



## **FULL-TIME RESEARCH POSITIONS AVAILABLE FOR NEW GRADUATES**

in the

## **BEHAVIORAL AND NEURODEVELOPMENTAL PSYCHIATRY & NEUROSCIENCE RESEARCH GROUP**

The goal of our research group is to understand causes and advance novel, personalized treatment approaches for autism spectrum disorders (ASD) and related neurodevelopmental disorders. Our current laboratory and clinic-based research projects focus on human biomarker development as well as increasing successful outcomes through clinical research and treatment in children and adolescents with Fragile X Syndrome (FXS), idiopathic ASD, Angelman Syndrome (AS), and other neurogenetic syndromes. Projects with individuals with neurodevelopmental disorders include clinical measures of behavior and cognitive ability, neuroimaging studies of brain development using Electroencephalography (EEG), functional Near Infrared Spectroscopy (fNIRS), functional Magnetic Resonance Imaging (fMRI), and transcranial magnetic stimulation (TMS), and medication treatment trials. In our translational neuroscience lab, we use human induced pluripotent stem cells, several mouse models of autism, FXS, and AS, and patient blood/saliva samples to better understand the pathophysiology of these disorders. Our projects also focus on integration of human and animal research in order to identify potential pharmacotherapy targets and biomarkers of treatment response.

We are currently hiring research coordinators for both our human clinical research projects and in our basic science labs. These positions are varied, but generally require a bachelor's degree in neuroscience, biology, computer science, psychology, or related field, and are for a minimum of 2 years. Successful applicants are bright, motivated post-baccalaureate students with a passion for research, neuroscience and autism and related neurodevelopmental disorders.

**INTERESTED IN WHAT WE DO?**

**CONTACT US AT [shelley.randall@cchmc.org](mailto:shelley.randall@cchmc.org)**

**PLEASE INCLUDE YOUR RESUME OR CV FOR CONSIDERATION**



## Our Faculty:

### **Craig Erickson, MD**

Dr. Erickson specializes in research and clinical treatment involving persons with developmental disorders. His primary research focus is on new treatment development for Fragile X Syndrome, Autism Spectrum Disorders, and other related disorders. He is the Director of the Fragile X Research and Treatment Center at Cincinnati Children's. Dr. Erickson additionally serves as the Director of Research at the Kelly O'Leary Center for Autism Spectrum Disorders at Cincinnati Children's and Director of Research, Division of Child & Adolescent Psychiatry.

### **Rebecca Shaffer, Psy.D.**

Dr. Shaffer is a clinical psychologist who specializes in research and clinical treatment of Autism Spectrum Disorder and Fragile X Syndrome. Her primary research focus is on the treatment of emotion regulation in ASD, behavioral parent training in Fragile X Syndrome, and outcome measurement development for a range of developmental disorders. In addition to research work, Dr. Shaffer provides psychological intervention and expert assessment for Fragile X Syndrome, Autism Spectrum Disorders, and other related disorders. She is the Director of Psychological Services for the Fragile X Research and Treatment Center at Cincinnati Children's.

### **Ernest Pedapati, MD, MS**

Dr. Ernie Pedapati in addition to clinical work as a pediatrician and a child psychiatrist, Dr. Pedapati has a strong interest in neuroplasticity and human electrophysiology. In 2016, he received the AACAP Junior Investigator Award to investigate differences in physiology and treatment response in youth with Autism and co-occurring ADHD. His research is broadly funded including a career development award from the NIH. His research specialty is in Fragile X where he is leading efforts on a protein replacement gene therapy program and modeling excitability changes in the Fragile X brain using EEG and transcranial magnetic stimulation.

### **Kelli Dominick, MD, PhD**

Dr. Dominick is a pediatrician and child psychiatrist who is currently the Associated Medical Director for the Neurobehavioral Psychiatry Clinic at CCHMC. She has extensive experience in neuroimaging in neurodevelopmental disorders including work in autism and fragile X syndrome. She is interested in understanding the brain region drivers of aberrant neuronal activity in our cohorts of patients with neurodevelopmental disorder. Additionally Dr. Dominick has an interest in education and is an Associate Program Director for the Triple Board Residency Program at Cincinnati Children's.

### **Lauren M. Schmitt, PhD**

Dr. Schmitt is a licensed clinical psychologist with additional training in sensorimotor functioning and cognition in individuals with neurodevelopmental disorders and she currently is an Assistant Professor of Pediatrics at Cincinnati Children's Hospital Medical Center (CCHMC). Her research focuses on identifying translational biomarkers of cognitive functioning to inform mechanistic understanding in neurodevelopmental disorders, with a particular interest in developing behavioral and neurophysiological assays of disorder-relevant behaviors that can be used across mouse and man.

### **Martine Lamy, MD, PhD**

Dr. Lamy is a triple board trained psychiatrist and pediatrician. She is currently the Associate Medical Director for the Neurobehavioral Psychiatry Inpatient Unit at CCHMC. This is a 10-bed specialty unit for children and young adults with neurodevelopmental disabilities including those with autism or significant intellectual disability. In addition to her clinical work, she conducts research in the areas of severe autism and Angelman's syndrome. She also has a strong interest in education and she is one of the Associate Program Directors for the Triple Board Residency Program at CCHMC.

### **Elizabeth G. Smith, PhD**

Dr. Smith is a licensed clinical psychologist and Assistant Professor of Pediatrics who studies early brain development and the neurobiological bases of impaired social-communicative development in autism and other neurodevelopmental disorders. Dr. Smith is interested in application of neuroimaging techniques understudied populations, including children with minimal verbal abilities and in toddlers and very young children. She is currently running a project using functional Near Infrared Spectroscopy (fNIRS) to study brain activation for language processing in Fragile X and how this relates to emergence of language skills over time.

"Working as a student in the Cincinnati Children's neurobehavioral research group has been extremely rewarding. Not only did this position help expand my research skills, but allowed me to apply the knowledge I had gained in my coursework to real-life experiences. The past year in this research group has taught me more about myself, autism, and research than any textbook could. I cannot imagine a better place to learn these valuable skills than here at Cincinnati Children's Hospital." – Kaela O'Brien, Student II