

DIVISION OF PEDIATRIC NEUROLOGY
Mattel Children’s Hospital at UCLA
Pediatric Neurology Rotation

Rotation Overview:

The rotation is conducted at the Mattel Children’s Hospital, which is a “hospital within a hospital,” and as such shares laboratory, radiology, and clinical electrophysiology services, although there are specialized personnel for the interpretation of pediatric diagnostic studies. The team consists of the pediatric neurology resident (“fellow”, PGY 4 or 5), two PGY 3 neurology residents, and one or two PGY 2 pediatric interns. A full time faculty member serving as the attending physician supervises the team. The team cares for primary neurology patients, generally on the 3rd and 5th floor of the hospital, and consultative services for all the pediatric services whose patients may be housed in the 5th floor including the Pediatric Intensive Care Unit (PICU), the Neonatal Intensive Care Unit (NICU) or the Cardiothoracic Intensive Care Unit (CTICU) for cardiothoracic patients. The resident team obtains the initial history and examines the patient, and formulates an initial plan for workup for discussion with the attending physician. The team is also able to undertake therapeutic measures necessary to stabilize a patient when necessary. The rotation also involves outpatient clinics on Monday and Thursday afternoons, where the residents see ambulatory patients with the supervision of attending physicians. Depending on service load and needs, they may occasionally go to outreach clinics in Bakersfield with Dr. Raman Sankar on the third Tuesday of the month. Learning occurs throughout the process of patient assessment and management, but is supplemented by structured educational activities.

This overview outlines the Pediatric Neurology Rotation at UCLA as a unified or integrated curriculum. This rotation provides a structure for resident education in all of the core competency areas; however there are rotation activities that promote growth in specific competency areas, which are further identified below using the following key:

- Patient Care: 1**
- Medical Knowledge: 2**
- Practice-Based Learning and Improvement: 3**
- Interpersonal and Communication Skills: 4**
- Professionalism: 5**
- Systems-Based Practice: 6**

Structured Educational Activities:

- **Morning Rounds:** Residents discuss all the patients with the attending physician Monday through Friday, at 9:30 AM (with the exception of Wed, when they meet at 8:00 AM, prior to Neurology Grand Rounds), to review all the patients. These are generally “work rounds” to review care and discharge plans, but may involve brief teaching sessions when the work volume permits that luxury.
Competencies addressed: 1, 2, 3, 4, 5, and 6.

- **Pediatric Neurology Outpatient Clinic** meets Monday and Thursday afternoons in the 200 UCLA Medical Plaza. New patients and follow-up patient with common and tertiary care neurological diseases are seen by the neurology residents with attending supervision and assistance from pediatric residents. Diagnostic and management plans are established collaboratively.
Competencies addressed: 1, 2, 3, 4, 5, and 6.
- **Pediatric Neurology Weekly Conference** occurs every Friday at noon. Topics range from clinical case presentation by residents to didactic lectures by the faculty, including faculty in child psychiatry, pain management, et cetera. We also have periodically lectures by visiting scientists or clinical scholars.
Competencies addressed: 1, 2, 3, 4, 5, and 6.
- **Pediatric Neurology Journal Club** is a forum where timely literature is selected for discussion by the pediatric neurology trainees with the faculty, residents, nurses and students rotating through the service. This is usually scheduled every two months at noontime on a Friday.
Competencies addressed: 2, 3, and 6

**** In addition, all residents rotating on the Pediatric Neurology Service are expected to attend and benefit from the competency based curriculum or Didactic covered in the Wednesday lecture series (Grand Rounds, Core Curriculum, Resident Update Meetings, Journal Club, Neuroanatomy Case Review, and NOC).**

Principal Educational Goals and Objectives:

Inpatient Component

1. Acquire competence in neurological examination of infants and children.
2. Plan appropriate diagnostic evaluations and subsequent therapy for children with serious neurological disorders including: epilepsy, cerebrovascular disease, neuromuscular disorders, central nervous system trauma, brain tumors, movement disorders, neurodegenerative diseases, and neurobehavioral disorders.
3. Become experienced in the diagnosis and management of neurological disorders in the intensive care setting, including: status epilepticus, coma, increased intracranial pressure, neurological complications of cardiac and thoracic surgery, peripheral neuropathies, metabolic and toxic encephalopathies, and central nervous system infections.
4. Become familiar with the evaluation and management of premature and term infants in the newborn intensive care unit with neurological problems including: intracranial hemorrhage, neonatal seizures, neonatal meningitis, hypoxic/ischemic encephalopathy, brachial plexus palsy, hypotonia/weakness, metabolic encephalopathies, congenital nervous system malformations, hydrocephalus and congenital infections.
5. Develop experience seeing neurological consultations on other services involving neurological complications of systemic disease (hematological, cardiac, pulmonary, and renal), developmental delay, mental retardation, learning disabilities, headaches, and alterations of consciousness.
6. Develop expertise in neurological consultations in the emergency room for problems including: seizure management, central and peripheral nervous system trauma, headache,

altered mental status, differentiation of acute neurological and psychiatric illness, acute weakness, and pain.

7. Become familiar with principles of neurological rehabilitation including: appropriate splinting and casting, pharmacological therapy for spasticity, timing of physical, occupational, and speech therapy, bladder/bowel care, and transition from hospital to home and school.
8. Develop competence in interpreting results of laboratory tests and neuroimaging.

Outpatient Component

1. Become adept at diagnosing and treating the more common childhood neurological problems including: migraine and other headache disorders, seizure disorders, attentional problems, learning disabilities, developmental delay, mental retardation, movement disorders, muscular dystrophy, ataxia, cerebral palsy, syncope, and neurocutaneous syndromes.
2. Become familiar with communicating with referring physicians by phone and letter.
3. Develop strategies for organizing outpatient diagnostic evaluations and setting priorities for laboratory tests and imaging studies.

Recommended Resources:

1. Menkes JH, Sarnat, HB. Textbook of Child Neurology. 2005
2. Swaiman KF, Ashwal S. Pediatric Neurology: Principles & Practice. 2006
3. Fenichel GM. Clinical Pediatric Neurology. A Signs and Symptoms Approach. 2009
4. [UCLA Website](#) with available links to the following resources: Pub Med, Medline MD Consult, Biomedical Library

Evaluation Methods:

- At the end of the rotation the attending faculty that have worked with the resident team are asked to fill out an evaluation form that is based on their observation of the performance of the resident on the wards and clinics.
- Residents are also asked to assess the faculty mentors they have worked with as well as the overall rotation, again with the use of a written evaluation form.
- Resident Update Meetings and Residency Training Committee meetings provide a forum for recommending curricular or structural changes in the rotation.