PGY-3 Rotations
Competency Based Goals and Objectives

The goals of the first year of the pediatric neurology residency program are to become familiar with the principles of neurologic localization, evaluation of patients with altered mental status, differentiation of structural and metabolic causes of neurologic disease, neurologic presentation of systemic disease, disorders of higher cortical function, and basics of critical care as it pertains to life-threatening neurologic conditions. The year is spent primarily under the direction of the adult neurology residency program. Residents maintain a pediatric neurology outpatient continuity clinic throughout the year. The objectives for each rotation completed during the first year are as follows:

11400 General Neurology Service

Patient Care. Provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

Objectives:
- Perform an accurate and specific history and physical examination on patients admitted to the general neurology service for recognition of neurologic disorders
- Integrate history and physical examination with medical knowledge for neurologic disorders to generate a differential diagnosis and plan
- Use evidence-based treatment guidelines to inform treatment decisions
- Order, review, and evaluate all diagnostic testing for patients on the general neurology service
- Perform diagnostic procedures including lumbar punctures
- Provide timely, compassionate service and seek appropriate consultation and support in the evaluation and treatment of neurologic disorders

Medical Knowledge. Understand the scope of established and evolving biomedical, clinical, epidemiological, and social-behavioral knowledge needed by a pediatric neurologist; demonstrate the ability to acquire, critically interpret, and apply this knowledge in patient care.

Objectives:
- Develop approach for evaluation of acute, severe, or debilitating neurologic problems requiring hospitalization
- Attend teaching rounds for case presentation and discussion with attending physicians
- Attend weekly neurology conferences when clinical duties permit
- Develop appropriate diagnostic and management strategies for common neurologic diagnoses, including arterial cerebral infarction, venous cerebral infarction, venous sinus thrombosis, seizures, meningitis, encephalopathy, hydrocephalus, multiple sclerosis, and brain injury
- Develop basic interpretation of neuroimaging studies commonly obtained in the general neurology patient including CT and MR
- Understand the basic principles of EEG interpretation
- Gain familiarity with the most current pathophysiological understanding of common neurologic disorders
Interpersonal and Professional Communication. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families, and professional associates.

Objectives:
- Provide clinical assessment of cases to senior resident and faculty, using correct terminology and with explanation of rationale based on appraisal of available clinical, laboratory, neuroimaging data
- Interact in a collegial way with staff, including nurses, nurse practitioners, lab technicians, radiology technologists, therapists, and social workers, with goal of providing optimal patient care
- Communicate effectively with patients and their families to obtain clinically relevant information and deliver diagnosis and treatment plan in an easily understood and culturally sensitive manner
- Maintain comprehensive, timely, and legible medical records
- Generate discharge summary at conclusion of hospital stay

Professionalism. Demonstrate a commitment to carry out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

Objectives:
- Be present and ready for rounds at the agreed time
- Admit errors or omissions and takes steps to correct them
- Protect patient privacy
- Demonstrate sensitivity to race, gender, ethnic background, religion, sexual orientation, and other social factors in dealing with patient care and interactions with other providers and other learners
- Treat colleagues at all levels with respect

Practice-based Learning and Improvement. Demonstrate knowledge, skills, and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one’s patient care practice.

Objectives:
- Prioritize clinical responsibilities, provide timely service, and seek appropriate consultation and support when necessary
- Integrate feedback from preliminary diagnostic errors to improve diagnostic accuracy
- Identify strengths, deficiencies, and limits to knowledge and expertise
- Access learning sources (textbooks, medical literature, online resources) to fill gaps in knowledge that are identified during case discussions
- Participate in the education of students, residents, and other health care professionals
Systems Based Practice. Understand how to practice quality health care and advocate for patients within the context of the health care system.

Objectives:
- Understand the concepts of cost containment and cost effectiveness that may be employed on the general neurology service for the management of patients with neurological disorders
- Describe methods for ensuring the physician and the general neurology service use scarce resources in a sound, thoughtful, and cost-effective manner

Neurology Consult Service

Patient Care. Provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

Objectives:
- Develop experience in evaluation and management of neurologic complaints complicating medical and surgical inpatient illnesses
- Integrate history and physical examination with medical knowledge for neurologic disorders to generate a differential diagnosis and plan
- Use evidence-based treatment guidelines to inform evaluation and treatment recommendations
- Review, and evaluate all diagnostic testing for patients on the neurology consult service
- Aid consulting services in performing diagnostic procedures including lumbar punctures

Medical Knowledge. Understand the scope of established and evolving biomedical, clinical, epidemiological, and social-behavioral knowledge needed by a pediatric neurologist; demonstrate the ability to acquire, critically interpret, and apply this knowledge in patient care.

Objectives:
- Attend and participate in weekly neurology conferences when clinical duties permit
- Demonstrate an understanding of the basic science background of neurologic disorders and apply this knowledge to the clinical care of patients admitted with complicating medical or surgical conditions
- Develop approach for evaluation of medically ill patients who present with neurologic complaints
- Understand the interaction of neurologic diseases with other organ systems and with other medical illnesses.
- Gain familiarity with the most current pathophysiological understanding of common neurologic disorders

Interpersonal and Professional Communication. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families, and professional associates.

Objectives:
- Develop effective communication skills with professionals from other areas of medical practice including internal medicine, general surgery, and surgical subspecialties
• Provide clinical assessment of cases to senior resident and faculty, using correct terminology and with explanation of rationale based on appraisal of available clinical, laboratory, neuroimaging data
• Interact in a collegial way with all members of the healthcare team
• Communicate effectively with patients and their families to obtain clinically relevant information and deliver diagnosis and treatment plan in an easily understood and culturally sensitive manner
• Maintain comprehensive, timely, and legible medical records
• Generate discharge summary at conclusion of hospital stay

Professionalism. Demonstrate a commitment to carry out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

Objectives:
• Be present and ready for rounds at the agreed time
• Admit errors or omissions and takes steps to correct them
• Protect patient privacy
• Demonstrate sensitivity to race, gender, ethnic background, religion, sexual orientation, and other social factors in dealing with patient care and interactions with other providers and other learners
• Treat colleagues at all levels with respect

Practice-based Learning and Improvement. Demonstrate knowledge, skills, and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one’s patient care practice.

Objectives:
• Prioritize clinical responsibilities, provide timely service, and seek appropriate consultation and support when necessary
• Perform enhanced independent evaluations for neurologic complaints including obtaining complete history, performing examination, and formulating treatment plans in the setting of a consultative practice
• Teach physicians throughout the hospital appropriate responses and treatments for neurologic disorders.
• Prioritize and organize consults so as to respond to the concerns of the consultants and to reassure that urgent problems are immediately evaluated and treated
• Integrate feedback from preliminary diagnostic errors to improve diagnostic accuracy
• Identify strengths, deficiencies, and limits to knowledge and expertise
• Access learning sources (textbooks, medical literature, online resources) to fill gaps in knowledge that are identified during case discussions
• Participate in the education of students, residents, and other health care professionals

Systems Based Practice. Understand how to practice quality health care and advocate for patients within the context of the health care system.
Objectives:
- Understand the concepts of cost containment and cost effectiveness that may be employed on the general neurology service for the management of patients with neurological disorders
- Describe methods for ensuring the physician and the neurology consult service use scarce resources in a sound, thoughtful, and cost-effective manner

**Night Float**

**Patient Care.** Provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

Objectives:
- Develop experience in the urgent consultation of hospitalized patients on medical and surgical services
- Integrate history and physical examination with medical knowledge for neurologic disorders to generate a differential diagnosis and plan
- Use evidence-based treatment guidelines to inform evaluation and treatment recommendations

**Medical Knowledge.** Understand the scope of established and evolving biomedical, clinical, epidemiological, and social-behavioral knowledge needed by a pediatric neurologist; demonstrate the ability to acquire, critically interpret, and apply this knowledge in patient care.

Objectives:
- Develop approach for rapid initial assessment of patients requiring emergent neurologic evaluation
- Attend and participate in weekly neurology conferences when clinical duties permit
- Demonstrate an understanding of the basic science background of neurologic disorders and apply this knowledge to the clinical care of patients admitted with complicating medical or surgical conditions
- Develop approach for evaluation of medically ill patients who present with neurologic complaints
- Understand the interaction of neurologic diseases with other organ systems and with other medical illnesses.
- Gain familiarity with the most current pathophysiological understanding of common neurologic disorders

**Interpersonal and Professional Communication.** Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families, and professional associates.

Objectives:
- Develop effective communication skills with professionals from other areas of medical practice including internal medicine, general surgery, and surgical subspecialties
- Provide clinical assessment of cases to senior resident and faculty, using correct terminology and with explanation of rationale based on appraisal of available clinical, laboratory, neuroimaging data
Interact in a collegial way with all members of the healthcare team
Communicate effectively with patients and their families to obtain clinically relevant information and deliver diagnosis and treatment plan in an easily understood and culturally sensitive manner
Maintain comprehensive, timely, and legible medical records
Generate discharge summary at conclusion of hospital stay

**Professionalism.** Demonstrate a commitment to carry out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

**Objectives:**
- Be present and ready for rounds at the agreed time
- Admit errors or omissions and takes steps to correct them
- Protect patient privacy
- Demonstrate sensitivity to race, gender, ethnic background, religion, sexual orientation, and other social factors in dealing with patient care and interactions with other providers and other learners
- Treat colleagues at all levels with respect

**Practice-based Learning and Improvement.** Demonstrate knowledge, skills, and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one’s patient care practice.

**Objectives:**
- Prioritize clinical responsibilities, provide timely service, and seek appropriate consultation and support when necessary
- Develop experience in evaluation and management of neurologic complaints complication medical and surgical inpatient illnesses
- Perform focused histories and examinations on patients with neurologic complaints and formulate a plan for immediate management in consultation with senior residents and/or attending physicians
- Prioritize and organize consults so as to respond to the concerns of the consultants and to reassure that urgent problems are immediately evaluated and treated
- Integrate feedback from preliminary diagnostic errors to improve diagnostic accuracy
- Identify strengths, deficiencies, and limits to knowledge and expertise
- Access learning sources (textbooks, medical literature, online resources) to fill gaps in knowledge that are identified during case discussions
- Participate in the education of students, residents, and other health care professionals

**Systems Based Practice.** Understand how to practice quality health care and advocate for patients within the context of the health care system.

**Objectives:**
- Understand the concepts of cost containment and cost effectiveness that may be employed on the general neurology service for the management of patients with neurological disorders
• Describe methods for ensuring the physician and the neurology consult service use scarce resources in a sound, thoughtful, and cost-effective manner

### Neuro-Critical Care Unit

**Patient Care.** Provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

**Objectives:**
- Perform an accurate and specific history and physical examination on patients admitted to the neuro-critical care unit for recognition of neurologic disorders
- Integrate history and physical examination with medical knowledge for neurologic disorders to generate a differential diagnosis and plan
- Use evidence-based treatment guidelines to inform treatment decisions
- Order, review, and evaluate all diagnostic testing for patients in the neuro-critical care unit
- Perform diagnostic procedures including lumbar punctures
- Provide timely, compassionate service and seek appropriate consultation and support in the evaluation and treatment of neurologic disorders

**Medical Knowledge.** Understand the scope of established and evolving biomedical, clinical, epidemiological, and social-behavioral knowledge needed by a pediatric neurologist; demonstrate the ability to acquire, critically interpret, and apply this knowledge in patient care.

**Objectives:**
- Develop approach for rapid initial assessment of patients requiring emergent neurologic evaluation
- Become familiar with intensive care unit procedures for support of critically ill patients with special emphasis on ventilator management, blood pressure management, and fluid/electrolyte management
- Attend and participate in weekly neurology conferences when clinical duties permit
- Demonstrate an understanding of the basic science background of neurologic disorders and apply this knowledge to the clinical care of critically ill patients affecting neurologic functioning
- Understand the interaction of neurologic diseases with other organ systems and with other medical illnesses.
- Gain familiarity with the most current pathophysiological understanding of common neurologic disorders

**Interpersonal and Professional Communication.** Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families, and professional associates.

**Objectives:**
- Provide clinical assessment of cases to senior resident and faculty, using correct terminology and with explanation of rationale based on appraisal of available clinical, laboratory, neuroimaging data
- Interact in a collegial way with all members of the healthcare team
Communicate effectively with patients and their families to obtain clinically relevant information and deliver diagnosis and treatment plan in an easily understood and culturally sensitive manner.
- Maintain comprehensive, timely, and legible medical records
- Generate discharge summary at conclusion of hospital stay
- Develop skills and techniques for delivering bad news

**Professionalism.** Demonstrate a commitment to carry out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

**Objectives:**
- Be present and ready for rounds at the agreed time
- Admit errors or omissions and takes steps to correct them
- Protect patient privacy
- Demonstrate sensitivity to race, gender, ethnic background, religion, sexual orientation, and other social factors in dealing with patient care and interactions with other providers and other learners
- Treat colleagues at all levels with respect

**Practice-based Learning and Improvement.** Demonstrate knowledge, skills, and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one’s patient care practice.

**Objectives:**
- Prioritize clinical responsibilities, provide timely service, and seek appropriate consultation and support when necessary
- Develop experience in management of pre-operative and post-operative neurosurgical conditions including traumatic brain injury, intracerebral hemorrhage, brain tumors, status epilepticus, and management of coma
- Perform comprehensive histories and physical examinations on all patients admitted to the neuro-critical care unit and develop diagnostic and therapeutic plans in conjunction with neuro-critical care fellows and attending physicians
- Integrate feedback from preliminary diagnostic errors to improve diagnostic accuracy
- Identify strengths, deficiencies, and limits to knowledge and expertise
- Access learning sources (textbooks, medical literature, online resources) to fill gaps in knowledge that are identified during case discussions
- Participate in the education of students, residents, and other health care professionals

**Systems Based Practice.** Understand how to practice quality health care and advocate for patients within the context of the health care system.

**Objectives:**
- Understand the concepts of cost containment and cost effectiveness that may be employed in the neuro-critical care unit for the management of patients with neurological disorders
- Describe methods for ensuring the physician and the neuro-critical care team use scarce resources in a sound, thoughtful, and cost-effective manner