

2025 Accelerator Grant Awardees

	Project Title	Investigator(s) ¹	Institution(s) ²
01	An integrated, deep learning-based tool for single-cell data analysis	Brendan Frey (PI) Lisa Bradley Graham Collingridge Janice Robertson Aaron Wheeler	University of Toronto The Hospital for Sick Children Tanz Centre for Research in Neurodegenerative Diseases
02	Predicting autism gene function through meta-analysis of single-cell RNAseq data from the developing human brain	Jesse Gillis (PI) Sridevi Venkatesan Yun Li	University of Toronto The Hospital for Sick Children
03	Decode broad-scale genome topology	Philipp Maass (PI) Artem Babian	The Hospital for Sick Children University of Toronto
04	Developing and piloting the data science strategy for a large-scale paediatric sequencing initiative	Christian Marshall (PI) Gregory Costain Tomasz Czarny Ashish Deshwar Molly Jakeman Roberto Mendoza-Londono Anna Szuto Karen Wong Francois Bernier Kym Boycott Jacques Michaud	The Hospital for Sick Children Alberta Children's Hospital Children's Hospital of Eastern Ontario CHU Sainte-Justine
05	Improved functional annotation for microbiome datasets	John Parkinson (PI)	The Hospital for Sick Children
06	Deep Learning Driven Analysis of RNA-Binding Protein Networks in Neurodegenerative Diseases	Janice Robertson (PI) Paul McKeever Aiden Sababi Gary Bader	University of Toronto
07	Estimating Epigenetic Age using PacBio HiFi Long-Read Sequencing: Application to Disease Severity Biomarkers in Cystic Fibrosis	Lisa Strug (PI) Jüri Reimand Delnaz Roshandel	The Hospital for Sick Children Ontario Institute for Cancer Research
08	Combining genome and transcriptome sequencing data to better understand the genetic etiology of Autism Spectrum Disorder	Brett Trost (PI) Evdokia Anagnostou Gregory Costain Ashish Deshwar Bridget Fernandez Lianna Kyriakopoulou	The Hospital for Sick Children Bloorview Research Institute University of Southern California
09	Detection and Analysis of Tandem Repeat Expansions for Clinical Diagnostics in Neurological Disorders	Ryan Yuen (PI)	The Hospital for Sick Children
10	AI-based gene function prediction and genome annotation using networks and biobanks	Gary Bader (PI) Yixiao Zeng	University of Toronto
11	Use of pharmaco-genomics to personalize male fertility treatment	Keith Jarvi (PI) Haiyang Chang	Lunenfeld-Tanenbaum Research Institute

¹ Bold indicates Lead or Co-Lead Principal Investigator (PI)

² Bold indicates Lead Institution