

2020 Accelerator Grant Awardees

	Project Title	Investigator(s) ¹	Institution(s) ²
01	Scalable computational methods for predicting phenotype from very large cohorts	Gary Bader (PI) Charlie Boone	University of Toronto
02	Genome-wide cell-free DNA methylation sequencing as a Novel Screening Tool for Non-Alcoholic Steatohepatitis	Mamatha Bhat (PI) Daniel De Carvalho Trevor Pugh Keyur Patel	University Health Network
03	The Personalized Genomics Platform for Patient Centred Care: The development and evaluation of a patient facing e-health platform for precision medicine	Yvonne Bombard (PI) Robin Hayeems (PI) Muhammad Mamdani Kevin Thorpe Melyssa Aronson Hanna Faghfoury June Carroll Jordan Lerner-Ellis Michael Brudno Emily Seto Lauren Chad Ronald Cohn Rebekah Jobling Eriskay Liston Christian Marshall Cheryl Shuman Wendy Ungar	St. Michael's Hospital The Hospital for Sick Children Mount Sinai Hospital University of Toronto
04	Improving genetic risk models for severe mental illness using a novel genetic method: A proof of principle study	Elemi Breetvelt (PI) Daniele Merico Jacob Vorstman Peter Szatmari	The Hospital for Sick Children Deep Genomics
05	Building capacity for genomic medicine and discovery in children with medical complexity	Gregory Costain (PI) Julia Orkin Robin Hayeems Michael Wilson James Dowling Miriam Reuter Ryan Yuen Christian Marshall	The Hospital for Sick Children Canada's Genomics Enterprise (CGEn)
06	Whole genome sequencing to investigate the etiology of obesity and response to bariatric surgery	Satya Dash (PI) Andrew Paterson	University Health Network The Hospital for Sick Children
07	BrainHealth Databank: Building a Longitudinal Depression Repository Featuring Integrated Clinical and Genomic Data	Sean Hill (PI) Stefan Kloiber Shreejoy Tripathy Daniel Felsky Joanna Yu	Centre for Addiction and Mental Health University of Toronto
08	Genetics of monogenic systemic inflammatory disease (SID)	Linda Hiraki (PI) Ronald Laxer Christian Marshall Dilan Dissanayake Robert Rottapel Johannes Roth Michelle Battish Roberta Berard	The Hospital for Sick Children St. Michael's Hospital McMaster University London Health Sciences Centre Children's Hospital of Eastern Ontario

09	Harnessing multi-omics to deliver innovative diagnostic care for rare genetic diseases in Canada (C4R-SOLVE)	Christian Marshall (PI) Michael Brudno James Dowling Robin Hayeems Kym Boycott	The Hospital for Sick Children Children's Hospital of Eastern Ontario
10	Identifying rare and common variants related to cognitive and behavioural phenotypes of 7q11.23 CNV using whole genome sequencing	Lucy Osborne (PI) Ryan Yuen Beth Kozel Carolyn Mervis	University of Toronto The Hospital for Sick Children US NIH/NHBLI U of Louisville
11	Analysis of Whole Genome Sequencing data from the SABE population-based cohort from Brazil	Esteban Parra (PI) Michel Naslavsky	U of Toronto Mississauga U of Sao Paulo
12	Investigation of epigenetic clock in Parkinson's Disease and rapid eye movement sleep behavior disorder	Ekaterina Rogaeva (PI) Paulina Gonzalez-Latapi Anthony Lang Ziv Gan-Or Ronald Postuma	University of Toronto University Health Network McGill University
13	Functional epigenomics can improve molecular diagnostics and create translational opportunities for the MSSNG Autism Cohort	Rosanna Weksberg (PI) Miriam Reuter Evdokia Anagnostou Cheryl Cytrynbaum	The Hospital for Sick Children Bloorview Research Institute Canada's Genomics Enterprise (CGEn)
14	A unified polygenic risk score analytics platform for risk prediction, causal inference and discovery	France Gagnon (PI) Lei Sun (PI) Vanessa Goncalves Laurent Briollais Linbo Wang Andrew Paterson Shelley Bull Lisa Strug Dehan Kong Qiang Sun Jennifer Brooks	University of Toronto Mount Sinai Hospital The Hospital for Sick Children Centre for Addiction and Mental Health
15	Protecting patients from carbapenemase-producing ENterObacter cloacae: Using Genomics to understand and prevent transmission in Hospitals (ENOUGH)	Robyn Lee (PI) Allison McGeer (PI) Roberto Melano Samir Patel Michael Mulvey George Golding Tony Mazzulli Mark Downing Matthew Muller Jennie Johnstone Susan Poutanen Wayne Gold Kevin Katz Jeff Powis Daniel Ricciuto David Richardson Mahin Baqi Sergio Borgia Andrew Simor Samira Mubareka Robert Kozak	University of Toronto Mount Sinai Hospital Public Health Ontario Public Health Agency of Canada University Health Network North York General Hospital Toronto East Health Network Lakeridge Health William Osler Health Centre Sunnybrook Health Sciences Centre

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

² Bold indicates Lead Institution