McLAUGHLIN CENTRE

UNIVERSITY OF TORONTO

2021 Accelerator Grant Awardees

	Project Title	Investigator(s)[1]	Institution(s)[2]
01	**Surgical genomics: how genetics impact surgical outcomes in Epilepsy**	**Danielle Andrade (PI)** Paula Marques Quratulain Zulfiqar Ali	**University Health Network**
02	**A splicing code resource for the discovery and characterization of neural microexons and associated genetic-based mechanisms underlying neurological disorders**	**Benjamin Blencowe (PI)** Quaid Morris Sabine Cordes	**University of Toronto** Mount Sinai Hospital Memorial Sloan Kettering Cancer Center
03	**Linking genomic data and administrative data to measure health service utilization and costs of genomic sequencing**	**Yvonne Bombard (PI)** Murray Krahn Kevin Thorpe Jordan Lerner-Ellis Raymond Kim	**St. Michael's Hospital** Mount Sinai Hospital University Health Network
04	**Single-nucleus transcriptomics and chromatin accessibility in a mouse model of hypoplastic left heart syndrome**	**Rajiv Chaturvedi (PI)** John Sled Michael Wilson Miriam Reuter	**The Hospital for Sick Children**
05	**Whole Genome Sequencing to understand genetic predisposition for Atypical Femur Fractures (AFFs)**	**Angela Cheung (PI)** Lisa Strug Shinya Ito	**University Health Network** University of Toronto The Hospital for Sick Children
06	**Rapid Genome Sequencing For Diagnosis And Discovery In Severe Infantile Epilepsy**	**Gregory Costain (PI)** Danielle Andrade Vann Chau Robin Hayeems Puneet Jain Christian Marshall Roberto Mendoza-Londono Anna Szuto Ryan Yuen	**The Hospital for Sick Children** University Health Network
07	**Accelerating PRecision mEDicIne for CriTical Care Study (PREDICT)**	**Claudia Dos Santos (PI)** Alexandra Binnie Pedro Castelo Branco Pingzhao Hu Robert Hancock Uriel Trahtemberg Andrew Baker Margaret Herridge Angela Cheung Lisa Strug	**St. Michael's Hospital** William Osler Health System University of Algarve University of Toronto University of Manitoba University of British Columbia University Health Network
08	**Combining bait-capture with whole genome sequencing to improving diagnosis of encephalitis of unknown etiology**	**Robert Kozak (PI)** Amadou Sall Gary Kobinger Samira Mubareka Natalie Knox Robyn Lee Andrew McArthur Jessica Forbes Jalees Nasir	**Sunnybrook Research Institute** Pasteur Senegal Université Laval McMaster University University of Toronto National Microbiology Laboratory

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 Roberto Mendoza Kym Boycott	**The Hospital for Sick Children** University Health Network Children's Hospital of Eastern Ontario
10	**Structural variants in childhood heart disease**	**Seema Mital (PI)** Ryan Yuen Rebekah Jobling Raymond Kim Erwin Oechslin	**The Hospital for Sick Children** University Health Network
11	**Defining the chromatin-bound epitranscriptome of human pluripotent stem cells using long-read Nanopore sequencing**	**Miguel Ramalho-Santos (PI)** Jared Simpson	**Mount Sinai Hospital** Ontario Institute for Cancer Research
12	**Identifying candidate molecular markers in epilepsy by integrating DNA methylation and whole genome sequencing data**	**Rosanna Weksberg (PI)** Elizabeth Donner Vann Chau Gregory Costain Evdokia Anagnostou Miriam Reuter Arun Ramani Andrei Turinsky	**The Hospital for Sick Children** Bloorview Research Institute
13	**Profiling genotype and epigenetic status of tandem repeats from nanopore sequencing**	**Ryan Yuen (PI)** Jared Simpson	**The Hospital for Sick Children** Ontario Institute for Cancer Research

[1] Bold indicates Lead or Co-Lead Principal Investigator (PI)
[2] Bold indicates Lead Institution