

**Tran Nguyen, Class 2024**

Campus: Houston Methodist Willowbrook Hospital, Houston TX

Research Area: Clinical Management of Pediatric Acute Seizures and Status Epilepticus

Mentor: D. Samba Reddy Ph.D., RPh

Tran Nguyen, a medical student in the School of Medicine, is writing a literature review on pediatric anti-seizure medications under the mentorship of [D. Samba Reddy, PhD, RPh](#), a Professor of Neuroscience and Experimental Therapeutics at the Texas A&M School of Medicine. An estimated 400,000 children are afflicted with epilepsy in the United States. Symptoms during a seizure vary depending on the type and cause temporary abnormalities in behaviors, sensations, muscle tone or movements (twitching, stiffness or limpness), or states of awareness. Febrile seizures and genetic disorders associated seizures are common in children. Status epilepticus, a prolonged seizure or multiple seizures lasting more than 5 minutes, is a common neurological emergency in children. Given the vulnerabilities of physiologic and obvious anatomical differences in children compared to adults, anticonvulsant treatments should be properly tailored for the pediatric population. The main goal is to systematically review current clinical management of epilepsy, acute seizures, and status epilepticus in the pediatric population. It also covers childhood epilepsies, including Dravet Syndrome, Lennox-Gastaut Syndrome, Fragile X-Syndrome, CDKL5 and other neurodevelopmental disorders associated with seizures.