#### 10biii. Benefits to the public (please include your rationale):

More effective, efficient, and coordinated care provided by physicians who are trained in neurocritical care will benefit the public through more appropriate use of limited resources and better patient outcomes.

#### 10c. Please explain the effects of the proposed new or modified subspecialty certification on:

#### 10ci. Immediate costs and their relationship to the probable benefits (please indicate your methodology):

The training costs are limited to salary for trainees. The benefits of reduced hospitalization costs and improved outcomes leading to reduced post-hospitalization costs will dwarf the costs of training. Administrative costs to institutions with existing residency programs and UCNS or CAST accredited training programs should not change significantly, since much of the infrastructure and training costs are already in place.

#### 10cii. Long-term costs and their relationship to the probable benefits (please indicate your methodology):

No additional long-term costs are anticipated.

#### 10d. Please explain the effects if this subspecialty certification is not approved:

The current UCNS and CAST accreditation and certification processes are insufficient to ensure that the highest quality of care will be maintained, and that neurointensivists are properly trained and engaged in continuous professional development.

# 11. Please indicate how the proposed new or modified subspecialty will be reassessed periodically (e.g., every five years) to assure that the area of clinical practice remains a viable area of certification:

The ACGME will be requested to develop Program Requirements in Neurocritical Care and to accredit and regularly monitor the status and quality of Neurocritical Care Training Programs. The performance on ABPN-administered certification examinations of graduates of accredited Neurocritical Care Training Programs will be one outcome measure of the quality of those training programs. The ABPN will periodically reassess the number of Neurocritical Care Training Programs, graduates, candidates for Neurocritical Care certification, and participation of diplomates in MOC.

#### 12. Please list key external public stakeholders that COCERT may solicit for possible public comment on the

#### proposed new or modified subspecialty area:

The Leapfrog Group American Heart/Stroke Association Brain Injury Association Centers for Medicare and Medicaid Services

NOTE: When submitting this application, please attach the following items:

X Copy of proposed application form for the candidates for certification

X A written statement indicating concurrence or specific grounds for objection from each Primary and Conjoint Board having expressed related interests in certifying in the same field

X Written comments on the proposed new or modified subspecialty area from at least two (2) external public stakeholders

X A copy of the proposed certificate for ABMS records

Name of Board:	American Board of Anesthesiology
Contact Name:	Mary Post
Email:	mary.post@theaba.org
Phone:	919-745-2249

#### Each Member Board is asked to describe specialty-specific modifications as they pertain to the questions below:

1. Will you require diplomates of your board to maintain their primary certificate once they've earned this subspecialty certificate?

No. However diplomates who have a CCM subspecialty certificate and become certified in NCC, will be asked to maintain both CCM and NCC.

2. Please specify education and training or experience required in the subspecialty field:

One year of general critical care through another ABMS Member Board with an additional one year of ACGME-accredited neurocritical care fellowship.

Or two years of ACGME-accredited neurocritical care fellowship or the practice pathway.

- X Copy of proposed application form for the candidates for certification
- X A copy of the proposed certificate for ABMS records

Name of Board:	American Board of Emergency Medicine
Contact Name:	Melissa Barton, MD
Email:	mbarton@abem.org
Phone:	517-332-4800 ext. 343

Each Member Board is asked to describe specialty-specific modifications as they pertain to the questions below:

1. Will you require diplomates of your board to maintain their primary certificate once they've earned this subspecialty certificate?

Yes

2. Please specify education and training or experience required in the subspecialty field:

One year of general critical care through another ABMS Member Board with an additional one year of ACGME-accredited neurocritical care fellowship.

Or two years of ACGME-accredited neurocritical care fellowship

- \_X\_ Copy of proposed application form for the candidates for certification
- X\_\_\_\_ A copy of the proposed certificate for ABMS records

Name of Board:	American Board of Neurological Surgery
Contact Name:	Fred Meyer, MD
Email:	meyer.fredric@mayo.edu
Phone:	507-284-2254

Each Member Board is asked to describe specialty-specific modifications as they pertain to the questions below:

1. Will you require diplomates of your board to maintain their primary certificate once they've earned this subspecialty certificate?

Yes

#### 2. Please specify education and training or experience required in the subspecialty field:

One year of general critical care through another ABMS Member Board with an additional one year of ACGMEaccredited neurocritical care fellowship.

Or two years of ACGME-accredited neurocritical care fellowship

#### For Neurosurgeons who have completed or are enrolled in ACGME-accredited training:

One year of an ACGME-accredited neurocritical care fellowship

Or one year of an ACGME-accredited fellowship during elective time within the residency, divided into no more than 4 three-month blocks.

#### 3. Addition to 3a:

While some neurosurgeons come to possess the entirety of this knowledge/skill base during the course of residency training by extra study and practice during elective time, the majority focus their efforts on providing neurosurgical critical care only (ACGME/ABNS mandated), and usually leave the management of the neurocritical care patients where neurosurgery currently plays no role to the neurointesivist, where available.

- \_\_\_\_ Copy of proposed application form for the candidates for certification
- \_\_\_\_ A copy of the proposed certificate for ABMS records

Name of Board: Contact Name:	American Board of Psychiatry and Neurology Larry Faulkner MD	Administrative Board
Email:	lfaulkner@abpn.com	
Phone:	847-229-6500	

#### Each Member Board is asked to describe specialty-specific modifications as they pertain to the questions below:

1. Will you require diplomates of your board to maintain their primary certificate once they've earned this subspecialty certificate?

Yes

#### 2. Please specify education and training or experience required in the subspecialty field:

One year of general critical care through another ABMS Member Board with an additional one year of ACGME-accredited neurocritical care fellowship.

Or two years of ACGME-accredited neurocritical care fellowship

- X Copy of proposed application form for the candidates for certification
- X A copy of the proposed certificate for ABMS records



Advancing the Highest Standards of the Practice of Anesthesiology 4208 Six Forks Road, Suite 1500 | Releigh, NC 27609-5765 | Phone: (866) 999-7501

#### 2018 Pain Medicine Registration Information

Date: 11/28/2017 10:27:46 AM





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Candidates for initial certification and ABA diplomates must report the state/province, license number, issue date and expiration date, for **every** U.S. or Canadian license you hold or have held at any time.

#### DO NOT report training licenses.

Candidates for initial certification and ABA diplomates have the affirmative obligation to advise the ABA of any and all restrictions placed on any of their medical licenses and to provide the ABA with complete information concerning such restrictions within 60 days after their imposition.

ullet - Is in good standing. ullet - Is inactive. llet - Is Restricted or Revoked. ldeo - License is expired.

Status	State	License Number	Expiration Date
<b>v</b>	FL		01/31/2018
V	NC		06/22/2016
<b>v</b>	ОН		10/01/2015

Created On 04/04/2017 Completed On 04/04/2017 Status Signed No



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# Substance Abuse

#### **ABA Policy**

The ABA supports the intent of the Americans with Disabilities Act, which protects individuals with a history of alcohol abuse who are rehabilitated, and protects former drug users who currently do not use drugs illegally. Please see the ABA policy regarding alcohol and substance abuse cited in the <u>Booklets of Information</u>.

Alcohol Abuse No Drug Abuse No Completed On 06/29/2017



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#### **Clinical Activity**

From To Work Privileges **Practice Type** Anesthesiology Days -1 Pain Medicine Days -1 **Critical Care Medicine Days** -1 Pediatric Anesthesiology Days -1 Hospice and Palliative Medicine Days -1 Sleep Medicine Days -1 **Other Anesthesiology Days -1 Other Anesthesiology Details** Date Completed 11/28/2017 Institution City State Phone Fax **Restrictions** No



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#### **Independent Practice Requirement**

Although admission into the ABA examination system and success with the examinations are important steps in the ABA certification process, they do not by themselves guarantee certification. After successful completion of the examination for certification, the ABA will make an independent determination whether each candidate meets all the criteria for certification, including the independent practice requirement, without accommodation or with reasonable accommodation.

Created On 06/13/2017 Completed On 06/13/2017 Status Signed Yes - Requirement Met



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#### Non-standard Examination Request

Are you requesting administration of an ABA examination under nonstandard conditions to accommodate substantial limitations in your ability to take the examination under standard conditions due to a physical or mental impairment?

Response No Response Date 06/29/2017



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I represent and warrant to the ABA that all information I provide to the ABA is true, correct and complete in all material respects. I understand and acknowledge that any material misstatement in or omission from this registration shall, at any time, constitute cause for disqualification from the ABA examination system or from the issuance of an ABA certificate or to forfeiture and redelivery of such ABA certificate to the ABA.

I agree that this Acknowledgement, as submitted by me, shall survive the electronic submission of the registration, regardless of whether or not the information or data provided in the registration has been reformatted in any manner by the ABA. I also agree that this Acknowledgement is a part of and incorporated into the registration whether submitted along with the registration or not.

I acknowledge that I have read a copy of the applicable ABA <u>Booklet of Information</u>. I agree to be bound by the policies, rules, regulations and requirements published in the applicable Booklet, in all matters relating to consideration of and action upon this registration and Certification should it be granted. I understand that ABA certificates are subject to ABA rules and regulations, all of which may be amended from time to time without further notice. I understand and acknowledge that in the event I have violated any of the ABA rules governing my registration and/or Certification, such violations shall constitute cause for disqualification from the ABA examination system or from the issuance of an ABA certificate or for revocation of certification and indication of such action when individuals attempt to verify my Certification on the ABA website.

Created On 06/13/2017 Completed On 06/13/2017 Status Signed Yes



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#### Release

In connection with my registration, I, the second s

I authorize the ABA to: (1) report my status in the examination system; (2) use any score in psychometric analyses to confirm observations and reports of suspected irregularities in the conduct of an examination; and (3) respond to any inquiry about my status in the ABA examination system.

I also authorize the ABA to use any and all Information for the purpose of conducting longitudinal studies to assess the ABA Certification process. Finally, I authorize the ABA and researchers conducting research on behalf of the ABA to use any and all Information for the purpose of conducting scientific research relating to anesthesiologists, the practice of anesthesiology and/or the education of anesthesiologists. Such Information may be reported or released only in the aggregate, and any results of such studies will have no direct bearing on my registration or C status.

Subject to applicable state and federal law requirements and the specific authorization herein, the ABA shall hold all Information in confidence.

I release and agree to hold harmless each person from any liability to me arising out of the giving or releasing of Information to the ABA. This release and agreement includes liability for the inaccuracy or untruth of the Information, so long as such Information is provided in good faith. I also release and agree to hold harmless the ABA and its agents and employees, including but not limited to its directors, officers and examiners, from any liability to me as a result of any acts or proceedings undertaken or performed in connection with my registration provided such acts or proceedings are made or conducted in good faith.

Created On 06/13/2017 Completed On 06/13/2017 Status Signed Yes



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#### **Confidentiality and Copyright Release Form**

The exam questions are the confidential and proprietary information of the American Board of Anesthesiology (ABA) and are the ABA's copyrighted material. By your registering to take the exam you agree to treat the exam questions as confidential and to not share, copy, create derivative works, or otherwise distribute the exam questions to any third party without the ABA's explicit written consent.

Any copying of questions, including memorizing questions and later reproducing them or creating derivative works from them, constitutes copyright infringement. The security of this examination is vital to the fair grading of the examination and is of paramount importance to the ABA.

Examination questions are the sole property of the ABA and are not available for review by candidates before or after the examination. Candidates found to have violated the confidentiality agreement or copyright protection by engaging in the aforementioned activities, or in some other conduct or manner, will be subject to disciplinary actions by the ABA, which may include permanent disqualification from this examination and all future examinations.

The ABA enforces your confidentiality obligations and its copyright of each examination question to the fullest extent of the law.

Created On 06/13/2017 Completed On 06/13/2017 Status Signed Yes - Requirement Met

# The American Board of Anesthesiology

HEREBY CERTIFIES THAT

John Sample Doe

A LICENSED PHYSICIAN AND DIPLOMATE OF THE AMERICAN BOARD OF ANESTHESIOLOGY, HAVING COMPLIED WITH ALL THE REQUIREMENTS OF THIS BOARD, IS AWARDED

### RECERTIFICATION

### IN THE

# SUBSPECIALTY OF PAIN MEDICINE

FROM OCTOBER 4, 2014 TO DECEMBER 31, 2024







#### AMERICAN BOARD OF EMERGENCY MEDICINE

3000 Coolidge Road, East Lansing, MI 48823-6319 517.332.4800

ABEM Neurocritical Care Subspecialty Application - 2018

#### 20xx Application for Certification in the Subspecialty of Neurocritical Care Medicine

#### Postmark this completed application by <date>

I hereby make application to the American Board of Emergency Medicine (ABEM), in accordance with and subject to its rules and regulations, to take the examination that may lead to subcertification in Neurocritical Care Medicine. I hereby certify that the information given in this application is true, complete and accurate to the best of my knowledge and that I have received and read the terms and conditions of this application set forth in ABEM's 20xx application packet. I acknowledge that I have no vested right in any policy or procedure, that the same is subject to change from time to time at the discretion of ABEM, and that I assume the obligation to keep myself acquainted with such changes. I further certify that I have completed the training and/or practice necessary to fulfill the eligibility requirements.

I understand that: (a) falsification of this application, or (b) the submission of any falsified documents to ABEM, or (c) the use of any falsified ABEM documents or the submission of such documents to other persons, or (d) the giving or receiving of aid in an examination as evidenced either by observation at the time of an examination or by statistical analysis of my answers and those of one or more other participants in that examination, or (e) the unauthorized possession, reproduction, recording, discussion, or disclosure of any materials, including, but not limited to, examination questions or answers, before, during, or after an examination, or (f) the offering of any financial or other benefit to any director, officer, employee, or other agent or representative of ABEM in return for any right, privilege, or benefit which is not usually granted by ABEM to other similarly situated candidates or persons, may be sufficient cause for ABEM to bar me permanently from all future examinations, to terminate my participation in an examination, to invalidate the results of my examination, to withhold my scores or certificate, to revoke my certificate, or to take other appropriate action.

I also understand that ABEM may withhold my scores and may or may not require me to retake one or more portions of an examination if ABEM is presented with sufficient evidence that the security of one or more portions of an examination has been compromised, notwithstanding the absence of any evidence of my personal involvement in such activities. I agree that ABEM will not be liable for candidate travel and/or other losses or expenses incurred as a result of an examination cancellation or postponement.

I agree to indemnify ABEM and its directors, examiners, committee members, officers, employees, and agents and to hold them harmless from any claims or damages including, but not limited to, attorneys' fees and costs, incurred in connection with any action they, or any of them, take or fail to take in connection with this application, my eligibility for examination, the gathering, furnishing and use of information about my training and practice, the grading or conduct of my examinations, and the failure of ABEM to issue me a certificate.

I agree that any controversy or claim arising out of or relating to this Agreement, or the breach thereof, that cannot be resolved directly between the parties, shall be settled by arbitration administered by the American Arbitration Association under its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in the Circuit Court of Ingham County, Michigan.

I further agree that if, notwithstanding the preceding provision, a court of competent jurisdiction determines that an action or a proceeding may be brought by a party in connection with this Agreement, the Agreement shall be governed by and construed in accordance with the laws of the State of Michigan, and shall be treated as though it were executed in and were to have been performed in Ingham County, Michigan. Any action relating to this Agreement must be instituted and prosecuted in a court located in Ingham County, Michigan. I specially consent to extra-territorial service of process and specifically waive any right I may have or acquire to sue ABEM in a country other than the United States or anywhere outside of Ingham County, Michigan.

I understand and agree that ABEM may inform the director of the program in which I completed my Neurocritical Care fellowship training as to my performance on the Neurocritical Care examination.

ABEM reserves the right to conduct and to report research studies of its examinations and its examination data for purposes of quality assurance, examination development, and benefit to the specialty. Individual candidate confidentiality would not be violated or compromised.

I understand that ABEM provides the American Board of Medical Specialties (ABMS) a list of its Neurocritical Care diplomates and diplomates who are renewing their certification that includes names, addresses, and other information as required by ABMS; that ABMS provides diplomate information for publication in a directory and to other licensees according to defined protocols and guidelines; that ABEM provides lists of diplomates to its sponsor organizations upon request; and that ABEM responds to individual inquiries to confirm a physician's subspecialty diplomate status, and I authorize ABEM to release this information.

I certify that I have read and understand the above information and that by my signature I authorize and request the persons listed in this application, representatives of the institutions named herein, any licensing boards, other persons and organizations to furnish any information requested by ABEM on my training, medical practice, and status of my medical license(s).

TYPE or PRINT Applicant's Name			
Signature of Applicant (Must be signed in the presence of )	Notary Public)		// 20 Date
Signature of Notary Public			// 20 Date
///		Stamp or Seal (optional)	
	FOR ABEM OFFICE U	SE ONLY	
APPLICATION #:	PAID/RECEIVED: \$	POSTMARK DATE:	/20

#### 20xx ABEM Application for Certification in the Subspecialty of Neurocritical Care Medicine

#### SECTION 1: PERSONAL DATA

Please enter your name as you wish it to appear on the certificate. If your name has changed since you applied for certification in Emergency Medicine, please include official documentation of the name change.

NAME:					
	First	Middle	Last	Degree	
ADDRES	SS and IDENTIFICATION:	Please inc applicable	licate which address is your primary check box next to the address type	v address by using the	
🗖 Ho	me Address:		Business Address:		
Home	Telephone:		Business Telephone:		
Email	Address:		Fax:		
Date	of Birth:		Medical School Graduation	n Year:	
NPI:					

#### AMERICAN BOARD OF MEDICAL SPECIALTIES (ABMS) BOARD CERTIFICATION:

List all your ABMS primary and subspecialty certifications below. Do not include your EM certification.

Specialty/Subspecialty:	Year of Certification:	Certificate #:
Specialty/Subspecialty:	Year of Certification:	Certificate #:

#### SECTION 2: MEDICAL LICENSURE

Please provide the following information regarding your license(s) to practice medicine. If you answer "No" to the question on compliance with the enclosed Policy on Medical Licensure, use a separate sheet to explain.

List all states, territories, or provinces in which you hold a medical license	License Number	Expiration Date mm/dd/yy	Is this license in compliance with the ABEM Policy on Medical Licensure?	
			YES	NO
			YES	NO
			YES	NO
Name:

#### **SECTION 3: APPLICATION PATHWAY**

I am applying for subspecialty certification in Neurocritical Care Medicine (NCC) through the following pathway:

Fellowship Training Pathway	Unaccredited Training Pathway	Practice Pathway
Complete Section 3A	Complete Section 3B	Complete Section 3C

Please review the NCC Eligibility Criteria for ABEM Diplomates to determine the application pathway within which you are eligible to apply. The eligibility criteria are included in this application packet and are available on the ABEM website, www.abem.org.

#### SECTION 3A: FELLOWSHIP TRAINING PATHWAY

Complete this section if, on or after <date>, 20xx, you successfully completed 24 months of fellowship training in Critical Care Medicine accredited by the Accreditation Council for Graduate Medical Education (ACGME). At least 12 months must have occurred in an ACGME-accredited Neurocritical Care program.

Name and Institution of Neurocritical Care Fellowship Training Pr	ogram:	
Address:	City/State:	
Program Phone:	Program Fax:	
Program Email:		
Was this fellowship program ACGME-accredited when you compl	eted it? 🛛 Yes 🛛 N	٩o
Name of NCC Fellowship Program Director:		
Number of months successfully completed: Months	From	То
	Month/Day/Year	Month/Day/Year
ABEM policy states that training used to fulfill the eligibility criteria of or	ne specialty or subspecialty	/ may not also be used to

ABEM policy states that training used to fulfill the eligibility criteria of one specialty or subspecialty may not also be used to fulfill the criteria of another specialty or subspecialty. Has the fellowship training listed in this application been used to fulfill the criteria of another specialty or subspecialty? Yes No

Name and Institution of <u>Other Critical Care</u> Fellowship Training Pr	ogram, if applicable:	
Address:	City/State:	
Program Phone:	Program Fax:	
Program Email:		
Was this fellowship program ACGME-accredited when you comple	eted it? 🛛 Yes 🛛 N	0
Name of NCC Fellowship Program Director:		
Number of months successfully completed: Months	From	То
	Month/Day/Year	Month/Day/Year
Has the fellowship training listed in this application been used to subspecialty?	fulfill the criteria of anoth	er specialty or

Note: ABEM will independently verify with your fellowship program directors that you successfully completed all program requirements.

Name:

#### SECTION 3B: UNACCREDITED TRAINING

Complete this section if you completed Neurocritical Care fellowship training that was not ACGME-accredited. If you trained in more than one program, please copy this page and provide information about each.

Name and Institution of Neurocritical Care Fellowship Training Pro	ogram (not ACGME-accre	dited):			
Address:	City/State:				
Program Phone:	Program Fax:				
Program Email:					
Name of NCC Fellowship Program Director:					
Number of months successfully completed: Months	From	То			
	Month/Day/Year	Month/Day/Year			
This training was accredited by:					
<b>UCNS</b> (United Council of Neurological Subspecialties)					
CAST (Society of Neurological Surgeons' Committee on Advanced	d Subspecialty Training)				
Neither					
ABEM policy states that training used to fulfill the eligibility criteria of one specialty or subspecialty may not also be used to fulfill the criteria of another specialty or subspecialty. Has the fellowship training listed in this application been used to fulfill the criteria of another specialty or subspecialty? Yes No					

#### SECTION 3C: PRACTICE (OR PRACTICE PLUS TRAINING) (GRANDFATHERING PATHWAY)

#### PRACTICE REQUIREMENT

Provide information about your Neurocritical Care (NCC) practice in each of the sections below. ABEM will independently verify the NCC practice(s) you list in this application.

1. Acceptability of your NCC Practice

An acceptable practice of NCC must occur in a designated unit providing Neurocritical Care. Practices that occur in critical care areas in the emergency department do not count.

Practice that occurred while you were in residency or fellowship training, regardless of the specialty or subspecialty in which you were training, regardless of whether the practice was part of the training curriculum, is not acceptable.

- The NCC practice(s) I am reporting occurred in designated units providing Neurocritical Care and not in the emergency department.
- My NCC practice did not occur at the same time that I was enrolled in residency or fellowship training, in any specialty or subspecialty.
- 2. Duration and Intensity of your Neurocritical Care (NCC) practice.

To report and describe your practice of NCC, you must have practiced NCC a specific percentage of the time over a specific number of years <u>immediately prior to applying for certification</u>. This means that the years of practice you report must have an end date that is the same as the date on which you submit your application, even if your practice will continue past the application date.

Select the category that best describes your practice and enter your practice information below

- **25% of Your Post-training** <u>Clinical Practice</u> for the Past FOUR Years (at least 10 hours per week)
- OR 
  33% of Your Post-training <u>Clinical Practice</u> for the Past THREE Years (at least 13 hours per week)
- OR
  - **50% of Your Post-training** <u>Clinical Practice</u> for the Past TWO Years (at least 20 hours per week)

	Start Date		End Date*	
Dates of Practice:		To:		* End Date is Date of Application Submission
	Month/Day/Year		Month/Day/Year	
My practice of <b>NCC</b> ave	eraged	ho	ours per week.	
My clinical practice time	e averaged	ho	ours per week.	

#### OR

#### 25% of Your Post-training Total <u>Professional Time</u>

	hours per week.	
My total professional time avera	jed hours per week.	

\* If your total professional time was greater than 40 hours per week, you may use 40 hours per week as your average total professional time.

#### 3. Practice and Verifier Information

Complete the form below, identifying your practice(s) of NCC and an individual to verify your practice and competence in NCC.

- Your verifier should be the Program Director of an ACGME-accredited NCC fellowship affiliated with the hospital where you spend the majority of your clinical time. If an accredited NCC fellowship is not present at this hospital, your verifier should be TBD in the hospital where you spend the majority of your clinical time. If you are the TBD in your institution, you may name the Chief of Staff, Vice-President of Medical Affairs, or someone in a similar position as your verifier.
- If you practiced in multiple settings or during more than one time period within the x required years, please copy this page and complete it for each practice separately.

Name of Institution:				
Address: City/State/Zip:				
Phone:	Fax:	Email:		
Type of ICU:				
Your Position:				
Name of Verifier: Verifier's Title:				
Verifier Address:		City/State/Zip:		
Phone:	Fax:	Email:		

Dates of Practice if different from information provided on Pg. 4:	То:

Month/Day/Year Month/Day/Year

Note: ABEM will seek independent verification of your practice in NCC and of your clinical competence in NCC as attested to in the section below.

#### 4. **Description** of your NCC Practice

On a separate piece of paper, please include a short, written description of each NCC practice you are submitting to fulfill the NCC practice requirement.

#### ATTESTATION OF SATISFACTORY CLINICAL COMPETENCE

I attest that I have satisfactory clinical competence in NCC, based on the criteria shown below

Global Assessment

 1. TBD

 Patient Care

 1. TBD

 Medical Knowledge:

 1. TBD

 Interpersonal and Communication Skills:

 1. TBD

 Practice-based Learning and Improvement

 1. TBD

 Professionalism

 1. TBD

 System-based Practice

 1. TBD

## **AMERICAN BOARD OF EMERGENCY MEDICINE** John M. Doe, M.D. having met the eligibility and examination requirements is certified in the subspecialty of **Neurocritical Care Medicine** December 31, 2013 – December 31, 2013 Certificate Number 12345 OFEM (signature) (signature) President Secretary-Treasurer This certificate is valid so long as primary certification is maintained.

A Member Board of the American Board of Medical Specialties

 Copy of proposed application form for the candidates for certification (sample online application process used for Epilepsy certification)



Sample Doctor, M.D. | ID:142486

🗽 Personal Information, UserId and Password 🛛 🚳 | Update my Personal Information | Update my UserId/eMail Address | Change my Password

Contact Address	Publication Address	Contact Information
U of Texas HSC at San Antonio MSC 7883-Neurology San Antonio, TX 78229-3901 United States	not on file	eMail Address: sdoctor@abc.com Home Phone: 111-222-3333 Office Phone: 111-222-1234 Fax Number: 111-222-1234

#### 🐘 License Information and Status 🚳 Update License Information

License Number	State	License Type	Expiration Date
К1692	TX	Unrestricted	11/30/2017
Not on file	он	OTher	09/30/1996

Examination Application and Status 🕲 Apply for an Examination

> Additional Information for Application Posting Dates and Qualifications: Click to view

Your Application(s) In Process

Examination	Start Date	End Date	Fee Deadline Date	Application Status	Payment Status
Neurology MOC Exam	10/31/2016	11/04/2016	N/A	Approved	Payment Complete

🚵 Maintenance of Certification 🚱 Requirement Status | Activity Attestation | Approved Products | Annual Fee | MOC Guide | Activity Records

**b** Diplomate Information and Status 🕲 Report or update your clinical activity status.

Certification	Certificate No.	Certification History	Status	Clinical Status	Status Updated
Neurology	41605	Certified on 06/30/1995 certificate valid through 12/31/2005 Recertified on 08/14/2006	<u>Certified</u>	Status Unknown <u>Update</u>	02/03/2016
Clinical Neurophysiology	945	Certified on 04/08/1997 certificate valid through 12/31/2007 Recertified on 08/13/2007 Certification contingent on meeting MOC requirements	<u>Certified</u>	Status Unknown <u>Update</u>	NOF
Epilepsy	699	Certified on 08/11/2014 Certification contingent on meeting MOC requirements	<u>Certified</u>	Status Unknown <u>Update</u>	NOF

Lexamination History Records and Status 🚳 <u>Click to View</u>

Log off



-

### **ABPN Physician Folios**

#### Sample Doctor, M.D. | ID:142486

<u>hi</u>nini k

🛦 Step-1: Select an Examination - Please select an Examination and complete the steps listed below and all included sections to submit this application.

Examination Selection ------ License Update ------ Application Sections ------ Confirm and Pay ------ Receipt

Instructions: The Examinations listed below reflect the available choices you currently have based on your Certification with the ABPN and the examination schedule.

Applications become available approximately 90 days prior to the application deadline date.

#### SELECT AN EXAMINATION AND CONTINUE TO THE NEXT STEP.

Maintenance of Certification (MOC) Application(s)

Select	Examination Description	Exam Start Date	Exam         Exam         Application         Next           Start Date         End Date         Deadline Date         Application Fee         Exam Fee         Late Fee         Ave							
0	Neurology MOC Exam	10/30/2017	10/30/2017 11/03/2017 07/06/2017 \$700 \$700 \$500 08/0							
***	Neurology MOC Exam	Currently available	Currently available as module in Combined MOC Exam or as single exam available on >> >> 08/02/2016							
***	Clinical Neurophysiology MOC Exam	Currently available	Currently available as module in Combined MOC Exam or as single exam available on >> >> 10/09/2017							
***	Epilepsy MOC Exam		No applicati	ons are for this exa	mination are availa	able at this t	ime.			

#### SubSpecialty Certification Application(s)

Select	Examination Description	Exam Start Date	Exam End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee	Next Application Available Date
0	Epilepsy Certification Exam	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$ 500	01/13/2018
0	Pain Medicine Certification Exam	09/09/2017	09/09/2017	02/24/2017	\$ 700	\$ 1200	\$ 500	11/28/2018
0	Sleep Medicine Certification Exam	11/20/2017	11/20/2017	02/24/2017	\$ 700	\$ 1200	\$ 500	11/28/2018



Sample Doctor, M.D. | ID:142486

#### Step-3: Application Section - Specific Questions

#### Examination Selection 🖌 ----- License Update 🖌 ---- Application Sections ------ Confirm and Pay ------- Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilep\$y	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$0

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

Training/Practice 🕲 ------ General Instructions ----- EP Exam Requirements ----- Cert Application Statement ----- International Testing Fee ----- ADA Request ----- EP 10/24/2016 Fee Payment Option

PLEASE PROVIDE INFORMATION WHERE REQUIRED AND CLICK SAVE.

>> SAVE >>

Uncheck box to reselect

Check if you have completed or will complete a fellowship program in Epilepsy Medicine by July 31 of the year of the subspecialty examination. List all fellowship training in Epilepsy Medicine in chronological order beginning with the date you entered training. Fax or mail documentation of fellowship training, that includes exact training dates (from month/day/year to month/day/year), to the Board office.

\*\* The last year of Residency Training information is required for this selection. Please enter Name, Date and select Specialty.

 Enter Residency Name and Location	Residency Completion Date	Specialty
Sample location	06/31/2014 (MM/DD/YYYY)	Child Neurology



Sample Doctor, M.D. | ID:142486

**.........** 

#### Step-3: Application Section - Specific Questions

#### Examination Selection 🗸 — License Update 🗸 — Application Sections — Confirm and Pay ------ Receipt

Epilepsy Certification Exam Epilepsy 10/24/2017 10/28/2017 03/29	/2017 \$ 700	\$ 1200	\$0

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

Training/Practice 🗸 ----- General Instructions ----- EP Exam Requirements ----- Cert Application Statement ----- International Testing Fee ----- ADA Request ----- EP 10/24/2016 Fee Payment Option

SAVE ADDITIONAL INPUTS OR CONTINUE TO THE NEXT ITEM.

>> SAVE >> Continue to Next Section >>

Uncheck box to reselect

Check if you have completed or will complete a fellowship program in Epilepsy Medicine by July 31 of the year of the subspecialty examination. List all fellowship training in Epilepsy Medicine in chronological order beginning with the date you entered training. Fax or mail documentation of fellowship training, that includes exact training dates (from month/day/year to month/day/year), to the Board office.

#### Residency Training Information: 22 Complete

Enter Residency Name and Location	Residency Completion Date	Specialty
Sample location	06/30/2014 AMM/DD/YYYY)	

#### Fellowship Training Record: 🌌 Complete

Enter Fellowship Institution Name and Location	From Date	To Date	Months Credit	Fuil/Part Time
Sample Fellowship training location	07/01/2014	06/30/2015	12 Months 💙	Full      Part     SAVE
			Select 🗸	O Full O Part SAVE
			Select 💙	O Full O Part SAVE

For Help call (847) 229-6512, email: <u>guestions@abpn.com</u> or Fax: 847-229-6600 Attn: Folios Help The American Board of Psychiatry and Neurology, Inc., 2150 E. Lake Cook Road, Suite 900, Buffalo Grove, IL 60089, Ph. 847-229-6500



Sample Doctor, M.D. | ID:142486

#### Step-3: Application Section - Specific Questions

#### Examination Selection 🖌 — License Update 🗸 — Application Sections — Confirm and Pay — Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilepsy	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$ O

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

Training/Practice 🗸 — General Instructions — EP Exam Requirements — Cert Application Statement — International Testing Fee — ADA Request — EP 10/24/2016 Fee Payment Option

#### PLEASE READ AND CONTINUE (available options are not required).

General Instructions:

#### The following instructions are applicable to all online transactions:

- The ABPN only accepts American Express, VISA, Discover and MasterCard. Other credit cards are not accepted at this time. For your protection the ABPN does **NOT** retain credit card information.
- If paying by check, have the checking account number, routing number and check number handy. Note that some corporate checks cannot be processed online. If you are using a corporate check, please confirm with your accounting department that the check can be processed as an ACH debit.
- Once you begin the payment process, you may stop and return to complete it at a later time. Payments are processed at 2:00 AM Central Time each day. Payment transactions not completed by that time will be deleted. You will then need to start the payment process from the beginning.
- All address changes, license changes, and clinical status changes will be processed within 2 business days of submission. Please allow that much time before contacting the Board office.



Sample Doctor, M.D. | ID:142486

#### Step-3: Application Section - Specific Questions

#### Examination Selection 🖌 — License Update 🗸 — Application Sections — Confirm and Pay — Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilepsy	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$ Q

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

Training/Practice 🗸 ---- General Instructions 🖌 ---- EP Exam Requirements ----- Cert Application Statement ----- International Testing Fee ----- ADA Request ------ EP 10/24/2016 Fee Payment Option

PLEASE READ AND CONTINUE (available options are not required).

EP Exam Requirements:

#### Examination Requirements

 Submission of your application through this software is NOT an indication that your credentials meet the requirements for admission to the examination. Requirements for application can be found in the Information for Applicants (IFA) publication. The IFA, examination content specifications, and the examination format and scoring documents can all be found on our website at: <a href="http://www.abpn.com/become-certified/taking-a-subspecialty-exam/epilepsy/">http://www.abpn.com/become-certified/taking-a-subspecialty-exam/epilepsy/</a>.

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Sample Doctor, M.D. | ID:142486

#### Step-3: Application Section - Specific Questions

#### Examination Selection 🖌 ---- License Update 🗸 ---- Application Sections ------ Confirm and Pay ------ Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilepsy	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$0

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

Training/Practice 
General Instructions 
EP Exam Requirements 
Cert Application Statement 
Thermational Testing Fee 
ADA Request 
EP 10/24/2016 Fee Payment
Option

#### THIS ITEM IS REQUIRED TO CONTINUE.

Cert Application Statement:

I agree that the Board shall be the final judge of my credentials and gualifications for admission to the examination and for certification.

I agree that the Board may disqualify me from examination, from certification, or may cancel my certification and require the return of the Diplomate Certificate in the event that the Board determines that any information furnished by me was false, that I violated the rules governing its examinations, or that I did not comply with or violated the Board's rules and policies.

I agree that irregular or improper behavior during the examinations, such as giving or obtaining unauthorized information or aid, looking at the test materials of another candidate, removing any examination materials from the test center, failing to comply with proctors' instructions, disregarding time limits, taking any recordings of the examination, or other disruptive behavior will be considered an attempt to subvert the certification process. These and other irregular or improper behaviors, as evidenced by observation, by subsequent statistical analysis, or by other means, may be sufficient cause for the Board to terminate my participation in the examination, to invalidate the results of my examination, to bar me from admission to future examinations or from certification, and to take appropriate actions, including informing licensing bodies, law enforcement agents, my program director(s), and/or others.

I agree not to bring food, drink, cellular phones, pagers, or other electronic devices, books, study materials, personal belongings including watches and wallets, or other prohibited materials into an examination room. I agree not to make any phone calls during an examination session.

I understand and consent to the fact that my certification status is public information and that the Board will publish and/or make my certification status publicly available. In addition, I authorize the Board to: (i) inform program director(s) from which I took training as to my performance on any or all of the Board's examinations taken by me at any time; (ii) send my name, upon achieving certification or maintenance of certification, to the American Board of Medical Specialties for publication; (iii) and may release any pertinent information in response to any appropriate inquiry about my Board status.

I also authorize the Board to, at its discretion, release information contained in this application, my examination results, and examination scores to researchers selected by the Board to study the testing and evaluation programs of the Board under appropriate conditions of confidentiality established by the Board. Any studies reported by the Board will contain information about candidates and diplomates only in the aggregate, and the names of individuals will not be revealed in any publications.

I hereby release and agree to hold harmless the Board and any of the Board's employees, officers, directors, representatives, agents and assigns from any liability arising out of the Board's giving, disclosing and/or releasing of information about or pertaining to me. This release and hold harmless includes liability for the inaccuracy of such information, so long as such information is provided in good faith.

I understand that the examination material is confidential and copyrighted. I agree not to copy, reproduce, or disclose examination materials or content, at any time.

Pursuant to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), any related regulations or promulgation, and any applicable state laws, I agree not to use or disclose any medical information, patient information, or other protected health information used or disclosed in any Board examination.

I understand that the Board makes academic and scientific judgments in its evaluation of the results of its examinations, and that situations may occur, even through no fault of mine, that will render my examination results unreliable in the judgment of the Board. I agree that if the Board determines that in its judgment the results of my examination are unreliable, the Board may require me to retake that examination at its next administration or other time designated by the Board.

I hereby release, discharge, and exonerate the Board, its directors, officers, members, examiners, representatives, and agents from any actions, suits, obligations, damages, claims, or demands arising out of, or in connection with, this application, the grade or grades given with respect to the computer-administered or oral examinations, or the failure of the Board to issue me such certificate. It is understood that the decision as to whether my examinations qualify me for a certificate rests solely and exclusively in the Board, and its decision is final.

I release from liability any organization or individual that provides information to the Board without malice for the purpose of establishing my professional qualification, credentials, clinical and/or professional competence, character, moral behavior, or any other matter having bearing on my consideration for being accepted as a candidate for certification.

I hereby declare under penalty of perjury that the information given in this application is true and correct to the best of my knowledge and belief.

For Help call (847) 229-6512, email: <u>auestions@abon.com</u> or Fax: 847-229-6600 Attn: Folios Help The American Board of Psychiatry and Neurology, Inc., 2150 E. Lake Cook Road, Suite 900, Buffalo Grove, IL 60089, Ph. 847-229-6500



#### Sample Doctor, M.D. | ID:142486

#### Step-2: Update License Information

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#### Examination Selection 🛷 ----- License Update 🗸 ---- Application Sections ------ Confirm and Pay ------ Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilepsy	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$0

Throughout the certification and maintenance of certification processes, and in order to maintain a valid certificate and ABPN Diplomate status, physicians must hold an active and unrestricted allopathic and/or osteopathic license to practice medicine in at least one state, commonwealth, territory, or possession of the United States or province of Canada. If licenses are held in more than one jurisdiction, all licenses held by the physician must be full and unrestricted to meet this requirement. An active and unrestricted medical license must be maintained even if a physician is out of the country for extended periods of time.

#### PLEASE CONTINUE TO THE NEXT STEP.

#### License Information Currently on File 🔍

Select	License Number	State	Туре	Expiration Date	Status
0	K1692	Texas	Unrestricted	11/30/2017	Accepted - Pending Verification
0	Not on file	Ohio	OTher	09/30/1996	Expired

General information for License requirements - Please see the Information for Applicants publication for specific licensure requirements.

• A License that is Accepted - Pending Verification is acceptable to continue and will be verified by the ABPN Credentials department upon application review.

• A License is not required to apply for an initial certification but will be required before the date of the exam.

• Only one license per State is allowed. To update, select the license in the list and click the Update Selected License button.

• You may add additional State license(s) if needed. To add a new State License, click the Add A New License button.

• If you wish to have license(s) removed from the list, please contact us at Folios Help@abpn.com and include the items to be removed.



#### Sample Doctor, M.D. | ID:142486

#### Step-3: Application Section - Specific Questions

#### Examination Selection 🗸 — License Update 🗸 — Application Sections — Confirm and Pay — Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilepsy	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$0

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

#### PLEASE READ AND CONTINUE (available options are not required).

International Testing Fee:

#### International Testing Fee:

ABPN candidates may schedule an exam at a Pearson VUE center outside the United States or Canada for an additional \$100.00 fee. The fee will be included in the total amount if paid in full, or in the first payment if the payment is split. Check this box if you wish to test outside the US/Canada then click Continue to Next Step.

If you are testing in the United States or Canada do not check the box and click Continue to Next Step.

NOTE - Under certain conditions, it may be possible for a candidate to schedule an examination at a U.S. military base outside of the U.S. for no additional fee. Candidates must check the box for international testing and pay the \$100.00 fee when applying for an examination and will be contacted by the Board with additional information.

For Help call (847) 229-6512, email: <u>questions@abpn.com</u> or Fax: 847-229-6600 Attn: Folios Help The American Board of Psychiatry and Neurology, Inc., 2150 E. Lake Cook Road, Suite 900, Buffalo Grove, IL 60089, Ph. 847-229-6500



#### Sample Doctor, M.D. | ID:142486

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#### Step-3: Application Section - Specific Questions

#### Examination Selection 🖌 ---- License Update 🖌 --- Application Sections ------ Confirm and Pay ------ Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilepsy	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$0

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

#### PLEASE READ AND CONTINUE (available options are not required).

ADA Request:

#### **Request for Testing Accommodations Due to a Disability:**

I request accommodations during the examination due to a disability. I understand that documentation of a disability is required within 30 days after the deadline for filing an application in order to receive accommodations.



Sample Doctor, M.D. | ID:142486

#### Step-3: Application Section - Specific Questions

#### Examination Selection 🖌 — License Update 🗸 — Application Sections 🖌 — Confirm and Pay — Receipt

Examination Selection	Certification	Start Date	End Date	Application Deadline Date	Application Fee	Exam Fee	Late Fee
Epilepsy Certification Exam	Epilepsy	10/24/2017	10/28/2017	03/29/2017	\$ 700	\$ 1200	\$0

Application Sections - Please answer all questions where required in each of the sections listed below and click the "CONTINUE TO NEXT SECTION" button when available.

Training/Practice 
- General Instructions 
- EP Exam Requirements 
- Cert Application Statement 
- International Testing Fee 
- ADA Request 
- EP 
- EP 
- DA 
- EP 
- DA 
- EP 
- EP 
- DA 
- EP 
- E

#### PLEASE CONTINUE TO THE NEXT STEP.

EP 10/24/2016 Fee Payment Option:

Candidates have two payment options when applying online, either pay the entire fee or set up a split payment option.

If you choose the split payment option:

- An initial installment of \$950 is due at the time of this application.
- A final installment of \$950 will be due May 11, 2017.
- If all payments are not received by May 11, 2017 it will result in a denial of your application.

If you choose the split payment option, ABPN will NOT automatically charge your credit card or checking account for the final installment.

If the initial installment payment is sent after March 29, 2016, the applicant must also include a \$500 late fee charge for a total of \$1450. Any installment payment made after the due date must also include a \$500 late fee charge.

Choose which payment option you would like to use:

Full Payment () Split Payment ()



Sample Doctor, M.D. | ID:142486

#### Step-4: Confirm and Pay

Please reviev	v ALL items	listed below.	This order HA	S NOT	been processed!
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When you are ready to pay, click "Continue to Payment". You will be transferred to a secure site for the payment transaction. The ABPN does not store, retain, keep or collect credit card information.

\*\* When Processing your payment, Please wait for the payment process to complete, \*\* Closing the payment page or using the back button on the payment page can result in a payment with an unprocessed order.

#### **Application Order Information**

Candidate Name: Sample Doctor, M.D. Examination Name: Epilepsy Certification Exam Exam Date Range: 10/24/2017 - 10/28/2017 eMail Address: sdoctor@abc.com Qty: 1

Application Fee: \$ 700.00 Examination Fee: \$ 1200.00

Total Purchase Amount: \$ 1.00

Pre-Examination Follow Up Items

**Required Documentation:** Fax or mail documentation of fellowship training, that includes exact training dates (from month/day/year to month/day/year), to the Board office. Include a copy of this document. Your application cannot be reviewed until this documentation is received.

- **EP Exam Requirements:** Submission of your application through this software is NOT an indication that your credentials meet the requirements for admission to the examination. Requirements for application can be found in the Information for Applicants (IFA) publication. The IFA, examination content specifications, and the examination format and scoring documents can all be found on our website at: <u>http://www.abpn.com/become-certified/taking-a-subspecialty-exam/epilepsy/</u>.
- **Computer Exam Next Steps:** All candidates who have been approved to sit for an examination will receive an email with scheduling instructions two months prior to the administration of the exam.

**DSM Terminology:** Starting in 2017, all specifications and content of all ABPN computer-delivered examinations will be based solely on DSM-5. No DSM-IV-TM classifications and

diagnostic criteria will be applicable.

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Date: 3/1/2017 1:30:15 PM

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For Help call (847) 229-6512, email: <u>questions@abpn.com</u> or Fax: 847-229-6600 Attn: Folios Help The American Board of Psychiatry and Neurology, Inc., 2150 E. Lake Cook Road, Suite 900, Buffalo Grove, IL 60089, Ph. 847-229-6500

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 A copy of the proposed certificate for ABMS records (sample Epilepsy certificate) The American Board of Medical Specialties

hereby declares

Order#: "/10/14 EMAIL (248) Initials:

Date Approved: \_\_\_\_

was certified in Epilepsy on August 11, 2014

as a Diplomate of the American Board of Psychiatry and Neurology Ongoing certification is contingent upon meeting the requirements of Maintenance of Certification

Bausen Schnedman, MD Aice-Chair Jany Rtalhun up Secretary

Tenne F. Carina

Certificate No

Certification is subject to the continued unlimited licensure to practice medicine in the United States of America or Canada.



2. A written statement indicating concurrence or specific grounds for objection from each Primary and Conjoint Board having expressed related interests in certifying in the same field



### THE AMERICAN BOARD OF ANESTHESIOLOGY, INC.

A MEMBER BOARD OF THE AMERICAN BOARD OF MEDICAL SPECIALTIES Advancing the Highest Standards of the Practice of Anesthesiology

SENT VIA EMAIL November 16, 2017

Lois Nora, M.D., J.D., MBA President and CEO American Board of Medical Specialties 353 North Clark Street, Suite 1400 Chicago, IL 60654

Dear Dr. Nora:

This letter serves as official notification of the intent of the American Board of Anesthesiology (ABA) to co-sponsor the application for establishment of subspecialty certification in Neurocritical Care (NCC) with the American Board of Psychiatry and Neurology (ABPN), the American Board of Emergency Medicine, the American Board of Neurosurgery, and the American Board of Surgery.

Given the multidisciplinary, multisystem, and team-based nature of NCC, the ABA will collaborate with ABPN to ensure the application aptly defines practice criteria that ensures appropriate and comprehensive parameters that encompass a broad clinical practice. The ABA will submit its own application for co-sponsorship of this subspecialty for consideration by the November 27, 2017 deadline.

We look forward to collaborating with these ABMS Member Boards to advance the training and recognition of neurocritical specialists and improve the care of patients.

Sincerely,

Uhbrach J. Cully, MD

Deborah J. Culley, M.D. Secretary

Daniel J. Cole, M.D.

President and Executive Director, Professional Affairs

DJC:sdf

cc: Mira Irons, M.D., ABMS Senior Vice-President for Academic Affairs Kathleen Ruff, MBA, ABMS Chief of Staff and Senior Vice President for Board and Member Board Relations Mary E. Post, MBA, CAE, ABA Executive Director, Administrative Affairs Larry R. Faulkner, M.D., ABPN President and CEO

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### American Board of Emergency Medicine

517.332.4800 fax 517.332.2234 www.abem.org

November 13, 2017

Lois Margaret Nora, M.D., J.D., M.B.A. President and Chief Executive Officer American Board of Medical Specialties 353 North Clark Street, Suite 1400 Chicago, IL 60654

Dear Dr. Nora:

This notice serves as a letter of intent for the American Board of Emergency Medicine (ABEM) as we pursue co-sponsorship for subspecialty certification in Neurocritical Care. The American Board of Psychiatry and Neurology would be the administrative board for this subspecialty.

As required, ABEM will submit a formal application to the American Board of Medical Specialties by the November 27, 2017, deadline.

ABEM appreciates your kind consideration of this opportunity. Please let me know if you have any questions.

With warmest regards,

Earl J. Reisdorff, M.D.

Executive Director

cc: Larry R. Faulkner, M.D., President and CEO The American Board of Psychiatry and Neurology, Inc.

Mira Irons, M.D., Senior Vice President, Academic Affairs American Board of Medical Specialties

Terry Kowalenko, M.D., President American Board of Emergency Medicine

John C. Moorhead, M.D., Chair American Board of Medical Specialties

Via Email

Executive Committee Terry Kowaienko, M.D., President Robert L, Muelleman, M.D., President-Elect Michael L. Carius, M.D., Immediate-Past-President Jill M. Baren, M.D., Secretary-Treasurer O, John Ma, M.D., Member-at-Large Kerryann B. Broderick, M.D., Senior Member-at-Large Directors Michael S, Beeson, M.D. Wallace A. Carter, M.D. Carl R. Chudofsky, M.D. Marianne Gausche-Hill, M.D. Deepl G. Goyal, M.D. Leon L. Haley, Jr., M.D. Ramon W. Johnson, M.D.

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The ABEM mission is to ensure the highest standards in the specialty of Emergency Medicine. A Member Board of the American Board of Medical Specialties



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### The American Board of Neurological Surgery, Inc. <sup>®</sup>

Member Board of the American Board of Medical Specialties

November 13, 2017

Lois Margaret Nora, MD, JD, MBA President and CEO American Board of Medical Specialties 353 North Clark Street, Suite 1400 Chicago, IL 60654

Dear Lois,

This letter confirms that the American Board of Neurological Surgery will serve as a co-sponsor of the Neurocritical Care Fellowship proposal in collaboration with the American Board of Psychiatry and Neurology (managing board), American Board of Surgery, American Board of Anesthesia and American Board of Emergency Medicine.

Respectfully yours,

Mayon M.D.

Fredric B. Meyer, M.D. Executive Director

cc: Larry R. Faulkner, M.D., ABPN President and CEO

3. Written comments on the proposed new or modified subspecialty area from at least two (2) external public stakeholders



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Associate Executive Director JANET WILSON, CAE January 19, 2018

Richard E. Hawkins, M.D. American Board of Medical Specialties President and Chief Executive Officer 353 North Clark Street Suite 1400 Chicago, IL 60654

Dear Dr. Hawkins:

The American Academy of Emergency Medicine (AAEM) supports the application by the American Board of Emergency Medicine (ABEM) for the co-sponsorship of subspecialty certification in Neurocritical Care Medicine.

AAEM supports board certification and believes that such high standards are essential to the continued enrichment of Emergency Medicine and necessary to ensure a high quality of care for the patients we serve.

AAEM and its Critical Care Medicine Section wishes ABEM all the best in this pursuit to provide a certification opportunity in Neurocritical Care Medicine to ABEM diplomates in the future.

Joseph Shiler

President

Joseph R. Shiber, MD FAAEM FCCM

AAEM Critical Care Medicine Section

Sincerely,

David A. Farcy, MD FAAEM FACEP FCCM President-Elect American Academy of Emergency Medicine

Ashika Jain, MD FAAEM President-Elect AAEM Critical Care Medicine Section

cc: John C. Moorehead, M.D., M.S., FACEP, ABMS Chair Randall K. Roenigk, M.D., ABMS Committee on Certification Chair Terry Kowalenko, M.D., ABEM President Mary Nan S. Mallory, M.D., ABMS Committee on Certification Member Michael L. Carius, M.D., ABMS Board of Directors Robert L. Muelleman, M.D., ABEM President-elect

### American Academy of Emergency Medicine

555 E. Wells St., Suite 1100, Milwaukee, WI 53202-3823 phone: 1-800-884-AAEM • fax: 414-276-3349 • e-mail: info@aaem.org • website: www.aaem.org



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Nicholas E. Johnson, MD Chair, Government Relations Committee Salt Lake City, Utah

Ex Officio, Non-voting Director Catherine M. Rydell, CAE Executive Director/CEO Minneapolis, Minnesota October 21, 2016

Larry R. Faulkner, MD President and CEO The American Board of Psychiatry and Neurology, Inc. 2150 E. Lake Cook Road, Suite 900 Buffalo Grove, IL 60089

Dear Dr. Faulkner:

In follow-up to our October 13, 2016 letter outlining the American Academy of Neurology's (AAN) support for the Neurocritical Care Society's request for Neurocritical Care Subspecialty certification, I am pleased to let you know that the AAN will serve as a co-sponsor with the Neurocritical Care Society on the application.

We look forward to working with the Neurocritical Care Society and the ABPN on these efforts. If you have any further questions, please feel free to contact me or Ms. Catherine Rydell, Executive Director/CEO, American Academy of Neurology.

Sincerely,

cc:

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Terrence Cascino, MD, FAAN President American Academy of Neurology

Ralph Sacco, MD, FAAN, President-Elect, AAN
Catherine M. Rydell, CAE, Executive Director/CEO, AAN
Michael Torbey, MD, President, Neurocritical Care Society
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Christine E. Phelps, Deputy Executive Director, AANI
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Kathryn Boyle, Manager, Member Relations, AAN

2017 AAN Annual Meeting Boston Convention & Exhibits Center - Boston, MA April 22–April 29, 2017 2018 AAN Annual Meeting Los Angeles Convention Center - Los Angeles, CA April 21–April 28, 2018



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Nicholas E. Johnson, MD Chair, Government Relations Committee Salt Lake City, Utah

Ex Officio, Non-voting Director Catherine M. Rydell, CAE Executive Director/CEO Minneapolis, Minnesota October 13, 2016

Larry R. Faulkner, MD President and CEO The American Board of Psychiatry and Neurology, Inc. 2150 E. Lake Cook Road, Suite 900 Buffalo Grove, IL 60089

Dear Dr. Faulkner:

The American Academy of Neurology (AAN) enthusiastically and unconditionally supports the Neurocritical Care Society's request that Neurocritical Care be recognized by the American Board of Psychiatry and Neurology (ABPN) and American Board of Medical Specialties (ABMS) as a new subspecialty in Neurology.

Neurocritical Care is a subspecialty of Neurology that focuses on the care of critically ill patients with primary and secondary neurological disorders. The practice of Neurocritical Care requires a comprehensive understanding of effects of critical illness on the nervous system and the special vulnerabilities of the nervous system among patients in intensive care unit and other emergency settings. Neurocritical Care bridges many medical and allied health specialties, including Critical Care Medicine, Emergency Medicine, Neurosurgery, nursing and social work. Development of the Neurocritical Care Subspecialty Certification recognizes the special health needs of critically ill patients with neurologic dysfunction, the characteristics of the nervous system in critically ill patients and the need for interdisciplinary collaboration in this field.

Neurocritical Care fellowship training programs and providers are currently accredited and certified by the Unified Council of Neurological Subspecialties (UCNS). There are 1,241 UCNS certified Neurocritical Care diplomates and 60 UCNS accredited Neurocritical Care fellowship training programs. Diplomates from the specialties of Neurology, Neurological Surgery, Internal Medicine, Anesthesiology, Surgery, Emergency Medicine and Pediatrics are eligible for NCC fellowships. The Neurocritical Care Society is requesting subspecialty recognition because the ABMS and ABPN represent the gold standard for specialty accreditation. Furthermore, UCNS Neurocritical Care diplomates are increasingly facing hospital credentialing barriers because other specialties have established ABMS recognized pathways to become certified in critical care. This trend is negatively impacting patient access to expert neurocritical care.

2017 AAN Annual Meeting Boston Convention & Exhibits Center - Boston, MA April 22-April 29, 2017 2018 AAN Annual Meeting Los Angeles Convention Center - Los Angeles, CA April 21–April 28, 2018 The mission of the AAN is to "promote the highest quality patient-centered neurologic care". The AAN strongly supports the Neurocritical Care Societies application because recognition by the ABPN and ABMS will enhance access to neurocritical care and improve outcomes for patients who are increasingly unable benefit from this expertise.

If you have any further questions, please feel free to contact me or Ms. Catherine Rydell, Executive Director/CEO, American Academy of Neurology.

Sincerely,

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Terrence Cascino, MD, FAAN President American Academy of Neurology

cc: Ralph Sacco, MD, FAAN, President-Elect, AAN Catherine M. Rydell, CAE, Executive Director/CEO, AAN Michael Torbey, MD, President, Neurocritical Care Society Edward Manno, MD, Past-President, Neurocritical Care Society JoAnn Taie, Executive Director, Neurocritical Care Society Gordon Smith, MD, FAAN, Chair, Education Committee, AAN Paul Nyquist, MD, Chair, FAAN, CCEN Section, AAN Christine E. Phelps, Deputy Executive Director, AANI Jason Kopinski, Deputy Executive Director, AAN Susan Rodmyre, Senior Director, Education, AAN Kathryn Boyle, Manager, Member Relations, AAN



January 17, 2018

Richard E. Hawkins, MD American Board of Medical Specialties President and Chief Executive Officer 353 North Clark Street Suite 1400 Chicago, IL 60654

Dear Dr. Hawkins:

The American College of Emergency Physicians (ACEP) supports the application by the American Board of Emergency Medicine (ABEM) for the co-sponsorship of subspecialty certification in Neurocritical Care Medicine.

ACEP supports board certification and believes that such high standards are essential to the continued enrichment of Emergency Medicine and necessary to ensure a high quality of care for the patients we serve.

ACEP and its Critical Care Medicine Section wishes ABEM all the best in this pursuit to provide a certification opportunity in Neurocritical Care Medicine to ABEM diplomates in the future.

Sincerely,

cc:

- Kine HD FACEP

Paul D. Kivela, MD, MBA, FACEP President

Nicholas Mohr, MD, FACEP Chair, Critical Care Medicine Section

John C. Moorehead, MD, ABMS Chair Randall K. Roenigk, MD, ABMS Committee on Certification Chair Terry Kowalenko, MD, ABEM President Mary Nan S. Mallory, MD, ABMS Committee on Certification Member Michael L. Carius, MD, ABMS Board of Directors Robert L. Muelleman, MD, ABEM President-elect

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October 19, 2016

4.4

Larry R. Faulkner, MD President and CEO The American Board of Psychiatry and Neurology, Inc. 2150 E. Lake Cook Road, Suite 900 Buffalo Grove, IL 60089

Dear Dr. Faulkner:

The Association of University Professors of Neurology (AUPN) has been made aware of the Neurocritical Care Society's request for Neurocritical Care to be recognized by the American Board of Psychiatry and Neurology (ABPN) and American Board of Medical Specialties (ABMS) as a new subspecialty in Neurology. The AUPN strongly and enthusiastically supports this request.

The practice of Neurocritical Care requires a comprehensive understanding of not only the pathophysiology of serious neurological conditions but also the systemic effects of those conditions, and the special vulnerabilities of the nervous system in critically ill patients. As intensivists, those who practice of Neurocritical Care must also acquire expertise in the core skills of critical care including management of airway, ventilation, cardiovascular system, nutrition and infection. Development of the Neurocritical Care Subspecialty Certification recognizes the unique health needs of critically ill patients with nervous system insults and that specially trained physicians with both neurologic and critical care expertise are most appropriate to care for them. Of note, the National Uniform Claim Committee has created a taxonomy code for Neurocritical Care and the Leapfrog group recognizing Neurointensivists as intensivists.

As more neurologists began to self-identify themselves as Neurointensivists, the Neurocritical Care Society was founded in 2002 and worked with the Unified Council of Neurological Subspecialties (UCNS) to develop training and certification requirements. The first certification exam was given in 2007. Since then 1,241 diplomates have been certified in Neurocritical Care. There are 60 UCNS accredited Neurocritical Care fellowship training programs which train an annually increasing number of fellows with close to 100 in 2016. The "grandfathering" period ended with the 2013 exam when 529 diplomates were certified; the next exam was offered in 2015 and an additional 164 diplomates were certified.

The Neurocritical Care Society is requesting subspecialty recognition to ensure comprehensive rigorous training of fellows, to address the increasing hospital credentialing barriers because other specialties have established ABMS recognized pathways to become certified in critical care, solidify the posture that Neurointensivists are the most appropriate physicians to manage

patients with critical neurologic illness, and to ensure that patients treated by ABMS certified Neurointensivist receive the highest quality care.

The AUPN unconditionally supports the Neurocritical Care Societies application for recognition by the ABPN and ABMS and believes that it will enhance access to Neurointensivists and improve outcomes for patients who are increasingly unable benefit from this expertise.

Sincerely,

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Karen C. Johnston, MD, MSc President, Association of University Professors of Neurology Professor and Chair of Neurology and Public Health Sciences University of Virginia

KCJ/jt

1000 West County Road E Suite 290 St. Paul, MN 55126

r | 651.486.9447 F | 651.486.9436 www.childneurologysociety.org

February 23, 2017

Larry R. Faulkner, M.D. President and CEO American Board of Psychiatry and Neurology, Inc. 2150 E. Lake Cook Road, Suite 900 Buffalo Grove, IL 60089

**RE:** Neurocritical Care

Dear Dr Faulkner,

The Child Neurology Society has been asked by the Neurocritical Care Society to support ABMS certification of Neurocritical Care.

The Child Neurology Society strongly supports the development of this field, and recognizes the potential benefits of seeking ABMS recognition.

As this this field grows, interest in pediatric Neurocritical Care will grow as well. As this process continues forward, it would be desirable to identify a pathway for graduates of a Child Neurology program to participate in this training. I would hope that representation from existing pediatric neurocritical care training programs would have a voice in this process.

Sincerely,

Kenneth (/ Mails

Kenneth J. Mack, MD PhD President Child Neurology Society

cc: Neurocritical Care Society


October 7, 2016

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Larry R. Faulkner, MD President and CEO The American Board of Psychiatry and Neurology, Inc. (ABPN) 2150 E. Lake Cook Road, Suite 900 Buffalo Grove, IL 60089 <u>Ifaulkner@abpn.com</u>

**Re: Petition for ABMS Certification of NCC** 

Dear Dr. Faulkner:

Neurocritical care (NCC) has always been an important element of the mission of the Society for Neuroscience in Anesthesiology and Critical Care (SNACC). In accord with this mission SNACC has been a supporter of the inception and subsequent growth of the subspecialty of NCC and has continued as a collegial collaborator with the Neurocritical Care Society. As such SNACC has strongly supported the notion that the quality of care rendered to neuroICU patients is best when provided in a context of multidisciplinary collaboration, cooperation, and cross-education. We are thus pleased with the significant growth which has arisen in NCC over the last twenty years with documented associated improvements in patient outcomes. This growth has included the number of qualified (by UCNS) physicians, meaningful inclusion of non-physicians in NCC activities and leadership, advances in research, significant educational activities, and several NCC manuals and textbooks. With the current efforts in SNACC regarding accreditation of neuroanesthesiology as a subspecialty we see room for future collaboration within the two subspecialties and are happy to be involved in this NCC initiative.

It is in this spirit of multidisciplinary collaboration that SNACC strongly supports the petition to ABPN from the leaders of NCC to seek certification and accreditation through the ABMS and ACGME, while maintaining its multi-disciplinary character by including candidates from several medical specialties.

Sincerely,

WAndraw Koffe

W. Andrew Kofke, MD, MBA, FCCM, FNCS President, Society for Neuroscience in Anesthesiology and Critical Care, 2015-16

Cc:

Michel T. Torbey, MD, MPH, FAHA, FCCM, FNCS President, Neurocritical Care 5ociety

Edward M. Manno, MD, FNCS, FANA, FAAN, FAHA, FCCM Immediate Past President, Neurocritical Care Society Page 2 Larry R. Faulkner, MD

CC Continued:

j. . .

Cherylee W. J. Chang, MD, FNCS Co-Chair, Certification Task Force Past President, Neurocritical Care Society

Michael N. Diringer, MD Co-Chair, Certification Task Force Past President, Neurocritical Care Society

Pat Janda, Director Credentials and Meetings

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