# AMERICAN ACADEMY OF NEUROLOGY NEURO-ONCOLOGY FELLOWSHIP CORE CURRICULUM

September 2013

#### I. PURPOSE:

The purpose of this document is to broadly define the content of core knowledge and principles to be mastered by fellowship trainees in the subspecialty of Neuro-Oncology.

## II. CORE CURRICULA

# A. DEFINITION OF SUBSPECIALTY

#### 1. Definition

**Neuro-oncology** is a specialty which involves the management of primary and metastatic central and peripheral nervous system neoplasms; neurologic complications of cancer and related disorders; and neurologic complications of therapy utilized in such patients.

# 2. Scope of practice

# a. Background of practitioners

The subspecialty evolved in the latter third of the 20<sup>th</sup> century out of a demonstrated need for physicians trained and experienced in the management of such patients. This specialty fell outside the scope of established practice requirements for the specialties of neurology, medical oncology, and neurosurgery, justifying its development Of late most physicians practicing neuro- oncology have background in Neurology. Currently there is a UCNS certification for Neuro-Oncology.

## b. Distinction from established specialties

It is the position of the Section on Neuro-Oncology that the proper management of neuro-oncology patients requires training and experience in Neurology or Medical Oncology or Neurosurgery. This allows familiarity with CNS disease and chemotherapeutic practices.

- 1) Approved residency training (U.S. or equivalent) in Neurology, Neurosurgery, or Internal Medicine (oncology fellowship) with experience in and/or rotations involving neurology
- 2) Training in clinical oncology as related to primary and secondary nervous system neoplasms, and direct and indirect complications of these neoplasms and their management (Approved completion of Medical Oncology fellowship by CGME approved program which includes emphasis in neuro-oncology or Neuro-Oncology Fellowship recognized by AAN/Section of Neuro-Oncology). Board certification or a board eligible status, in accord with requirements of the American Board of Medical Specialties, in one of the following specialties (neurology, internal medicine

## B. CORE CONTENT AND KNOWLEDGE BASE

Fellowship training programs in neuro-oncology will have the following purposes and goals (See attached UCNS guidelines for complete content):

- 1. To provide supervised training in the practice of neuro-oncology. Core training will include but not necessarily be limited to the following areas:
  - a. Advanced principles in the diagnosis of primary and secondary (metastatic) nervous system malignancies
  - b. Advanced principles of management of primary and secondary nervous system malignancies, to include:
    - 1. Expertise in the treatment of these neoplasms, including:
      - a. Primary central nervous system adult and pediatric tumors
      - b. Metastatic cancer to the nervous system, including:

Brain and spinal cord

Metastases neoplastic

Meningitis

epidural cord compression

Nerve and plexus

Metastases base of skull

Metastases

c. Treatment of cancer related complications, including:

Encephalopathy

**CNS** infections

Cerebrovascular

Disease Seizures

Increased intracranial pressure

Thromboembolism

Neutropenia, thrombocytopenia, anemia

Sepsis and other infections

Metabolic disorders Pain management Palliative /

end of life care

- 2. Expertise in the use of related chemotherapeutic agents, supportive medication related to neuro-oncology, and blood products
- 3. Expertise in the recognition and management of complications of related chemotherapy and other therapeutic agents (including radiotherapy, surgery, steroids etc.)
- 4. Experience in the coordination of multidisciplinary management of patients with neuro-oncologic disorders with other subspecialties, including medical oncology, neurosurgery, radiation oncology, neuroradiology, neuropathology, pain management, rehabilitative and cognitive services, palliative care and hospice transitions.

- 2. To provide supervised training in clinical research. This experience will include but is not necessarily restricted to:
  - a. Experience in: clinical scientific research methodology and protocol design; data management and interpretation; regulatory mechanisms applicable to clinical oncology research; toxicity, safety and biostatistical methodology; independent design of original clinical or laboratory research; presentation of accomplished activities; and writing and submission of manuscripts and research grant applications.
- 3. To provide guidelines and counsel with regards to the transition to an independent career as a competent neuro-oncologist.