
2025 ELTERMAN RESEARCH GRANT AWARD

Joseph Vithayathil, MD, PhD

Dr. Joseph Vithayathil, MD PhD, is a Pediatric Neurologist at the Children's Hospital of Philadelphia. Dr. Vithayathil's clinical and research interests center around dysregulation to brain iron metabolism in acquired and genetic neurodevelopmental disorders. Iron related pathology has been identified in a variety of different neurologic disorders, yet there is limited understanding regarding how changes in cellular iron status drive pathophysiologic responses. His current research utilizes rodent models of neonatal hypoxic ischemic brain injury severity to identify the effect of cell-specific iron dysregulation on injury severity. Clinically, he treats/evaluates patients with neurologic sequelae from perinatal injury and patients with genetic pediatric neurodegenerative disorders with brain iron accumulation.

Dr. Vithayathil completed his MD and PhD degrees at Case Western Reserve University where he studied signaling pathways that regulate embryonic cortical and hippocampal neurogenesis under the mentorship of Dr. Gary Landreth. He completed his Child Neurology residency at the Children's Hospital of Philadelphia and is now continuing his post-doctoral work with Dr. Joshua Dunaief, an ophthalmologist that studies the role of iron accumulation in the retina as a mechanism for age related macular degeneration.