PEDIATRIC NEUROLOGY

Rotation Specific Objectives

Medical Staff:	Dr. Colin Wilbur (Program Director) Dr. Francois Bolduc Dr. Francois Morneau-Jacob Dr. Janani Kassiri Dr. Natarie Liu Dr. Janette Mailo Dr. Thilinie Rajapakse Dr. Lawrence Richer Dr. D. Barry Sinclair Dr. Jerome Yager Dr. Risa Namsechi Dr. Ratika Srivastava Dr. Andy Ng Dr. Hanna Kolski
Program Administrator:	Emily Girard pedneuro@ualberta.ca

PREAMBLE

1. This subspecialty pediatrics rotation includes inpatient consultation and outpatient clinics primarily at the Stollery Children's Health Centre

2. At the end of this rotation, residents can expect to have a sound understanding of common neurologic diseases and presentations in children, including assessment, diagnostic evaluation and initial treatment

ROTATION SPECIFIC OBJECTIVES

KNOWLEDGE

The resident will be able to demonstrate knowledge including:

- basic neuroanatomy and neurophysiology of the CNS
- indications for appropriate use of and risks/complications of the following investigations:
  - lumbar puncture
  - EEG
  - electromyogram and nerve conduction studies

    - skull and spine x-rays
    - ultrasound of the head and spine
    - CT scan
    - MRI
    - muscle biopsy
- interpretation of cerebrospinal fluid (CSF) analysis
- basic pharmacology of medications used in the treatment of epilepsy and migraine

SKILLS
The resident will be able to demonstrate the following skills:
- neurologic exam of the neonate, infant, child, and adolescent

PROBLEMS
The resident, using the relevant knowledge, skills and attitudes, will be able to recognize, diagnose and initiate management of the following problems:-
- pediatric seizures/epilepsy
- pediatric headache, migraine, and migraine equivalents
- tic disorders
- neurocutaneous syndromes
- syncope/loss of consciousness and breath-holding spells
- ataxia (acute and chronic)
- minor head trauma
- hypotonia
- common congenital malformations of the CNS
- developmental delay or regression
- pediatric cerebrovascular diseases
- cerebral palsy
- common neuromuscular disorders presenting as weakness and/or sensory symptoms

CanMEDS Format Objectives in Pediatric Neurology

Role	Key Competencies
Medical expert / clinical decision maker	1. Identify basic neuroanatomical details of MRI and CT scans. 2. Appreciate basic neuroanatomical and neurophysiological principles in the localization and diagnosis of disease of the nervous system. 3. Must recognize the urgency of some neurological emergencies including spinal cord compression and status epilepticus. 4. Must have a good understanding of common neurological problems (as above) in children. 5. Must be able to obtain an accurate history. 6. Must be able to perform a thorough neurological examination aimed at identifying and localizing diseases of the nervous system. This includes the examination of the comatose child. 7. Must be able to formulate an appropriate differential diagnosis or

	prioritized problem list
Communicator	1. Must be able to discuss the management plan with the family, patient, and other caregivers in a timely and accurate fashion. 2. Must communicate effectively with other health care professionals. 3. Must address the concerns of patients and their caregivers. 4. Must include the patient in the discussion of the management plan and diagnosis. 5. Must communicate effectively with the Neurology service to maintain a high standard of care for each assigned patient. 6. Must maintain complete and accurate medical records
Collaborator	1. Demonstrate effective collaboration among members of the neurology service and other health professionals involved in the care of assigned patients. 2. Contribute effectively to Pediatric Neuroscience rounds – a multidisciplinary review of patients with problems of the nervous system. 3. Teach more junior members of the Neurology service including medical students and junior residents.
Leader	1. Will be expected to follow and derive a management plan for all assigned patients on a daily basis balancing effective utilization of resources with patient care. 2. Be punctual for inpatient rounds and outpatient clinics. 3. Maintain complete and accurate medical records including the initial consultation note on inpatients, progress notes on a daily basis, as well as outpatient clinic notes and dictations. 4. Must be able to organize and coordinate common ancillary investigations when appropriate and reviewed by the Neurology service. 5. Must be able to prioritize requests for consultations based on the urgency of the problem.
Health advocate	1. Must identify important determinants in the control of chronic neurological disorders including epilepsy and headache. 2. Must be able to advise on safety concerns with epilepsy and other paroxysmal disorders of the nervous system. 3. Must advocate for children with disabilities for appropriate care and attention at school, home, and other extracurricular activities. 4. Use available educational material in teaching patients about their neurological condition
Scholar	1. Must be able to identify areas of weakness and drive their own learning to manage assigned patients, complementing the teaching on rounds and discussion among colleagues. 2. Demonstrate a strategy for continuing medical education. 3. If interested, participate in a research activity, literature review, or case report.

Professional	1. Must act in an honest, compassionate, and ethical fashion. 2. Must recognize self-limitations and act upon them to optimize patient care.

Mapped Entrustable Professional Activities

EPAs mapped to the Peds Neurology Rotation (dependent on stage of training)

Transition To Discipline 1	**Performing and presenting a basic history and physical examination**
Transition To Discipline 2	**Documenting orders for pediatric patients**

Foundations 5	**Assessing, diagnosing, and managing patients with common pediatric problems**
Foundations 8	**Communicating assessment findings and management plans to patients and/or families**
Foundations 9	**Documenting clinical encounters**

Core 3	**Assessing patients with medical and/or psychosocial complexity**
Core 4	**Diagnosing and managing pediatric patients**
Core 5	**Providing ongoing management for patients with chronic conditions**

Optional EPAs (depending on stage of training)

Foundations 4	**Assessing, diagnosing, and initiating management for newborns with common problems**
Foundations 10	**Transferring clinical information between health care providers during handover**
Foundations 11	**Coordinating transitions of care for non-complex pediatric patients**

Core 10	**Leading discussions with patients, families and/or other health care professionals in emotionally charged situations**
Core 11	**Coordinating transitions of care for patients with medical or psychosocial complexity**
Core 14	**Providing teaching and feedback**

Transition to Practice 3	**Leading discussions about goals of care**