Research Experiences

Research is an important part of the training of Child Neurology residents at Children's Mercy Hospital. Training in research starts with the research mentor that each resident is encouraged to engage at the beginning of their child neurology training. The residents are also invited to complete a course on biostatistics and each resident is expected to complete a 1 year course in Quality Improvement and Clinical Safety. As part of the QI course each resident will initiate a QI project which can be presented at CMH Research Day. Each resident is also given the opportunity to present at the yearly Missouri Valley Child Neurology Colloquium. This is a joint meeting with The University of Washington and Saint Louis University Child Neurology programs. Finally, each resident is expected to graduate with at least one first author publication. Over the last 4 years our residents have given over 100 talks (with approximately 20% of these original research or case presentations) and have published 13 papers in peer reviewed journals (including original research and review papers).

Faculty

Program Director



Jean-Baptiste (J.B.) Le Pichon, MD, PhD: Dr. Le Pichon was born in New York City but grew up in France. He completed his undergraduate education at Gannon University, Erie Pennsylvania followed by an MD/PhD program at Baylor College of Medicine, Houston Texas. Dr. Le Pichon completed his PhD in neuroscience. Following medical school, he completed two years of Pediatrics at Driscoll Children's Hospital in Corpus Christi and then completed a Child Neurology Residency at Texas Children's Hospital. Dr. Le Pichon is board certified in both child neurology and epilepsy. He has been at Children's Mercy Hospital since December 2007 and has been the residency program director since 2010. His interests lie in neurogenomics but he also has a passion for international medicine. Dr. Le Pichon has most recently developed collaborations with

colleagues in Nigeria, Mexico and Thailand investigating a genetic susceptibility to hyperbilirubinemia.



Keith A. Coffman, MD: Dr. Coffman was born in Washington, Pennsylvania and grew up in the Greater Pittsburgh area. His education includes an undergraduate in Psychology at Boston University, MD at the Milton S. Hershey College of Medicine, and residencies in both Pediatrics and Neurodevelopmental Disabilities at Children's Hospital of Pittsburgh. In the laboratory of Peter L. Strick, PhD, he completed a post-doctoral research fellowship in Systems Neuroscience studying the anatomy of the cerebellum. Dr. Coffman serves as the Director for both the Movement Disorders Program and the Tourette Syndrome Center of Excellence here at Children's Mercy and has board certifications in child neurology and neurodevelopmental disabilities. His research

interests include neuropharmacology, trans-cranial magnetic stimulation, Tourette syndrome, and pediatric onset movement disorders.



Ahmed Abdelmoity, MD, FAAP: Dr. Abdelmoity, Professor of Child Neurology, is the Director of the Division of Neurology and Chief of the Section of Epilepsy and Clinical Neurophysiology here at Children's Mercy Kansas City. Dr. Abdelmoity earned his medical degree from Cairo University in Egypt. He then completed his residency in child neurology at the University of Texas Southwestern Medical Center in Dallas, a residency in pediatrics at Texas A&M University/Driscoll Children's Hospital in Corpus Christi, and a residency in child neurology at Baylor College of Medicine in Houston, Texas. Dr. Abdelmoity completed his fellowship in physiology research at the University of Texas Southwestern Medical Center and in clinical neurophysiology at Baylor College of

Medicine. He is triple board certified in Neurology with Special Qualifications in Child Neurology, Clinical

Neurophysiology and in Epilepsy. Dr. Abdelmoity serves as Chair of the advisory board for the Epilepsy Foundation, Missouri and Kansas Chapter. His educational didactics on epilepsy is in the *Epilepsy Compendium*, a compilation of resources for providing care to children and youth with epilepsy, in partnership with the American Academy of Pediatrics. He also has a number of publications in treatment of drug resistant epilepsy. Dr. Abdelmoity is the founder and medical director of the NeuroDiagnostic Technology program at Johnson County Community College for EEG technologists.



Tyler Allison, MD: Dr. Allison is an Assistant Professor in Pediatrics at Children's Mercy. He completed his residency at Children's Mercy in 2015 and has been developing a center for children with neuroinflammatory disorders within the department of neurology. This includes patients with various inflammatory conditions that effect the nervous system including multiple sclerosis, neuromyelitis optica, chronic idiopathic demyelinating polyneuropathy, opsoclonus-myoclonus syndrome, etc. He has received numerous awards for his teaching at Children's Mercy including multiple Golden Apple awards and was the Fellow Teacher of the Year in 2015. He has also been a regular advocate for his patients for the American Academy of Neurology through their Neurology on the Hill program.



Lalit Bansal, MD: Dr. Bansal is an Assistant Professor of Neurology here at Children's Mercy Kansas City as well as The University of Kansas Medical Center and is the Director of Epilepsy Surgery Medical Program. Dr. Bansal completed his pediatric residency at the Bronx-Lebanon Hospital in New York City and residency in child neurology at the Children's Hospital of Pittsburgh of UPMC. Following this, Dr. Bansal completed his fellowship in clinical neurophysiology and epilepsy at Miami Children's Hospital. He is triple board certified in pediatrics, neurology with special qualification in child neurology and clinical neurophysiology. His clinical and research interests include intractable epilepsy, epilepsy surgery, clinical neurophysiology, PET hypermetabolism, SPECT, DTI in epilepsy and transcranial magnetic stimulation (TMS) in CSWS.



Jennifer Bickel, MD: Dr. Jennifer Bickel is an Associate Professor of Pediatrics and the Chief of the Headache Section, Division of Neurology, at Children's Mercy in Kansas City, MO. She completed her neurology residency at the University of Kansas in 2006 and has extensive experience in managing children and adults with headache disorders. She leads a multi-disciplinary team of physicians, APRN's, researchers and psychologists to provide comprehensive, accessible services to children and adolescents with migraines. She acts as the program director for the new Children's Mercy Headache Medicine one year fellowship. She has been the recipient of multiple grants for headache related research. Dr. Bickel is an innovative course director for the University of Missouri – Kansas City basic neuroscience course. She serves on the

Neurology Today Editorial Advisory Board and the AAN Undergraduate Education Subcommittee. She is a recognized national leader in advocacy for neurology patients including community outreach, research fundraisers and website development (<u>www.headachereliefguide.com</u>).



Jennifer Dilts, DO, MHA: Dr. Jennifer Dilts is a Kansas City native! After completing her undergraduate education at Wake Forest University, she earned her DO and Masters in Health Administration degrees at Kirksville College of Osteopathic Medicine. She then completed her pediatric residency at Riley Hospital for Children, Indiana University School of Medicine. Dr. Dilts practiced general pediatrics in a rural setting for three years before coming to Children's Mercy in 2008. During her 8 years in the CMH Northland urgent care center, she developed a passion for decreasing pediatric pain and anxiety. In 2016, Dr. Dilts joined our Headache Section and states that she enjoys her increased opportunities to teach residents in this new role. She is currently

completing a three year Educational Scholars Program through the Academic Pediatric Association and is currently teaching Pediatric Advanced Life Support classes. Her quality improvement and educational research projects have focused on decreasing pediatric pain and anxiety.



Anna Esparham, MD, FAAP, DABMA: Dr. Anna Esparham is an Assistant Professor in the Division of Child Neurology at Children's Mercy Hospital and Director of the Headache Treatment Center. She completed her medical school and pediatric residency at the University of Kansas School of Medicine. At a national level, she is a Fellow of the American Academy of Pediatrics and Executive Committee Membership Chair on the Section of Integrative Medicine. She was also one of the National Team Leaders for implementing the first University of Arizona Pediatric Integrative Medicine in Residency curriculum at the University of Kansas Health Systems to improve resident physician well-being, and educate physicians on complementary and integrative

therapies. Dr. Esparham is on the Board of Directors of the American Academy of Medical Acupuncture (AAMA) and Vice Chair of the AAMA Symposium to help advance national acupuncture training and education. She has several peer-reviewed publications and has been featured in local news and radio shows discussing pediatric nutrition and acupuncture.



Keely Fitzgerald, DO: Dr. Fitzgerald's interests lie in all areas of pediatric neurology including epilepsy, migraine, stroke, movement disorders, demyelinating diseases, sports neurology and neuro-cutaneous disorders. She enjoys working with students in all stages of medical training to expand their academic knowledge and provide a wide variety of clinical experiences. As a young faculty member, Dr. Fitzgerald can provide pediatric neurology residents with guidance regarding post-residency career steps and other general information.



Rose Gelineau-Morel, MD: Dr. Gelineau-Morel joined our team at Children's Mercy in 2017. Her clinical and research interests lie in movement disorders, especially dystonia and deep brain stimulation (DBS). Throughout her career she has worked with neuroimaging research and is interested in using this modality to further explore the anatomy and connectivity of patients with secondary dystonia, with the goal of optimizing DBS targets and patient clinical outcomes. Dr. Gelineau-Morel is also interested in more systematically studying DBS programming, in order to further standardize our approach to care of children with dystonia. She would welcome any Child Neurology residents who would enjoy collaborating and discussing these ideas, but would also be available to help with any general questions about residency or early

career decisions.



Marcie Goeden, MD: Originally from Virginia, Dr. Goeden completed her undergraduate work at the University of Virginia (wahoowah!) and medical school at the Virginia Commonwealth University School of Medicine, previously known as MCV. Following her undergrad, she moved to Kansas City for residency here at Children's Mercy Hospital and recently completed her training and started as faculty. Dr. Goeden is interested in neurocritical care, neurohospitalist medicine, and stroke.



epilepsy.



Meagan Hainlen, MD: Dr. Meagan Hainlen attended medical school at Indiana University School of Medicine in Indianapolis, Indiana and completed a Child Neurology and Neurodevelopmental Disabilities residency at Texas Children's Hospital/Baylor College of Medicine in Houston, Texas. She specializes in Tourette Syndrome and is one of the physicians staffing the Tourette Syndrome Clinic at Children's Mercy Kansas City. She also maintains a broad interest in various neurological disorders and staffs the Children's Mercy general neurology clinic. Outside of work, Dr. Hainlen is passionate about spending time with children with neurological disorders and devotes most of her summer vacations volunteering at the EFTX camps for children and teens with

Ara Hall, MD: Dr. Ara Hall is an Assistant Professor of Pediatrics in the Division of Neurology at Children's Mercy in Kansas City, MO. She completed her child neurology residency at the University of Texas Health Science Center at Houston in 2011 and her pediatric epilepsy fellowship at Children's Hospital Colorado in 2013. Dr. Hall is the director of the Neuro-NICU program which focuses on timely evaluation, treatment, and long-term follow up for infants at risk for neurologic impairment. Her research interests include clinical trials of new drug options for treatment of children with epilepsy, use of the ketogenic diet in epilepsy treatment and the best practices for the prevention of burnout in medical staff. Dr. Hall enjoys teaching learners from different backgrounds

and lectures to numerous local groups including medical students, residents, family organizations and students enrolled in the Neurodiagnostic Technology course at Johnson County Community College. She is a member of the American Epilepsy Society and the American Academy of Neurology.



Mohammed Ilyas, MD: Dr. Ilyas received his MD at Deccan College of Medical Sciences in India in 2004. From there, he went on to complete medical training in Pediatrics at Niloufer Hospital for Woman and Children, and a pediatric residency, child neurology training, and clinical neurophysiology fellowship at Children's Hospital of Michigan. Before coming to Children's Mercy Hospital in 2016, he completed an epilepsy fellowship at Rainbow Babies and Children's Hospital. Dr. Ilyas is triple board certified in neurology with special qualifications in child neurology and has had the privilege of being mentored by world renowned epileptologists Harry Chugani, MD, and Hans Lüders, MD, PhD. He has also been successful in research with several poster

presentations and publications and was awarded the Young Investigator Award at AES in 2013. Dr. Ilyas' research interests include epileptic spasms and epilepsy surgery. Dr. Ilyas is currently the Program Director for the Pediatric Epilepsy Fellowship at Children's Mercy Hospital.



Gina Jones, DO: Dr. Jones was born and raised in Missouri and completed her undergraduate degree at Drury University in Springfield, Missouri. She then went on to complete medical school at Kansas City University of Medicine and Biosciences in Kansas City, Missouri. She spent two years at Greenville Medical Center in Greenville, South Carolina studying pediatric medicine and completed her child neurology residency at Wake Forest Baptist Medical Center in Winston-Salem, North Carolina. Dr. Jones is board certified in child neurology. She joined our team at Children's Mercy Hospital in August 2012 and is currently the neurology clinic director. She enjoys all general neurology, but works specifically in headache where she dedicates most of her time performing headache procedures including nerve blocks and Botox for chronic

migraines. Dr. Jones enjoys the time she spends with residents and students and looks forward to participating in their education.



Roha Khalid, MD: Dr. Roha Khalid is an Assistant Professor of Pediatrics and the Neurology Director of the Pediatric Stroke Program at Children's Mercy in Kansas City, MO. She was born and raised in Pakistan and moved to the United States to start her Pediatric Residency at University of Texas Medical Branch in Galveston. She then went on to complete her Child Neurology residency at Duke University in 2015. She has a special interest in Pediatric Stroke and Neonatal Neurology and is actively involved in running the multi-disciplinary Pediatric Stroke clinic. She is also part of the combined Neonatal Neurology clinic which follows Neonatal Intensive Care Unit (NICU) patients long term. Dr. Khalid is a member of the International Pediatric Stroke Study and serves

as a mentor for University of Missouri Kansas City medical students who are interested in research in Pediatric Stroke. She is deeply committed to resident education and is member of the Clinical Competency Committee for PGY-1 and PGY-2 at Children's Mercy as well as the Child Neurology Residency Education Committee. Dr. Khalid lives in Leawood, Kansas with her husband and enjoys reading and shopping online in her free time.



Kailash Pawar, MD: In 2005, Dr. Pawar received his MD from Seth Gordhandas Sunderdas Medical College and King Edward Memorial Hospital, Mumbai. He subsequently completed a pediatric residency at Flushing Hospital, adult neurology training at Ohio State University, child neurology training at the Children's Hospital of Michigan, and a clinical neurophysiology fellowship at Children's Mercy Hospital. Dr. Pawar is triple board certified in neurology with special qualifications in child neurology, clinical neurophysiology, and epilepsy. He is a member of the American Epilepsy Society, American Clinical Neurophysiology Society, and the American Academy of Neurology. Research interests include intractable epilepsy management, ketogenic

diet, intraoperative neuromonitoring, and epilepsy surgery, and he has given several poster presentations at national conferences on the topic of epilepsy.



Julio Quezada, MD: Born and raised in Guatemala, Dr. Quezada came to the USA in 2013 to Children's Mercy Hospital to complete a combined pediatrics/child neurology program. He completed medical school in Guatemala City at Francisco Marroquin University, where he rotated through all medical specialties and subspecialties. After graduating, he practiced medicine in Guatemala as a field doctor for a sugar mill for three years prior to coming to Kansas City. During those three years, Dr. Quezada was part of the team that developed a prescreening program for the sugar cane workers and monitoring program, along with developing a teaching program to educate the sugar cane workers about good basic health practices. This experience helped him develop a

better understanding of health habits of people from varied socioeconomic backgrounds, competency in cultural medicine, and a strong sense of advocacy for "the underdog". This passion for helping those in need has lead Dr. Quezada to develop an interest in behavioral neurology, specifically in patients with conversion disorder or any other patient with neuropsychological disease. He is currently working on developing a multidisciplinary outpatient program for patients with conversion disorder. During residency he completed a 1 year long pediatric bioethics certificate program and has presented ethical patient analyses in local and nationwide meetings. He is currently a member of the ethics committee at Children's Mercy Hospital.



Steve Shapiro, MD, MSHA: Born and raised in Pennsylvania, Dr. Shapiro completed medical school at University of Pittsburgh, completed Pediatric Residency at Case Western University and Rainbow Babies and Children's Hospital, and completed Child Neurology Residency at Children's Hospital of Pittsburgh. Dr. Shapiro completed a year of research in auditory neurophysiology at Pitt followed by another research year and fellowship at University of Wisconsin-Madison before joining the Pediatric Neurology faculty there. He then took a position in Child Neurology at Virginia Commonwealth University (VCU) where he became board-certified in Clinical Neurophysiology and

Neurodevelopmental Disabilities in addition to Pediatrics and Child Neurology. Dr. Shapiro rose from Assistant to full Professor, and completed an executive master's degree in Health Administration. Over the years his basic and translational science research on the effects of bilirubin neurotoxicity on the developing nervous system have received over \$8 million in funding including seven competitive NIH R01 grants. At VCU he served as Program Director for Intraoperative Monitoring, the Clinical Neurophysiology Fellowship and the Child Neurology Residency Programs, and Vice-Chairman of Pediatric Neurology at VCU before joining Children's Mercy Hospital in 2011 as Chief of Neurology. After six years as Chief, he stepped down to focus on building a clinical and research Neonatal Hyperbilirubinemia and Kernicterus Center of Excellence. Dr. Shapiro's passion is mentoring and helping younger faculty and students to be successful. Outside of work Dr. Shapiro enjoys music and playing piano (particularly jazz).



Lines M. Vargas Collado, MD: Dr. Vargas graduated Cum Laude from the Pontifical Catholic University in Ponce, Puerto Rico with a Bachelors' degree in General Sciences and received her medical degree from Ponce School of Medicine in Puerto Rico. She then moved to New York where she completed her pediatric residency at The Steven and Alexandra Cohen Children's Medical Center of NY, part of the Northwell Health System, as well as her child neurology training. Dr. Vargas then went on to complete her fellowship in Clinical Neurophysiology: EEG track, at Montefiore Medical Center in New York. She is board certified in Pediatrics and Child Neurology. Dr. Vargas joined our Epilepsy team at Children's Mercy in August 2016 and is currently the Director of Epilepsy Clinic. She is a member of the American Epilepsy Society, Child Neurology

Society and the American Academy of Neurology and has given several poster presentations at national conferences including topics related to frontal lobe seizures and autoimmune epilepsies. Dr. Vargas has a particular interest in autoimmune epilepsies.