# Post-Doctoral Fellowship in Pediatric Clinical Neuropsychology

## 2022-2024



### **Department of Psychology** The Hospital for Sick Children, Toronto, ON, Canada

Pediatric Neuropsychology Fellowship Coordinator: Laura Janzen, Ph.D., ABPP-CN Director of Training: Sharon Guger, Ph.D., C.Psych



#### **Overview**

**Two (2)** post-doctoral fellowship positions in paediatric clinical neuropsychology are offered through the Department of Psychology at the Hospital for Sick Children in Toronto, Ontario. The two-year, full-time training positions begin on **September 6, 2022**, with the second year conditional on successful completion of the first year requirements. Employment is contingent upon meeting the Hospital for Sick Children's Occupational Health Requirements.

Our program has been a member of the Association of Post-Doctoral Programs in Clinical Neuropsychology (APPCN) since 2008 and training conforms to the Houston Conference Guidelines for Specialty Education and Training in Clinical Neuropsychology. The fellowship adheres to a scientist-practitioner model and training prepares fellows for independent practice in paediatric neuropsychology, registration with the College of Psychologists of Ontario (CPO), and board certification through the American Board of Clinical Neuropsychology (ABCN).

The philosophy of the fellowship mirrors that of The Hospital for Sick Children in that the needs of the patient and family are primary. An evidence-based/best practice approach is used and clinical research is closely integrated with patient care activities. Conceptualizing the child's neuropsychological needs and challenges within a developmental framework is integral to practice.

The Department of Psychology at SickKids exists as an independent department within a Child Health Services cluster model of service provision. It includes over 30 psychologists, 11 psychometrists, and numerous research staff and trainees providing clinical services and conducting research within the hospital. There are 9 staff paediatric neuropsychologists who regularly provide clinical supervision in our training program. Four are board certified (ABPP-CN). In addition to specialty training in Paediatric Neuropsychology, the Department offers clinical training at the post-doctoral level in Paediatric Health Psychology (1 position), residency level (3 positions, accredited by the Canadian Psychological Association), and graduate practicum level.

#### **COVID-19 Impact on Training**

Since the onset of the COVID19 pandemic, the training program and faculty have navigated the uncertain landscape with flexibility prioritizing clinical care, training and safety. Responses to the global pandemic continue to evolve and, at the time of writing this brochure, a hybrid model of care (combination of in-hospital and virtual) is being provided. It is unclear the degree to which similar arrangements will be in place for the 2022-2024 training cycle.

The SickKids Psychology Department leadership, training committee, and supervisors are committed to the training of future neuropsychologists, and high-quality training experiences remain the priority. This brochure describes the intended program structure

and rotation experiences, which may require modification depending on limitations imposed by COVID19. We are committed to being transparent with information, collaborating with trainees to develop contingency plans guided by training goals, and to documenting adjusted goals and expectations (including supervision arrangements). Should disruptions to rotations occur in the future, potential and current fellows will be notified as soon as information is available.

Fellows are expected to comply with any and all federal, provincial, and Sick Kids organizational regulations and other Infection Prevention and Control procedures within the context of providing clinical services, or otherwise.

#### Goals of the Fellowship

Fellows are exposed to a wide array of patient populations (aged 0-18 years) in both inpatient and outpatient settings. A primary goal of the first year is to develop a working model of neuropsychological assessment, consultation, and intervention that allows for accurate, thorough, yet efficient service delivery in the fast paced and complex setting of an academic health sciences centre. Goals of the second year are to obtain registration as a psychologist with the CPO, and to further develop clinical and research skills by working with a broader range of supervisors, patient groups, and multi-disciplinary teams. By the end of the second year, fellows should be eligible to apply for board certification (ABCN). Graduates of our program have entered into positions in academic medical centers, private practice and multi-disciplinary community clinics.

#### **Training Activities**

Post-doctoral fellows are involved in direct clinical service for at least 75% of their time and participate in focused research and educational activities for the remaining 25% of their time. The focus of training is on advanced practice in paediatric clinical neuropsychology, including comprehensive neuropsychological consultation, functional neuroanatomy, ethical practice, individual/cultural diversity, writing integrated reports, multi-disciplinary and school consultation, and clinical research. The fellow receives high-level training in conducting neuropsychological evaluations, providing feedback (including recommendations and education) to family, staff and school personnel, providing supportive psychological services, participating in multi-disciplinary teams, and assisting with treatment and discharge planning. Fellows receive supervision from various staff neuropsychologists in their work with a diverse range of patients across multiple programs and in conducting applied research.

#### Rotations

The first year of training consists of three, four-month rotations chosen to meet the fellow's training needs, balancing exposure to patients of varying ages, levels of functioning, and focal vs. diffuse deficits. There are opportunities to conduct assessments with special patient populations (e.g., severe sensory, motor or behavioral needs requiring non-standardized assessments) and combined neuropsychological and autism spectrum disorder (ASD) diagnostic assessments.

The second year of training focuses more specifically on Hematology/Oncology populations and neuropsychological consultations to programs within the hospital that are not served by a staff neuropsychologist, allowing for both depth and breadth of training. Second-year fellows work with greater autonomy, often providing supervision to others. Evaluations are typically conducted through the outpatient Psychology Clinic, but inpatient consultations may be provided.

#### Primary rotations are available within the following programs:

- Neurology
  - o Stroke
  - Epilepsy Surgery Program
  - Epilepsy Classroom
  - Neonatal Neurology
  - Neurology General Consultation
- Genetics/Metabolics
- Craniofacial-Cleft Lip and Palate program
- Solid Organ Transplant
- Hematology/Oncology
  - o Brain Tumor
  - o Leukemia/Lymphoma
  - o Sickle Cell Disease
  - Long-Term Follow-Up for Cancer

#### **Other Training Opportunities**

Additional training opportunities may include:

- Adult Neuropsychology rotation (appropriate experience is required)
- Psychological intervention and/or parenting training with medically-complex patients
- Provision of lectures and presentations within the hospital or for community groups
- Providing supervision to more junior trainees (residents and/or practicum students) to develop competency as a supervisor.
- Mentored journal-article peer reviews.



#### Supervision

Fellows are assigned a primary supervisor and receive at least two hours of individual face-to-face supervision per week. Regularly scheduled, one-to-one supervision involves case review, setting and monitoring of training goals, and professional development. Supervision follows a developmental model and fellows work with a variety of faculty members throughout the fellowship for broad exposure to different styles of clinical practice and supervision.

Group professional support/supervision meetings with the Coordinator of Post-Doctoral Training occur on a monthly basis to address advanced topics in neuropsychology, including professional/ethical standards, professional practice issues, and preparing for ABCN board certification. In addition to formal supervision, fellows receive ongoing mentorship and coaching in developing a career path and establishing a professional identity.

#### **Didactics**

A variety of formal and informal educational opportunities exist. Rotation-specific readings will be suggested by individual supervisors. More formal didactics are provided to ensure a broad knowledge-base in clinical neuropsychology, and include:

#### **Required:**

- Paediatric Neuropsychology Directed Readings Seminars (monthly)
- Professional Issues Seminar for Neuropsychology Clinical Fellows (monthly)
- Psychology Department Rounds (monthly)

#### Optional

- Clinical Health Evaluative Science (CHES) Rounds (weekly)
- Brain and Behavior Cross-Talks (monthly)
- Neuroscience and Mental Health Program (SickKids Research Institute) Symposia (monthly)
- Paediatric and Neurology Grand Rounds (weekly)
- Clinical and research rounds associated with individual rotations (e.g., Neurology, Neurosurgery, Hematology/Oncology, Psychiatry)
- Adult Neuropsychology journal club and case presentations

#### Research



The Hospital for Sick Children is an active and exciting research environment. Fellows work with at least one research mentor as a member of a specialized research team, working on grant-funded or clinical research projects. Demonstration of scholarly activity is a required exit criteria for the fellowship. This may be accomplished through presentation at a national or international conference, and either one manuscript submitted for publication in a peer-reviewed journal or a grant proposal submission.

Ongoing research at SickKids involves characterizing the impact of various adverse insults on development, understanding the core neurocognitive deficits associated with neurodevelopmental disorders or acquired brain injury, and identifying the relations

between neuroimaging measures of brain structure/function and neurocognitive outcome. Opportunities to collaborate in research presentations or peer reviews of research (e.g., mentored journal article peer reviews) are also available.

#### Evaluation

Formal written progress evaluations are prepared by the Neuropsychology staff at the conclusion of each rotation. Fellows also evaluate supervisors and rotations. Fellows whose performance is not at an expected level of competence will be advised regarding the problem areas in their performance, and a specific plan to remediate those weaknesses will be developed.

#### Salary and Benefits

Salary is \$42,000 CAD in the first year and \$44,000 CAD in the second year, with an additional annual stipend of \$5,000 CAD. Fellows are eligible for the modified SickKids benefits package (health and dental), as well as 3 weeks of paid vacation, nine statutory holidays recognized by the hospital, and one week paid professional development leave per year.

Fellows have individual office space, a computer with internet connection, a private phone line and access to electronic medical journals through the University of Toronto Library.

#### Eligibility

Applicants should be graduates of CPA/APA accredited clinical or school psychology programs and have completed a CPA/APA accredited internship in clinical psychology. It is expected that applicants will have internship-level training in paediatric psychology and neuropsychology. Applicants with prior coursework in Functional Neuroanatomy, Clinical Neurology, Basic Neuroscience, and/or Neuropathology are preferred. Applicants who bring diversity to the program (e.g., fluency in French or experience with under-served

populations) are especially encouraged to apply. All degree requirements must be completed before the start date.

Our program is an APPCN Match Participant; applicants must therefore register with National Matching Services, Inc. (<u>www.natmatch.com</u>) to participate in the APPCN Resident Matching Program. This residency site agrees to abide by the APPCN policy that no person at this facility will solicit, accept or use any ranking-related information from any fellowship applicant.

\*Applicants whose training has been negatively impacted by the COVID-19 pandemic are encouraged to have their Director of Clinical (University) or Internship Training highlight the nature of this impact in their letter of reference.

#### Application

The deadline for applications is **January 7, 2022.** Applicants should submit their materials (e.g., letter of interest, application form, CV) electronically as a single .pdf file. Transcripts and letters of reference can be sent separately. All material should be emailed to: <u>Laura.Janzen@sickkids.ca</u>

- Letter of interest including clinical and research goals.
- Application Form The Hospital for Sick Children Clinical Neuropsychology Fellowship (see link on website)
- Curriculum vitae.
- Official graduate transcripts listing courses, grades and degrees.
- Three (3) letters of reference (two clinical supervisors and one academic/research mentor).
- A letter or e-mail from the internship Training Director confirming that a CPA/APAaccredited internship will be completed by September 6, 2022.
- If dissertation has not been defended at the time of application, a letter or e-mail from the CPA/APA-accredited graduate program Training Director confirming that the doctoral degree will be awarded before September 6, 2022.

#### Contact:

Laura Janzen Ph.D., C. Psych., ABPP-CN Hospital for Sick Children 555 University Avenue, Toronto, ON M5G 1X8 Tel: 416-813-5437 / Fax: 416-813-8839 laura.janzen@sickkids.ca

#### Information about SickKids and Toronto

The Hospital for Sick Children (SickKids), affiliated with the University of Toronto, is recognized as one of the world's foremost pediatric health-care institutions. It is Canada's leading centre dedicated to advancing children's health through the integration of patient care, research and education. To learn about the SickKids Strategic Plan 2020-2025 "Unprecedented outcomes powered by Precision Child Health" please see: <u>https://2025.sickkids.ca/</u>

With a staff that includes professionals from all disciplines of health care and research, SickKids provides the best in complex and specialized care by creating scientific and clinical advancements, sharing knowledge and expertise and championing the development of an accessible, comprehensive and sustainable child health system. The Peter Gilgan Centre for Research and Learning is a hub where researchers and learners can congregate and share ideas to transform the current state of child health care since its 2013 opening.

SickKids is located in downtown Toronto, Canada's largest city. Toronto lies on the shore of Lake Ontario, the easternmost of the Great Lakes. Over 4 million people live in the Greater Toronto Area (GTA). Toronto is a clean, safe, cosmopolitan city with a wonderful network of parks, recreational, and cultural facilities. For more information: <u>www.seetorontonow.com</u>



#### Core Training Faculty: Programs and Recent Publications \*names of current or prior fellows in italics



Naddley Désiré, Ph.D., C.Psych. (Université de Montréal). Staff Neuropsychologist

**Programs:** Neurology and Craniofacial-Cleft Lip and Palate program

Neuropsychological assessment and consultation of children and adolescents with history of preterm birth complications, hypoxic-ischemic encephalopathy, neonatal arterial ischemic stroke, cleft lip and palate, craniosynostosis, encephaloceles, and other neurological or congenital conditions. French assessment and consultation services also provided to Francophone families. Research interests include neurocognitive and psychosocial outcomes following pediatric acquired brain injuries and craniofacial diseases.

MacAllister, W. S., Désiré, N., Vasserman, M., Dalrymple, J., Salinas, L., & Brooks, B. L. (2020). The use of the MSVT in children and adolescents with epilepsy. Applied Neuropsychology: Child, 1-6. DOI: 10.1080/21622965.2020.1750127

Roebuck-Spencer, T., Désiré, N. & Beauchamp, M. (2018). Traumatic Brain Injury. In J. Donders & S.J. Hunter (Eds.). *Neuropsychological Conditions Across the Lifespan* (pp. 139-161). Cambridge: Cambridge University Press, Cambridge.

Beauchamp, M.H., Tang, K., Yeates, K.O., Anderson, P., Brooks, B.L., Keightley, M., Désiré, N., Boutis, K., Gagnon, I., Gravel, J., Dubrovsky, A. S., and Zemek, R., for the 5P PERC Concussion (2019). Predicting Wellness after Pediatric Concussion. Journal of International Neuropsychology Society, 25(4), 375-389. PMID: 31050335

Brooks, B.L., Plourde, V., Beauchamp, M.H., Tang, K., Yeates, K.O., Keightley, M., Anderson, P., Désiré, N., Barrowman, N., Zemek, R. and on behalf of PERC Concussion Team (2019). Predicting psychological distress after pediatric concussion. Journal of Neurotrauma, 36 (5), 679-685. PMID: 30032719

Beauchamp, M., Aglipay, M., Yeates, K.O., Désiré, N., Keightley, M., Anderson, P., Brooks, B.L., Barrowman, N., Gravel, J., Boutis, K., Gagnon, I., Dubrovsky, S., and Zemek, R., for the 5P PERC Concussion-Neuropsychology Team (2018). Predictors of neuropsychological outcome after paediatric concussion. Neuropsychology, 32(4), 495-508. PMID: 29809036



Anna Gold, Ph.D., C. Psych. (University of East Anglia, UK). Staff Neuropsychologist

Program: Transplant and Regenerative Medicine Centre

Neuropsychological assessment and consultation of paediatric patients who are awaiting or have undergone solid organ transplant (heart, lung, liver, kidney and small bowel). Research interests include neuropsychological outcomes following transplant, longer term neurodevelopmental sequelae of complex surgically treated gastro-intestinal failure and paediatric transition.

Gold, A., *Danguecan, A.,* Belza, C., So, S., de Silva, N, Avitzur Y, et al. Neurocognitive Functioning in Early School-Age Children with Intestinal Failure. Journal of Pediatric Gastroenterology and Nutrition. 2019 Sep 17. PubMed PMID: 31568150.

Gold, A., Rogers, A., Cruchley, E., Rankin, S., Kamath, B., Avitzur, Y., and Ng, V. School Readiness in Chronic Cholestatic Liver Disease – A Pilot Study Examining Children With and Without Liver Transplantation. Canadian Journal of Gastroenterology and Hepatology, 2017.

So, S., Patterson, C., Gold, A., Rogers, A., Kosar, C., DeSilva, N., Burghardt, K., Avitzur, Y. and Wales, P. Early Neurodevelopmental Outcomes of Infants with Intestinal Failure. Early Human Development, 2016, 101, 11-16.

Gold, A., Martin, K., Breckbill, K., Avitzur, Y., & Kaufman, M. (2015). Transition to adult care in paediatric solid-organ transplant: development of a practice guideline. Prog Transplant, 25(2), 131-138. doi: 10.7182/pit2015833

Korus, M., Cruchley, E., Stinson, J. N., Gold, A., & Anthony, S. J. (2015). Usability testing of the Internet program: "Teens Taking Charge: Managing My Transplant Online". Pediatr Transplant, 19(1), 107-117. doi: 10.1111/petr.12396



Sharon Guger, Ph.D., C. Psych. (York University). Staff Neuropsychologist, Director of Clinical Training in Psychology.

Program: Hematology/Oncology – AfterCare

Neuropsychological assessment and consultation of late effects of childhood cancer, promotion of transition.

Zapotocky M, Beera K, Adamski J, Laperierre N, Guger S, Janzen L, et al. Survival and functional outcomes of molecularly defined childhood posterior fossa ependymoma: Cure at a cost. Cancer. 2019 Jun 1;125(11):1867-76. PubMed PMID: 30768777. Pubmed Central PMCID: 6508980.

Janzen LA, Guger S: Clinical neuropsychology practice and training in Canada. Clin Neuropsychol:1-14, 2016

Lafay-Cousin L, Fay-McClymont T, Johnston D, Fryer C, Scheinemann K, Fleming A, Hukin J, Janzen L, Guger S, Strother D, Mabbott D, Huang A, Bouffet E. Neurocognitive evaluation of long term survivors of atypical teratoid rhabdoid tumors (ATRT): The Canadian registry experience. PaediatricBlood & Cancer. 2015 Jul;62(7):1265-9.

French AE, Tsangaris E, Barrera M, Guger S, Brown R, Urbach S, Stephens D, Nathan PC. School attendance in childhood cancer survivors and their siblings. The Journal of Pediatrics. 2013 Jan;162(1):160-5.

Mabbott DJ, Monsalves E, Spiegler BJ, Bartels U, Janzen L, Guger S, Laperriere N, Andrews N, Bouffet E. Longitudinal evaluation of neurocognitive function after treatment for central nervous system germ cell tumors in childhood. Cancer. 2011 Dec 1;117(23):5402-11.



**Laura Janzen, Ph.D., C. Psych., ABPP-CN** (University of Victoria). Staff Neuropsychologist, Coordinator of Post-Doctoral Training in Neuropsychology, Department of Pediatrics, University of Toronto.

Program: Hematology/Oncology

Neuropsychological assessment of children with brain tumors, leukemia, and sickle cell disease; neuropsychology training issues; research on the neuropsychological implications of congenital and acquired neurological conditions as well as the effects of various interventions on cognitive outcomes.

*Peterson RK,* Williams S, Janzen L. Cognitive Correlates of Math Performance in School-Aged Children with Sickle Cell Disease and Silent Cerebral Infarcts. Archives of clinical neuropsychology : the official journal of the National Academy of Neuropsychologists. 2021;36(4):465-74.

*Peterson RK*, McKeown T, Tabori U, Bartels U, Bouffet E, Janzen L. Neuropsychological impact of trametinib in pediatric low-grade glioma: A case series. Pediatric blood & cancer. 2020;67(12):e28690.

Schulte F, Kunin-Batson AS, Olson-Bullis BA, Banerjee P, Hocking MC, Janzen L, et al. Social attainment in survivors of pediatric central nervous system tumors: a systematic review and meta-analysis from the Children's Oncology Group. Journal of cancer survivorship : research and practice. 2019 Oct 17. PubMed PMID: 31625086.

Barrera M, Atenafu EG, Sung L, Bartels U, Schulte F, Chung J, Cataudella D, Hancock K, Janzen L, Saleh A, Strother D, Downie A, Zelcer S, Hukin J, McConnell D: A randomized control intervention trial to improve social skills and quality of life in pediatric brain tumor survivors. Psychooncology 27:91-98, 2018

Janzen LA, *David D*, Walker D, Hitzler J, Zupanec S, Jones H, et al. Pre-Morbid Developmental Vulnerabilities in Children With Newly Diagnosed Acute Lymphoblastic Leukemia (ALL). Pediatric blood & cancer. 2015 Dec;62(12):2183-8. PubMed PMID: 26305495.



Elizabeth N. Kerr, Ph.D., C. Psych. (University of Calgary). Staff Neuropsychologist, Director of Epilepsy Classroom; Department of Paediatrics, University of Toronto.

Program: Neurology – Epilepsy Surgery, Epilepsy Classroom

Neuropsychological assessment and consultation: medically refractory epilepsy/epilepsy surgery.

Tavares TP, Kerr EN, Smith ML. Memory outcomes following hemispherectomy in children. Epilepsy & behavior : E&B. 2020;112:107360.

Kerr EN, Fayed N: Cognitive predictors of adaptive functioning in children with symptomatic epilepsy. Epilepsy Res 136:67-76, 2017

Fuentes A, Kerr EN: Maintenance effects of working memory intervention (Cogmed) in children with symptomatic epilepsy. Epilepsy Behav 67:51-59, 2017

Hayeems RZ, Miller FA, Barg CJ, Bombard Y, Carroll JC, Tam K, Kerr E, Chakraborty P, Potter BK, Patton S, Bytautas JP, Taylor L, Davies C, Milburn J, Price A, Gonska T, Keenan K, Ratjen F, Guttmann A: Psychosocial Response to Uncertain Newborn Screening Results for Cystic Fibrosis. J Pediatr 184:165-171 e1, 2017

Kerr EN, *Blackwell MC*. Near-transfer effects following working memory intervention (Cogmed) in children with symptomatic epilepsy: An open randomized clinical trial. Epilepsia. 2015 Nov;56(11):1784-92.



**Eva Mamak, Ph.D., C. Psych., ABPP-CN** (University of North Carolina at Chapel Hill). Staff Neuropsychologist

Programs: Clinical and Metabolic Genetics, Epilepsy Surgery

Neuropsychological assessment and consultation of metabolic genetic conditions and epilepsy surgical candidates, infant/toddler and preschool assessment, and research on lysosomal storage diseases, and infant development.

Parkin PC, Borkhoff CM, Macarthur C, Abdullah K, Birken CS, Fehlings D, et al. Randomized Trial of Oral Iron and Diet Advice versus Diet Advice Alone in Young Children with Nonanemic Iron Deficiency. The Journal of pediatrics. 2021;233:233-40 e1.

Tran C, Patel J, Stacy H, Mamak EG, Faghfoury H, Raiman J, Clarke JTR, Blaser S, Mercimek-Mahmutoglu S: Long-term outcome of patients with X-linked adrenoleukodystrophy: A retrospective cohort study. Eur J Paediatr Neurol 21:600-609, 2017

Almuqbil M, Go C, Nagy LL, Pai N, Mamak E, Mercimek-Mahmutoglu S. New Paradigm for the Treatment of Glucose Transporter 1 Deficiency Syndrome: Low Glycemic Index Diet and Modified High Amylopectin Cornstarch. Paediatric Neurology. 2015 Sep;53(3):243-6.

Abdullah K, Thorpe KE, Mamak E, Maguire JL, Birken CS, Fehlings D, Hanley AJ, Macarthur C, Zlotkin SH, Parkin PC. An internal pilot study for a randomized trial aimed at evaluating the effectiveness of iron interventions in children with non-anemic iron deficiency: the OptEC trial. Trials. 2015;16:303.

Shapiro EG, Nestrasil I, Rudser K, Delaney K, Kovac V, Ahmed A, Yund B, Orchard PJ, Eisengart J, Niklason GR, Raiman J, Mamak E, Cowan MJ, Bailey-Olson M, Harmatz P, Shankar SP, Cagle S, Ali N, Steiner RD, Wozniak J, Lim KO, Whitley CB. Neurocognition across the spectrum of mucopolysaccharidosis type I: Age, severity, and treatment. Molecular Genetics and Metabolism. 2015 Sep-Oct;116(1-2):61-8.



Katia Sinopoli, Ph.D., C.Psych. (University of Toronto). Staff Neuropsychologist

Program: Neurology.

Neuropsychological assessment and consultation of children and adolescents with diverse neurological conditions including non-surgical epilepsy, multiple sclerosis/demyelinating diseases, and inflammatory brain diseases. Research interests include exploration of predictors of neurocognitive outcome, examination of neurodevelopment following early injuries and early medical interventions, and cross-disorder comparisons of cognitive functioning.

McCoy B, Wang L, Zak M, Al-Mehmadi S, Kabir N, Alhadid K, McDonald K, Zhang G, Sharma R, Whitney R, Sinopoli K, Snead OC, 3rd: A prospective open-label trial of a CBD/THC cannabis oil in dravet syndrome. Ann Clin Transl Neurol 5:1077-1088, 2018

Urban KJ, Riggs L, Wells GD, Keightley M, Chen JK, Ptito A, Fait P, Taha T, Sinopoli KJ. Cortical Thickness Changes and Their Relationship to Dual-Task Performance following Mild Traumatic Brain Injury in Youth. J Neurotrauma. 2016 Oct 13.

Vaags AK, Bowdin S, Smith ML, Gilbert-Dussardier B, Brocke-Holmefjord KS, Sinopoli K, Gilles C, Haaland TB, Vincent-Delorme C, Lagrue E, Harbuz R, Walker S, Marshall CR, Houge G, Kalscheuer VM, Scherer SW, Minassian BA. Absent CNKSR2 causes seizures and intellectual, attention, and language deficits. Annals of Neurology. 2014 Nov;76(5):758-64.

Sinopoli KJ, Chen JK, Wells G, Fait P, Ptito A, Taha T, Keightley M. Imaging "brain strain" in youth athletes with mild traumatic brain injury during dual-task performance. Journal of Neurotrauma. 2014 Nov 15;31(22):1843-59.

Dennis M, Spiegler BJ, Simic N, Sinopoli KJ, Wilkinson A, Yeates KO, Taylor HG, Bigler ED, Fletcher JM. Functional plasticity in childhood brain disorders: when, what, how, and whom to assess. Neuropsychology Review. 2014 Dec;24(4):389-408.



Robyn Westmacott, Ph.D., C. Psych., ABPP-CN (University of Toronto). Staff Neuropsychologist

Program: Neurology

Neuropsychological assessment and consultation in the area of paediatric stroke and other neurovascular or neurological conditions; Neuropsychological outcomes in paediatric stroke; Impact of age at injury on outcome; Emerging deficits following early brain injury.

*Peterson RK*, Williams T, Dlamini N, Westmacott R. Parent experiences and developmental outcomes following neonatal stroke. The Clinical neuropsychologist. 2021;35(5):973-87.

*Peterson RK*, McDonald KP, Vincent M, Williams TS, Dlamini N, Westmacott R. Characterizing language outcomes following childhood basal ganglia stroke. Applied neuropsychology Child. 2019 Apr 21:1-12. PubMed PMID: 31006275.

Westmacott R, McDonald KP, Roberts SD, deVeber G, MacGregor D, Moharir M, Dlamini N, Williams TS: Predictors of Cognitive and Academic Outcome following Childhood Subcortical Stroke. Dev Neuropsychol:1-21, 2018

*Byrne AM*, Schechter T, Westmacott R. Neuropsychological Profile of a Girl with Wiskott-Aldrich Syndrome. Cognitive and behavioral neurology : official journal of the Society for Behavioral and Cognitive Neurology. 2018 Mar;31(1):13-7. PubMed PMID: 29561314.

Westmacott R, McDonald KP, deVeber G, MacGregor D, Moharir M, Dlamini N, Askalan R, Williams TS: Neurocognitive outcomes in children with unilateral basal ganglia arterial ischemic stroke and secondary hemidystonia. Child Neuropsychol 24:923-937, 2018



**Tricia Williams, Ph.D., C. Psych. ABPP-CN** (York University). Staff Neuropsychologist.

Program: Neurology.

Neuropsychological assessment, consultation and research involving children and families from neonatal neurology, paediatric stroke and other neurovascular or neurological conditions. Special interest in early parent intervention to promote optimal mental health outcomes following neonatal brain injury.

*Ostojic-Aitkens D*, Ford MK, Cunningham T, Gold A, Janzen LA, Sinopoli KJ, et al. Examining parent and clinician views of a hospital-based pediatric neuropsychological service: a Canadian perspective. Child neuropsychology : a journal on normal and abnormal development in childhood and adolescence. 2021:1-21.

*Peterson RK,* Williams TS, McDonald KP, Dlamini N, Westmacott R. Cognitive and Academic Outcomes Following Childhood Cortical Stroke. Journal of child neurology. 2019 Aug 12:883073819866609. PubMed PMID: 31402724. Epub 2019/08/14. eng.

Roberts SD, McDonald KP, *Danguecan A,* Crosbie J, Westmacott R, Andrade B, et al. Longitudinal Academic Outcomes of Children with Secondary Attention Deficit/Hyperactivity Disorder following Pediatric Stroke. Developmental neuropsychology. 2019 Jul;44(4):368-84. PubMed PMID: 31068020.

Williams TS, McDonald KP, Roberts SD, Dlamini N, deVeber G, Westmacott R: Prevalence and Predictors of Learning and Psychological Diagnoses Following Pediatric Arterial Ischemic Stroke. Dev Neuropsychol 42:309-322, 2017

Williams TS, Roberts SD, *Coppens AM,* Crosbie J, Dlamini N, Westmacott R: Secondary attentiondeficit/hyperactivity disorder following perinatal and childhood stroke: impact on cognitive and academic outcomes. Child Neuropsychol 24:763-783, 2018

#### Affiliated Faculty (Research)



**Donald J. Mabbott, PhD., C.Psych., ABPP-CN** (University of Alberta), Senior Scientist and Program Head, Neurosciences and Mental Health Program, Research Institute, The Hospital for Sick Children; Professor, Department of Psychology, The University of Toronto

Research using innovative brain imaging techniques (i.e., Diffusion Tensor Magnetic Resonance Imaging; Magnetoencephalography) and psychological tests to study the impact of brain injury on how the brain grows and develops in childhood, particularly in children treated for pediatric brain tumours.

*Laliberte Durish C,* Moxon-Emre I, Bouffet E, Bartels U, Mabbott DJ. Family environment as a predictor and moderator of cognitive and psychosocial outcomes in children treated for posterior fossa tumors. Child neuropsychology : a journal on normal and abnormal development in childhood and adolescence. 2021;27(5):641-60.

*Peterson RK,* Tabori U, Bouffet E, Laughlin S, Liu F, Scantlebury N, et al. Predictors of neuropsychological late effects and white matter correlates in children treated for a brain tumor without radiation therapy. Pediatric blood & cancer. 2019 Oct;66(10):e27924. PubMed PMID: 31309694.

Partanen M, Bouffet E, Laughlin S, Strother D, Hukin J, Skocic J, Szulc-Lerch K, Mabbott DJ: Early changes in white matter predict intellectual outcome in children treated for posterior fossa tumors. Neuroimage Clin 20:697-704, 2018

Szulc-Lerch KU, Timmons BW, Bouffet E, Laughlin S, de Medeiros CB, Skocic J, Lerch JP, Mabbott DJ: Repairing the brain with physical exercise: Cortical thickness and brain volume increases in long-term pediatric brain tumor survivors in response to a structured exercise intervention. Neuroimage Clin 18:972-985, 2018

Oyefiade AA, Ameis S, Lerch JP, Rockel C, Szulc KU, Scantlebury N, Decker A, Jefferson J, Spichak S, Mabbott DJ: Development of short-range white matter in healthy children and adolescents. Hum Brain Mapp 39:204-217, 2018



Mary Lou Smith, Ph.D., C. Psych. (McGill University). Staff Neuropsychologist, Professor of Psychology, University of Toronto.

Programs: Neurology, Infectious Diseases

Assessment and consultation of candidates for epilepsy surgery and for the HIV clinic. Research on epilepsy and HIV.

*Danguecan AN,* Smith ML. Re-examining the crowding hypothesis in pediatric epilepsy. Epilepsy & behavior : E&B. 2019 May;94:281-7. PubMed PMID: 30904421.

*Danguecan, A. N.,* and M. L. Smith. 2019. 'Verbal associative memory outcomes in pediatric surgical temporal lobe epilepsy: Exploring the impact of mesial structures', *Epilepsy Behav*, 101: 106529.

Law N, Smith ML, Widjaja E: Thalamocortical Connections and Executive Function in Pediatric Temporal and Frontal Lobe Epilepsy. AJNR Am J Neuroradiol 39:1523-1529, 2018

*Danguecan AN,* Smith ML. Academic Outcomes in Individuals With Childhood-Onset Epilepsy: Mediating Effects of Working Memory. Journal of the International Neuropsychological Society : JINS. 2017 Aug;23(7):594-604. PubMed PMID: 28343465.

Gascoigne MB, Smith ML, Barton B, Webster R, Gill D, Lah S: Accelerated long-term forgetting and behavioural difficulties in children with epilepsy. Cortex, 2018



Ashley Danguecan, PhD., C.Psych. (University of Windsor), Staff Neuropsychologist

**Programs:** Division of Rheumatology, Neonatal Neurodevelopmental Follow-Up Clinic

Dr. Danguecan can offer research rotations through the Lupus Clinic or the Neonatal Neurodevelopmental Follow-Up Clinic.

**Lupus Clinic:** Dr. Danguecan works in close collaboration with staff rheumatologist Dr. Andrea Knight. Our research program is focused on cognitive dysfunction and mental health disorders in patients with childhood onset systemic lupus erythematosus (cSLE). Current studies examine the association between affective function and multimodal brain imaging metrics, cognitive skills, and serum biomarkers in cSLE. The fellow would also participate in weekly research rounds with other physicians, fellows, and graduate students.

**Neonatal Neurodevelopmental Follow-Up Clinic:** Dr. Danguecan conducts research on developmental outcomes in children with a range of neonatal brain injuries, as well as postpartum parent trauma and coping. The fellow would have the opportunity to collaborate with interdisciplinary team members including occupational therapists, speech and language therapists, and medical staff.

Danguecan A, El Shahed AI, Somerset E, Fan CS, Ly LG, Williams T. Towards a biopsychosocial understanding of neurodevelopmental outcomes in children with hypoxic-ischemic encephalopathy: A mixed-methods study. The Clinical neuropsychologist. 2021;35(5):925-47.

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Quilter, M., Hiraki, L., Knight, A., Couture, J., Levy, D., Silverman, E., Danguecan, A.N., Neufeld, K., Cost, K., Ng, L., Dominguez, D., Schacter, R., & Korczak, D. (submitted). Evaluation of the CES-DC and the SCARED in the detection of depressive and anxiety disorders among children and adolescents with Systemic Lupus Erythematosus.