



Faculty Grants Funding 2020-2022

Bartlett, E

- 2018-2020
RSNA Education Scholar Grant (Research Award)
Title: North American Assessment of Early Emergency Radiology Competence Via an Online Simulator with PGY2 Diagnostic Radiology Residents
Amount: \$62,856 USD
Principal Investigator : Bartlett, E

Berger, F

- 2021-2025
Ministry of Health and Long-Term Care (MOHLTC)
Title: AHSC AFP IF Grant; Identifying COVID-19 infection on chest radiography based on artificial intelligence
Amount: \$100,000 CAD
Principal Investigators: Berger, FH; Oikonomou, A
Co-Investigator: Mohammadi, A; Afshar, P; Tyrrell, P; Moody, A; Daneman, N; Chan, A K; Kha, LC; Berger, FH; Naderkhani, F; Plataniotis, K
- 2020-2022
American Society of Emergency Radiology
Title: ASER-ACR-NHPI Grant; Mass Casualty Incidents: Optimizing the Radiology Response
Amount: \$40,000 USD
Principal Investigator: Bernstein, MP
Collaborators: McMenamy, J; Baxter, A; Berry, C; Frangos, S; Kochkine, S; Bukur, M; Berger, FH; Chong, S
- 2018-2022
Ministry of Health and Long-Term Care (MOHLTC)
Title: AHSC AFP IF Grant; Understanding and Addressing contributors to repeat Imaging in trauma transfer patients
Amount: \$90,436 CAD
Principal Investigators: Berger, FH and McDonald, A.
Collaborators: Nathens A; Nagels J; Glanc P; Aviv R et al

Bilbily, A

- 2020
Supercluster Covid-19 Grant
Amount: \$1, 300, 000
Principal Investigator
- 2020
Amgen Osteoporosis Grant
Amount: \$150, 000
Co-Principal Investigator



Branson, H

- 2020-2024
Canadian Institutes of Health Research
Title: Healthy brain growth in preterm children for optimal function: do males and females differ?
Amount: \$910,352
Collaborators: Miller S, Grunau R, Branson HM, Guo T, Williams T, Brant R, Kelly E, Brudno M, Ly L, Chau V, Synnes A.
- 2020-2022
Feiga Bresver Catalyst Grant. Centre for Brain & Mental Health Research Committee.
Title: Quantitative Perfusion Imaging for Autoimmune Encephalitis Diagnosis and Monitoring.
Amount: \$98,694.72
Co-Investigators: Branson, HM; Brown, RA; Longoni, G; Uludag, K; Yeh EA.

Chavhan, G

- 2020-2022
Canadian Donation and Transplantation Research Program (CDTRP)
Title: Bilateral Anterior Thigh Thickness in Children with and without Liver Disease: A Feasibility Study
Amount: \$30,000 CAD
Principal Investigator: Vicky Lee Ng
Collaborators: Binita, K; Chavhan, G.

Cheung, HMC

- 2022-2026
Department of Medical Imaging Research Grants.
Title: MRI phenotype of colorectal liver metastases as a predictor of mutational profile and long-term outcomes.
Amount: \$100,000
Principal Investigator
Collaborator(s): Patel C, Martel A, Seth A, Amemiya Y, Reynolds D, Lim C, Yan C.
- 2022-2026
Department of Medical Imaging Research Grants
Title: Utility of a multiparametric prostate MRI AI-derived (MAI)-score of when to biopsy (and when to avoid biopsy) of PI-RADS category 3 and 4 lesions.
Amount: \$100,000
Principal Investigator: Christopher Lim.
Collaborator(s): Yan C, Cheung H, Patel C, Reynolds D, Lim A
- 2021-2023
Society of Abdominal Radiology (SAR) Wylie J. Dodds Research Award
Title: MRI risk score for colorectal liver metastases.
Amount: 15,000 USD
Principal Investigator
Collaborator(s): Martel A, Patel C.



Cheyne, D

- 2020-2025
CIHR Project Grant
Title: Investigating the neural basis of motor and cognitive disabilities following childhood stroke
Amount: \$749, 000
Co-Investigator
- 2019-2025
NSERC Discovery Grant
Title: "Understanding the neural basis of motor development in early childhood
Amount: \$198, 000
Co-Investigator
- 2018-2024
CIHR Project Grant
Title: Non-invasive imaging of sensorimotor plasticity following cranial nerve repair
Amount: \$673, 200
Co-Investigator

Coblentz, A

- 2014-Present
Seed Grant Committee Diagnostic Imaging, The Hospital for Sick Children
Title: Adverse Effects of Radiation During IR Procedures- A Step Towards Prevention.
Amount: \$4,000 CAD
Principal Investigator
- 2012-Present
The Society for Pediatric Radiology. SPR Research and Education Foundation.
Title: Testing the use of the emerging γ -H2AX biomaker for quantifying DNA damage from pediatric interventional procedures involving ionizing radiation- the first step in assessing the use of DNA protective agents in children.
Amount: \$10, 000 CAD
Principal Investigator
- 2012-2020
Canadian Research Foundation
Title: A Double Blind, Randomized Controlled Trial Examining the Efficacy of the use of tissue plasminogen activator (tPA) in intra-abdominal collections in children – a prospective study
Amount: \$7, 500 CAD
Principal Investigator
Collaborators: Gibson, C. Amaral, J. Langer, J.

Colak, E

- 2022
St. Michael's Hospital Medical Services Association Innovation Fund.
Title: Integrated pipeline for real time triage of patients suffering traumatic brain injury.
Amount: \$ 162,838.68



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- 2021
St. Michael's Hospital Medical Services Association Innovation Fund.
Title: Automated Detection and Classification of Pulmonary Embolism on Computed Tomography Pulmonary Angiography with Clinical Workflow Integration.
Amount: \$50,000
- 2020
St. Michael's Hospital Medical Services Association Innovation Fund.
Title: Automated Detection and Classification of Intracranial Hemorrhage on Head Computed Tomography with Clinical Workflow Integration.
Amount: \$44,281.61

Curpen, B

- 2020-2025
CIHR Project Grant
Title: Using MRI to develop a personalized risk-based breast cancer screening strategy.
Amount: \$925,650 CAD
Principal Applicants: Anne Martel & Jennifer Brooks
Co-Applicants: Astley S, Briollais L, Curpen B, Warner E

Ditkofsky, NG

- 2020-2021
AFP Innovation Award
Title: Automated Detection and Classification of Intracranial Hemorrhage on Head Computed Tomography with Clinical Workflow Integration
Amount: \$22,468.01

Doria, AS

- 2021-2024
Canadian Institutes of Health Research (CIHR)
Title: Machine Learning Based Craniosynostosis Triaging System
Amount: \$535,501
Co-Investigators: Doria A (Co-Investigator), Singh D, Brudno M
- 2021-2023
Temerty Innovation Grants
Title: Machine Learning-Based Innovation in Ocular Pediatric Assessment Using Point-of-Care Ultrasound
Amount: \$199,500
Co-Investigators: Doria A, McLean L, Brudno M, Tessaro M, Fischer J, Wan M, Evans A, Drysdale E, Skreta M, Haghpanah FS, Daniel R
- 2021-2022
Childhood Arthritis and Rheumatology Research Alliance (CARRA)
Title: Elastography Ultrasound in Localized Scleroderma (Morphea): A Prospective, Longitudinal, Multicentric Pilot Study
Amount: \$62,808
Co-Investigators: Laxer R (Toronto, ON), Li Suzanne (Hackensack, NJ), Liebling M (Hackensack, NJ),



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Levin T (Montefiori, NY), Vasque N (Montefiori, NY), Torok K (Pittsburgh, PA), Squires J (Pittsburgh, PA)

- 2020-2023
Radiological Society of North America – Education Development Grant
Title: Towards Enhancing the Value of Imaging by Communicating with Data: Developing the Next Generation of LQ2 (Qualitative-Quantitative Leaders)
Amount: \$284,000
Co-Investigators: Khalvati F, Meaney C
- 2020-2021
SickKids Foundation
Title: Towards Implementation of Horizontal Workflow of SickKids' Systems as a Catalyst for Precision Child Health
Amount: \$40,000
Co-Investigators: Mazwi ML, Solomon R, Zani A, Goldenberg A, Khalvati F, Brudno M, Sami V, Koyle M, Matava C, Fischer J

Dowdell, T

- 2017-2020
Canada's Academic Health Sciences Centres (AHSC), AHSC AFP Innovation Fund Multi Year Project
Title: Developing Educational Materials for Patients and Providers on Medical Imaging Tests and Ionizing Radiation.
Collaborator

Dunkley, BT

- 2022
Innovation for Defence Excellence and Security (IDEaS) Program, Department of National Defence
Title: Leveraging advanced brain imaging and analytics for diagnostics and precision medicine in Canadian Military and Veteran PTSD
Amount: \$450,000,
Nominated Principal Investigator
- 2021
Mitacs Accelerate, Canada
Title: Efficacy of end-to-end digitized eye movement for trauma desensitization on Savyn's app for PTSD symptoms
Amount: \$15,000,
Nominated Principal Investigator
- 2021
Centre for Brain and Mental Health Catalyst Grant, Hospital for Sick Children, Toronto, Canada
Title: Addressing autism spectrum disorder heterogeneity for precision care: symptom characterization and subtyping using neural activity profiling and artificial intelligence
Amount: \$100,000,
Nominated Principal Investigator: Dunkley, BT, Zhang, J, Safar, K, Taylor, MJ, Anagnostou, E.
- 2021
Industry Partnership study
Title: MEG for the assessment of mTBI and PTSD



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Amount: \$63,000

Nominated Principal Investigator (Miller, SP, Dunkley, BT, Chau, V, Guo, T, Ly, L, Sananes, R, Seed, M, Williams, T.)

- 2021
CIHR Project Scheme: Spring Rounds 2021, Canada
Title: Neurodevelopmental function and neural oscillations in children born with congenital heart disease: the roles of brain injury, brain growth and heart function
Amount: \$757,000
Principal Investigator
- 2021
CIHR Project Scheme: Spring Rounds 2021, Canada
Title: Characterising brain network dynamics in very young children with autism using OPM-based MEG
Amount: \$1.12 million,
Role: Co-Investigator: Taylor, MJ, Dunkley, BT, Safar, K, Brian, J, Anagnostou, E., Kadis, D
- 2021
CIHR Project Scheme: Fall Rounds 2020, Canada
Title: Understanding cognitive impairment in children with sickle cell anemia: Linking cerebrovascular impairment to brain activation
Amount: \$1,350,000
Co-Investigator: Kassner, A, Mabbott, DM, Dlamini, N, Dunkley, BT, Janzen, L, Odame, I, Williams, S.
- 2020
NIH R01, USA
Title: Neurological Outcome of Glycemia in Neonatal Encephalopathy
Amount: \$1,400,000
Co-Investigator: Tam, EWY, Chau, V, Dunkley, BT, Ly, L, Mamak, E, Moore, A, Pinchefsky, E, Widjaja, E, Williams, T & Vanhatalo, S.

Ertl-Wagner, B

- 2021-2022
Canadian Institutes of Health Research (CIHR)
Title: Neurobiological Mechanisms of Reading Disabilities
Amount: \$1,185,750 CAD
PI: Barr, C.
Co-Applicants(s): Kadis D, Ertl-Wagner B, Singh K, Tripathy S, Guger S, Kerr E, Strug L, McIntosh AR
- 2021-2022
Canadian Cancer Society (CCS)/ Canadian Institutes of Health Research (CIHR)/ Brain Canada Foundation (BC) Spark Grant: Novel Technology Applications in Cancer Prevention and Early Detection (SPARK-21).
Title: Detection and Prevention of Hypermutant Glioma in Children and Young Adults.
Amount: \$149,878 CAD
Co-Applicant
PI: Tabori.
Collaborator(s): Bouffet E, Hawkins C, Khalvati F, Laperriere N.
- 2021-2022



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Canadian Cancer Society (CCS)/ Canadian Institutes of Health Research (CIHR)/ Brain Canada Foundation (BC) Spark Grant: Novel Technology Applications in Cancer Prevention and Early Detection (SPARK-21).

Title: Early Detection and Novel Stratification of Pediatric Low Grade Gliomas by MRI-Based Artificial Intelligence.

Amount: \$150,000 CAD

Co-Applicant

PI: Khalvati F.

Collaborator(s): Bouffet E, Hawkins C, Tabori U, Wagner M

- 2021-2022

CHASE Grant

Title: Artificial intelligence to enhance neuroradiological assessment of brain injury and development in preterm neonates.

Amount: \$50,000 CAD

Co-Applicant

PI: Miller S.

Collaborator(s): Wagner M, Shroff M, Guo T

- 2020-2021

CRF/CHAR Research Grant

Title: BRAIN-REST. Brain MRI result forecast model.

Amount: \$25,000 CAD

Principal Investigator

Collaborator(s): Wagner M, Brudno M, Goldenberg A, Lee W, Shroff MM.

- 2019-2021

SPR Research and Education Foundation Young Investigator Award.

Title: Artificial intelligence-based neuroradiological assessment of brain injury and development in preterm neonates.

Amount: \$50,000 USD

Co-Principal Investigator

Co-PI: Shroff MM

Collaborator(s): Wagner M, Guo T, Brudno M, Goldenberg A, Lee W, Miller S.

- 2017-2020

Graduiertenkolleg Advanced Medical Physics for Image-Guided Cancer Therapy. GRK 2274.

Title:

Robust evaluation of IVIM- and DCE-MRI for perfusion quantification.

Amount: 166.350€

Principal Investigator

- 2016-2020

Deutsches Zentrum für Lungenforschung (DZL)

Amount: 1.399.580€

Co-Principal Investigator.

Collaborator(s): Reiser M, Dinkel.

Faingold, R

- 2021-2023



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CARRA-Arthritis Foundation Small Grant Application Title: Elastography Ultrasound in Localized Scleroderma (Morphea): A Prospective, Longitudinal, Multicentric Pilot Study

Amount: \$49,751

Co-Investigator

Doria A, Laxer R,

- 2022-2025

Funding Agency: The Physician Services Incorporated Foundation

Title: Renal ultrasound after first febrile urinary tract infection in hospitalized children: reducing overdiagnosis and cascade effects

Amount: \$250,000

Co-Investigator

Principal Investigator: Sanjay Mahant Co-PI: Peter Gill

Co-Investigators: Barrowman N, Moretti M, Zappitelli M, Faingold R, Armando Lorenzo A, Dos Santos J, Rickard M, Shaikh N, Born K, Friedman J, Ostrow O, Bayliss A, Sakran M, Zhou K, Pearl R, Giglia L, Pound C, Jetty R, Sehgal A, Taheri S, Parkin P

Freitas, V

- January 2020

The JDMI Academic Incentive Fund

Title: . Best supplemental screening modality in patients with dense breast and negative mammography

Amount: \$10,000

Principal Investigator

- August 2019-July 2022

Canadian Cancer Society

Title: Incorporating advanced capabilities in best-in-class PEM system for improved clinical outcomes

Amount: \$448,800

Co-Investigator

Principal Investigator: Alla Resnik

Glanc, P

- 2022-2023

AFP Innovation Fund

Title: Quality Implementation and Validation of O-RADS Ultrasound Risk Stratification and Management System

Amount: \$98,940.00

Principal Investigators: Hack K, Bouchard-Fortier G

Co-Investigators: Cartwright B, Djorjevic B, Elman D, Ferfuson S, Kupets R, Po L, Glanc P

- 2022

Department of Medical Imaging Research Grants 2022- 2025, Sunnybrook Health Science Center

Project Title: Quality Implementation and External Validation of O-RADS Ultrasound Risk Stratification and Management System

Amount: \$100,000 across 5 years.

Project Lead(s): Hack K and Glanc P



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Gray, B

- April 2019-March 2021
Canada's Academic Health Sciences Centres, Grant
Title: Developing Educational Materials for Patients and Providers on Medical Imaging Tests and Ionizing Radiation Part II, Development and Validation of Draft Materials.
Amount: \$28, 898.41 CAD
Principal Investigator
Co-Investigators: Weyman, K., Dowdell, T
- April 2017-March 2020
Canada's Academic Health Sciences Centres (AHSC), AHSC AFP Innovation Fund Multi-Year Project
Title: Developing Educational Materials for Patients and Providers on Medical Imaging Tests and Ionizing Radiation
Amount: \$44, 587.60 CAD
Principal Investigator
Co-Investigators: Weyman, K., Dowdell, T

Guimaraes, L

- **2017-Present**
Academic Health Sciences Centre AFP Innovation Funds
Title: Comparison of Volume-Mode 2-Rotation kV-mA Switching Dual Energy Computer Tomography (CT) and of CT Subtraction Imaging with Magnetic Resonance Imaging for the identification of enhancing septa and mural nodules in cystic pancreatic lesions: a change in paradigm
Amount: \$ 83, 720 CAD
Principal Investigator
Collaborators: Rogalla P, Jhaveri K, Gallinger S, Serra S
- **2017-Present**
Canon Medical Systems.
Title: Low and Ultra-low Dose CT enterography with Forward Projected Model-Based Iterative Reconstruction: a Change in Crohn's Disease Imaging Paradigm
Amount: \$15, 000 CAD
Principal Investigator
Collaborators: Rogalla P

Hack K

- 2022
Sunnybrook AFP Innovation Fund Committee – Sunnybrook Health Sciences Centre
Amount: \$97,920.00
Title: Quality Implementation and External Validation of O-RADS Ultrasound Risk Stratification and Management System
Co-Principle Investigator
Co-Investigators: Ferguson S, Kupets R, Po L, Djordjevic B, Elman D, Cartwright B, Glanc P
- 2022
Sunnybrook Department of Medical Imaging – University of Toronto
Amount: \$100,000



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Title: Quality Implementation and External Validation of O-RADS Ultrasound Risk Stratification and Management System

Co-Principle Investigator

Co-Investigators: Bouchard-Fortier G, Ferguson S, Kupets R, Po L, Djorjevic B, Elman D, Cartwright B, Glanc P

Haider, M

- 2009-2023
Ontario Institute of Cancer Research (OICR)
Title: OICR Investigator Award
Award. 1,250,000 CAD/5 year block
Principal Investigator

Hanneman, K

- 2022–2026
Canadian Institutes of Health Research (CIHR) Project Grant.
Title: International study of Artificial Intelligence-based Diagnosis of Cardiomyopathy using cardiac MRI (AID-MRI).
Co-Investigator.
Principal Investigator: White J.
Amount: \$1,410,000
- 2022
Canadian Radiological Foundation (CRF) and the Canadian Heads of Academic Radiology (CHAR) Fund Award.
Title: Myocardial Injury and Outcomes Following COVID-19 Vaccination (MYOVAX Study).
Principal Investigator.
Amount: \$10,000 CAD.
- 2021 – 2022
Academic Incentive Fund Award, Joint Department of Medical Imaging.
Title: Myocardial Injury and Outcomes Following COVID-19 Vaccination (MYOVAX Study).
Principal Investigator.
Amount: \$39,960 CAD.
- 2021 – 2023
JDMI AI Centre Translational Projects.
Title: Clinical Integration and Validation of an AI System to Predict Cardiac Risk from Imaging.
Principal Investigator.
Co-Principal Investigator: McIntosh C
- 2021 Apr – 2024 Mar
Ontario Academic Health Sciences Centre Alternate Funding Plan (AHSC AFP) Innovation Fund.
Title: Artificial Intelligence for Scar Quantification on Cardiac MRI.
Co-Principal Investigator.
Co-Principal Investigators: Tsang W and Wang B.
Amount: \$116,597
- 2021 – 2026



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Canadian Institutes of Health Research (CIHR) Project Grant.

Title: Fabry cardiomyopathy: Identification of Early myocardial Structural and Tissue Abnormalities using multiparametric MRI (FIESTA-MRI).

Principal Investigator.

Amount: \$726,750 CAD.

- 2020 – 2021

Peter Munk Cardiac Centre Innovation Fund, University Health Network.

Title: In-Silico Surgical Planning for Personalized Ascending Aortic Repair to Reduce Distal Dissections (SPAReD2).

Co-Investigator.

Principal Investigator: Chung, Jennifer.

Amount: \$74,836 CAD.

- 2020 – 2022

Academic Incentive Fund Award, Joint Department of Medical Imaging.

Title: Assessment of COVID-19 Related Heart Injury Using Combined Simultaneous Cardiac PET/MRI.

Principal Investigator.

Amount: \$38,300 CAD.

- 2020 – 2021

Ted Rogers Centre for Heart Research (TRCHR) Innovation Fund – COVID-19 Award.

Title: Cardiovascular disease and outcomes among patients with SARS-CoV-2 infection during hospital admission and post discharge: The COVID study.

Co-Principal Investigator.

Co-PIs: Thavendiranathan P and Howe K.

Amount: \$150,000 CAD.

- 2020 – 2020

Genetic Aortic Disorders Association Canada Research Grant.

Title: Cardiac MRI biomarkers of myocardial remodeling and genotype phenotype correlations in hereditary thoracic aortic disorders.

Co-Investigator.

Principal Investigator: Karur, Gauri.

Amount: \$21,820 CAD

- 2019 – 2021

Title: Identifying antimalarial-induced heart damage in systemic lupus erythematosus. Lupus Canada Catalyst Grant.

Co-Investigator.

Principal Investigator: Urowitz, Murray.

Amount: \$35,000 CAD

Heyn, C

- 2018-2022

W. Garfield Weston Foundation; Early Phase Clinical Trials: Canada 2018 Program

Title: Phase 2a Trial of MR-guided Focused Ultrasound in Mild-to-Moderate Alzheimer's Disease

Amount: \$1,495,500 CAD

Co-Applicant

- 2017-2020



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Sick Kids Foundation (SKF); New Investigator Grant

Title: Brain Energy Metabolism and Heat Production in Adolescents with Bipolar Disorder

Amount: \$277,096 CAD

Principal Investigator

Houbois, CP

- 2020 – 2021

German RESEARCH FOUNDATION; Project number 419344766;

Title: Cardiac Magnetic Resonance Imaging in Early Detection and Therapy Monitoring of Myocardial Cardiotoxicity under Chemotherapy.

Amount: 68.000 Euro (\$100.000 CAD)

Principal Investigator

Co-Investigators: Wintersperger B, Thavendiranathan P

Jhaveri, K

- 2020-2021

Paul Helliwell Foundation

Development and Validation of a Predictive Clinical Decision Making Algorithm using AI for the Management of Patients with Iron Overload on Chelation Therapy.

Principal Investigator

Amount: \$110,000CAD, \$55,000 per year

- 2016 - 2021

CIHR

Non-operative management for locally advanced rectal cancer.

Co-Investigator

PI: Erin Kennedy.

Amount: 530,000 CAD

Jimenez-Juan, L

- 2018-Present

Private Donor

Title: Non-invasive evaluation of blood flow hemodynamics in coronary artery disease

Amount: \$60,000 CAD

Co-Principal Investigator

Co-Principal Investigator: Triverio P

Jong, R

- 2018-2021

U.S. Army Medical Research and Materiel Command

Title: Molecular and Imaging Biomarkers for Precision Therapy of Breast Cancer

Amount: \$448,152

Co-Applicant

Co-Applicants: Cheung A, Slodkowska E, Pritchard K, Troester M

Principal Investigator: Yaffe, MJ

- 2017-2025



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National Cancer Institute 2017-2025

Title: Digital Tomosynthesis Mammography and Digital Mammography in Screening patients for Breast Cancer (TMIST) MAC.22 (ECOGACRIN EA1151)

Amount: \$1, 000, 000 USD

Site Principal Investigator and Qualified Investigator

- 2017-2025

National Cancer Institute

Title: Tomosynthesis Mammographic Imaging Screening Trial – Lead-in

Amount: \$2, 100, 000 USD

Co-Investigator and Sunnybrook Site Principle Investigator

Kachura, J.R.

- 2016-Present

Celsion

Title: OPTIMA Trial: A Phase III, Randomized, Double Blind, Dummy-Controlled Study of ThermoDox® (Lyso-Thermosensitive Liposomal DoxorubicinLTLD) in Hepatocellular Carcinoma (HCC) using standardized Radiofrequency Ablation (RFA) treatment time ≥ 45 minutes for solitary lesions ≥ 3 cm to ≤ 7 cm

Amount: \$42, 000

Principal Site Investigator

Khalvati, F

- 2021 – 2026

NSERC Discovery Grant.

Title: Attention networks and optimized deep learning architectures for cancer diagnosis and prognosis in medical imaging.

PI: Khalvati, F.

Principal Investigator.

Amount: \$140,000 CAD.

- 2021 – 2022/01

CCS/CIHR/BC Spark Grants in Novel Technology Applications in Cancer Prevention and Early Detection. Early detection and novel stratification of pediatric low-grade gliomas by MRI-based Artificial Intelligence.

Amount: \$150,000 CAD.

PI: Khalvati, F. Co-PI: Bouffet, E.

Co-Applicants: Ertl-Wagner, B., Tabori, U., Hawkins, C., Wagner, M.

- 2021 – 2022

CCS/CIHR/BC Spark Grants in Novel Technology Applications in Cancer Prevention and Early Detection. Title: Detection and prevention of hypermutant glioma in children and young adults.

Amount: \$149,878 CAD

Co-Applicant.

PI: Tabori, U. Co-PI: Hawkins, C. Co-Applicants: Khalvati, F., Ertl-Wagner, B., Keith, J., Tsang, D., Das, D., Laperriere, N.J., Gao, A., Croul, S.E., Barron, J.

- 2021/01 – 2021/12

Associated Medical Services Small Grant in Compassion and Artificial Intelligence.



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Title: Artificial Intelligence for compassionate healthcare delivery in Diagnostic Imaging.

Amount: \$20,000 CAD.

Principal Investigator.

PI: Khalvati, F. Co-PI: Lee, W. Collaborators: McCradden, M., Karmali, K.

- 2020/09 – 2021/08

NSERC Alliance Grant.

Title: Rapid reagent-free detection of COVID-19 in exhaled breath condensate using ultra-sensitive multi-wavelength SERS nano-gratings.

Amount: \$50,000 CAD.

Collaborator.

PI: Kherani, N. Co-I: Matsuura, N. Collaborators: Zavodni, A., Khalvati, F., Mazzulli, T.

- 2020 – 2021

SickKids Foundation Precision Child Health Catalyst Grant Program.

Title: Towards implementation of horizontal workflow of SickKids' systems as a catalyst for precision child health.

Amount: \$40,000 CAD.

Co-Investigator.

PI: Doria, A. Co-PI: Singh, S. Co-Is: Mazwi, M.L., Solomon, R., Zani, A., Goldenberg, A., Khalvati, F., Brudno, M., Sami, V., Koyle, M., Matava, C., Fischer, J.

- 2020 – 2023

RSNA Education Development Grants.

Title: Towards enhancing the value of imaging by communicating with data: Developing the next generation of LQ2 (Qualitative-Quantitative Leaders).

Amount: \$225,000 US.

Co-Investigator.

PI: Doria, A. Co-I: Khalvati, F., Goldenberg, A.

- 2020/04 – 2023/03

HiSilicon Grants. Huawei Technologies Canada.

Title: Novel Artificial Intelligence (AI) solutions for improved image understanding tasks.

Amount: \$296,500 CAD.

Principal Investigator.

- 2020/04 – 2025/03

Chair in Medical Imaging and Artificial Intelligence.

The Hospital for Sick Children and SickKids Foundation.

Principal Investigator.

PI: Khalvati, F.

Amount: \$250,000 CAD.

Khalili, K

- 2019-2021

Pancreatic Cancer Canada Foundation

Title: GATA6 Expression as a Predictor of Response to Peri-Operative Standard Chemotherapy in Resectable Pancreatic Adenocarcinoma: A Multicentre Canadian Phase II study (NeoPancONE)

Amount: \$900,000



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Co-Investigator

Principal Investigator: Knox J

- 2018-2020
Cancer Research Society
Title: Advancing the local staging of pancreatic ductal adenocarcinoma through high-resolution ultrasound: A pilot study
Amount: \$86,065.20
Principal Investigator
Collaborators: Kim TK, McGilvray I, Chetty R

Kielar, A

- 2021
Title: 'Living' Systematic Review and IPD Meta-Analysis to Evaluate the Contributions of Major and Ancillary Imaging Features on the Diagnostic Accuracy of LI-RADS –
Amount: \$414,755
Principal Investigators: McInnes M, Chernyak V, Salameh, JP, Tang A, van der Pol CB, Thombs B,
Co-Investigators: Bashir M, **Kielar A**, Sirlin C, Martel G, Levis B, Costa AF, Kennedy E, Flemming, JA, Singal A

Kirpalani, A

- 2015-2020
Canadian Institutes of Health Research (CIHR). Collaborative Health Research Projects (NSERC partnered)
Title: Using magnetic resonance imaging to non-invasively image and quantify kidney fibrosis.
Amount: \$777,102 CAD
Co-Principal Investigator
Collaborators: Jothy, S, Leung, G, Simmons, C

Krishnan, P

- 2020-Present
Tolnai Grant. Mount Sinai Hospital
Title: Functional Fetal Brain MR - an exploratory study. Multicenter project
Co-Investigator
Principal Investigators: Van Mieghen T, Blaser S.
- 2019-Present
Ongoing Multicentre Provincial Project. Funded by Brain Canada
Title: Childhood Cerebral Palsy Neuroscience Discovery Network (CPNET III).
Collaborator and Reviewer
Principal Investigators: Fehlings D, Raybaud C
- Imaging Data in Phase I of the Funded Stroke Imaging Laboratory for Children (SILC) Project. REB:
Prospective Single-Centre Research
Title: Advanced Neuroimaging in Pediatric Stroke, Pathophysiology and Repair in Children with Focal Brain Ischemia.
Collaborator and Reviewer
Principal Investigators: Kassner A and DeVeber G



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- 2016-Present
Brain Canada Institute
Title: Childhood Cerebral Palsy Neuroscience Discovery Network (CPNET II). Ongoing Multicenter Provincial Project
Collaborator and Reviewer
Principal Investigators: Raybaud C, deVeber G
- 2016-Present
Title: Phase I/IIa, 2-Part, Multi-center, single-arm, open label study to determine the safety, tolerability and pharmacokinetics of oral Dabrafenib in children and adolescent subjects with advanced BRAF V600-Mutation positive solid tumors.
Collaborator and Reviewer
Principal Investigators: Whitlock J.

Kulkarni, S

- 2019-2020
Breast Friends Conquer All Grant 2019-2020 Princess Margaret Breast Cancer Group Sponsored Seed Grants
Title: Lumpectomies for primary breast cancer and ductal carcinoma in-situ at Princess Margaret Cancer Centre: a retrospective chart review
Principal Investigator - Andrea Covelli
Co-Investigators: Easson A, DaCosta R, Done SL, Escallon J, Kulkarni S, Shahid A

Lam, C

- 2020 Jan – Present
Canadian Institutes of Health Research Project Grant.
Hemodynamics of pediatric congenital heart disease using accelerated and motion-compensated MRI.
Total Amount: \$722,925 CAD.
Co-Investigator.
Principal Investigator: Macgowan, CK.
Co-Investigators: Lam CZ, Yoo SJ.

Laughlin, S

- 2018 Jan-2023 Jan
Canadian Institutes of Health Research (CIHR).
Title: White matter plasticity in brain synchronization and memory.
Amount: 1,147,500 CAD.
Co-Investigator.
Operating Grant. PI: Mabbott D.
Collaborator(s): Bartels U, Decker A, Frankland P, Laughlin S, Lefebvre J, Oyefiade A, Ramaswamy V.

Machnowska, M

- 2018-2023
Canadian Foundation for Innovation - Project Innovation Fund
Title: Toronto Perinatal Brain Protection Research Collaboration
Amount: CFI Funding \$937,305. Total funding \$2,343,263.



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Co-Investigator

Principal Investigators: Lee S, Barrett J, Cunningham C, Kelly E, Kingdom J, Macgowan C, Miller S, Scherer S, Seed M, Sled J.

Co-Investigators: Morgen E, Mabbott D, White L, Blaser S, Ryan G, Windrim R, Keunen J, Shah P, Jain A, Deshpande P, Melamed N, Ng E, Church P, Glanc P

Mafeld, S

Medtronic External Research Program.

Title: Parallel cluster-randomized trial of the Integrated Pulmonary Index for nurse-administered procedural sedation.

Amount: \$63,500 to support direct research costs and ~\$60,000 worth of equipment has been awarded Joint collaboration between JDMI and Cardiology

Co-investigator

PI: Conway A

AMS Healthcare Small Grant in Compassion and Artificial Intelligence

Automation of procedural fasting instructions.

Amount: \$20,000

Co-investigator

PI: Dr. Aaron Conway A

Mandell, D

- 2021–2022

Funding agency Peter Munk Cardiac Centre Innovation Award (UHN)

Project: Canadian Patent Foramen Ovale and Perioperative Stroke Evaluation Study (CAPPRES): A Feasibility study.

Co-Investigator

Amount: \$101,775

Maralani P

- 2022–2028

Canadian Institute of Health Research (CIHR) – Project Grant.

Title: Redefining the paradigm for surveillance in patients with low-grade glioma using saturation transfer magnetic resonance imaging.

Co-Principal Investigator.

Principal Investigators: Stanisz GJ, Jabehtar Maralani P, Sahgal A

Co-investigators: Das S, Lim-Fat MJ, Lipsman N, Sussman D,

Amount: \$830,024 CAD

- 2021 –2023

Cancer Research Society of Canada.

Title: Advanced MRI for non-invasive mapping of glioma stem cells in Glioblastoma.

Principal Investigator.

Principal Investigator: Jabehtar Maralani P

Collaborators: Dirks P, Das S and Pirouzmand F

Amount: \$119,165 CAD.



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- 2021 – 2026
Canadian Institute of Health Research (CIHR) – Project Grant.
Selective neuroimaging for head-injured emergency patients who take anticoagulant medication.
Amount: 1,239,300 CAD.
Co-Investigator.
Principal Investigator: de Wit, Kristen.
- 2021 –2023
Alternative Funding Plan (AFP) – Innovation Fund.
Title: Visual dysfunction in patients with moderate to severe traumatic brain injury.
Co-Principal Investigator.
Co-Principal Investigator: Pirouzmand, Farhad.
Collaborator(s): Sundaram A; Pinto R; Cullen N; Meng Y; Adamonis J.
Amount: 97,210 CAD.
- 2019–2021
American Society for Neuroradiology – 2019 Scholar Award.
Title: Quantitative BOLD MRI to detect glioma stem cell niches in non-enhancing FLAIR hyperintense regions in patients with glioblastoma and their effect on treatment response.
Principal Investigator.
Principal Investigator Jabehtar Maralani, Pejman.
Collaborator(s): Das S, Diamandis P, Lau A, Mehrabian H, Atenafu E.
Amount: 60,000 USD.
- 2019 Apr–2021 Mar
Alternative Funding Plan (AFP) – Innovation Fund.
Magnetic Resonance Imaging of Brain in Patients with Glioblastoma over the Course of Radiation Therapy.
Principal Investigator.
Principal Investigator: Jabehtar Maralani, Pejman.
Collaborator(s): Sahgal A, Myrehaug S, Tseng CL, Heyn C, Lau A, Campbell M, Atenafu E.
Amount: 80,874 CAD.
- 2019 Apr–2021 Mar
The Canadian Radiological Foundation.
Title: Quantitative BOLD MRI as a non-invasive tool to unmask the role of glioma stem cells in patients with glioblastoma.
Principal Investigator.
Principal Investigator: Jabehtar Maralani, P.
Amount: 10,000 CAD.
- 2018 Apr–2023 Mar
Canadian Institute of Health Research: Project Grant.
Title: PROphylaxis for venous ThromboEmbolism in Severe Traumatic brain injury (PROTEST): a Double-blind Randomized Controlled Trial.
Co-investigator
Principal Investigators: Farhad Pirouzmand and Damon Scales.
Collaborator(s): Alkins RD; Boyd JG; Christie SD; Cusimano MD; English SW; Fournay DR; Fowler RA; Geerts WH; Gooderham PA; Griesdale D; Jabehtar Maralani, Pejman; Kelly M; Kramer, Andreas H; Kutsogiannis DJ; Lauzier F; Machnowska MH; Mansouri A; Midha R; Murphy LD; O'Kelly CJ; Patel C;



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Pronovost AP; Sharma SV; Sinclair J; Tsai EC; Turgeon AF.

Amount: 2,314,126 CAD.

- 2018 Apr–2021 Mar
National Sciences and Engineering Research Council of Canada (NSERC): Collaborative Research & Development Grants.
Title: Development of a magnetic resonance imaging and image-analysis framework for high-precision gamma knife-based stereotactic radiosurgery of brain tumours.
Co-investigator.
Principal Investigator: Ali Sadeghi-Naini; Collaborator(s): Chugh B; Czarnota G; Jabehtar Maralani P; Lau A; Ruschin M; Sahgal A; Soliman H; Stanisz G. Industry Collaborator: Elekta.
Amount: 819,859 CAD (NSERC: \$391,859, Elekta: \$428,000).
- 2018 Aug–2021 Jul
Brain Tumour Foundation of Canada.
Title: Advanced magnetic resonance imaging for detection of tumour regions enriched with glioma stem cell niches.
Principal Investigator.
Principal Investigator: Jabehtar Maralani, P.
Amount: 25,000 CAD.

Matsuura, N

- 2020-2021
Ontario Centres of Excellence (OCE) Voucher for Innovation and Productivity (VIP)
Title: Germicidal ultraviolet decontamination devices for minimizing SARS-CoV-2 Spreading
Amount: 100,000 CAD
Principal Investigator
- 2020-2021
NSERC Alliance
Title: Rapid Reagent-Free Detection of COVID-19 in Exhaled Breath Condensate using Ultra-Sensitive Multi-Wavelength SERS Nanogratings
Amount: \$50,000 CAD
Co-Principal Investigator
Co-Principal Investigator: Kherani N
- 2020-2021
UofManchester-UofT
Title: Bioengineered Intervertebral Disc (IVD) tissue implants: A multimodal approach
Amount: \$8,500 CAD + 5,000 GBP
Co-Principal Investigator
Co-Principal Investigator: Domingos M
- June 2020-May 2022
EMHSeed Program (University of Toronto)
Title: Novel Temporary Embolic Particles for the Treatment of Osteoarthritic Pain
Amount: 120,000 CAD (Total); 60,000 CAD (Matsuura)
Co-Principal Investigator
Co-Principal Investigator: Mafeld S
- 2020-2022



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New Frontiers in Research Fund – Exploration

Title: Ultrasound-activated materials for the diagnosis and treatment of deadly pediatric brain cancers

Amount: \$200, 000 CAD

Principal Investigator

Co-Principal Investigator: Drake J

Collaborator: Waspe A

- 2020-2024

CIHR Project Grant

Title: Ultrasound activated bubbles to potentiate cancer therapy

Amount: 455,176 CAD

Principal Investigator

Co-Principal Investigator: Goertz D

Co-Investigators: Shultz D, Allen C

- 2020-2021

NSERC RTI

Title: Next-Generation Point-of-Care System: Custom Integration of Confocal Raman Spectrometer and High-Sensitivity NanoPhotonic MicroFluidic Devices

Amount: 150,000 CAD

Co-Investigator

Principal Investigator: N. Kheara

Co-Investigators: S. Aitchison, A. Wheeler

- 2020

CRAFT-NRC

Title: 3D bioprinting of a retrievable stent design using ultrasound-triggered nanodroplets

Amount: \$8, 333 CAD

Principal Investigator

- 2019-2020

TIAMS – UofT

Title: UofT Biomaterials Manufacturing Cluster – UofTokyo Collaboration

Amount: \$15, 000

Principal Investigator

Co-Investigators: Hani Naguib, Ben Hatton, Eli Sone, Michael Garton

McInnis, M

- 2021-2022

Canadian Institutes of Health Research - Emerging COVID-19 Research Gaps & Priorities – Post Covid Condition

Title: Pulmonary vascular disease in patients with long COVID

Amount: \$292, 092 CAD

Co-investigator

Co-investigators/Collaborators: Cheung A, Lam G, Pohn D, Stelfox H, Garcia Flores J, Lydell C, Rozenberg D, Stickland M, Greenway S, Skolnik K, Howlett J, Myrah J, Smith M.

- 2021-2024



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Canadian Institutes of Health Research - Respiratory Effects of Nicotine and THC E-Cigarettes.

Title: Catalyst Grant: Health Effects of Vaping.

Amount: \$99,995 CAD

Collaborator

Co-investigators/Collaborators: McInnis M, Chalton M, Kirby M, Peng H, Ryan C.

Metser, U

- 2020-2022
Canadian Neuroendocrine Tumour Society (CNETS) 2019 - Neuroendocrine Tumour Research Grant
Title: Examining the Utility of Combined 68Ga-DOTATATE and 18F-FDG PET/CT Imaging on Clinical Management of Patients with Well-differentiated, G2-G3, Gastroenteropancreatic NETs.
Amount: \$40, 000
Principal Investigator
- 2020-2025
Canadian Cancer Society and Movember Foundation
Title: PSMA PET/CT Guided Intensification of Therapy in Patients at Risk of Advanced Prostate Cancer (PATRON): A Pragmatic Phase III Randomized Controlled Trial.
Amount: \$2, 976, 803 CAD
Co-Investigator
PI: Menard C

Mikulis, DJ

- 2021-2022
JDMI AIF
Title: Quantifying Pulmonary Shunting
Amount: \$10, 000
Co-Investigator
- 2021-2024
NIH K99 and K00
Title: Measuring blood flow dysregulation following mild traumatic brain injury
Amount: \$290, 000
Co-Principal Investigator
PI: Wasserman B
- 2022-2023
CIHR
Title: International Cohort Study of Neuropsychiatric and Cognitive Sequelae of SARS-Cov-2 (CNS-SARS-CoV-2)
Amount: \$500, 000
Co-Investigator
Principal Investigator: Carmela Tartaglia

Mohankumar, R

- 2021-2023
The Arthritis Society Innovation Grant
Title: Bone marrow lesions in osteoarthritis: Genomics and core pathophysiology



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Amount: \$100,000 over two (2) years

Co-Investigator

PI: Keating A

Moody, A

- 2020-2025
CIHR
Title: Investigating risk factors for cognitive impairment using novel neuropsychological and neuroimaging measures in a Canadian multi-ethnic cohort
Amount: \$755,000
Co-Applicant
Principal Applicant: Rabin J
- 2019-2024
CIHR
Title: Brain and Body Blood Vessels: Toward Bipolar Disorder as a Systemic Microvascular Illness, Grant, Operating
Amount: \$952,424 CAD
Co-Investigator
Principal Applicant: Goldstein B
- 2019-2023
Infrastructure Canada, CSIF
Title: Terry Fox Institute and Imagia Collaborative: Marathon of Hope Digital Health and Discovery Platform (DHDP)
Amount: \$49,000,000
Co-Investigator
Principal Applicant: Le Bouthillier A
- 2019-2023
Infrastructure Canada, CSIF
Title: Industry Consortium for Image Guided Therapy (ICIGT)
Amount: \$49,000,000
Co-Investigator
Principal Applicant: Hynynen K

Muradali, D

- 2017-2021
Canadian Institutes of Health Research
Title: MRI parenchymal enhancement and risk of breast cancer: A population-based study of women screened in the Ontario Breast Screening Program
Amount: \$478,124 CAD
Co-Investigator
Co-Investigators: Brooks J, Chiarelli AM, Kulkarni S, Done S, Jiang H, Yaffe M

Muthusami, P

- 2020
AHA Bugher Grant; Centers of Excellence in Hemorrhagic Stroke Research



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Title: Pediatric Hemorrhagic Stroke Center: Improving Outcomes of Children with Brain AVMs.
Collaborative grant with UCSF, for a collaborative center with 3 projects.

- 2020
Centre for Brain & Mental Health Research
Title: “The Vascular Endothelial Dysfunction and Stroke in Early Life Study (VESSELS)”
Amount: \$86,105. 80
Co-Investigator

Naraghi, A

- 2019-2020
The Lung Association
Title: Skeletal muscle fat infiltration of the limb muscles in idiopathic pulmonary fibrosis
Amount: \$49,912
Co-Applicant
Principal Investigator: Rozenberg, D
- 2018-2020
American Foundation for Surgery of the Hand
Title: Evaluation of the regenerative potential for autologous fat transfer in the treatment of early CMC OA
Amount: \$20,000
Co-Applicant
Principal Investigator: Baltzer, H

Nguyen, E

- 2022-2023
Academic Incentive Fund, Joint Department of Medical Imaging
Title: Joint BrEast CAncer & CardiOvascular ScreeniNg in Women: BEACON Study
Amount: \$50, 000
Principal Investigator
Co-Investigators: Harvey P, Afgani F, Hanneman K, Ghai S, Freitas V, Kulkarni S
- 2020-2023
Peter Munk Cardiac Centre Innovation Fund
Title: In-Silico Surgical Planning for Personalized Ascending Aortic Repair to Reduce Distal Dissections (SPAReD²)
Amount: \$223, 000
Co-Investigator
Co-Investigators: Chung J, Amon C, David T, Doyle M, Hanneman K, Ouzounian M
- 2021-2023
Women’s College Research Foundation, Sir Thomas Cropo Foundation
Title: Joint Breast and Cardiovascular Screening Program
Amount: \$260, 000
Principal Investigator
Co-Investigators: Harvey P, Afgani F
- 2020
Heart and Stroke Foundation of Canada



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Title: Women's Heart and Brain Health Mid-Career/Senior Career Investigator Award for Improving the Heart and Brain Health for Women in Canada

Amount: \$50,000

Co-Investigator

Co-Investigators: Sedlak T, Udell J, Mancini J

Oikonomou, A

- 2021
Alternative Funding Plan Innovation Fund, Year 14, 2021-2022 Academic Physicians, the Ontario Medical Association (OMA) and the Ontario Ministry of Health and Long-Term Care (MOHLTC)
Title: "Accelerated cardiac magnetic resonance imaging for heart failure".
Amount: \$100,000 CAD
Collaborator
Co-Collaborators: Wijeyesundera H, Wright G, Poon S, Goldman J,

Ortega Mogilevich, C

- 2022
AIF granted funds for statistical analysis
Title: Correlation of radiomics features and progression free survival in 68Ga-DOTATATEPET/CTin metastatic neuroendocrine tumors
Amount: \$5000 CAD

Pereira, V.M.

- 2019-2020
Toronto Western Hospital Foundation
Title: Advanced Imaging Computational Cluster.
Amount: \$150,000 CAD
Principal Investigator
- 2017-2020
Philips
Title: PHILIPS Imaging Collaboration. Advances in Cone Beam CT for acute stroke assessment
Amount: \$240,000

Rajan, D

- 2018-Present
Becton Dickenson
Title: Prospective North American Multicenter, Post Approval Study of the Lutonix Drug Coated Balloon for dysfunctional dialysis fistulas
Co-Primary Investigator
- 2020-Present
Vascular Medcure
Title: FIH Study of the CAPRE thrombectomy device for declotting of dialysis grafts
Co-Primary Investigator

Rogalla, P



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- 2020-2022
ISC/NRC
Title: Dual Energy Mobile X-Ray for detecting COVID pneumonia
Amount: \$546, 400 CAD
Principal Applicant
- 2021-2022
OBIO
Title: Dual Energy X-ray technology
Amount: \$25, 000 CAD
Principal Applicant
- 2019-2021
AHSC AFP
Title: Artificial Intelligence supported, non-invasive detection and staging of liver fibrosis
Amount: \$162,535 CAD
- 2020-2020
German Research Foundation DAAD
Title: CT perfusion in pancreas cancer
Amount: 50, 000 EURO
Co-Applicant
- 2019-2020
Canon Medical Systems, Japan
Title: Diffuse liver disease
Amount: \$200,000 CAD
Principal Applicant
- 2018-2021
Canon Medical Systems, Japan
Title: qIDEA initiative, diffuse liver disease and biomarker
Amount: \$260, 000 CAD
Principal Applicant

Seed, M

- 2020-2025
Canadian Institute of Health Research (CIHR).
Title: The Artificial Placenta
Amount: \$738,225 CAD
Principal Investigator
Co-Investigators: Belik J, Chaturvedi R, De Queiroz Taniguchi L, Flake A, Floh A, Haller C, Jaeggi E, Kingdom J, Macgowan C, Maxwell C, Maynes J, McVey M, Morrison J
- 2020-2023
NHMRC Project Grant
Title: Mending a broken heart. Understanding and harnessing the fetal heart's capacity for repair
Amount: \$1,000,060 AUD
Co-Investigator



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Principal Investigator: Morrison, J

Co-Investigators: Seed M, Selvanayagam J, Nyensgaard J, Macgowan C.

- 2019-2021
Australian Research Council
Title: Going with the flow: Directing nutrient rich blood to the brain. A
Amount: \$397,057 CAD
Co-Investigator
Principal Investigator: Morrison, J.
Co-Investigator: Macgowan, C
- 2016-2020
Canadian Institute of Health Research Project Grant
Title: Brain development following late onset intrauterine growth restriction
Amount: \$550,440 CAD.
Principal Investigator
Co-Investigators: Kingdom J, Widjaja E, Kelly E, Miller S, Manlhiot C, Keating S, Keunen J, Macgowan C.
- 2016-2022
CHILD BRIGHT SPOR, Canadian Institute for Health Research.
Title: Maternal hyperoxygenation in congenital heart disease
Amount: \$1,180,000 CAD
Principal Investigator
Co-Investigators: Miller S, Hornerger L, Kingdom J, Bhargava R, Hicks M, Fruitman D, Macgowan C, Ly L.
- 2015-2021
Canadian Institute of Health Research.
Title: Cardiovascular physiology and brain development in neonates with congenital heart disease.
Amount: \$1,008,000 CAD
Co-Principal Investigator
Co-Principal Investigator: Miller S.
Co-Investigators: Macgowan C, Kingdom J, Chau V, Brant R, Schwartz S, Sled J, Hickey E, Blaser S

Shammas, A

- 2020
Garron Foundation
Title: HR-pQCT in ALL.
Amount: \$20,000
Co-Investigator
Primary Investigator: Natian P

Schlomovitz, E

- 2022
AIF Grant, University Health Network
Title: *Design and initial validation of a box simulator for percutaneous cholangioscopy.*
Amount: \$10,000
Principal Investigator



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- 2020
2020 The Foundation for Surgical Innovation and Education (FSIE)
Title: NOLeak
Amount: \$10, 000
Principal Investigator

Shroff, M

- February 2018-February 2020
Rare Disease Foundation and BC Children’s Hospital Foundation (BCCHF).
Title: Comparison of 3D printed models with conventional imaging for pre-therapeutic evaluation of vein of Galen malformations.
Amount: \$4, 980 CAD
Co-Investigator
Principal Investigator: Dr. Muthusami P

Simons, M.E.

- 2014-2020
JDMI Academic Incentive Fund
Title: Embolization of Gastric arteries to control Ghrelin levels and weight in bariatric patients.
Amount: 40,000 CAD
Principal Investigator
Collaborator(s): Mironov, O., Zener, R., Tan, KT.

Singh, N

- 2022
CREMS Program, Faculty of Medicine, University of Toronto
Title: CREMS Project grant to support medical student sub-study for Advanced Analytics—Lymph Node Metastases Detection by Artificial Intelligence Augmented CT Chest Analysis.
Amount: \$5,500
Principle Investigator
- 2021
CREMS Program, Faculty of Medicine, University of Toronto
Title: CREMS Project grant to support medical student for Detection of Human Coronary Inflammation by Perivascular Adipose Tissue Computed Tomography Imaging.
Amount: \$5,500
Principle Investigator
- 2021
Medical Imaging Alumni Research Award
Title: Deep Learning for Quantification of Perivascular Adipose Tissue from Non-Contrast ECG-Triggered Cardiac CT.
Amount: \$2, 000
Principal Investigator
Collaborators: Khalid U, Dixit A, Abbasi E, Mahyar



Singnurkar, A

- 2021-2023
Alzheimer's Society – Proof of concept grant
Title: Supervised Machine Learning Applied to Brain Perfusion Imaging and MRI to Classify Patients with Neurodegenerative Disease (SMaRTBRAIN)
Amount: \$100,000
Principal Investigator
Co-Investigators: Black S, Lee D, So A, Symons S, Wang B
- 2021-2025
CIHR Project Grant
Title: Alpha-Particle Radioimmunotherapy of Brain Metastases from HER2-Positive Breast Cancer
Amount: \$760, 000
Co-Investigator
Co-Investigators: Cai Z, Lipsman N, Hynynen K, Trudeau M, Reilly R
- 2021-2023
CIHR Project Grant
A Study to Evaluate the Safety and Feasibility of Blood-Brain-Barrier Disruption Using MRI-Guided Focused Ultrasound in the treatment of Her2-positive breast cancer brain metastases
Amount: \$100, 000
Co-Investigator
Co-Investigators: **Lipsman N**, Trudeau M, Hynynen K, Sahgal A, Meng Y, Reilly R
- 2021-2023
Brain Tumor Foundation Grant
Title: Mapping of Essential Amino Acid Metabolism for the Detection of Glioblastoma Multiforme Spread in Post-Surgical Patients (MAP-GBM)
Amount: \$50, 000
Principal Investigator
Co-Investigators: Sahgal A, Detsky J, Maralani P, Lipsman N, Graham S, Goubran M
- 2021-2023
SRI Internal Grant
Title: 18F-FET-PET with Standard MRI versus Standard MRI alone to Predict Treatment Failure after Stereotactic Radiotherapy for High Grade Brain Gliomas: A Pilot Study (FETSMaRT)
Amount: \$150, 000
Principal Investigator
Co-Investigators: Detsky J, Maralani P, Sahgal A, Graham S, Lipsman N, Pond G

Stimec J

- 2019-2021
Department of Medical Imaging – University of Toronto; Physicians' Services Incorporated Foundation.
Title: Randomized Control Trial of Casting vs Pediatric Walker-Boot in the Management of Toddlers' Fractures 2019-2021
Amount: \$100,500 CAD over 2 years
Co-Investigator
Co-Investigators: Boutis K, Willan A, Khosroawshahi A, Stimec J, Colaco K, Camp M, Moretti M,



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Narayanan U.

Sussman, M

- 2018-2022
Canadian Institutes of Health Research (CIHR); Catalyst Grant: Musculoskeletal Health and Arthritis
Title: Developing Image-Based Disease Profiles to Predict Success in Knee Arthroscopy
Amount \$355, 000 CAD
Co-Investigator
Principal Applicant :Kin On Wong A, Gandhi R
Co-Applicants: Linda D; McDonald-Blumer H; Mahomed N; Mohankumar R; Marshall W
- 2018-2021
General Electric Canada
Title: 3D Hybrid ECG/SIMNAV Cardiac Imaging (in vivo)
Amount: \$40, 000 CAD
Principal Investigator
Co-Investigator: Wintersperger B
- 2018-2021
General Electric Canada
Title: Breath-hold T2 Mapping for Liver Iron Quantification
Amount: \$34, 000 CAD
Co-Investigator
Principal Investigator: Jhaveri K
- 2018-2021
Siemens Canada
Title: Ultra-short TE Imaging
Amount: \$33, 000 CAD
Principal Investigator
Co-Investigator: Wintersperger B

Symons, S.P.

- 2017-2022
Ontario Brain Institute.
Title: Ontario Neurodegenerative Research Initiative (ONDRI) 2.0
Amount: \$17,000,000 CAD
Co-Investigator
- 2016-2021
2015 Platform Grants. Brain Canada Foundation.
Title: The Toronto Dementia Research Alliance (TDRA) Dementia Clinical Research Database: A Platform in Neurodegenerative Diseases
Amount: \$2,774,955 CAD
Co-Investigator

Tan, K. T.

- 2020-2023
CIHR New Frontiers in Research Fund – Exploration



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Title: Gallium-dotatate PET-MR imaging to detect macrophages in abdominal aortic aneurysms.

Amount: \$250, 000 CAD

Co-Investigator

Principal Investigator: Byrne J

- 2021-2026

R3 Vascular, Inc.

Title: The R3 Vascular Drug-Eluting Bioresorbable Scaffold in Below the Knee Vessels Trial I (RESOLV I).

Amount: \$50, 000 CAD

Principal Investigator

- 2021-2023

Peter Munk Cardiac Centre Innovation Fund, University Health Network.

Title: A Prospective, Single-centre Study Investigating the Clinical Use and Safety of the Jetstream Atherectomy with Drug Coated Balloon (Ranger) for the Treatment of Dysfunctional Arterio-Venous Graft Stenosis.

Amount: 58,800 CAD

Principal Investigator

- 2019-2021

Joint Department of Medical Imaging Academic Incentive Fund, University Health Network.

Title: Evaluation of Prognostic Value of 18f-Fluoroazomycin Arabinoside (FAZA). Position Emission Tomography/Magnetic Resonance Imaging (PET/MR) In Patients with Critical Limb Ischemia pre- and post Revascularization: A Pilot Study.

Amount: \$40,000 CAD

Co-Investigator

Principal Investigator: Veit-Haibach P.

- 2019-Ju2020

Peter Munk Cardiac Centre Innovation Fund, University Health Network.

Title: Comparison of Carbon Dioxide Flush and Saline Flush to Saline Flush Alone in TEVAR and TAVI Procedures to Reduce Cerebral Ischemia.

Amount: \$50,000 CAD

Principal Investigator

- 2018-2020

Lutonix, Inc., a subsidiary of Becton, Dickinson and Company (BD).

Title: . A Prospective, Global, Multicenter, Single Arm Post-Approval Study Investigating the Clinical Use and Safety of the Lutonix® Drug Coated Balloon PTA Catheter for the Treatment of Dysfunctional AV Fistulae (Lutonix AV PAS).

Amount: \$70, 000 CAD

Co-Investigator

Principal Investigator: Rajan D

- 2018-2023

Endospan Ltd. PI: Lindsay, Thomas

Title: The SB NEXUS™ Aortic Arch Stent Graft System Data Collection Study for Special-Access Procedures in Canada.

Amount: \$68, 000 CAD

Co-Investigator



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Principal Investigator: Lindsay T

- 2017-2020
Cook Research Incorporated.
Title: Post-Market Study for Zenith Alpha™ Abdominal Endovascular Graft.
Amount: \$90,000 CAD
Co-Investigator
Principal Investigator: Thomas L
- 2016-2021
Boston Scientific Corporation
Title: MPERIAL- A randomized trial coMParing the ELUVIA™ dRug-eluting stent versus Zilver® PTX® stent for treatment of superficial femoral and/or proximal popliteal arteries.
Amount: \$65,000 CAD
Principal Site Investigator
- 2015-2020
National Heart, Lung, and Blood Institute (NHLBI)
Title: BEST-CLI Trial: Randomized, Multicenter, Controlled Trial to Compare Best Endovascular versus Best Surgical Therapy in Patients with Critical Limb Ischemia.
Amount: \$120,000 CAD
Co-Principal Site Investigator

Taylor, M.J.

- 2021-2024
SFARI (Simons Foundation)
Title: Investigating neural imbalance in early autism with innovative wearable MEG.
Amount: \$703,545 USD
Co-Investigator
Co-Investigators: Anagnostou E, Brian J, Safa K
- 2021-2026
CIHR-BSB
Title: Characterising brain network dynamics in very young children with autism using OPM-based MEG. Taylor
Amount: \$864,450.
Co-Investigator
Co-Investigators: Anagnostou E, Brian J, Dunkley BT, Kadis D, Safar K.
- 2021- 2023
Feiga Bresver Catalyst Grant
Title: Brain oscillations and emerging symptoms in toddlers with autism: Combined insights from new MEG technology and basic neurophysiology.
Amount: \$99,282.
Co-Investigator
Co-Investigators: Safar K, Anagnostou E, Brian J, Collingridge G
- 2021 – 2023
Centre for Brain & Mental Health (C-BMH) Health Outcomes
Title: Addressing autism spectrum disorder heterogeneity for personalized care: symptom characterization and subtyping using neural activity profiling and artificial intelligence.



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Amount: \$100,000

Co-Investigator

Co-Investigators: Zhang J, Safar K, Anagnostou E, Dunkley, BT

- 2018-2024

CFI-JELF

Title: It's all about time: Optimising infrastructure for functional brain imaging in children.

Amount: \$1,592,005

Co-Investigator

Co-Investigators: Mabbott DJ, Dunkley BT

- 2018-2023

CIHR-BSB

Title: Aging in Autism Spectrum Disorder: Changes in brain structure and function.

Amount: \$1,024,152

Co-Investigator

Co-Investigators: Anagnostou E, Grady C, Lerch JP, StoddartK.

- 2015-2021

CIHR-BSB

Title: Understanding the thoughts and emotions of others: neuroimaging measures of typical and atypical development.

Amount: \$825,126 (total)

Co-Investigator

Co-Investigators: Pang EW, Smith ML, Anagnostou E.

Torres, FS

- 2021-2023

JDMI AI Centre

Title: Automated pulmonary function quantification and toxicity risk prediction from computed tomography imaging of non-small cell lung cancer patients.

Amount: \$170,000

PI: Torres FS

Co-I: Raman S, Hope A, Baldauf-Lenschen F, Akbar S

Tyrrell, P

- 2020-2024

Nippon Steel Corp. (Japan)

Title: Medical Imaging Recognition via Reduced Annotation Workload

Amount: \$180,000

Principal Investigator

- 2021-2022

Novo Nordisk A/S (Denemark)

Title: An AI-augmented hemarthrosis detection system to improve healthcare delivery to hemophilia patients

Amount: 2021/12 - 2022/12 - \$278,000 CAD; 2020/11 - 2021/10 - \$228,000 CAD

Principal Investigator

- 2020 - 2022



Medical Imaging
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Novo Nordisk A/S (Danemark)

Title: AI/ML solution for MSK Hemarthrosis Image Dataset Scarcity: Creating Synthetic Data

Amount: \$115, 000

Principal Investigator

- 2020- 2022

Mathematics of Information Technology and Complex Systems (MITACS)

Title: Portable Detection and Characterization of the Synovium and Effusion in Musculoskeletal Ultrasound

Amount: \$60, 000 CAD

Principal Investigator

- 2020- 2021

Digital Technology Supercluster, COVID-19 program

Title: Development of an Open Global Clinical Dataset and AI-based Clinical Prediction Tool for Hospitalized Patients with COVID-19

Amount: \$1, 777, 000 CAD

Co-applicant

- 2020

Mathematics of Information Technology and Complex Systems (MITACS)

Title: Detection and Characterization of the Synovium in Musculoskeletal Ultrasound

Amount: \$15, 000 CAD

Principal Applicant

Vali, R

- 2020

Garron Foundation

Title: "HR-pQCT in ALL"

Amount: \$20, 000

Co-Investigator

Primary Investigator: Nathan P

Viet-Haibach, P

- 2022

Academic Incentive Fund

Title: Pmod Software Upgrade

Amount: \$19, 469

Principal Investigator

- 2022

PMH Catalyst Grant

FLT-PET/MR for Evaluation of pseudoprogression vs. true progression in patients with brain metastases.

Amount: \$100, 000

Co-Investigator

- 2022

Terry Fox Investigator Award

Title: Optimizing Therapy for Hepatocellular Carcinoma via Image-guided Porphyosome delivery.



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Amount: \$450, 000

Co-Investigator

- 2021
Academic Incentive Fund
Title: NaF PETMR in management of OA
Amount: \$30, 800
Co-Investigator
- 2021-2024
OICR, Clinical Acceleration Team Awards
Title: First-in-Human Porphysome Nanotechnology for Precision Tumour Ablation and Surgical Guidance.
Amount: \$1, 130, 803
Co-Investigator
- 2020
CIHR
Title: Understanding the Interaction of Acute Myeloid Leukemia with the Bone Marrow Microenvironment: Elucidating New Therapeutic Targets Through In Vivo Imaging
Amount: \$800, 000
Co-Investigator
- 2020-2023
CIHR, New Frontiers Grant
Amount: \$375, 000 CAD
Principal Investigator
Co-Principal Investigator: Byrne J
Collaborators: Tan KT, Robbins C, Montbriand J, Doyle M
- 2021
PMH foundation molecular imaging research support
Amount: \$250, 000/year
- 2020
Siemens Healthineers
Title: PET/MR research support Exploratory evaluation of simultaneous cardiac PET/MR, metabolomic markers and circulating dna as possible prognostic markers in identifying developing transient or permanent cardiopulmonary dysfunctions after radiotherapy.
Amount: \$150, 000

Waspé, A

- 2021-2026
Canada Foundation for Innovation – 2020 Innovation Fund
Title: Advanced Fetal Diagnostics and Therapy Program
Amount: \$7,113,863
Co-Applicant
Co-Applicants: Drake, J.M., Van Mieghem T, Campisi P., Kahrs L., Looi T., Macgowan C., Ryan G., Seed M., Sussman D.
- 2021-2022
Strategic Innovation Fund - INOVAIT



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Title: MR-guided laser interstitial thermal therapy in the brain by AI-based modelling of laser tissue interaction and heat propagation in clinical MRI data

Amount: \$125,000

Co-Applicant

Co-Applicants: Drake, J.M., Kahrs L., Lilge L., Tyc R., Weersink R.

- 2020-2022

New Frontiers in Research Fund – Exploration Grant

Title: Ultrasound-activated materials for the diagnosis and treatment of deadly pediatric brain cancers

Amount: \$250,000

Co-Applicant

Co-Applicants: Matsuura, N., Drake J.M

- 2019-2022

Canadian Institutes of Health Research – Operating Grant

Title: Magnetic resonance-guided focused ultrasound for incisionless musculotendinous contracture release

Amount: \$424,576

Co-Applicant

Co-Applicants: Drake J.M., Chu Kwan W., Narayanan U., Temple M.J.

- 2019 – 2022

Collaborative Health Research Projects (CHRP – CIHR/NSERC Partnered)

Title: Development of a Magnetic Resonance guided High Intensity Focused Ultrasound Therapy Platform for Perinatal Applications

Amount: \$650,000

Applicant

Co-Applicants: Drake J.M., Allard M., Looi T., Macgowan C., Pichardo S., Ryan G., Van Mieghem T.

- 2018-2023

Natural Sciences and Engineering Research Council of Canada (NSERC) – Discovery Grant

Title: Development of simulation tools and enhanced image-guidance for optimized planning and monitoring of high intensity focused ultrasound energy delivery

Amount: \$120,000

Applicant

Widjaja, E

- 2022-2023

Temerty Ukraine – Toronto Education and Collaboration Initiative Grant. University of Toronto

Title: Ukraine – Pediatric Epilepsy Educational Project.

Amount: \$50,000

Principal Investigator

- 2020 – 2025

NIH RO1 HD101419

Title: Neurological Outcome of Glycemia in Neonatal Encephalopathy

Amount: US\$803,996

Co-Investigator

Principal Investigator: Emily Tam



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- 2019 – 2022
Pediatric Epilepsy Research Foundation (PERF).
Title: Pediatric Epilepsy MR-guided Laser Interstitial Thermal Therapy (PEP-LITT) Registry
Amount: US\$200, 000
Principal Investigator
- 2019 – 2025
CIHR
Title: Neurological Outcome of Glycemia in Neonatal Encephalopathy
Amount: \$770,104
Co-investigator
Principal Investigator: Tam E
- 2018-2023
EpLink/ Ontario Brain Institute
Title: Improving Epilepsy Surgery Outcomes
Amount: \$253,745
Principal Investigator
- 2017 – 2020
Ontario Ministry of Health and Long Term Care
Title: Epilepsy ECHO Across the Lifespan
Amount: \$2,061,412
Chair of Evaluation Committee
Principal Investigator: Snead C
- 2016 – 2021
CIHR
Title: Brain development following late onset intrauterine growth restriction
Amount: \$550,440
Co-Principal Investigator
Co-Principal Investigator: Kingdom J
Nominated Principal Investigator: Seed M
- 2014 – 2020
CIHR
Title: Impact of Pediatric Epilepsy Surgery on Health-Related Quality Of Life
Amount: \$697,292
Nominated Principal Investigator

Wood, M

- 2016-2021
IOF Award from Canada Foundation for Innovation and Ontario Research Fund
Title: Diet, the Digestive tract, and Disease: The 3D Centre
Amount: \$126,000.
Collaborating Institution Project Leader
Project Leader: Jenkins D

Yan, C

- 2022-2025



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Department of Medical Imaging – University of Toronto

Title: Utility of a multiparametric prostate MRI AI-derived (MAI)-score of when to biopsy (and when to avoid biopsy) of PI-RADS category 3 and 4 lesions

Amount: \$100,000

Collaborator

Principal Investigator: Lim C

- 2022-2025

Department of Medical Imaging – University of Toronto

Title: MRI phenotype of colorectal liver metastases as a predictor of mutational profile and long-term outcomes

Amount: \$100,000

Collaborator

Principal Investigator: Cheung H, Patel C

Yu, E

- 2017-2020

Innovation Fund Surgical Oncology (Ontario Cancer Institute/Princess Margaret Cancer Centre

Title: Finding/Identifying Primaries with Neck Disease (FIND Trial): A Pilot Study Integrating Transoral Robotic Surgery, Histopathologic Localization, and Tailored DeIntensification of Radiotherapy for Unknown Primary and Small Oropharyngeal Head and Neck Squamous Cell Carcinoma

Amount: \$70,000

Co-Investigator

Co-Investigators: Kim J, Martino R, Goldstein D, Jang R, Chepeha D, Bratman S, Weinreb I, Metser U, Perez-Ordóñez B, Xu W.

- 2012-Present

Spinal Research Foundation

Title: A Phase II Study to Determine Efficacy of Stereotactic Body Radiotherapy (SBRT) for Spinal/Para-Spinal Metastases –Sub-section on CT perfusion

Amount: \$10,000 CAD

Collaborator

Co-Collaborators: Collaborator(s): Laperriere JN, Massicotte E, Lewis S, Rampersaud R, Fehlings F, Xu W, Letourneau D

Principal Investigator: Sahgal A