ARMC Neurology Residency Program and Institutions

- Total ACGME Approved Positions in Neurology PGY-1: 4
- Program Director: Michael Xu, M.D, Ph.D
- **Designated Institutional Official:** Carol Lee M.D.
- Sponsoring Institution: Arrowhead Regional Medical Center
- Participating Institution: Children's Hospital of Los Angeles
- Participating Institution: Fullerton Neurology and Headache Center
- Participating Institution: CUSM Health Movement Disorder Program

Site 1: Arrowhead Regional Medical Center (ARMC)

- ARMC is the primary clinical site of the program where 80% of the program rotations take place.
- ARMC is a 456-bed tertiary care teaching hospital for San Bernardino County affiliated with the California University of Science and Medicine (CUSM). All Core Faculty at this primary clinical site are full time faculty at CUSM. Ninety of the total 456 beds are for behavioral health and 366 beds are hospital inpatient beds.
- Inpatient facilities:
 - Of the 366 hospital inpatient beds, 30-40 beds are occupied by neurology patients daily.
 Most of these patients will be served by the Inpatient Neurology Consult Service which is a Teaching Consult Service daily.
 - ARMC has 48 adult ICU beds including a 16-bed Neurosciences and Cardiovascular ICU, a 16-bed Surgical ICU and a 16-bed Medical ICU which can be also used for neurology or neurosurgery patients.
 - ARMC has also a 30-bed Neurosciences Ward Unit with non-invasive cardiac and neurological monitoring available for neurology and neurosurgery patients.
 - ARMC is at nearly 100% capacity on most days. It has a length of stay for neurology patients of 3.8 days.
 - ARMC's Graduate Medical Education (GME) operates eleven ACGME Accredited Residency Programs in specialties such as Anesthesiology, Diagnostic Radiology, Combined Emergency Medicine-Internal Medicine, Emergency Medicine, Family Medicine, Internal Medicine, Neurology, Obstetrics & Gynecology, Psychiatry, Surgery, Vascular Surgery-Integrated and four Fellowship Programs in subspecialties such as Emergency Medical Services (EMS), Maternal-Fetal Medicine, Pulmonary Disease and Critical Care Medicine, and Surgical Critical Care.

Outpatient facilities:

- ARMC will offer a half-day residents' longitudinal clinic and teaching clinics in Neurology Subspecialties such as epilepsy, neuroimmunology (multiple sclerosis), neuromuscular disease and stroke/cerebrovascular disease, and in neuro-infectious disease, neurooncology, neuro-otology, neuro-ophthalmology, neurorehabilitation, and pain management.
- o ARMC has Neurodiagnostic Service (EEG, EMG, evoked potentials, and transcranial Doppler ultrasound), and a Neuropathology Laboratory to complement residents' education.
- Care of neurology patients:
 - Neurology patients are admitted by the Hospitalist Service as per ARMC Medical Staff bylaws.
 - o Most of these patients are admitted through the Emergency Department.

- These patients are seen and followed by the Inpatient Neurology Consult Service through the length of stay. The Inpatient Neurology Consult Service has a total average daily patient census of 20 patients.
- Emergency care of neurology patients:
 - The Emergency Department is a Comprehensive Stroke Center that treats 1,000 patients annually with a Stroke Code Team composed by the Inpatient Neurology Consult Service faculty attendings, residents and medical students, and the Neurosurgical Interventional Team faculty attendings and residents, and a Level II Trauma Center that treats 2,500 patients annually.
 - o ARMC receives over 130,000 emergency adult and children visits, has almost 25,000 admissions, performs 6,500 inpatient and 6,000 outpatient surgeries, and has 254,000 outpatient visits per year.

Site 2: Children's Hospital of Los Angeles (CHLA)

- CHLA is a pediatric urban teaching hospital affiliated with the University of Southern California, Keck School of Medicine.
- CHLA is in Los Angeles, 57.8 miles from ARMC, and where the program three-month rotation in Child Neurology takes place.
- Inpatient facilities:
 - CHLA has 401 active beds, and it had 862 medical staff members, 17,576 annual discharges, 17,283 surgeries, 601,224 patient visits, and 118,203 patient days in 2019.
 - CHLA is a Level 4 Neonatology Center and the only Level 1 Pediatric Trauma Center in Los Angeles County.
 - Neuroscience is one of the areas of excellence with robust clinical services in Neurology, Neurosurgery and Neurodiagnostics (EEG, EMG), and/or translational research.
 - The residents' rotation in Child Neurology will take place in this hospital with 16 pediatric neurologists as members of the faculty, including collaboration pediatric and adult psychiatry, pediatric radiology, the pediatric ICU, the newborn infant ICU, pediatric neurosurgery, genetics, ophthalmology, oncology, and adult neurology at the University of Southern California.
 - Neurology patients are admitted by a Pediatric Hospitalist Service as per CHLA Medical Staff by-laws. These patients will be seen and followed by the Neurology Teaching Consultation Service through the length of stay.
 - The residents will be assigned to the Neurology Teaching Consult Service and/or the Pediatric Neurology Outpatient Clinic, including epilepsy, movement disorders, neurocutaneous disorders and neuromuscular disorders during this educational experience.

• Outpatient facilities:

- The two hospitals house state-of-the-art neurological diagnostic facilities, including MRI (multiple 1.5 Tesla and 3 Tesla magnet), and CT scanners, and cerebral angiography suites.
- The resident is assigned to the Pediatric Neurology Outpatient Clinic, including epilepsy, movement disorders, neurocutaneous disorders and neuromuscular disorders during this educational experience.
- Care of neurology patients:
 - The residents will have the opportunity to evaluate and manage child neurology patients in this three-month rotation at a national referral center for child neurology, offering patients state-of-art and novel therapeutic approaches.

Site 3: Fullerton Neurology and Headache Center

• Outpatient facilities:

- The residents will have the opportunity to evaluate and manage headache patients in this one-month rotation at a regional referral center for headache medicine, offering patients state-of-art and novel therapeutic approaches, including infusion therapy and Botox injections, and headache clinical trials under a regionally recognized neurologist faculty with expertise in headache medicine who will also serve as the rotation director at this site.
- The clinic is over 3,000 square feet and has an average daily neurology census of 50 headache patients, including patients seen through telehealth. The clinic has a waiting room, six exam rooms and an infusion suite with three infusion chairs to treat patients with migraine.
- The clinic is also a clinical research site for migraine and other neurological disorders with over than 40 clinical trials conducted on site and with five to ten ongoing clinical trials at any given time.

Site 4: CUSM Health Movement Disorder Program

Outpatient facilities:

- The residents will have the opportunity to evaluate and manage patients with movement disorders, including but not limited to Parkinson's disease in this one-month rotation at a national and international referral center for movement disorders, offering patients stateof-art and novel therapeutic approaches, and movement disorders clinical trials under the supervision of an internationally recognized neurologist faculty and another neurologist also with expertise in movement disorders.
- Only one resident will be sent at a time to this rotation to assure a 1:1 faculty/resident ratio.
- The clinic has an average daily neurology census of 30 patients with movement disorders, including patients with Parkinson's disease.
- The clinic has a waiting room and nine exam rooms.
- The clinic is a clinical research site for clinical trials in movement disorders, especially Parkinson's disease.
- The clinic has 35 staff personnel lead by an internationally recognized neurologist with expertise in movement disorders.