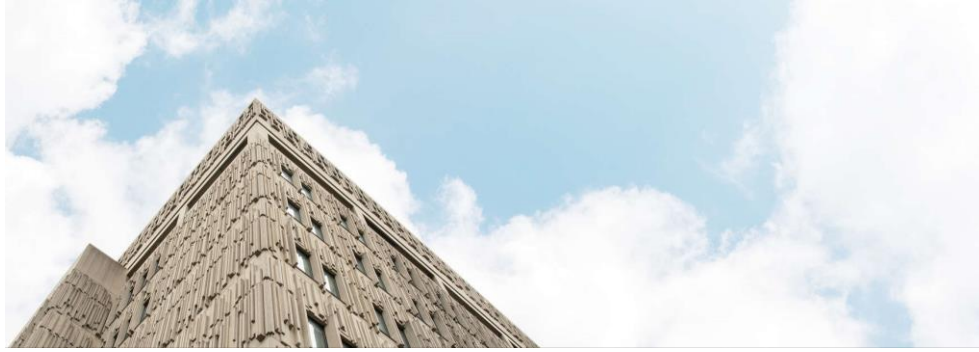




Institute of Medical Science
UNIVERSITY OF TORONTO



IMS Graduate Student Recruitment: January 2023

The Institute of Medical Science (IMS) is one of the largest graduate units at the University of Toronto. With over 600 active graduate faculty members, the IMS takes a leading role in translational research training that links fundamental discovery with patient-based research and clinical applications in health promotion and disease prevention with the intention of improving health outcomes for individuals and populations.

We are dedicated to training medical researchers and dissemination of new knowledge relevant to human biology and pathobiology within our Doctoral Stream Programs. The program includes both a Master of Science (MSc) and a Doctor of Philosophy (PhD) degree.

All applicants must identify an appropriate IMS faculty member as their research supervisor before initial registration in the IMS graduate program.

Within this document, you will find:

- available MSc and PhD positions
- research summaries, keywords
- supervisor's funding information, and
- contact information

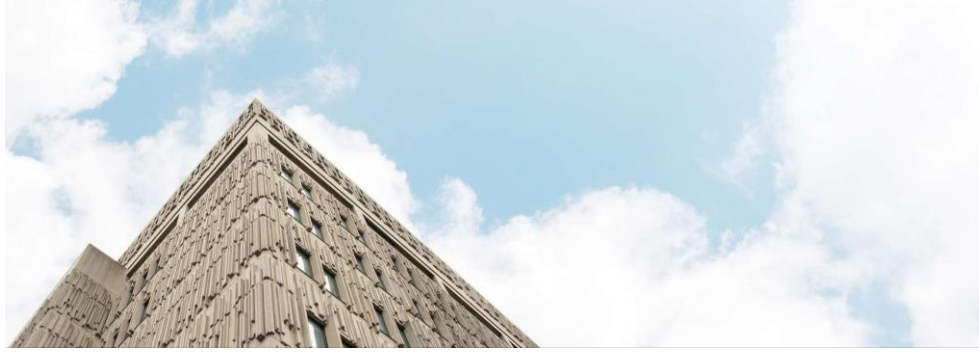
Interested students may contact the principal investigator or administrative assistants as listed.

To learn more, see [Prospective Students](#), browse our full faculty list on our [Faculty Directory](#).

**Last Updated: November 7, 2022*



Institute of Medical Science
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**Last Updated: November 7, 2023*

Principle Investigator: *Ann Yeh*

Currently Accepting	MSc;PhD;
Ideal Candidate	I am seeking a student with a background in computer science/machine learning and/or vision science.
Research Summary	My lab focuses on neuroinflammatory disorders with specific emphasis on visual outcomes and physical activity. We perform pharmacologic and non pharmacologic clinical trials focused on neuroinflammatory conditions, and have interests in the use of AI to predict diagnosis and outcome.
Keywords	Pediatric, neuroinflammation, multiple sclerosis, vision, exercise, outcome
Lab location	SickKids
Available Funding	Yes;
Relevant Links	https://lab.research.sickkids.ca/neuroinflamm/
Contact Information	akshaniya mohanrajah akshaniya.mohanrajah@sickkids.ca

Principle Investigator: *Nigil Haroon*

**Currently
Accepting**

PhD;

Ideal
Candidate

Immunology or cell biology background with wet lab experience

Research
Summary

Macrophage migration inhibitory factor (MIF) is an innate immune cytokine that drives inflammation and new bone formation in axial spondyloarthritis. We recently identified MIF as an important mediator of disease pathogenesis that can be therapeutically targeted in a pre-clinical model of spondyloarthritis. We are continuing to work on the detailed mechanisms that drive this disease process.

Keywords

MIF, neutrophils, spondyloarthritis, inflammation, immunology, arthritis, discovery

Lab location

Krembil Discovery Tower

Available

Yes;

Funding

Relevant

<https://www.eurekalert.org/news-releases/932090>

Links

Contact

Michael Kim

Information

Michael.Kim4@uhnresearch.ca

Principle Investigator: *Susanna Mak*

Currently Accepting	PhD;
Ideal Candidate	Students with interest and familiarity with human cardiovascular physiology or exercise sciences typically work in my laboratory. May be more opportunity for September 2023, but will consider students for January.
Research Summary	Integrative physiology, human research in cardiovascular function. Specific interests in sex differences, exercise physiology, pulmonary hypertension and heart failure
Keywords	Hemodynamics, Pulmonary hypertension, heart failure
Lab location	Mount Sinai Hospital
Available	Yes;
Funding	
Relevant Links	@MakLab_
Contact Information	Susanna Mak or Teodora delaCruz susanna.mak@sinaihealth.ca teodora.delacruz@sinaihealth.ca

Principle Investigator: *Stefan Kloiber*

Currently Accepting

MSc;PhD;

Ideal Candidate

Experience in clinical research, neuroimaging, genomics, and/or psychiatry/psychology.

Research Summary

Dr. Kloiber's clinical expertise and research focuses on mood and anxiety disorders. A major focus of Dr. Kloiber's clinical research is to investigate novel neurobiological systems including the brain endocannabinoid system in mood and anxiety disorders as well as to explore novel treatment approaches through clinical trials with a specific interest in neurobiological and clinical effects of cannabinoids. Research projects in this field include clinical studies evaluating the effects of cannabinoids, e.g. cannabidiol (CBD) and projects to understand perceptions and motivations for cannabis use in mood and anxiety disorders, as well as neuroimaging / positron emission tomography (PET) studies evaluating the brain endocannabinoid system in the with mood and anxiety disorders, healthy controls and the effect of cannabinoids such as THC on the brain endocannabinoid system.

Another aspect of Dr. Kloiber's work is focused on improving treatment of mood and anxiety disorders by standardizing and individualizing therapy through Integrated Care Pathways (ICPs) and biomarker research combining various strategies such as genomics, neuroendocrinology, metabolomics, digital behavioral phenotyping and psychophysiology. With this approach Dr. Kloiber aims to detect individual biological signatures for prediction of treatment response, prevention of adverse events, and subclassification of mood and anxiety disorders.

Keywords

Mood Disorders
Anxiety Disorders
Biomarker
Cannabinoids
Endocannabinoid System
Neuroimaging

Lab location

CAMH

Available
Funding
Relevant
Links
Contact
Information

Yes;

<https://psychiatry.utoronto.ca/faculty/stefan-kloiber>

Stefan Kloiber
stefan.kloiber@camh.ca

Principle Investigator: *Anne S. Bassett*

Currently Accepting Ideal Candidate

MSc;PhD;

The student will have the opportunity to formulate a feasible research question of interest within the framework of our existing patient populations and data resources. Suggested topics include delineating the multi-system expression in genetic subtypes of tetralogy of Fallot or schizophrenia, studying genetic pathways to abnormal cardiac or brain development and related diseases, and identifying prenatal and obstetrical risk factors related to developmental disorders of the heart or brain. Responsibilities will include designing the specific details of the project, coordinating data collection and analysis, presenting results at local and/or international venues, and writing a manuscript suitable for publication in a peer-reviewed medical journal. The student will have the option to participate in an academic clinic where we see relevant patients with diagnosed and yet to be diagnosed genetic conditions, and to hone assessment and related skills. The student will report directly to the PI who provides substantial mentorship and guidance with regular weekly or biweekly meetings. Expert collaborators and senior students and trainees are also available to the student.

Research Summary

There is a large genetic component to risk for common human diseases, including congenital heart disease and major psychiatric illnesses. We study risk and adult outcomes in these conditions, especially those with complex multi-system disease and pediatric developmental conditions. Our patient populations and extensive data offer the opportunity to discover new genetic causes and insights into the outcomes of patients with specific genetic variants and syndromes that represent important human models of common diseases. We work at the University Health Network and Centre for Addiction and Mental Health, and with renowned local and international collaborators, including geneticists, cardiologists, endocrinologists, and neurologists. Resources include DNA sequencing data, comprehensive and long-term outcome data, and clinical data across the lifespan for patient populations with tetralogy of Fallot and other congenital heart diseases, with treatable psychiatric illness including schizophrenia, and with multi-system genetic conditions. Our clinical and bioinformatics-based research results have demonstrated potential to be immediately translated into clinical practice, and to have public health

	implications.
Keywords	Clinical genetics; Developmental diseases of heart and brain; Multi-system disease
Lab location	UHN - Toronto General Hospital Centre for Addiction & Mental Health - Clinical Genetics Research Program,
Available	Yes;
Funding	
Relevant	www.22q.ca
Links	
Contact	Gladys Wong
Information	gladys.wong@camh.ca

Principle Investigator: *Jonathan Yeung*

Currently
Accepting

MSc;

Ideal
Candidate

Self-motivated and self-directed student with programming background or molecular biology background.

Research
Summary

We study the genomics of esophageal adenocarcinoma and lung transplantation using patient-derived samples.

Keywords

Genomics, organoids, cell-free DNA, esophageal cancer, lung transplantation

Lab location

UHN PMCRT

Available

Yes;

Funding

Relevant

Links

Contact

Jonathan Yeung

Information

jonathan.yeung@uhn.ca

Principle Investigator: *Dr. Moumita Barua*

Currently
Accepting
Ideal
Candidate
Research
Summary

MSc;PhD;

The starting point of our research is to perform genetic studies in adults with kidney disease using patient and population based cohorts. We then use our genetic discoveries to prioritize clinically relevant models, in which we study kidney disease mechanisms. The lab is currently funded by 2 CIHR awards. The 3 main projects in the lab are:

1. Genome-wide association studies of kidney traits - basic programming knowledge is an asset for this human based study
2. Pax2 mediates kidney repair/regeneration - enthusiasm to work with mouse models is an asset
3. Mechanisms in Alport syndrome - enthusiasm to work with mouse models is again an asset

We are looking for highly motivated trainees to join our collaborative, enthusiastic team to work on any one of these projects depending on applicant interests and strengths.

Keywords

genetics, molecular genetics, human genetics, mouse models, translational research

Lab location

Toronto General Hospital - MARS Discovery District

Available

Yes; Awaiting results;

Funding

Relevant

Links

Contact

Sarah Wilson

Information

sarah.wilson@uhnresearch.ca

Principle Investigator: *Shiphra Ginsbur*

Currently
Accepting

MSc;

Ideal
Candidate

Background or experience in health professions education and/or qualitative research an asset.

Research
Summary

Dr. Ginsburg's program of research involves two inter-related areas. The first explores how clinical supervisors conceptualize, assess and communicate about the performance and competence of their learners, with a focus on the language used in workplace-based assessment. The second area explores professionalism in medical education, from the perspective of learners, faculty and practicing physicians. Dr. Ginsburg's research involves the use of qualitative and mixed methods. She has ongoing projects related to competency based medical education, assessment, feedback, implicit gender bias in assessment of learners and faculty, and issues central to the field of medical education research in general, including academic publishing and dissemination.

Keywords

Medical education
Assessment
Qualitative research
Professionalism

Lab location

Wilson Centre (UHN); Mount Sinai Hospital

Available

Some funds may be available;

Funding

Relevant

sginsburg.com

Links

<http://thewilsoncentre.ca/dr-shiphra-ginsburg>

Contact

Shiphra Ginsburg

Information

shiphra.ginsburg@utoronto.ca

Principle Investigator: *Dr. Andrew Advani*

Currently Accepting	MSc;
Ideal Candidate	The ideal candidate will be able to work independently and as part of a team; will show a high level of empathy and ability to connect with others; and will have an excellent command of written and spoken English.
Research Summary	A position is available for an MSc student to undertake a qualitative project exploring stakeholder preferences for engagement of people living with diabetes. The project involves a scoping review, patient interviews and a concept mapping workshop.
Keywords	Diabetes Patient engagement Qualitative research
Lab location	St. Michael's Hospital
Available	Awaiting results;
Funding	
Relevant Links	advanilab.com
Contact Information	Andrew Advani andrew.advani@unityhealth.to

Principle Investigator: *Beverley Orser*

Currently Accepting Ideal Candidate	MSc;PhD; Strong background in neuroscience with some lab experience, self-motivated, independent thinkers.
Research Summary	We are exploring the molecular mechanisms underlying general anesthesia and the causes for and prevention of cognitive deficits that occur after anesthesia and surgery in older adult patients.
Keywords	memory, GABAA receptors, tonic inhibition.
Lab location Available Funding Relevant Links	Medical Sciences Building, St. George Campus Yes; www.perioperativebrainhealth.com
Contact Information	Dr. Dianshi Wang dianshi.wang@utoronto.ca

Principle Investigator: *Satya Dash*

**Currently
Accepting**

MSc;

Ideal

Enthusiastic and inquisitive students. Familiarity with R helpful

Candidate

Research

Summary

The genetics of obesity and metabolic disease: why are some people but not others predisposed to weight gain and metabolic disease.

Keywords

Obesity type 2 diabetes genetics

Lab location

TGH/Pmcrt

Available

Yes;

Funding

Relevant

<https://pubmed.ncbi.nlm.nih.gov/?term=satya+dash>

Links

Contact

Satya Dash

Information

Satya.dash@uhn.ca

Principle Investigator: *Trung N. Le*

Currently Accepting Ideal Candidate Research Summary	MSc; Background and experience in basic science bench works. Sensorineural hearing loss is one of the most common disabilities in society and sets in place a gradual but ongoing degeneration of hair cells and auditory nerves of the cochlea. Hair cells help convert sound (acoustic) energy into neural (electrical) signals, which then travel via the auditory nerve to the brain where sound is interpreted. Injury to any part of this information highway will lead to irreversible hearing loss. The overall goal of Dr. Le's research is to develop therapeutic interventions that will regenerate this auditory pathway and restore normal hearing to those affected with hearing loss. The three specific aims of his laboratory include the following: -investigating different techniques of magnetic targeting as a therapeutic delivery method to the cochlea. -applying gene and refurbished drug therapy for regeneration of hair cells and auditory neurons. -studying the permeability of blood-labyrinth barrier of the inner ear.
Keywords	hearing loss, gene therapy, magnetic targeting, drug delivery, blood-labyrinth barrier, ototoxicity
Lab location	Sunnybrook Research Institute
Available Funding	Awaiting results;Yes;
Relevant Links	https://sunnybrook.ca/research/team/member.asp?t=11&m=754&page=528 https://scholar.google.com/citations?user=g_00Zu0AAAAJ&hl=en
Contact Information	Trung N. Le trung.le@sunnybrook.ca

Principle Investigator: *Joanne Kotsopoulos*

Currently Accepting Ideal Candidate	MSc;PhD; Interest in cancer epidemiology, risk factors, cancer genetics, high risk populations, statistics
Research Summary	<p>Dr. Joanne Kotsopoulos is a Scientist with the Familial Breast Cancer Research Unit at the Women’s College Research Institute, Women’s College Hospital, and an Associate Professor at the University of Toronto. She received her PhD from the University of Toronto in 2007 and subsequently conducted her post-doctoral research training at the Brigham and Women's Hospital/Harvard Medical School.</p> <p>Dr. Kotsopoulos directs a wide-range of research initiatives to further our understanding of BRCA-associated breast and ovarian cancer, with the goal of identifying viable strategies that confer substantial risk reduction and improve outcomes. Her studies have demonstrated an important role of hormonal, reproductive and modifiable exposures on BRCA-associated cancer development. This critical work has provided women and healthcare providers with evidence-based management options while contributing to our understanding of the pathogenesis of hereditary cancer. Additional interests are aimed at identifying prognostic factors for ovarian cancer, a highly fatal disease, and furthering our understanding of how variation in treatment may impact outcomes.</p> <p>She is also actively involved in the teaching and mentoring of students at the University of Toronto across various stages of their academic careers.</p>
Keywords	Breast cancer, ovarian cancer, epidemiology, cancer genetics, biomarker
Lab location	Women’s College Hospital
Available Funding	Awaiting results;
Relevant Links	https://www.womensresearch.ca/scientists/core-faculty/joanne-kotsopoulos-phd

Contact
Information

Ellen Macdougall
Joanne.kotsopoulos@wchospital.ca

Principle Investigator: *Allan S Kaplan*

Currently Accepting Ideal Candidate Research Summary Keywords	MSc; Exploring the neurobiology of eating disorders anorexia nervosa bulimia nervosa
Lab location	CAMH
Available Funding	Awaiting results;
Relevant Links	
Contact Information	Simone Rodrigues simone.rodrigues@camh.ca

Principle Investigator: *Bernard Le Foll*

Currently
Accepting

MSc;PhD;

Ideal
Candidate

Looking for students with a clinical background

Research
Summary

The main goal of the Translational Addiction Research Laboratory is to improve the treatment and understanding of drug addiction. The research aims at linking discovery in basic science to clinical applications. The research program is currently covering various drugs of abuse (cannabis, opioid, tobacco and alcohol). The main approaches used in the laboratory are i) PET imaging approaches to uncover some of the neurotransmitters involved in drug addiction processes; ii) drug administration studies in the laboratory; iii) Randomized clinical trials. Various patients based projects are also available at Waypoint Centre for Mental Health Care

Keywords

Addiction, patient based care, trial, neurobiology

Lab location

CAMH and Waypoint Centre for Mental Health Care

Available

Yes;

Funding

Relevant

<https://pharmtox.utoronto.ca/faculty/bernard-le-foll>

Links

Contact

Jessica Caston

Information

jcaston@waypointcentre.ca

Principle Investigator: *Sukhvinder Kalsi-Ryan*

Currently Accepting	MSc;
Ideal Candidate	Clinicians
Research Summary	Neurorestoration after paralysis for upper limb and locomotion
Keywords	electrical stimulation, non invasive neuromodulation, upper extremity, walking, spinal cord injury, stroke
Lab location	Lynhurst Centre - Toronto Rehab/UHN
Available	No;
Funding	
Relevant Links	https://kite-uhn.com/scientist/sukhvinder-kalsi-ryan
Contact Information	Gita Gholamrezaei gita.gholamrezaei@uhn.ca

Principle Investigator: *Yaping Jin*

Currently Accepting	MSc;
Ideal Candidate	Students with basic knowledge of epidemiology and biostatistics and the interest and ability to learn to use statistical software (e.g. SAS, R, SPSS) to analyze large-scale databases are preferred.
Research Summary	<p>Glaucoma is a leading cause of blindness in Canada. About half of the individuals with glaucoma do not know they have glaucoma and thus are not receiving treatment. Routine eye exams can facilitate early glaucoma diagnosis and improve disease outcomes. Routine eye exams are mostly done by optometrists (an eye doctor typically not requiring a referral) in Canada. Using physician billing data from the Ontario Health Insurance Plan, we will determine the number and percentage of patients who received a glaucoma diagnosis from a routine eye exam by optometrists by age groups (20-39, 40-64, 65+ years), sex, socioeconomic status and rural versus urban residence for each year from 1998-2019. We will also assess the number of Ontarians with a missed glaucoma diagnosis from routine eye exams by optometrists due to the government stopping coverage for routine eye exams for individuals aged 20-64 in 2004 in Ontario. This study will be the first to assess the role of routine eye exams by optometrists in glaucoma detection using data from all patients in a population. It will also be the first to evaluate the impact of public-funded routine eye exams on glaucoma detection.</p>
Keywords	Routine eye exams, Glaucoma, Optometrists
Lab location	Kensington Eye Institute
Available	Yes;
Funding	
Relevant Links	https://pubmed.ncbi.nlm.nih.gov/?term=Jin+YP+ophthalmology
Contact Information	Yaping Jin Yaping.Jin@utoronto.ca

Principle Investigator: *Ajoy Vincent*

Currently Accepting	MSc;PhD;
Ideal Candidate	Looking for a motivated student with background knowledge in genetics. Wet lab experience in various genetics techniques and a strong background in statistics will be preferred.
Research Summary	<p>Research focus 1: In our lab, we recently discovered key genetic disorders that affect the polyunsaturated fatty acid (PUFA) metabolism leading to Hereditary Macular Dystrophy. We are actively studying them to uncover the role of lipid dysregulation in macular dystrophy and macular/retinal degeneration. We are using patient derived cell line approaches (lymphoblast and fibroblast) and transgenic mouse model.</p> <p>Research focus 2: Missing heritability in Inherited Retinal Dystrophies (IRDs) continue to be the research focus of the lab. Our lab continues to recruit unsolved cases from the eye genetics clinic. We aim to do whole genome sequencing (with or without RNA sequencing and linkage analysis) in about 5-10 pedigrees each year to identify missing genes/variants. We have an excellent track record of identifying missing heritability in IRDs and the graduate students have opportunity to study such pedigrees and perform functional assays. Our hypothesis is that a significant portion of missing heritability will be explained by deep intronic variants and structural variants that have not yet been thoroughly explored in IRDs.</p>
Keywords	Inherited Retinal dystrophy; Hereditary Macular Dystrophy; Lipid metabolism; genome sequencing; RNA sequencing; mice models
Lab location	14th floor, PGCRl, SickKids
Available	Awaiting results;
Funding	
Relevant Links	
Contact Information	Kashif Ahmed kashif.ahmed@sickkids.ca

Principle Investigator: *Michael Zappitelli*

Currently Accepting

MSc;PhD;

Ideal Candidate

Passionate science advocate and life long learner. Strong computer skills that include database management (Microsoft Office Suite is a must; Familiarity with RedCap, and Adobe Creative Suite is an asset) or willingness to learn new applications. Exceptional communication skills to engage patient partners and multidisciplinary team for research, idea sharing. Other specific strengths or areas of previous experience which would be assets (but not necessities): statistical analysis; quality improvement; focus groups; clinical research; cardiovascular or kidney research; healthcare utilization/administrative healthcare data. Appetite for kidney research.

Research Summary

Dr. Michael Zappitelli studies acute kidney injury (AKI) in children. AKI mostly occurs in hospitalized patients and often in children whose primary diseases are not related to the kidney. After years of delineating the definition of AKI and understanding hospital-AKI epidemiology, our lab is now more focused on studying novel biomarkers for a) AKI diagnosis; b) predicting long-term kidney and other outcomes; and c) predicting cardiovascular outcomes. We are also performing multiple multicentre prospective and retrospective cohort studies (including use of provincial and national administrative healthcare data) to understand the long-term kidney and blood pressure outcomes AKI. Patient populations we study include critically ill children, children undergoing cardiac surgery or ECMO and children treated for cancer, however, we also focus on general pediatrics wards patients. Using mixed methods, we are equally trying to determine the most cost-efficient and acceptable (to patients; healthcare providers; health systems) methods to ensure appropriate long-term follow-up of AKI in children and determine how current healthcare needs to change for these patients. The lab has support of an analyst, a lab manager, several research assistants and hosts a number of multi-level trainees each year. Funding for research is excellent. Currently, there are several potential MSc and/or PhD level projects available in the areas of long-term kidney outcomes in pediatric cancer, qualitative studies on healthcare delivery for AKI, long-term kidney outcomes and health care delivery using national administrative healthcare data, and intervention trial on AKI follow-up; also, a project on biomarkers of cisplatin-induced AKI in adults and children.

Keywords	Nephrology, Administrative Data, Cohort Study, Pediatrics, Critical care, Hypertension
Lab location	SickKids (Peter Gilgan Centre for Research and Learning)
Available	Yes;
Funding	
Relevant Links	https://wp-stg.research.sickkids.ca/zappitelli/
Contact Information	Carla Santos Carla.Santos@sickkids.ca

Principle Investigator: *Melanie Penner*

Currently Accepting

MSc;

Ideal Candidate

Experience working with autistic children or children with developmental disorders is an asset.

Research Summary

As a clinician scientist, Dr. Penner's clinical and research interests are in autism spectrum disorder. In particular, she is interested in service delivery for this population, including evaluating the impact and cost-effectiveness of new care models. Dr. Penner has done research and educational work to expand Ontario's diagnostic capacity for autism spectrum disorder diagnoses in the community setting, decreasing wait times and facilitating earlier access to essential intervention programs.

Keywords

Autism; developmental disorders; health services; program evaluation

Lab location

Holland Bloorview Kids Rehabilitation Hospital

Available

Yes;

Funding

Relevant

<https://hollandbloorview.ca/people/melanie-penner-md-frcpc>

Links

Contact

Leah Wong

Information

lwong@hollandbloorview.ca

Principle Investigator: *Arun Ravindran*

Currently Accepting	MSc;
Ideal Candidate	Hard working and conscientious. Interested in human subject research. Good writing and interpersonal skills.
Research Summary	Clinical trials of antidepressants and mood stabilizers. Therapeutics of mood and anxiety disorders. Neuroimaging. Global mental health.
Keywords	Clinical trials Global mental health Psychopharmacology
Lab location	CAMH
Available	Yes;
Funding	
Relevant Links	https://www.researchgate.net/profile/Arun-Ravindran-3
Contact Information	Arun Ravindran/Angela Paric angela.paric@camh.ca arun.ravindran@camh.ca

Principle Investigator: *Mingyao Liu*

Currently Accepting	MSc;PhD;
Ideal Candidate	Academic excellence, committed to medical science, interested in research, bioinformatics knowledge and data science background will be assets.
Research Summary	Acute lung injury and repair in lung transplantation
Keywords	Acute lung injury, lung transplant, ischemia reperfusion, bioinformatics, cell death, inflammatory response
Lab location	Toronto General Hospital Research Institute
Available	Yes;
Funding	
Relevant Links	https://www.uhnresearch.ca/researcher/mingyao-liu
Contact Information	Ivone Gomes ivone.gomes@uhnresearch.ca

Principle Investigator: *Antonio Strafella*

Currently Accepting Ideal Candidate	MSc;PhD;
Research Summary	Parkinson's Disease and PET imaging
Keywords	Parkinson, PET, Neuroimaging
Lab location	CAMH
Available Funding	
Relevant Links	http://www.neuroscience.utoronto.ca/faculty/list/strafella.htm https://pubmed.ncbi.nlm.nih.gov/?term=Strafella+AP%5Bau%5D&sort=date&size=20
Contact Information	Nil nil

Principle Investigator: *Ashwin Mallipatna*

Currently Accepting	MSc;PhD;
Ideal Candidate	Students will be under the supervision of UofT Faculty Members who collaborate with the Mallipatna Lab.
Research Summary	Dr. Mallipatna was the lead author of a publication investigating the use of periocular Topotecan in treating retinoblastoma, providing an experience innovating and introducing a novel therapy into clinical practice. A peer-reviewed scientific publishing platform (F1000Prime) recognized this as work that would pave the way for novel treatments developed for the management of retinoblastoma. More recently, Mallipatna led an effort to standardize the American Joint Committee on Cancer TNM staging of retinoblastoma. This work impacted the management of retinoblastoma worldwide by allowing for international treatment protocols to be tested on the same platform. Mallipatna has a keen interest in the early detection of childhood blindness and retinoblastoma.
Keywords	Three-Dimensional Imaging, Diagnostic Imaging, Retinal Neoplasms, Retinoblastoma, Pediatric Ophthalmology, Blindness Screening
Lab location	Department of Ophthalmology and Vision Sciences The Hospital for Sick Children
Available Funding	Yes;
Relevant Links	https://www.sickkids.ca/en/staff/m/ashwin-mallipatna/
Contact Information	Kaitlyn Flegg Retinoblastoma Research Program Manager E-Mail: kaitlyn.flegg@sickkids.ca

Principle Investigator: *Professor Michael Fehlings*

Currently Accepting	MSc;PhD;
Ideal Candidate	The ideal candidate will have a keen interest in translational research, and a desire to grow in this fast-paced environment.
Research Summary	I run a translationally oriented research program focused on discovering novel treatments to improve functional outcomes for both traumatic and non-traumatic forms of spinal cord injury (SCI).
Keywords	Spinal Cord Injury, Stem Cells, Translational Research, Clinical Trials
Lab location	Krembil Discovery Tower, Toronto Western Hospital, University Health Network
Available	Yes;Awaiting results;
Funding	
Relevant Links	www.drfehlings.ca
Contact Information	Address email to PI (michael.fehlings@uhn.ca) and cc administrative assistant libertad.puy@uhnresearch.ca

Principle Investigator: *Istvan Mucsi*

Currently
Accepting

MSc;PhD;

Ideal

EPIDEMIOLOGY, PUBLIC HEALTH

Candidate

Research

Summary

Our research focuses on psycho-social and ethno-cultural determinants of access to all solid organ transplantation and assessing barriers and disparities in access to living donor transplantation. Additional projects investigate and analyze patient-reported outcomes, and develop enhanced, culturally appropriate patient education toolkits about solid organ transplant. We are also conducting studies to validate and implement novel patient reported measures (PROMS), quality of life questionnaires using innovative electronic data capture and computer adaptive testing. Read more @ <https://nefros.net/>

Keywords

Health equity; ethnocultural disparities; Muslim Canadians; kidney transplantation; qualitative research; culturally competent care; health education; patient reported outcomes

Lab location

Toronto General Hospital, University Health Network

Available

Yes;

Funding

Relevant

<https://nefros.net/>

Links

Contact

Lidiia lunashko

Information

munoresearch@gmail.com

Principle Investigator: *Matthew Sloan*

Currently Accepting Ideal Candidate Research Summary	MSc; Dr. Sloan is a clinician scientist specializing in the treatment of substance use disorders and their psychiatric comorbidities. His primary research interests are developing innovative new treatments for substance use disorders and exploring determinants of psychopharmacological response to drugs of abuse. He has obtained competitive funding from CIHR and the CAMH Discovery Fund and has received scientific prizes from the American Academy of Addiction Psychiatry and the National Institute on Alcohol Abuse and Alcoholism.
Keywords	Addiction, Alcohol, Drug Self-Administration, Endocannabinoid System, Telemedicine, Clinical Trials
Lab location Available Funding Relevant Links	CAMH Yes;
Contact Information	Matthew Sloan matthew.sloan@camh.ca

Principle Investigator: *Dr. Camilla Zimmermann*

Currently Accepting	MSc;
Ideal Candidate	The ideal student would be interested in gaining experience in our clinical research environment, working directly with patients and conducting quality of life studies.
Research Summary	Our research team is studying theoretical, empirical, and methodological aspects of measuring the effectiveness of specialized palliative care. This involves developing and testing potential models for the provision of palliative care, as well as validating existing measures of palliative care effectiveness and creating new ones.
Keywords	palliative care, supportive care, health services research, clinical trials, complex intervention design, mixed methods research
Lab location	2303-700 Bay Street, UHN
Available	Yes;
Funding	
Relevant Links	Twitter: @ZimmTeamLab
Contact Information	Nadia Swami nswami@uhnresearch.ca

Principle Investigator: *Vanessa Goncalves*

Currently Accepting	MSc;PhD;
Ideal Candidate	Students with previous genetics experience will be great, but open for any interested student with interest in the field.
Research Summary	Dr. Gonçalves has multidisciplinary background in statistical genetics and molecular biology. Her primary research focuses on the role of mitochondrial gene variants in the risk for and phenomenology of neuropsychiatric disorders. Her research portfolio includes pharmacogenetic studies focusing on the mitochondrial system, especially its effects on treatment response. She aims to translate her clinically relevant findings to improve the quality of patient care in psychiatry; such research findings include discovery of novel biomarkers for genes underlying psychiatric treatment response, factors contributing to reduced side-effects and incidence of medication failure, and enhanced diagnostics and therapies for psychiatric patients.
Keywords	Mitochondrial Genetics Human Genetics Psychiatry Schizophrenia Biomarkers Statistical Genetics
Lab location	CAMH
Available	Yes;
Funding	
Relevant Links	https://scholar.google.com/citations?user=_CljkgAAAAJ&hl=en&oi=ao
Contact Information	Vanessa Goncalves Vanessa.Goncalves@camh.ca

Principle Investigator: *Andrew Lim*

**Currently
Accepting**

PhD;MSc;

Ideal
Candidate

Students should be comfortable straddling the computer science / computational biology, contemporary genomics / transcriptomics, human neurophysiology, device engineering, and clinical trials. Programming experience is an asset, as are experience in signal processing, machine learning, genomics, and human physiology.

Research
Summary

We unravel the mechanisms linking sleep, circadian rhythms and brain diseases by relating wearable sensor data to clinical, imaging, and molecular outcomes in studies of 100's to 1000's of people.

Keywords

Sleep, Circadian Rhythms, Dementia, Transcriptome, Wearables, Machine Learning

Lab location

Sunnybrook

Available

Yes;

Funding

Relevant

sleepandbrainhealth.ca

Links

Contact

Richelle Bercasio

Information

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