Postdoctoral Residency in Pediatric Neuropsychology

The postdoctoral residency (fellowship) in pediatric neuropsychology at IU School of Medicine and Riley Hospital for Children at IU Health is designed to meet the training guidelines set by the Houston Conference for postdoctoral specialization in clinical neuropsychology.

The neuropsychology service at IU School of Medicine is located at the IU Health Neuroscience Center (Goodman Hall). The service is comprised of pediatric and adult providers, appointed across the Departments of Neurology and Psychiatry, functioning collectively within the discipline of neuropsychology. The residency was founded in 1997 and is a longstanding member of the Association of Postdoctoral Programs in Clinical Neuropsychology (APPCN). The residency houses pediatric and adult tracks, with residents sharing workspace areas, attending lifespan neuropsychology didactics together, and jointly participating in the program’s professional development and cultural competence series.

Within the pediatric track, residents gain expertise in developmental brain-behavior relationships and strengthen essential skills working with medically complex children. This is accomplished through diverse clinical activities, pediatric-focused didactics, and research involvement in the Neuroscience Center and Riley Hospital for Children at IU Health. As the only pediatric academic medical facility in Indiana, we provide an essential service to some of the most medically complicated children in the state. Graduating residents are well prepared for independent practice in pediatric neuropsychology. They are also ready to pursue ABPP board certification in clinical neuropsychology, as well as subspecialization in pediatric neuropsychology.
Program Structure

Approximately 60% of the resident’s time is spent in clinical activities, 30% in didactics and supervision, and 10% in research. The program is designed to provide residents with exposure to a wide range of medical conditions, neurocognitive and neurodevelopmental disorders, and comorbid psychiatric issues. A strong emphasis is placed on multidisciplinary collaboration and participation in medical teams. Over the course of the 2-year program, residents gain increased independence in clinical, research, and professional activities.

Year 1

**Outpatient Evaluations**: The resident performs 3 outpatient evaluations per week from the general referral stream, with psychometrist testing coverage on 2 cases.

**Neuro-Oncology Rotation**: The resident is the neuropsychology liaison in multidisciplinary brain tumor board and Neuro-Oncology clinic.

**Inpatient Rehabilitation**: The resident follows 1-2 inpatient rehabilitation cases per month, in preparation for taking a leadership role in the second year of residency.

Year 2

**Outpatient Evaluations**: The resident performs 2 outpatient evaluations per week from the general referral stream, with psychometrist testing coverage on most cases, depending on inpatient rehabilitation testing demand.

**Inpatient Rehabilitation Rotation**: The resident follows 4-5 inpatient rehabilitation cases per month and assumes a leadership role in coordinating neuropsychology services on the unit.

**TBI Clinic**: The resident is the neuropsychology liaison to multidisciplinary TBI clinic.
Clinical Training Experiences

Outpatient Evaluations
In order to be referred for a pediatric neuropsychological evaluation, patients must have a medical condition that impacts the CNS. Common medical conditions seen by our service include epilepsy, brain tumor, stroke, leukemia and other cancers, traumatic brain injury, spina bifida, cerebral palsy, genetic disorders, sickle cell disease, cardiac disease, and neurofibromatosis. Outpatient evaluations are performed in a “same-day” model, with diagnostic intake, testing, supervision, and feedback all occurring in the same day-long appointment. In addition to full-day evaluations, residents conduct specialty abbreviated evaluations with preschool-age and concussion patients. The pediatric service has 4 full-time psychometrists, who provide testing support to faculty and trainees.

Medical Clinic Consultation
Residents rotate in several multidisciplinary outpatient medical clinics, serving as the primary neuropsychology liaison to the team. In Neuro-Oncology Clinic, residents consult on children with complex psychosocial and educational needs in the context of complicated brain tumor outcomes. In TBI Clinic, residents provide post-acute education, brief assessment, and targeted intervention for children/teenagers who have sustained a mild traumatic brain injury (concussion). They also provide follow-up consultation for moderate to severe TBI patients who completed an admission to the inpatient rehabilitation unit. As Riley Hospital for Children at IU Health continues to grow, our neuropsychology service to the hospital is expanding. Opportunities exist for the motivated resident to take initiative in developing programming in medical clinics of interest, as time and schedule permit.
**Epilepsy Surgery Program**

Riley Hospital for Children houses the only Level 4 epilepsy program in the state. Residents conduct pre- and post-surgical outpatient neuropsychological evaluations and participate in the multidisciplinary epilepsy surgery program throughout residency, attending two monthly conferences and participating in presenting patients. Over the course of training, residents have the opportunity to follow patients through the epilepsy surgery program, conducting pre-surgical neuropsychological evaluation, observing fMRI, presenting in epilepsy surgery conference, observing the neurosurgical procedure, and re-evaluating the patient at one year post-surgery.

**Inpatient Rehabilitation Unit**

Residents work with a multidisciplinary team to provide care for patients with a variety of traumatic and acquired brain injuries, including traumatic brain injury, brain tumors, CNS infections, and cerebrovascular accidents. Residents provide psychoeducation to caregivers and the rehabilitation team. They work with the rehabilitation team to monitor cognitive recovery and provide recommendations for behavioral health management. They also provide bedside evaluation prior to discharge and coordinate with the team to advise on return to home and learning environments. Residents have the opportunity to follow up with patients and families in the TBI clinic (described above) as well as during outpatient neuropsychological re-evaluation.
Professional Development

Over the course of training, the resident is expected to develop an area of special interest and expertise. Faculty will mentor residents to help them curate their training goals, research activities, didactic exposure, and clinical opportunities to develop this area of focus. Second-year residents develop a job talk and practice mock interviews with faculty in preparation for their job search.

Residents across pediatric and adult tracks participate in the program’s Professional Development Series. This series includes monthly didactics on professional development topics. The series also includes formal supervision readings, and group supervision for second-year residents who are actively engaging in vertical supervision of interns and practicum students.

Sample Professional Development Series Topics
- Making the Most of Residency
- Board Certification
- Job Search, Interview, Negotiation
- Promotion & Networking
- Medicolegal Work
- Private Practice
- Hot Topics & New Directions
- Supervision
- Business of Neuropsychology
- Ethics
Seminars & Didactics

Neuropsychology Didactics
These required didactics are organized within the neuropsychology section and are designed to cover major adult and pediatric neurobehavioral conditions, relevant clinical issues, clinical neurology/psychiatry, and functional neuroanatomy. The goal of neuropsychology didactics is to prepare residents for independent practice and ABPP board certification in clinical neuropsychology.

Pediatric Neuropsychology Seminar
Residents on the pediatric track participate in specialty didactics that cover medical conditions, clinical syndromes, and issues/topics that are unique to pediatric populations. This seminar also includes a case conference component, with faculty and trainees presenting unusual or complex cases.

Neuropsychology Seminar
Residents on the pediatric and adult track participate in lifespan neuropsychology seminar, which consists of lectures and guided readings on topics that cover major neurobehavioral conditions in adults and children, broad clinical issues in neuropsychology, and lifespan clinical neurology/psychiatry. As part of this seminar, residents complete a Functional Neuroanatomy and Neurobehavioral Syndromes short course, offered by the neuropsychology faculty. Residents also practice fact finding in the style of ABPP board certification.

IU School of Medicine & IU Neuroscience Center Didactics
These didactics are organized by the School of Medicine and IU Neuroscience Center and cover a variety of medical conditions, clinical issues, and new developments in the fields of neurology, psychiatry, and neuroscience. Many of
these didactic experiences are optional but can enhance clinical competence and promote a well-rounded understanding of how neuropsychology functions within a broader medical context.

Pediatrics Grand Rounds  
Neurology Grand Rounds  
Child Neurology Grand Rounds  
Neurology Resident Didactics  
Psychiatry Grand Rounds  
Pediatric Neuroradiology Conference  
Stark Neurosciences Research Institute Seminar  
Brain Cuttings  
Medical Neuroscience Wet Labs

Research

Residents are required to produce one tangible scholarship project with first authorship, or achieve equivalent academic contribution (i.e., co-authoring a book chapter, presenting at a conference). Residents may contribute to ongoing faculty-led studies or may pursue an original research/academic project.

Hydroxyurea & SCD – investigates the association between oral hydroxyurea and neuropsychological performance in children with Sickle Cell Disease.

Pelizaeus-Merzbacher Disease – examines functional status of children with this rare genetic condition through review of school records.

Educational Liaison in Concussion – investigates clinical utility and recovery outcomes for involving a dedicated educational liaison in a multidisciplinary concussion clinic.

Archival Clinic Dataset – dataset of neuropsychological test performance for over 1400 pediatric patients.

Archival Neuropsychological and Structural and Functional MRI Datasets – datasets of children and adolescents with temporal onset epilepsy, who experienced mild traumatic brain injury, and who were treated with chemotherapy for leukemia, as well as healthy controls, who participated in studies including neuropsychological assessment and structural and functional MRI of working and episodic memory.
Diversity & Inclusion

The goal of the pediatric neuropsychology residency is that all residents feel included and that diversity is valued. The recently created Committee for Diversity, Equity, and Inclusion in clinical neuropsychology focuses on providing continued training in culturally competent care and developing and maintaining an inclusive environment for patients, families, trainees, staff, and faculty. Participation in this committee is open to residents. Training in our program includes the monthly Cultural Competence Seminar, which includes discussion of readings relevant to the practice of culturally competent neuropsychology, as well as featuring speakers with expertise on topics like developing cultural awareness for practice in Indiana, gender health in psychological assessment, intersectionality in psychology, and increasing healthcare equity in neuropsychology. If a resident has clinical or research interest in a particular population, there are also opportunities to shape the resident’s clinical work, didactic involvement, and research to focus on that population.

The residency also adheres to IU’s nondiscrimination policies and does not engage in discrimination based on characteristics such as age, color, disability, ethnicity, gender, marital status, national origin, race, religion, sexual orientation, or veteran status. All of our training facilities are fully ADA-compliant in terms of accessibility. If a resident is in need of additional resources to succeed, the program will work with that person on accessing additional available resources.
Supervision

Liz Begyn, PhD, HSPP, ABPP is a Clinical Assistant Professor of Neurology. She completed her doctorate at the University of North Texas and her residency in pediatric neuropsychology at Children’s Medical Center Dallas. She is board certified in Clinical Neuropsychology, with subspecialty certification in Pediatric Neuropsychology. Dr. Begyn is the Clinic Director for the Pediatric Neuropsychology service, Co-Director of the overall Residency program, and the supervising neuropsychologist in the RASopathy Clinic. Dr. Begyn has particular clinical interests in working with people with visual impairment/blindness. Dr. Begyn supervises practicum students, interns, and residents. Outside the hospital, Dr. Begyn is busy raising two kids and a German Shepard with her husband. She is a Disney fanatic, enjoys going to concerts and movies, and loves to travel (with and without the kids)!

Jana Chan, PhD, HSPP is a Clinical Assistant Professor of Neurology. She completed her doctorate at Ohio University, and her internship and residency in pediatric neuropsychology at Nationwide Children’s Hospital. Dr. Chan has particular interest in working with children and families across the range of traumatic brain injury. She is the attending neuropsychologist on the Inpatient Rehabilitation Unit at Riley Hospital for Children and the supervising neuropsychologist for the TBI Rotation. Dr. Chan supervises practicum students, interns, and residents. Outside the hospital, Dr. Chan is a Hoosier native and lives on the northside of Indianapolis with her husband and baby daughter. Despite their transition from downtown living to burl life (and parenthood!), they still feel cool, and enjoy traveling, biking the Monon Trail, kayaking Indiana’s rivers and lakes, and exploring new restaurants and breweries.

Anne-Marie Fleckenstein, PhD, HSPP is a Clinical Assistant Professor of Neurology. She completed her doctorate at Fielding Graduate University, her clinical psychology internship at the University of Denver, and residency in pediatric neuropsychology at Akron Children’s Hospital. Dr. Fleckenstein has particular interests in working with children and adolescents with a wide range of neurodevelopmental conditions, and she brings a unique trauma-informed perspective to neuropsychological evaluation. Dr. Fleckenstein supervises practicum students, interns, and residents. Outside the hospital, Dr. Fleckenstein enjoys hiking with her dogs, traveling, exploring new restaurants, and shopping at locally owned funky boutiques!
Emily Kalscheur, PhD, HSPP is a Clinical Assistant Professor of Neurology. She completed her doctorate at Rosalind Franklin University of Medicine & Science, clinical psychology internship at Emory University School of Medicine/Children’s Healthcare of Atlanta (adult/pediatric neuropsychology) and her residency in pediatric neuropsychology at Medical College of Wisconsin. Dr. Kalscheur has particular interest in understanding risk for change following neurosurgical intervention and the memory system as it relates to a variety of neurological conditions. Originally from Green Bay, WI, Dr. Kalscheur is an avid Packers fan and is always on the search for an excellent batch of cheese curds. In her free time, she enjoys mountain biking with her husband, gardening, and cooking.

Kate Kingery, PhD, HSPP is a Clinical Assistant Professor of Neurology. She completed her doctorate at the University of Cincinnati, pediatric neuropsychology internship at Texas Children’s Hospital/Baylor College of Medicine, and residency in pediatric neuropsychology at Indiana University School of Medicine/Riley Hospital for Children. Dr. Kingery has particular clinical interests in working with epilepsy and hematology/oncology populations. Dr. Kingery supervises residents in the Epilepsy Surgery Program as well as in the Neuro-Oncology Rotation. Outside the hospital, Dr. Kingery grew up in the Hoosier state and enjoys cooking, attending sporting events, and urban farming with her husband, children, and brood of animals.

Sarah Koch, PhD, HSPP is a Clinical Assistant Professor of Neurology. She completed her doctorate in Medical/Clinical Psychology at the University of Alabama at Birmingham, internship in pediatric neuropsychology at Texas Children’s Hospital/Baylor College of Medicine, and residency in pediatric neuropsychology at Indiana University School of Medicine/Riley Hospital for Children. Dr. Koch has a particular interest in working with children with developmental disabilities within the context of their medical condition. Dr. Koch supervises the Neuro-Oncology Rotation of the first-year resident. Outside the hospital, Dr. Koch lives in downtown Indianapolis with her husband, daughter, and golden retriever. She and her family enjoy frequenting the city’s canal walk, shops, and restaurants. She is an Indianapolis native and avid Butler basketball fan – go Dawgs!
Brenna McDonald, MBA, PsyD, HSPP, ABPP is a Professor of Radiology and Imaging Sciences, Neurology, and Clinical Psychology in Psychiatry. She is Director of Pediatric Neuropsychology, and Associate Director of the IU Center for Neuroimaging. She completed her doctorate and internship in Clinical Psychology at Widener University and her residency in Neuropsychology and Neuroimaging at Dartmouth Medical School. She is board certified in Clinical Neuropsychology, with subspecialty certification in Pediatric Neuropsychology. Dr. McDonald has particular clinical interests in presurgical populations, for whom she also provides clinical fMRI evaluations. Dr. McDonald is the supervising neuropsychologist for the Epilepsy Surgery Program, and Co-Director of the overall Residency Program. Dr. McDonald’s research program includes cognitive and structural and functional MRI studies of children with epilepsy, mild traumatic brain injury, and leukemia, as well as cognitive effects of breast cancer chemotherapy. Outside the hospital, Dr. McDonald is a proud Baltimore native and sports fan. She spends free time with her husband and daughter, ideally in the great outdoors, and enjoys running and playing soccer.

Salary & Benefits

Salary is $54,840 for the first year and $55,224 for the second year.

Benefits are offered at no cost to the resident and include:
- Family health insurance
- Vision and dental insurance
- Life insurance
- Disability insurance
- Malpractice insurance

Campus parking is provided at no extra cost.

PTO is 15 days (plus 3 professional days) in the first year, and 20 days (plus 5 professional days) in the second year. These are in addition to the 10 standard IU holidays.

Professional funds total $3,000 across the entirety of the two-year residency.
Application & Selection

The pediatric track will be recruiting one resident for the 2023-2025 training cycle. Preferred applicants are doctoral candidates in an APA-accredited graduate program in clinical, counseling, or school psychology, and are currently completing an APA-accredited internship. Applicants must participate in the APPCN-affiliated National Matching Service. Interested applicants should submit their materials via email to Dr. Daniel Rexroth (drexroth@iupui.edu). All materials must be received by December 15, 2022.

- Cover letter
- CV
- 3 letters of recommendation
- Graduate transcript (copies issued to student are acceptable)

Interviews will take place after initial screening of applications. Interviews will be conducted virtually (by phone or videoconference) in 2023 in line with current recommendations from APPCN.
Indianapolis

Affectionately referred to as the “Crossroads of America,” Indianapolis combines the metropolitan perks of city life with the accessibility of Midwest America. Whether you’re seeking excitement, culture, or commerce, Indy truly has it all.

Active residents of Indiana’s capital can walk, run, or bike the Cultural Trail that encircles and sprawls through every major section of downtown, before slowing to enjoy the scenic Canal Walk or checking out the gold mine of wine and dine that is Mass Ave. For those who prefer to watch others be active, Indianapolis has nearly every major sport covered, between the Colts, the Pacers, and the world-famous Indy 500, along with minor league baseball and professional soccer. Spend a quiet day at our nationally ranked zoo or one of several museums in the area, including the world’s largest children’s museum. Take in a show with the Indiana Repertory Theater company or the Indianapolis Symphony Orchestra, located in the heart of downtown Indianapolis on Monument Circle. Other highlights of Indianapolis include:

- Affordable cost of living
- A conveniently stationed international airport
- A wealth of quality restaurants options from those specializing in vegetarian fare to the acclaimed St. Elmo’s Steakhouse
- The 26-mile Monon Rail Trail, a paved outdoor trail running from the edge of Mass Ave through some of Indy’s most lively suburbs
- Venues that are home to the visual, musical, and performing arts
- A number of historical monuments
- Free family membership for IU residents to Newfields arts and garden museum