#CanNRTSS24

# CanNRT Annual Summer School

**August 19-23, 2024**

SENS HØTEL

**1808 Sherbrooke St W, Montreal, Quebec H3H 1E5 Canada**

Canadian Neurodevelopmental
Research Training Platform

CanNRT

Powered by

Fondation
Azrieli
Foundation

cannrt.ca | cannrt@mcgill.ca

# PROGRAM | Year 1

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais |
| | **Welcome and introduction** 9:30 – 10:30 a.m. Chateauneuf  E. Minogianis V. Tamburro | **Session 2: Biomedical Research** 9:30 – 10:30 a.m. Chateauneuf  **Intro to genetics of ASD** R. Yuen  **Introduction to Early Neural Development** C. Schuurmans | **Session 3: Clinical Research** 9:30 – 10:30 a.m. Chateauneuf  **Early Identification of Autism** L. Zwaigenbaum  **Early intervention programs for toddlers with emerging autism or related social communication challenges: An introduction to naturalistic developmental behavioural interventions (NDBIs)**  J. Brian | **Session 4: Social, Cultural, Environmental and Population Health** 9:30 – 10:30 a.m. Chateauneuf  **Epidemiology of Autism Spectrum Disorders** E. Fombonne  **Understanding and promoting brain health of older adults with developmental disabilities** Y. Lunsky | **Plan your program** 9 :30 – 10 :15 a.m. Chateauneuf |
| | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:15 – 10:30 a.m. Beaujolais |
| | **Session 1: We Did Good – Learning from Lived and Living Experiences and its Impact on the Community** 10:45 a.m. – 12:00 p.m. Chateauneuf  H. Brown | **Session 2 Continued** 10:45 a.m. – 12:00 p.m. Chateauneuf | **Session 3 Continued** 10:45 a.m. – 12:00 p.m. Chateauneuf | **Session 4 Continued** 10:45 a.m. – 12:00 p.m. Chateauneuf | **Session 5: Health Systems and Services** 10:30 a.m. – 12:30 p.m. Chateauneuf  **The Diagnosis of Neurodevelopmental** |

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
|---|---|---|---|---|---|
| | M. Salt<br>S. Thompson-Hodgetts<br>R. Martens | | | | **Conditions: Understanding the Use of Diagnostic Tools**<br>J. Scorah<br><br>**Community Capacity for Autism Care**<br>M. Penner |
| | **Lunch**<br>12:00 – 1:00 p.m.<br>Ristorante Geso | **Lunch**<br>12:00 – 1:30 p.m.<br>Ristorante Geso | **Lunch**<br>12:00 – 1:30 p.m.<br>Ristorante Geso | **Lunch**<br>12:00 – 1:30 p.m.<br>Ristorante Geso | |
| | **Session 1 Continued**<br>1:00 – 2:30 p.m.<br>Chateauneuf | **Career Skills Workshop: Fellowship Writing Strategies: From Macro to Micro**<br>1:30 – 4:00 p.m.<br>Chateauneuf<br><br>Y. Hung | **Career Skills Workshop: Different Lenses on Inclusive Research**<br>1:30 – 4:00 p.m.<br>Chateauneuf<br><br>H. Brown<br>M. Giroux<br>R. Martens<br>M. Salt<br>S. Thompson-Hodgetts<br>Curriculum Co-Design Committee | **Career Skills Workshop: A Different Look at Career Paths**<br>1:30 – 4:00 p.m.<br>Chateauneuf<br><br>M. Puri (Moderator)<br>N. Gendron<br>G. Wei | **Farewell Lunch**<br>12:30 – 1:30 p.m.<br>Ristorante Geso |
| **Hotel Check-In**<br>3:00 p.m. | **Free Time**<br>2:30 – 4:00 p.m. | | | | |
| **Fellows' Dinner**<br>6:00 – 8:00 p.m.<br><br>Casa Grecque<br>200 Rue Prince-Arthur E, H2X 1B9 | **Welcome Reception**<br>4:00 – 6:00 p.m.<br><br>OMNI Hotel Atrium<br>1050 Sherbrooke St. W.<br>H3A 2R6 | **Pitch Fest**<br>5:00 – 7:00 p.m.<br><br>Maison Publique McLean's<br>1420 Peel St, H3A 1S8 | **Summer School Dinner**<br>6:00 – 9:00 p.m.<br><br>GESO Ristorante<br>SENS HØTEL | **Networking Event**<br>5:00 – 7:00 p.m.<br><br>GESO Ristorante (Bar)<br>SENS HØTEL | **Free Time** |

# PROGRAM | Year 3

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais | **Breakfast** 8:30 – 9:30 a.m. Beaujolais |
| | **Welcome and introduction** 9:30 – 10:30 a.m. Chateauneuf<br><br>E. Minogianis<br>V. Tamburro | **Session 2: Biomedical Research – Neuroimaging** 9:30 – 10:30 a.m. Bordeaux<br><br>**Understanding neurodevelopmental disorders through EEG** S. Lippé<br><br>**Neuroimaging in Autism and ADHD: MRI** K. Murias | **Session 3: Clinical Research** 9:30 – 10:30 a.m. Chateauneuf<br><br>**Early Identification of Autism** L. Zwaigenbaum<br><br>**Early intervention programs for toddlers with emerging autism or related social communication challenges: An introduction to naturalistic developmental behavioural interventions (NDBIs)** J. Brian | **Session 4: From Insights to Impact: Participatory Research Approaches for Shaping Policy** 9:30 – 10:30 a.m. Bordeaux<br><br>K. Shikako<br>L. Lach | **Plan your program** 9 :30 – 10 :15 a.m. Chateauneuf |
| | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:30 – 10:45 a.m. Beaujolais | **Break** 10:15 – 10:30 a.m. Beaujolais |
| | **Session 1: Atypical Development and Transdiagnostic Insights**<br><br>10:45 a.m. – 12:00 p.m. Bordeaux<br><br>E. Anagnostou | **Session 2 Continued** 10:45 a.m. – 12:00 p.m. Bordeaux | **Session 3 Continued** 10:45 a.m. – 12:00 p.m. Chateauneuf | **Session 4 Continued** 10:45 a.m. – 12:00 p.m. Bordeaux | **Session 5: Open Science**<br><br>**The Tanenbaum Open Science Institute (TOSI): Putting Open Science into practice at The Neuro and across Canada**<br><br>10:30 – 11:30 a.m. Bordeaux |

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 6 |
|---|---|---|---|---|---|
| | | | | | G. Rouleau |
| | **Lunch** 12:00 – 1:00 p.m. Ristorante Geso | **Lunch** 12:00 – 1:30 p.m. Ristorante Geso | **Lunch** 12:00 – 1:30 p.m. Ristorante Geso | **Lunch** 12:00 – 1:30 p.m. Ristorante Geso | **Career Skills Workshop: Mastering Media – Essential Skills for Early Career Researchers** 11:30 a.m. – 12:30 p.m. Bordeaux V. Tamburro E. Bono H. Gemmrich |
| **Hotel Check-In** 3:00 p.m. | **Session 1 Continued** 1:00 – 2:30 p.m. Bordeaux<br><br>**Free Time** 2:30 – 4:00 p.m. | **Career Skills Workshop: Building the CanNRT LMS** 1:30 – 4:00 p.m. Bordeaux K. Dyson | **Career Skills Workshop: Different Lenses on Inclusive Research** 1:30 – 4:00 p.m. Chateauneuf H. Brown M. Giroux R. Martens M. Salt S. Thompson-Hodgetts Curriculum Co-Design Committee | **Career Skills Workshop: A Different Look at Career Paths** 1:30 – 4:00 p.m. Chateauneuf M. Puri (Moderator) N. Gendron G. Wei | **Farewell Lunch** 12:30 – 1:30 p.m. Beaujolais |
| **Fellows' Dinner** 6:00 – 8:00 p.m. Casa Grecque 200 Rue Prince-Arthur E, H2X 1B9 | **Welcome Reception** 4:00 – 6:00 p.m. OMNI Hotel Atrium 1050 Sherbrooke St. W. H3A 2R6 | **Pitch Fest** 5:00 – 7:00 p.m. Maison Publique McLean's 1420 Peel St, H3A 1S8 | **Summer School Dinner** 6:00 – 9:00 p.m. GESO Ristorante SENS HØTEL | **Networking Event** 5:00 – 7:00 p.m. GESO Ristorante (Bar) SENS HØTEL | **Free Time** |

## SESSION DESCRIPTIONS

**Intro to Genetics** (R. Yuen)

In this talk, students will be able to learn:

1) the genetic basis of autism spectrum disorder;
2) approaches to identify genetic variants relevant to complex disorders;
3) the benefits of identifying associated genes;
4) the genetic architectures of complex disorders.

**Introduction to early neural development** (Carol Schuurmans)

This session aims to understand:

1) how neural stem and progenitor cells make the decision to proliferate or differentiate;
2) how neuronal subtype specification is regulated;
3) cell lineage analysis;
4) how modern techniques and transgenic models have greatly expanded our current understanding of neural development.

**Fellowship Writing Strategies: From Macro to Micro** (Yvonne Hung)

Applying for funding is an integral part of life as an academic or researcher. Although you may be experienced in writing about your research, the committees reviewing your application will be composed of experts from multiple disciplines. In most cases, those evaluating your application will not be familiar with your specific area of research. Writing a strong fellowship application, therefore, means understanding the needs of this audience with regard to structuring a convincing narrative throughout.

Participants will learn the following strategies:

1) how to clearly present your proposed research for a fellowship application;
2) how to frame the significance of the research;
3) how to hone your revision to increase clarity and concision.

**Understanding neurodevelopmental disorders through EEG** (Sarah Lippé)

This session aims to provide an in-depth understanding of how EEG (electroencephalography) can be used as a powerful tool for assessing atypical brain dynamics in neurodevelopmental disorders. Participants will explore the principles of EEG, its application in identifying atypical brain development, and its potential clinical utility in managing neurodevelopmental disorders.

Learning objectives:

1) Understand the Basics of EEG:
   a. Explain the fundamental principles of EEG, including how it measures brain activity.
   b. Describe the typical EEG patterns observed in healthy brain development.
2) Identify EEG Markers of Neurodevelopmental Disorders:
   a. Recognize common EEG abnormalities associated with various neurodevelopmental disorders.
   b. Understand how EEG can differentiate between typical and atypical brain development.
3) Explore the potential Clinical Applications of EEG:
   a. Discuss the advantages of using EEG over other neuroimaging techniques.
   b. Discuss how it can be used in intervention monitoring.

**Neuroimaging in Autism and ADHD: MRI** (Kara Murias)

In this session we will discuss the opportunities and limitations of MRI for researching Autism and ADHD. An overview of previous learnings, possible misdirections and new findings will be presented.

**Building the CanNRT LMS** (Kenneth Dyson)

In this session, you'll collaborate with peers to provide valuable input on the design and development of courses for the CanNRT Platform's LMS. We'll use a course you just attended in person at this Summer School as a real-world example, exploring how to best convert it into an online format.

**Early Identification of Autism** (Lonnie Zwaigenbaum)
The recognition and diagnosis of autism is an important step towards accessing supports and services across the lifespan. There have been significant advances in characterizing the earliest features of autism, in part from longitudinal studies of infants at increased likelihood of the diagnosis, including younger siblings. We have learned about onset and development in autism, both from detailed characterization of behavioural features, and measures of brain structure/function and other biological markers, which have the potential to move detection of autism to even earlier in life. There are also some autistic people for whom diagnosis remains uncertain until school-age or even later in life, emphasizing the importance of ensuring access to diagnostic assessment throughout the lifespan. Finally, there is growing evidence that we can improve access to diagnosis through training and collaboration with community professionals, while maintaining the accuracy and quality of the assessment process.

Specific learning objectives for this session include:
1) Critically assess research methodologies used to characterize early features of autism;
2) Increase knowledge regarding the earliest features of autism;
3) Consider implications for the diagnostic process and how system capacity can be expanded through community partnerships.

**Early intervention programs for toddlers with emerging autism or related social communication challenges: An introduction to naturalistic developmental behavioural interventions (NDBIs)** (Jessica Brian)
Naturalistic developmental behavioral interventions (NDBIs; Schriebman, 2015) have gained momentum in autism intervention over the past decade. NDBI approaches prioritize natural learning contexts and developmental science, through which behavioral principles are used to support development. This presentation will discuss the guiding principles of early intervention and supports, within the context of neurodivergent-affirming care. The key elements of NDBI approaches will be discussed and the evidence supporting the efficacy of NDBI models will be covered. The presentation will focus on caregiver-mediated NDBI models, with a deep dive into the Social ABCs, a Canadian-made approach for toddlers.

Participants will:
1) Become familiar with the key elements of naturalistic developmental behavioural interventions (NDBIs).
2) Be aware of the research evidence supporting the use of NDBI models for autistic toddlers.
3) Understand the application of NDBI approaches for use by caregivers (caregiver-mediated models).
4) Be able to articulate the guiding principles of early intervention and neurodivergent-affirming care.
5) Be able to reflect on the above in the context of a Canadian-made example – the Social ABCs.

**Epidemiology of Autism Spectrum Disorders** (Eric Fombonne)
After defining prevalence survey among other epidemiological study designs, 163 epidemiological surveys of autism conducted since 1966 in 38 countries are reviewed; the median prevalence of autism is 1.15% in 19 high-income countries in recent years. Methodological advances and remaining challenges in designing and executing surveys are discussed, including the effects on prevalence of variable case definitions and nosography, bias arising from reliance on parental reports only, adding case ascertainment through mainstream school surveys, development of innovative approaches to screen school samples more efficiently, and the need to carefully consider age in interpreting surveys. Directions for the future of autism epidemiology are discussed, including the need to systematically examine cross-cultural variation in phenotypic expression and developing surveillance programs.

Learning objectives:

1. Learn the basic design principles of an epidemiological survey
2. Learn about current estimates of the prevalence of ASD
3. Recognize that prevalence estimates vary by sociodemographic characteristics of participants
4. Examine secular changes and cross-cultural differences in autism prevalence
5. Learn about the few existing surveillance program

## Understanding and promoting brain health of older adults with developmental disabilities (Yona Lunsky)

This session will provide an overview of health needs of older adults with developmental disabilities using population level data.

Learning objectives:

1) Understand population level data on health needs of older adults with developmental disabilities;
2) Explain concept of brain health as it applies to older adults with developmental disabilities and older caregivers;
3) Describe and reflect on a co-designed capacity building intervention to promote brain health in both groups.

Through this session, we will explore why we need to pay greater attention to the needs of older adults and their families, and illustrate the value of research partnerships and important considerations when working together with people with lived experience.

## Research and policy: It's time to play! (Keiko Shikako & Lucyna Lach)

In this session we will discuss different pathways, methods, and challenges through which research can inform policy to create upstream benefits for children with disabilities and their families.

Learning objectives:

1) Appreciate the role of research and researchers in informing policy;

2) Understand multiple spaces where you can act on informing policymaking at different levels;
3) Understand methods of knowledge translation to policy.

## A Different Look at Career Paths (Mira Puri, Nathalie Gendron & Grace Wei)

Learning objectives:

1) Introduce the Fellows to professionals from sectors outside of academia;
2) Provide background on their career paths and to share professional development experiences.

## The Tanenbaum Open Science Institute (TOSI): Putting Open Science into practice at The Neuro and across Canada (Guy Rouleau)

Learning Objectives:

1) Learn what is Open Science and its core principles, and how it can accelerate scientific research;
2) Gain an understanding of the key elements for driving a culture change towards Open Science, and reflect on how this model might apply in the context of your institution, unit or lab.

## Mastering Media: Essential Skills for Early Career Researchers (Vanessa Tamburro)

In this interactive workshop, early career researchers will learn how to engage with the media to ensure their work reaches a broader audience. Participants will receive practical tips on preparing for interviews, crafting clear and impactful messages, and leveraging relationships with journalists and bloggers. The workshop includes the opportunity to participate in a mock interview, to help attendees build confidence and refine their communication skills.

## The Diagnosis of Neurodevelopmental Conditions: Understanding the Use of Diagnostic Tools (Julie Scorah)

This session will cover the process of diagnostic evaluation, common tools used, their scores, and other considerations and adaptations for inclusive evaluation. Following

this session, trainees will be familiar with the diagnostic process and common tools to evaluate autism and other neurodevelopmental conditions. Trainees will understand the strengths and limitations of these tools and how they could be used in a research context.

**Community capacity for autism care : Evaluating capabilities and enhancing skills through ECHO Autism**  (Melanie Penner)

Learning objectives:

1) Understand the rationale for community-based autism diagnosis
2) Explore community pediatrician and family needs for autism assessment
3) Evaluate the accuracy of general pediatrician autism diagnosis, and which children might be best suited for these assessments
4) How to get help and get started.

**Evdokia Anagnostou** is a Child Neurologist and Professor of Pediatrics at the University of Toronto, and Vice President of Research and Director of the Holland Bloorview Research Institute. Dr. Anagnostou studies how genes affect brain structure / function, behaviour, cognition and health in children and adults with neurodevelopmental disorders. She then works to translate this information to new interventions, in order to improve outcomes and quality of life for children with autism spectrum disorders and their families.

**Jessica Brian** is a Psychologist and Senior Clinician-Scientist at Holland Bloorview Kids Rehabilitation Hospital, where she co-leads the Autism Research Centre. She is also an Associate Professor in Paediatrics at the University of Toronto. Dr. Brian received her Ph.D. from the clinical-developmental program at York University and has been heavily involved in the Canadian Infant Siblings Study (now the Baby Sibs Research Consortium) over the past two decades, examining the early emergence of autism and developmental pathways from infancy to adolescence. She co-developed the Social ABCs parent-mediated intervention for toddlers, and has led several clinical trials and community implementation studies related to the program.

**Heather M. Brown** was trained initially as an elementary school teacher, but she is now an Associate Professor in the Faculty of Education at the University of Alberta. Dr. Brown is also an autistic researcher passionate about supporting the academic achievement and overall well-being of autistic children, youth and adults. Her community-based participatory research aims to empower autistic individuals to be more self-confident in their neurodiversity and better understand the factors that most support their well-being at home, work and school.

**Noémie Cusson** is a doctoral student in psychology at the Université du Québec à Montréal and CanNRT Fellow. Her studies focus on the influence of alexithymia on empathy and on theory of mind in autism.

**Kenneth Dyson** is an Academic Associate and Manager of the Azrieli Centre for Autism Research (ACAR). A science administrator with twenty years of experience in experimental, clinical, and data research in the academic and not-for-profit sectors, he is committed to scientific discovery, open science, interdisciplinary co-operation, knowledge transfer, and the development of evidence-based policy. His past scientific contributions include research projects in cardiovascular physiology and neuroscience.

Most recently, he coordinated the establishment of the M3 Platform at the Douglas Research Centre. His commitment to open science is evident in his spearheading several collaborative initiatives including the standardization of rodent behaviour and 1-photon calcium imaging data. He is also active within the Canadian Network of Scientific Platforms (CNSP) where he is a member of the communications working group.

**Eric Fombonne** trained in child and adolescent psychiatry in France. He held appointments as clinical scientist at the National Institute of Health and Medical Research (INSERM, France), as Senior Lecturer and Reader at the Institute of Psychiatry and Maudsley Hospital, King's College London, UK (1993-2001), as tenured Professor of Psychiatry at McGill University (Canada), Head of the Division of Child Psychiatry and Canada Research Chair in Child Psychiatry (2001-2012). In September 2012, he joined the Department of Psychiatry at Oregon Health & Science University in Portland, Oregon (USA) where he is now Professor Emeritus. He has a long experience of clinical work with children with autism and their families, over the lifespan, and has been also directing clinical services for teenagers with depression. Dr. Fombonne's research activities on neurodevelopmental and psychiatric disorders encompass clinical/longitudinal, population-based epidemiological studies in international settings, studies of risk factors and especially of vaccine exposure, clinical trials, and genetic studies. He has published over 380 articles in peer-reviewed journals, 50 chapters in books. He is past Associate Editor of the Journal of Autism and Developmental Disorders (JADD; 1994-2004); he is currently Joint Editor of Journal of Child Psychology and Psychiatry (JCPP; 2016-current) and is on the editorial board of several other journals in the field of autism and child psychiatry.

**Nathalie Gendron** obtained a BSc and MSc in Biochemistry from the Université de Laval in 1990 and a PhD in Microbiology from the Université de Paris 7 in 1994. She then pursued two post-doctoral fellowships: the first in Pharmacology at the University of Ottawa and the second in Neurosciences at the Children's Hospital of Eastern Ontario Research Institute (CHEO). She then held a position as a Research Scientist at the CHEO Apoptosis Research Centre for 5 years, where her research interests focused on

the molecular mechanisms of Spinal Muscular Atrophy. Dr. Gendron joined the Canadian Institute of Health Research as a Deputy Director (Program Delivery) in 2006. In 2010, she became Assistant Director for the CIHR's Institute of Neurosciences, Mental Health and Addiction. From 2017 to 2020, she was Manager of Program Design and Delivery at CIHR. Since December 2020, Dr. Gendron is Director, Research Services at the Institut national de la recherche scientifique (INRS), a Quebec university dedicated exclusively to graduate level research and training.

**Mathieu Giroux** is an autistic person with a mental health situation and an autism research collaborator for almost 10 years. His interests include issues of social inclusion, health care and autism diagnosis.

**Yvonne Hung** is the Director of the McGill Writing Centre, McGill University's central resource in written communication. In this capacity, she oversees its suite of undergraduate and graduate courses, the Graphos program focused on graduate students and postdocs, a Tutorial Service that offers individual writing consults to students, and various special projects, including a "Three Months to Advance Your Thesis" collaboration with McGill's Graduate and Postdoctoral Studies. For several years, she was a member of the QART Advisory group, where she took great satisfaction in working with others to support QART's training mandate. With the launch of the CanNRT platform, Dr Hung will continue to be involved in the Platform by developing curriculum as a Priority Area Lead in the area of scientific writing and communication.

**Lucy Lach** is an associate professor in the School of Social Work at McGill University. Her program of research has two main streams. The first focuses on documenting social determinants of living a life of quality among children, youth and young adults with neurodisabilities and their families. The second focuses on the co-construction of systems of care that promote navigation of—and access to—supports and services needed by these individuals and their families.

**Sarah Lippé** is a clinical neuropsychologist, Full Professor of Psychology at the University of Montreal and FRQ-S Senior Scientist at Sainte-Justine Hospital studies neurodevelopment and the cerebral mechanisms involved in learning processes in infants and children. As the director of the multidisciplinary Neuroscience of Early Development Lab (NED), her lab proposes EEG as an outcome measure in international and national clinical trials. She leads the neuropsychology and EEG investigation aspect of Canada-USA-European clinical trials for children presenting with autism, FXS

or NF1 and is involved in several national and international initiatives on infant EEG, aiming at creating a normative database to understand EEG signals maturation and to create a clinical tool for infants' brain signal assessment. Moreover, she is on board of directors of several initiatives including Kids Brain Health Network and Fragile X Research Foundation of Canada aiming at supporting research and families.

**Yona Lunsky** is the Scientific Director of the Azrieli Adult Neurodevelopmental Centre at the Centre for Addiction and Mental Health and Professor in the Department of Psychiatry at University of Toronto. She has a PhD in Clinical Psychology and focuses her work on the mental and physical health of adults with developmental disabilities, and their families.

**Rachel Martens** is a disabled self-advocate and a bereaved parent of an autistic young man whom she had the privilege of raising for 14 years. She functions as a Knowledge Broker, mentoring researchers and people with lived experience through the development of optimal community partnerships. She is affiliated with McMaster University, CanChild, the University of Calgary, and the Kids Brain Health Network.

**Kara Murias** is a pediatric neurologist and Assistant Professor in the Cumming School of Medicine Departments of Pediatrics, Clinical Neuroscience and Psychiatry. She completed her MD, MSc and PhD in Neuroscience from the University of Calgary and Pediatric Neurology residency and clinical fellowship training in neurodevelopmental disorders at the Alberta Children's Hospital. She is a physician in division of Developmental Pediatrics, and a researcher within the Alberta Children's Hospital Research Institute - Owerko Centre and the Hotchkiss Brain Institute – Matheson Centre. Her research focuses on the different trajectories of cognitive development in children with neurodevelopmental or neurological disease, and what underlies these differences. Her research projects include neuroimaging investigations of Autism and ADHD, methods of assessment in neurodevelopmental disorders, cognitive assessment of deficits in ADHD, and interventions for attention and executive function deficits.

**Melanie Penner** is a Senior Clinician Scientist and Developmental Pediatrician at the Holland Bloorview Kids Rehabilitation Hospital, and the Bloorview Children's Hospital Foundation (BCHF) Research Chair in Developmental Pediatrics. She is also an Associate Professor in Department of Paediatrics at the University of Toronto, an Assistant Professor (Status) at the Institute of Health Policy, Management and

Evaluation at the University of Toronto and Associate Faculty at the Institute of Medical Sciences. As a clinician scientist, Dr. Penner's clinical and research interests are in autism spectrum disorder. In particular, she is interested in service delivery for this population, including evaluating the impact and cost-effectiveness of new care models. Dr. Penner has done research and educational work to expand Ontario's diagnostic capacity for autism spectrum disorder diagnoses in the community setting, decreasing wait times and facilitating earlier access to essential intervention programs.

**Michelle Phoenix** is an Assistant Professor in the Speech-Language Pathology Program in the School of Rehabilitation Science at McMaster University. She has ten years of clinical experience working as a speech-language pathologist. She is also an adjunct scientist at Bloorview Research Institute. Her research focuses on improving accessibility and engagement in children's rehabilitation services, family-centered care and ethics, parents' mental health, and public engagement in research. Dr. Phoenix works closely with a variety of community-partners to integrate student education, clinical practices, and research.

**Mira Puri** is the Manager of Science Initiatives at the [Azrieli Foundation](#), the largest private foundation in Canada. Her responsibility is to develop and steward the Foundation's funding initiatives in basic and clinical research in neuroscience and neurodevelopmental disorders. At the Foundation, they explore the intersections between fundamental neurosciences research, healthcare and advocacy and community services for those living with neurodevelopmental conditions and their families.

Prior to joining the Azrieli Foundation in 2018, Dr. Puri held positions in academia: Staff Scientist at the Lunenfeld-Tanenbaum Research Institute at Mount Sinai Hospital in Toronto (2010-2016), and at Sunnybrook Research Institute (2004-2010) and was a faculty member of the University of Toronto's Department of Medical Biophysics throughout. During this time, she conducted research in stem cell biology and somatic cell reprogramming and coordinated several internationally funded research projects. From 2016-2017, she worked in partnerships and technology evaluation for an organization whose goal is to commercialize cell and gene therapies. By drawing on these professional experiences and supporting academic research through the Azrieli Foundation, her aspiration is to promote an interdisciplinary research community towards new discovery and knowledge translation in collaborative ways that address complex social and health issues.

**Meaghan Reitzel** completed her Masters of Science in Occupational Therapy from Western University in 2011. In 2009, she received a Bachelor of Science in Health Studies from the University of Waterloo. She practices as a paediatric occupational therapist at KidsAbility, specializing in early intervention services as well as augmentative and alternative communication. Meaghan is currently a PhD student in the School of Rehabilitation Science at McMaster University, working under the supervision of Dr. Michelle Phoenix. Her PhD research focuses on examining the implications of organizational practices and service delivery models on access and engagement in paediatric rehabilitation services.

**Guy Rouleau** is the Director of The Neuro (Montreal Neurological Institute-Hospital), the Chair of the Department of Neurology and Neurosurgery at McGill University, the Chair of the Department of Neuroscience at the McGill University Health Centre, and a co-founder of the Tanenbaum Open Science Institute. In 2022, he was elected First Vice President of the World Federation of Neurology. For nearly 35 years, Dr. Rouleau and his team have been working to identify the genes responsible for various neurological and psychiatric disorders, such as autism, amyotrophic lateral sclerosis, hereditary neuropathies, epilepsy, and schizophrenia. They also aim to better understand the molecular mechanisms leading to the symptoms of these diseases.

Among Dr. Rouleau's major achievements are the identification of more than twenty disease-causing genes and the discovery of new mutational mechanisms. Dr. Rouleau has published nearly 1,000 peer-reviewed papers and has been cited over 110,000 times (Google Scholar). He has supervised over a hundred master's, doctoral, and post-doctoral students and has received numerous awards for his contributions to science and society. As a co-founder of the Tanenbaum Open Science Institute, Dr. Rouleau is pioneering new research approaches by making The Neuro the first academic institution to adopt open science principles, aiming to accelerate discoveries for the benefit of patients and society.

**Mackenzie Salt** is an Autistic autism researcher and a postdoctoral fellow with the McMaster University Autism Research Team and Autism Alliance of Canada. He is also a Health System Impact Fellowship program alumnus. He has a background in qualitative research and research engagement. He is currently working on several projects, all involving gathering information from and learning from the experiences of Autistic adults and using the findings to inform policy change. Dr. Salt is also currently

the Editor-in-Chief of the all-Autistic editorial board of the Canadian Journal of Autism Equity.

**Carol Schuurmans** is the Dixon Family Chair in Ophthalmology Research and Senior Scientist at the Sunnybrook Research Institute (SRI) in Toronto. She completed her BSc and MSc degrees in Microbiology at the University of Alberta and her PhD degree in Medical Genetics at the University of Toronto. She undertook postdoctoral studies at the Institut de Génétique et de Biologie Moléculaire et Cellulaire in Strasbourg, France. Dr. Schuurmans joined the Department of Biochemistry and Molecular Biology at the University of Calgary as an Assistant Professor in 2001 and became full Professor in 2014. In July 2016, Dr. Schuurmans joined SRI and became full Professor in the Department of Biochemistry at the University of Toronto. Her research is focused on the specification of neural cell fates in the developing nervous system and using developmental pathways to devise regenerative strategies for neurodegenerative diseases.

**Julie Scorah** is a licensed neuropsychologist specializing in neurodevelopmental conditions, including autism, ADHD, and Fetal Alcohol Spectrum Disorder.  Since joining McGill University in 2019 as an Assistant Professor (Professional) in the Department of Neurology and Neurosurgery of the Faculty of Medicine and Health Sciences, Scorah has been actively involved in advancing neurodevelopmental research and care. Scorah is a research member of the Transforming Autism Care Consortium (TACC) and leads the Neurodevelopment Learning Community initiative. She is also responsible for introducing ECHO-Autism to Quebec. Additionally, she serves as a co-investigator for the Quebec 1,000 (Q1K) Families initiative, fostering collaboration across six institutions to make groundbreaking discoveries in autism research. Her research interests focus on identifying and addressing barriers to healthcare for neurodivergent individuals.  Scorah is a research member of the Azrieli Centre for Autism Research (ACAR), where she served as Associate Director of the ACAR Clinic from 2019 to 2023.

**Keiko Shikako** holds the Canada Research Chair in Childhood Disability: Participation and Knowledge Translation, is an Associate professor at the School of Physical and Occupational Therapy at McGill University and Associate Member of the Department of Ethics, Equity, and Policy. The goal of her research is to contribute to the creation of just, equitable, and inclusive communities with policies, programs, and spaces that consider the needs of children with disabilities and their families. Dr. Skikako's research has contributed to bringing the issues of children with disabilities in Canada to the United Nations Committee on the Convention of Persons with Disabilities, the government of Canada, and provincial governments. She is also the co-creator of the Jooay App and its research program, focusing on using mobile health to promote participation in leisure and community for children with disabilities.

**Vanessa Tamburro** is the Communications and Engagement Lead for the Canadian Neurodevelopmental Research Training (CanNRT) Platform and the Transforming Autism Care Consortium (TACC). With nearly two decades of experience in communications and media relations across government, not-for-profit, and education sectors, Vanessa excels in community building, human-centric storytelling, and social impact communications. She holds a Master of Museum Studies from the Faculty of Information at the University of Toronto and a Bachelor of Education from McGill University, combining her expertise in affective learning and storytelling.

**Sandy Thompson-Hodgetts** is Associate Professor and Acting Chair, Department of Occupational Therapy, Faculty of Rehabilitation, University of Alberta. Her work is focused on contextual approaches to support inclusion, participation and belonging for Autistic people.

**Grace Wei** has held the position of COO at Encellin since 2016. Prior to that, Grace worked as a biologist at UCSF from 2005 to 2015. Grace Wei has a Bachelor's Degree in Human Genetics from McGill University and a Ph.D. in Molecular and Cellular Biology from the University of Chicago. Grace also completed programs at Stanford University Graduate School of Business and Y Combinator.

**Ryan Yuen** is a Senior Scientist in Genetics & Genome Biology Program at SickKids, and Associate Professor in Department of Molecular Genetics at the University of Toronto. Dr. Yuen is interested in the genomics of brain-related disorders. His research focuses on understanding how genetic variations contribute to human health, with the goal of developing gene discovery strategies that result in more effective diagnostic approaches and better treatments for diseases. He has developed novel strategies to investigate tandem repeat expansions in complex disorders, such as autism spectrum disorder and schizophrenia.

**Lonnie Zwaigenbaum** is a developmental pediatrician at the Glenrose Rehabilitation Hospital, where he directs the Autism Research Centre and a Professor in the Department of Pediatrics at the University of Alberta, supported by the Stollery

Children's Hospital Foundation Chair in Autism. He is the Associate Director and lead for Child Health Research for the Women's and Children's Health Research Institute at the University of Alberta and the Edmonton Zone Clinical Department Head for Child Health with Alberta Health Services. His current research focuses on improving early detection, timely diagnosis and health care related to autism. Lonnie is also active in translating research to practice and supporting evidence-based policy. He chaired the Canadian Pediatric Society Task Force that issued practice statements on autism diagnosis and ongoing pediatric care in 2019, and the oversight panel of the Canadian Academy of Health Sciences Autism Assessment requested to guide the development of a national autism strategy.