

HHS Research welcomes a new research team

The newly branded, MacART -- the McMaster Autism Research Team -- is the latest to officially join the HHS research community. Headed by Founder and Co-Director Stelios Georgiades, MacART's mission is captured in the simple tagline, *Advancing autism care through meaningful research.*

"At McMaster Children's Hospital, we have top level, experienced clinicians providing care to children with Autism Spectrum Disorder – ASD -- and their families. At McMaster University, we have leading researchers conducting studies on the etiology, diagnosis, treatment, and prognosis of ASD. However, we currently have no systematic mechanism of linking academic research to clinical practice in ASD," explains Dr. Georgiades.



Autism Spectrum Disorder refers to a group of complex, lifelong conditions that have a detrimental effect on the function and quality of life of affected individuals and their families. According to the [US Centers for Disease Control and Prevention](#), ASD is much more common than previously believed (latest prevalence rate is 1 in 68 children) and comes with a high burden of care and economic cost to families, communities, and society.

To address this research-to-practice gap, a group of local ASD experts came together in 2014 to form the McMaster Autism Research Team. With an emerging partnership among Hamilton Health Sciences, McMaster Children's Hospital, and McMaster University, MacART's goal is two-fold: To reduce silos and foster collaboration among autism stakeholders -- families, researchers, clinicians, educators, and policymakers; and, to focus on increasing the translational value, clinical implications and impact of scientific research. By integrating research, education, community engagement, and knowledge translation, MacART aims to generate scientific evidence that will lead to better sharing and uptake of effective clinical practices, programs, and policies to support individuals, families, and communities affected by autism.

To accomplish this, MacART brings together an interdisciplinary team of 29 ASD experts from 11 academic departments (Psychiatry, Psychology, Pediatrics, Epidemiology, Rehabilitation Science, Biochemistry and Biomedical Sciences, Linguistics and Language, Pathology and Molecular Medicine, Medicine, Anthropology, and Religious Studies), and five research centres, institutes, and programs (Offord Centre for Child Studies, CanChild Centre for Childhood Disability Research, Farncombe Family Digestive Health Research Institute, Stem Cell and Cancer Research Institute, and Population Genomics Program).

With one of the largest ASD clinics in Ontario, supporting more than 700 patients and families, McMaster/HHS is well positioned to lead novel interdisciplinary research. McMaster/HHS is the only place in Canada with the unique combination of expertise, infrastructure, capacity and vision -- all under one roof. And with both provincial and national research studies underway, there is enormous potential that can lead to novel discoveries and more precise, evidence-based treatments in ASD.

"With support from HHS and McMaster, over the next two to three years MacART aims to facilitate a stakeholder engagement process that will lead to the development of an integrated model of research and clinical practice," said Dr. Georgiades, "The main idea is to harmonize all data on children and families receiving autism-related care at HHS and analyze it in an integrated way to generate evidence that can inform clinical practice and the quest for etiological discoveries in ASD."

The MacART model of collaboration and its main idea of integrating research into clinical practice has already caught the attention of autism stakeholders across Canada. With both the Provincial and Federal Governments moving toward a more evidence-based system for autism care, MacART is serving as an example of how such a model can be built from the ground up.

"MacART is a great example of how university and hospital can work together to meet the increasingly complex needs of children and families affected by autism. For the first time, researchers and clinicians are working together to design and implement more meaningful research that directly meets the needs of ASD stakeholders." Adds Dr. Georgiades, "*Evidence-based care is the destination; needs-based research is the journey.*"

MacART made an official debut with its inaugural [Autism Research Stakeholder Symposium](#) held in Hamilton on January 15, 2016. More than 150 participants, representing the full spectrum of stakeholders, including patient advocacy, educators, clinicians, researchers and policy makers, came together to discuss and plan collaborations to help advance autism care through meaningful research. With a focus on Early Interventions, the symposium featured the world-renowned expert on early interventions in ASD, Dr. Connie Kasari, Professor of Human Development and Psychology in School of Education and Department of Psychiatry at UCLA and founding member of the Center for Autism Research and Treatment at UCLA. On hand to support the MacART collaborative were guests, Rob MacIsaac, President and CEO, Hamilton Health Sciences, Dr. Patrick Deane, President McMaster University, and Dr. Peter Fitzgerald, President, McMaster Children's Hospital.



*Keynote speaker, Dr. Connie Kasari with
Dr. Stelios Georgiades, Co-Director, MacART*

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Research Team

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For more information, please visit
www.macautism.ca