IOTH / 10E SCIENTIFIC UE MEETING / RENCONTRE

MAY 24 – 26 MAI, 2024

SHERATON CENTRE TORONTO HOTEL LOWER CONCOURSE TORONTO, ONTARIO

Accelerating Collaboration Accélérer la collaboration

PROGRAM PROGRAMME





MARATHON OF HOPE CANCER CENTRES NETWORK réseau des centres d'oncologie du MARATHON DE L'ESPOIR



Digital Health & Discovery Platform Digital • Hôpital Découverte • Plateforme



PRESIDENT'S MESSAGE

Welcome to Toronto!

We are thrilled to meet in Toronto this year, our first time to do so! Our meeting location over the next few days is significant! Terry ran right by the hotel on Queen Street just before arriving at Nathan Phillips Square (across the street) where 10,000 Torontonians were there to greet him on July 11, 1980.

Our theme of "Accelerating Collaboration" is fitting for our Terry Fox community, especially for those of us (old enough!) who well remember how much Terry's presence then brought out the crowds, accelerating our country's unity and support for his dream of eradicating cancer through research.

As we approach year 44 of the annual Terry Fox Run (on Sept 15), his dream – and our commitment to achieve it – remains strong! Progress is being made, but there is much more to do.

We hope you will use this meeting as an opportunity to help us to continue his Marathon of Hope through accelerated collaboration at our sites, within and across our funded teams, across the provinces and coast to coast with partners and supporters, and in discussions with patients and colleagues. Together we can reach Terry's dream. We anticipate the meeting's theme will percolate through a number of the plenaries and sessions you'll hear and see over the next few days, where

- you'll learn about the remarkable milestones achieved by our Marathon of Hope Cancer Centres Network members;
- listen to some of our long-funded, new and rising stars describe how they are making a difference through genomic, AI, microbiome, tumour microenvironment, and computational studies; and
- find out how our Digital Health and Discovery Platform has relaunched with new partners to develop a vibrant ecosystem and platform for data sharing to accelerate precision medicine in cancer and other diseases.

Topping off the meeting, two of our international keynote speakers will present talks on their innovative work that we hope will fuel further inspiration and acceleration for all. Enjoy!



Jim Woodgett TFRI President and Scientific Director



André Veillette MOHCCN Executive Director

CONTENTS

ITEM	PAGE
Agenda	
Friday, May 24	3
Saturday, May 25	4
Sunday, May 26	4
Event Days	
Friday, May 24	
Plenary 1	5
Keynote Speaker	5
Plenary 2	6
Plenary 3	7
Saturday, May 25	
Terry Fox Early Morning Run	28
Plenary 4	8
Keynote Speaker	8
Plenary 5	9
Plenary 6	10
Speaker Biographies	11 - 22
Rapid-Fire Talks / Attended Poster Sessions	23 - 26
Glossary	27
Early-Morning Run Map	28
Hotel Floorplans	28

Wifi Access

Network name: Sheraton_Conference

Password: terryfox2024

Statement on Respect for Confidentiality of Unpublished Material

The Institute has invited everyone attending this meeting because of their contribution, or potential for contribution, to the work of our research community. In building our community, we are committed to respecting the confidentiality of ideas and data that is unpublished at this meeting. We request and require that all registrants refrain from recording such confidential information, and do not discuss such information with colleagues outside of this meeting. It is only in this way that we will collectively build the trust and respect that is necessary for effective collaborations. We appreciate your respect of and compliance with this important request.

2024 Scientific Organizing Committee Members

Dr. Jim Woodgett Dr. Christopher Paige Dr. Isabel Serrano Dr. Natalie Szudy Dr. Russ Watkins Adrian Thorogood Marina Lefilliatre Kelly Curwin

Ontario

Dr. Rama Khokha, PMCC Dr. Robert Rottapel UHN/UofT/OICR

Quebec

Dr. Sonia del Rincon, McGill University and Lady Davis Institute, Segal Cancer Centre-Jewish General Hospital

British Columbia

Dr. Ly Vu, BCCRC Dr. Jessica McAlpine, BCCRC and VGH, UBC Dr. Dean Regier, BCCRC and UBC Dr. Aly Karsan, BC Cancer

MOHCCN Patient Working Group

Dr. Denis Petitclerc James Pereira

Friday, May 24

START	END	EVENT	LOCATION
7:00 am	12:00 noon	REGISTRATION Posters installed between 8:30 and 10:30 am. All posters must be installed by 11 am when judging begins.	Osgoode Foyer Sheraton Hall E
7:00 am	8:00 am	Breakfast	Osgoode Ballroom West
8:00 am	9:00 am	WELCOME & OPENING REMARKS • Dr. Jim Woodgett, TFRI • Dr. André Véillette, TFRI/MOHCCN/IRCM • Michael Mazza, TFF	Osgoode Ballroom East
9:00 am	10:30 am	 PLENARY 1 Marathon of Hope Cancer Centres Network: Patients, Populations and Equitable Health Systems Co-chairs: Dr. Isabel Serrano, managing director, Marathon of Hope Cancer Centres Network, and Jennifer Graham, patient partner Dr. Dean Regier, senior scientist, BC Cancer Research Institute, associate professor, UBC School of Population and Public Health, and associate director, UBC Academy of Translational Medicine Dr. Yvonne Bombard, scientist, St. Michael's Hospital, Unity Health Toronto, associate professor and Canada Research Chair in genomics health services, University of Toronto Deirdre Weymann, senior health economist, Cancer Control Research, BC Cancer, adjunct professor, Faculty of Health Sciences at Simon Fraser University and founding member of the MOHCCN Health Technology Assessment (HTA) Working Group Dr. Avram Denburg, MD, staff oncologist and clinician-scientist, Hematology/Oncology, Hospital for Sick Children Panellists: All above, and Kirsten Efremov, patient partner 	Osgoode Ballroom East
10:30 am	11:00 am	Break 30 min All posters installed by 11:00 am.	Osgoode Ballroom West
11:00 am	12:00 noon	KEYNOTE SPEAKER Dr. Benjamin H. Kann, Harvard Medical School "A Picture is Worth a Thousand Data Points: Leveraging Al and Medical Imaging to Improve Cancer Care" Co-chairs: Dr. Jim Woodgett, TFRI, and Natalie A-K, patient partner	Osgoode Ballroom East
12:00 noon	1:00 pm	Lunch REGISTRATION CLOSED	Osgoode Ballroom West
1:00 pm	2:30 pm	PLENARY 2 Digital Health and Discovery Platform Use Case Demo Co-chairs: Drs. Natalie Szudy, DHDP/TFRI, Laszlo Radvanyi, DHDP/OICR, James Pereira and Dr. Denis Petitclerc, patient partners Part 1: DHDP Introduction/Demonstration Dr. Natalie Szudy, DHDP/TFRI, Adrian Thorogood, TFRI, Dr. Benjamin Haibe-Kains, PMCC/UHN, Dr. Karen Cranston, UHN Part 2: Speaker (Al and Precision Medicine) Dr. Michael Kolios, Toronto Metropolitan University "Predicting Cancer Treatment Response with Machine Learning Applied to Cancer Imaging: Techniques and Refinements" Part 3: Al Panel Jessica Wise Blackman, Vector Institute, Dr. Laurent Tillement, MILA, Dr. Karl Martin, Integrate.ai	Osgoode Ballroom East
2:30 pm	3:30 pm	 PLENARY 3 Emerging Leaders in Cancer Research Co-chairs: Dr. Ly Vu, Terry Fox Laboratory, BC Cancer, and Kathy Palmer, patient partner Speakers: Dr. Anastasia Tikhonova, PMCC "IRF5 Defines a New High-Risk Inflammatory T-Lineage Acute Lymphoblastic Leukemia Subtype" Dr. Bertrand Routy, CRCHUM "Novel Biomarkers of Cancer Immunotherapy from Gut to Lung Microbiome" Dr. Ana Nikolic, UofCalgary "Cell State and Epigenome Evolution in Recurrent Glioblastoma" Dr. Sushant Kumar, PMCC/UofT "Building Computational Toolboxes for Cancer Prevention and Precision Oncology" 	Osgoode Ballroom East
3:30 pm	4:00 pm	RAPID-FIRE PLENARY #1 (30 MIN) Chair: Dr. Rama Khokha, PMCC/UHN	Osgoode Ballroom East
4:00 pm	5:30 pm	POSTER SESSION #1 / LIGHT RECEPTION (90 MIN)	Sheraton Hall D & E
6:30 pm 7:00 pm	7:00 pm 9:00 pm	RECEPTION BANQUET DINNER	Sheraton Hall D Osgoode Ballroom West/Sheraton C

Saturday, May 25

START	END	EVENT	LOCATION
6:15 am	7:30 am	TERRY FOX EARLY MORNING RUN	Meet near escalators in Lobby. Depart from Lobby area via Queen St. Doors.
7:00 am	8:00 am	Breakfast	Osgoode Ballroom West
8:00 am	9:30 am	 PLENARY 4 At the Intersection of the Tumour Microenvironment and Cell Plasticity Co-chairs: Dr. Sonia del Rincon, McGill University, and Heather Hogan, patient partner Speakers: Dr. Marianne Koritzinsky, PMCC/UHN "The Role of Oxygen Sensing in Cancer Cell Plasticity" Dr. Julian Lum, Deeley Research Centre "The Spatial Metabolome Hubble Project to Decipher Tumour-Driven Immunosuppression (MetaboHUB)" 	Osgoode Ballroom East
9:30 am	10:00 am	RAPID-FIRE PLENARY #2 (30 MIN)	Osgoode Ballroom East
10:00 am	11.00 am	POSTER SESSION #2 / REFAK (60 MIN)	Sheraton Hall F
11:00 am	12:00 noon	KEYNOTE SPEAKER Dr. Rosalie C. Sears, Oregon Health and Science University "Opportunities and Challenges in the Management of Pancreatic Ductal Adenocarcinoma" Co-chairs: Dr. André Véillette, TFRI/MOHCCN/IRCM and Debbie Duclos, patient partner	Osgoode Ballroom East
12:00 noon	12:30 pm	GROUP PHOTOGRAPH (Instructions to be supplied)	ТВС
12:30 pm	1:30 pm	Lunch	Osgoode Ballroom West
1:30 pm	3:00 pm	 PLENARY 5 Tribute to Dr. Connie Eaves: Stem Cell Pioneer Co-chairs: Dr. Aly Karsan, BC Cancer, Dr. Susanna Tan, Stemcell Technologies Speakers: Dr. Peter Zandstra, UBC "Engineering Lymphoid Development for Off-the-Shelf Cellular Immunotherapies" Dr. Long Nguyen, PMCC/UHN "Dynamics and Plasticity of Human Breast Cancer Single Cell-Derived Clones" Dr. Kristin Hope, PMCC/UHN "Charting New Territory: Uncovering Post-Transcriptional Circuitries Governing Normal and Malignant Hematopoietic Stem Cells" 	Osgoode Ballroom East
		Patient Working Group Closed Session: The Patient Working Group will hold a member- only meeting during this time. Attendance will be in-person and virtual for these participants. Co-chairs: Dr. Nicole Beauchemin, MOHCCN Steering Committee, and Patient Working Group Chair, and Jessie Micholuk, TFRI/MOHCCN Program Manager.	Sheraton Hall B
3:00 pm	3:30 pm	Break	
3:15 pm	3:30 pm	Winners Announced for Rapid-Fire Talks, Poster Sessions and Patients' Choice Awards	Sheraton Hall D & E
3:30 pm	4:45 pm	PLENARY 6 Marathon of Hope Cancer Centres Network Data Sharing (60 min) Co-chairs: Adrian Thorogood, TFRI/MOHCCN, Dr. Lincoln Stein, OICR, and Melissa Coombs, patient partner Panellists: • Dr. Ian Watson, McGill University • Dr. Jennifer Chan, UofCalgary • Dr. Michael Brudno, PMCC/UHN • Darrin Park, patient partner MEETING WRAP-UP Dr. Jim Woodgett, TFRI	Osgoode Ballroom East

Sunday, May 26

START	END	EVENT	LOCATION
7:00 am	8:00 am	Breakfast	Osgoode Ballroom West
8:00 am	11:00 am	MOHCCN MEETING BY INVITATION ONLY Main Plenary	Sheraton Hall B

PLENARY 1: Marathon of Hope Cancer Centres Network: Patients, Populations and Equitable Health Systems

Friday, May 24

9:00 – 10:30 am / Osgoode Ballroom East / **Co-chairs: Dr. Isabel Serrano**, managing director, Marathon of Hope Cancer Centres Network, and **Jennifer Graham**, patient partner

Health care systems' use of genomic data to select treatment independent of cancer type represents a clinical paradigm shift. In Canada, access to precision oncology is highly variable because quality evidence of patient and population benefit is lacking. Generating evidence for precision oncology presents challenges, however. Evidence generation is hindered by a lack of representation of traditionally underserved groups; a minority of patients having known driver or actionable variants, making inference of benefit difficult; a dearth of integration of patients into the translational medicine pathway; and regulatory and reimbursement frameworks that are maladapted to innovations. This plenary discusses issues that relate to the current state when generating data and deliberating on evidence of patient value, effectiveness and cost-effectiveness for precision oncology.

Dr. Dean Regier, senior scientist, BC Cancer Research Institute, associate professor, UBC School of Population and Public Health, and associate director, UBC Academy of Translational Medicine

Dr. Yvonne Bombard, scientist, St. Michael's Hospital, Unity Health Toronto, associate professor and Canada Research Chair in genomics health services, University of Toronto

Deirdre Weymann, senior health economist, Cancer Control Research, BC Cancer, adjunct professor, Faculty of Health Sciences at Simon Fraser University and founding member of the MOHCCN Health Technology Assessment (HTA) Working Group

Dr. Avram Denburg, MD, staff oncologist and clinician-scientist, Hematology/Oncology, Hospital for Sick Children

PANELLISTS

All above, and Kirsten Efremov, patient partner

KEYNOTE SPEAKER: Dr. Benjamin H. Kann

Friday, May 24

11:00 am – 12:00 pm / Osgoode Ballroom East / **Co-Chairs: Dr. Jim Woodgett**, TFRI president and scientific director, and **Natalie A-K**, patient partner

"A Picture is Worth a Thousand Data Points: Leveraging AI and Medical Imaging to Improve Cancer Care"

Dr. Benjamin H. Kann MD, assistant professor, Harvard Medical School, principal investigator, Mass General Brigham Artificial Intelligence in Medicine (AIM) Program and clinical faculty, radiation oncology department at Dana-Farber Cancer Institute/Brigham and Women's Hospital

In this talk, Dr. Kann discusses how computers view images as data, and how various computational imaging strategies, including traditional radiomics and deep learning can be used to better inform cancer decision-making over the current standard of care. He describes the potential benefits of artificial intelligence (AI) in making the impractical, practical, and the impossible, possible. He describes his work in the development and validation of medical imaging-based algorithms for particular cancers along with ways to build generalizable algorithms in data-limited scenarios. Finally, he characterizes the current translational gap in clinical AI and opportunities to bridge this gap for effective clinical translation.

PLENARY 2: Digital Health and Discovery Platform Use Case Demo

Friday, May 24

1:00 – 2:30 pm / Osgoode Ballroom East / **Co-chairs: Drs. Natalie Szudy**, TFRI-DHDP managing director, **Laszlo Radvanyi**, president and scientific director, Ontario Institute for Cancer Research and independent chair, DHDP; and patient partners **James Pereira** and **Dr. Denis Petitclerc**

Part 1: DHDP Introduction/Demonstration

The Digital Health and Discovery Platform (DHDP) is a pan-Canadian initiative that combines Canadian expertise in artificial intelligence (AI) and precision medicine to improve health care for Canadians. Led by the Terry Fox Research Institute (TFRI), the Platform will be deployed at sites across Canada and minimizes risks to patient privacy through a federated model to support pan-Canadian research. In Part 1 there will be a demonstration of the Platform that will showcase data access, data discovery and federated learning.

SPEAKERS

Dr. Natalie Szudy, DHDP/TFRI

Adrian Thorogood, TFRI data governance manager

Dr. Benjamin Haibe-Kains, senior scientist, Princess Margaret Cancer Centre (PMCC), University Health Network, and professor, medical biophysics department, University of Toronto

Dr. Karen Cranston, team lead, CanDIG project, University Health Network (UHN) DATA

Part 2: Speaker (AI and Precision Medicine)

"Predicting Cancer Treatment Response with Machine Learning Applied to Cancer Imaging: Techniques and Refinements"

Dr. Michael Kolios, professor, Department of Physics, Toronto Metropolitan University, associate dean of research innovation and external partnerships, Faculty of Science and co-director, Institute for Biomedical Engineering, Science and Technology (iBEST)

As a distinguished researcher and innovator, Dr. Kolios' work focuses on the biomedical use of ultrasound and optics in diagnosis and therapy and he directs the Advanced Biomedical Ultrasound Imaging and Spectroscopy Laboratory at Toronto Metropolitan University.

Part 3: Panel Discussion: Spotlight on Al in Precision Medicine

The final part of this session includes a diversified panel who will discuss the use of AI to accelerate efforts in precision medicine. The panel will dive deep into AI, exploring the roles health care professionals and patients alike can contribute to its success. The discussion will also explore what role representation plays in the use of data within AI and machine learning.

PANELLISTS

Jessica Wise Blackman, director of health research operations at the Vector Institute

Dr. Laurent Tillement, director of partnerships, Al and Health at Mila-Quebec Al Institute

Karl Martin, chief technology officer (CTO) at integrate.ai

Friday, May 24

2:30 pm – 3:30 pm / Osgoode Ballroom East / **Co-chairs: Dr. Ly Vu**, scientist, Terry Fox Laboratory, BC Cancer, and assistant professor, pharmaceutical sciences, UBC, and **Kathy Palmer**, patient partner

Innovation is the force propelling research and often brings in new perspectives and findings that change our view of cancer as well as clinical practices in the treatment of diseases. In this plenary session, we will highlight four Terry Fox New Investigators whose research programs are at the forefront of cancer research. These range from new insights into the altered immune microenvironment in leukemia (Dr. Anastasia Tikhonova); identification and characterization of the extra- and intratumoural microbiomes and their roles in cancer immunotherapy in lung cancer (Dr. Bertrand Routy); defining novel epigenetic factors in tumour evolution in glioblastoma (Dr. Ana Nikolic) and the development of pioneering machine-learning methods to smartly unravel omics' data for cancer prevention and precision oncology (Dr. Sushant Kumar).

"IRF5 Defines a New High-Risk Inflammatory T-Lineage Acute Lymphoblastic Leukemia Subtype"

Dr. Anastasia Tikhonova, scientist, PMCC, and assistant professor, medical sciences, UofT

"Novel Biomarkers of Cancer Immunotherapy from Gut to Lung Microbiome"

Dr. Bertrand Routy, associate professor, hemato-oncology, University of Montreal (CHUM), and scientific director, CHUM Microbiome Centre, University of Montreal Research Centre (CRCHUM)

"Cell State and Epigenome Evolution in Recurrent Glioblastoma"

Dr. Ana Nikolic, neuropathologist, clinician-scientist and assistant professor, Department of Pathology and Lab Medicine and Biochemistry and Molecular Biology, University of Calgary

"Building Computational Toolboxes for Cancer Prevention and Precision Oncology"

Dr. Sushant Kumar, scientist, PMCC and assistant professor, Department of Medical Biophysics, UofT

PLENARY 4: At the Intersection of the Tumour Microenvironment and Cell Plasticity

Saturday, May 25

8:00 – 9:30 am / Osgoode Ballroom East / **Co-chairs: Dr. Sonia del Rincon**, principal investigator, Cancer Axis, Lady Davis Institute-Segal Cancer Centre, associate professor, Department of Oncology, McGill University, co-director, The Cancer Research Network (RRCancer), and **Heather Hogan**, patient partner

Tumours have been referred to as "dysfunctional organs," made up of cancer cells, but also tumour supportive cells such as endothelial cells, fibroblasts and immune cells. These "dysfunctional organs" can co-opt metabolic pathways, thrive under low oxygen conditions and acquire resistance to therapy. In the context of the tumour microenvironment, cancer cells and tumour supportive cells can switch their phenotype as the tumour progresses and resists therapy, thus it is said that there is cellular plasticity. The speakers in this session attack the clinical challenge of tumour cell plasticity from different perspectives. Dr. Marianne Koritzinsky will speak on the impact of hypoxia (poor oxygenation) in promoting cancer cell plasticity toward aggressive phenotypes, and Dr. Julian Lum will share some new work on how certain nutrients can constrain immune cell function. Together this session serves to highlight new avenues to harness different aspects of the tumour microenvironment to help fight cancer.

"The Role of Oxygen Sensing in Cancer Cell Plasticity"

Dr. Marianne Koritzinsky, senior scientist, PMCC, associate professor and director of research, Department of Radiation Oncology, with cross appointments to the Department of Medical Biophysics and the Institute of Medical Science, UofT

"The Spatial Metabolome Hubble Project to Decipher Tumour-Driven Immunosuppression (MetaboHUB)"

Dr. Julian Lum, professor, Department of Biochemistry and Microbiology, University of Victoria, and distinguished scientist, Deeley Research Centre, BC Cancer Research Institute

KEYNOTE SPEAKER: Dr. Rosalie C. Sears

Saturday, May 25

11:00 am – 12:00 pm / Osgoode Ballroom East / **Co-chairs: Dr. André Véillette**, TFRI-MOHCCN executive director and director, Molecular Oncology Research Unit, IRCM, and **Debbie Duclos**, patient partner



"Opportunities and Challenges in the Management of Pancreatic Ductal Adenocarcinoma"

Dr. Rosalie C. Sears, PhD, full professor, Department of Molecular and Medical Genetics, Oregon Health & Science University and co-director, Brenden-Colson Center for Pancreatic Care

Pancreatic ductal carcinoma (PDAC) is projected to become the second leading cause of cancer-related deaths in the United States by 2030, with a dismal five-year survival rate of 13 per cent. The majority of patients (85 per cent) have advanced disease at the time of diagnosis, with a five-year survival rate of less than five per cent. For patients with localized disease that can be surgically treated, the five-year survival rate approaches 70 per cent for resected tumours, and recent analysis of 2012 SEER data found that five-year survival for stage 1A PDAC reached 83.7 per cent. These striking statistics highlight the need for early detection strategies for PDAC. For the majority of patients with advanced disease, the standard-of-care treatment includes combination chemotherapy that only extends life by months. These chemotherapy regimens are difficult to tolerate and the frailty of patients further limits their use. Recent advances in small molecule design have brought novel inhibitors to the previously "undruggable" KRAS, which is an oncogenic driver in roughly 90 per cent of PDAC. Unfortunately, resistance mechanisms are anticipated to be a major concern with these new inhibitors. Dr. Sears' centre is tackling this deadly disease by focusing on novel approaches for earlier detection and interception, precision combinatorial therapeutics that address resistance mechanisms and treatment strategies to support patient resiliency and alleviate cachexia. Indeed, this three-pronged approach, across collaborative cancer centre networks, has the greatest promise to improve outcomes for PDAC patients, and all patients burdened with the devastation of cancer.

PLENARY 5: Tribute to Dr. Connie Eaves: Stem Cell Pioneer

Saturday, May 25

1:30 – 3:00 pm / Osgoode Ballroom East / **Co-chairs: Dr. Aly Karsan**, clinician-scientist, BC Cancer, professor of pathology, UBC, and **Dr. Susanna Tan**, scientist, R&D, STEMCELL Technologies



Connie Eaves was a force of nature. It always seemed that she was in multiple places at the same time. Rigour, quantification and precision were her hallmarks. She lived by the credo that to move our scientific understanding forward, one had to quantify the phenomenon being studied. Her approach and generosity of spirit resulted in the training of many outstanding scientists in stem cell biology.

In this session of three speakers, two are former trainees, and the third was highly influenced by Dr. Eaves' work in hematopoietic stem cell biology. Dr. Peter Zandstra's research focuses on understanding how functional tissue forms from stem cells, and how this information can be applied to the design of novel cell therapies. Dr. Long Nguyen studies clonal heterogeneity in human breast cancer to understand how rare malignant clones contribute to disease progression and treatment resistance. Dr. Kristin Hope's work is designed to understand the molecular circuitry that controls normal and malignant blood stem cell function to facilitate the design of novel stem cell-directed regenerative and anti-leukemic therapies.

SHORT VIDEO PRESENTATION

"Engineering Lymphoid Development for Off-the-Shelf Cellular Immunotherapies"

Dr. Peter Zandstra, professor, Michael Smith Laboratories, director, School of Biomedical Engineering, UBC, professor, School of Biomedical Engineering

"Dynamics and Plasticity of Human Breast Cancer Single Cell-Derived Clones"

Dr. Long Nguyen, scientist and staff medical oncologist, Breast Site Group, PMCC, and assistant professor, Departments of Medicine and Medical Biophysics, University of Toronto

"Charting New Territory: Uncovering Post-Transcriptional Circuitries Governing Normal and Malignant Hematopoietic Stem Cells"

Dr. Kristin Hope, Senior Scientist, PMCC/UHN, Ontario Institute for Cancer Research Investigator

Marathon of Hope Cancer Centres Network Patient Working Group (Closed Session)

Saturday, May 25

1:30 – 3:00 pm / Sheraton Hall B / **Co-chairs: Dr. Nicole Beauchemin**, MOHCCN Steering Committee, and chair, Patient Working Group, and **Jessie Micholuk**, TFRI-MOHCCN program manager

The Patient Working Group will hold a member-only meeting during this time. Attendance will be in-person and virtual for these participants.

Saturday, May 25

3:30 – 4:45 pm / Osgoode Ballroom East / **Co-chairs: Adrian Thorogood**, TFRI data governance manager, **Dr. Lincoln Stein**, OICR, and **Melissa Coombs**, patient partner

The Marathon of Hope Cancer Centres Network (MOHCCN) promotes the uptake of advanced technologies like whole-genome sequencing across Canada and has made significant progress toward generating a Gold Cohort of 15,000 patient profiles consisting of rich genomic and clinical data. The Network is founded on core commitments to share this valuable data resource with Network researchers and also with the broader scientific community. Such data sharing can accelerate scientific research and innovation, improve scientific rigour and promote collaboration, so as to ultimately improve precision medicine for cancer patients.

This panel discussion will explore the scientific and innovation opportunities opened by MOHCCN's efforts to facilitate data sharing. It will also explore the potential challenges and risks, and how these can be addressed through innovative policies, practices and platforms. The panel will bring together diverse perspectives from patient representatives, cancer researchers and technologists, to develop a shared vision of what it means to share data in an effective and responsible way, for the benefit of all.

PANELLISTS

Dr. Ian Watson, investigator, Research Institute of the McGill University Health Centre (MUHC), and associate professor, McGill University

Dr. Jennifer Chan, director, Arnie Charbonneau Cancer Institute, UofCalgary and Alberta Health Services, consortium lead, MOHCCN Prairie Cancer Research Consortium, principal investigator, Alberta Cancer Research Biobank

Dr. Mike Brudno, professor, Department of Computer Science, UofT, chief data scientist, UHN and scientific director, HPC4Health Darrin Park, patient partner



Natalie A-K

Natalie A-K has been an advocate for cancer patients since she was diagnosed with de novo, triple-positive breast cancer in 2019. She is a patient advocate with Dense Breasts Canada and a Terry Fox Ambassador. Natalie completed a BSc, though she altered course to compete as a snowboard racer for Team Canada. She then pursued graduate-level studies in business and, over her two-decade long career, broke down cross-organizational silos to implement customer-centric strategies. She was a sessional Bachelor of Business (BBA) instructor at three universities and holds Project Management Professional, Certified Public Accountant and Certified Management Accountant designations. Halfway through her MSc from HEC Paris she was diagnosed with cancer. Her ongoing palliative treatments forced Natalie to quit her career and studies. In May 2024, Natalie joined the Marathon of Hope Cancer Centre's Network (MOHCCN) Network Council and the MOHCCN's Patient Working Group as a co-chair of "Focus Group C", which is tasked with building a patient/public precision oncology education program.



Jessica Wise Blackman

Jessica Wise Blackman, MHA, MBA, has developed expertise in health, research and technology with over 15 years of experience in hospitals and research institutes in the areas of strategic planning, business development and program development. A leader known for successfully navigating change, she has collaborated with stakeholders at local, national and international levels. Jessica holds an MBA and MHA from Dalhousie University, with accolades including the Frank H. Sobey Award for Excellence in Business Studies. Currently serving as the director of health research operations at the Vector Institute, she oversees contract negotiations, develops agreement frameworks and helps lay the foundation for data access in order to enable discovery in machine learning artificial intelligence. In her previous role as manager of business operations and strategy at the University Health Network, Jessica spearheaded business development activities aligned with the organization's values. During her tenure at the Princess Margaret Cancer Centre, she played a pivotal role in driving strategic initiatives as senior manager of cancer strategy stewardship.



Yvonne Bombard

Dr. Yvonne Bombard is an associate professor and Canada Research Chair in genomics health services at the University of Toronto. As a scientist at St. Michael's Hospital, Unity Health Toronto, she directs the Genomics Health Services Research Program. Her work evaluates the impact of genomic technologies on patients and healthcare systems, develops digital tools for genomic medicine and engages patients in health technology assessment. Dr. Bombard is actively involved in international policy advisory committees and serves on the boards of the American Society of Human Genetics, Canadian Institutes of Health Research (CIHR)Institute of Genetics and Exactis. She has received numerous awards, including a CIHR Foundation grant, Rising Star and Presidential awards from the Canadian Agency for Drugs and Technologies in Health (CADTH), CIHR, University of Toronto and the Canadian Cancer Society for her impactful research and policy contributions, for which she has been inducted into the Royal Society of Canada's College of New Scholars.



Mike Brudno

Dr. Michael Brudno is a professor in the Department of Computer Science at the University of Toronto, as well as the chief data scientist at the University Health Network (UHN). He is also a faculty member at the Vector Institute for Artificial Intelligence and the scientific director of HPC4Health, a private computing cloud for Ontario hospitals. After receiving a BA in computer science and history at UC Berkeley, Michael completed his PhD in computer science at Stanford University. His work focuses on the capture of structured phenotypic data from clinical encounters, using both refined user interfaces, and mining of unstructured data (based on machine learning methodology), and the analysis of omics data (genome, transcriptome, epigenome) in the context of the structured patient phenotypes, mostly for rare diseases. His overall research goal is to enable the seamless automated analysis of patient omics data based on automatically captured information from a clinical encounter, thus streamlining clinical workflows and enabling faster and better treatments.



Jennifer Chan

Dr. Jennifer Chan is the director of the Arnie Charbonneau Cancer Institute at the University of Calgary and Alberta Health Services, and leads the Marathon of Hope Cancer Centres Network's Prairie Cancer Research Consortium. Dr. Chan's research uses patient samples and cancer models to understand how tumours evolve in response to therapy, and she tests new therapeutic approaches for brain cancers. As a pathologist-scientist, Dr. Chan's ability to traverse between the lab and the clinic has enabled her to bring together investigators from across the cancer research continuum broadly. A strong advocate for collaboration and for sharing of samples and data, she currently directs the Clark Smith Tumour Bank at the University of Calgary, is the principal investigator of the Alberta Cancer Research Biobank, serves on the Canadian Tissue Repository Network's Executive Committee and is a member of the Correlative Sciences and Tumour Biology Committee of the Canadian Cancer Trials Group. She also leads the clinical data repository for the national Precision Oncology for Young People project.



Melissa Coombs

Melissa Coombs, St. John's, Newfoundland, was diagnosed with acute lymphoblastic leukemia T-cell on September 30, 2016. The protocol that she followed was the Dana Farber Pediatric protocol and she has been in remission since November 2016 and finished treatment in November 2018. In 2019, she was sponsored by the Terry Fox Research Institute to attend the Canadian Cancer Research Conference (CCRC) in Ottawa as a patient advocate. The CCRC Patient Involvement Program led her to become a patient research advocate and opened doors to a number of opportunities and collaborations. Melissa never misses an opportunity to speak to anyone about the importance of cancer research, especially about how it will improve the quality of life for patients, caregivers and survivors. She sits on numerous committees and boards, but her greatest joy comes from meeting with researchers, particularly early-career researchers. She also enjoys meeting fellow patients and sharing her knowledge and contacts with them as many hands make light work.



Karen Cranston

Dr. Karen Cranston is a computational biologist with a longstanding passion for open science. She has spent a good part of her career trying to make science more efficient and reproducible through better software, coding skills and data management practices. She joined University Health Network (UHN) in 2021 and is the team lead for the CanDIG project at UHN.



Sonia del Rincon

Dr. Sonia del Rincon received her PhD from McGill University and then completed her post-doctoral training at the Sanford Burnham Prebys Medical Discovery Institute (California). Since 2018, she has been principal investigator in the Cancer Axis at the Lady Davis Institute-Segal Cancer Centre. In 2022, she was promoted to associate professor in the Department of Oncology, McGill University. In 2023, she accepted to co-direct The Cancer Research Network (RRCancer), which seeks to promote fundamental and clinical multidisciplinary research by serving as a hub for biobanking efforts within Quebec. Her team seeks to understand the role of specific signal transduction pathways in metastatic disease, with an emphasis on breast cancer and melanoma. They use the PhenoCycler-Fusion system, a highly multiplexed, single-cell imaging technology, to characterize the murine and human tumour immune microenvironment in response to therapy.



Avram Denburg

Dr. Avram Denburg is a staff oncologist and clinician-scientist in the Division of Hematology/Oncology at the Hospital for Sick Children in Toronto. He has a Master of Science in health policy, planning and financing from the London School of Economics and a PhD in health policy from McMaster University. Dr. Denburg's research centres on the analysis and strengthening of childhood cancer care systems, with specific focus on issues related to pharmaceutical policy and drug access for children in Canada and internationally. His lab at SickKids Research Institute is engaged in projects on cancer drug access in various health system contexts globally. Current priority areas of research include: development of novel approaches for value-based assessment of pediatric health technologies, including precision cancer therapies; incorporation of societal values and public preferences into health technology assessment and pharmaceutical policy; comparative analysis of policy approaches to cancer therapy regulation and reimbursement; and analysis of cancer drug availability, cost and access dynamics in a range of low- and middle-income countries.



Debbie Duclos

Debbie Duclos, Campbellville, Ontario, is a registered nurse, the founder of Shaping Minds in Healthcare Inc. and a member of the Marathon of Hope Cancer Centres Network (MOHCCN) Patient Working Group. For more than 30 years Debbie has combined her patient-focused clinical expertise with a well-developed business acumen. Her diverse health care experience was formed through progressive positions in acute care, medical device sales and training, managerial roles and clinician training. Her academic training focused on health care delivery programs, nursing frameworks and staff development. At the age of 42, Debbie was diagnosed with breast cancer and, shortly after her diagnosis, was referred to the Odette Cancer Centre at Sunnybrook Hospital for treatment of an aggressive form of Stage 2 breast cancer and a tumour as big as a lemon. Important information about Debbie's tumour was added to a databank that is helping their team develop the best treatment plans for future patients.



Kirsten Efremov

Kirsten Efremov, Toronto, Ontario, is a childhood and young adult cancer survivor having had cancer three times before the age of 30, being diagnosed first in 1998 with acute lymphoblastic leukemia. Kirsten is a dedicated patient partner with the Canadian Cancer Society, University Health Network, Canadian Cancer Research Alliance and the Marathon of Hope Cancer Centres Network. Kirsten has completed her Bachelor of Science in medical sciences and Master's in public health. Her research interests lie particularly in the cancer journey for children, adolescents and young adults, including equity and access to healthcare, and long-term follow-up and late effects along with palliative care. As both a pediatric and AYA survivor, Kirsten feels she has great advocacy skills and a powerful story to inspire others and spark change. In her spare time, she enjoys hiking, travelling and tap dancing.



Jennifer Graham

Jennifer's involvement today as a member of the Marathon of Hope Cancer Centres Network (MOHCCN) Patient Working Group (PWG) really began 12 years ago with a breast cancer diagnosis following a self-exam, physical exam, mammogram, then biopsy. Treatment for the early-stage invasive ductile carcinoma included unilateral mastectomy with immediate reconstruction, follow up surgeries, chemotherapy, tamoxifen and counselling. Through CancerCare Manitoba's Breast and Gyne Cancer Centre of Hope post-treatment and peer support program, she was exposed to a community of professionals, survivors and those caring for them. According to Jennifer, meeting other survivors on community projects like Woman Redefined, and the Chemo Savvy dragon boat team showed her people thriving in spite of the disease through connection with others. Becoming a peer supporter allowed her to help women in her own family going through breast cancer. The MOHCCN's PWG is an opportunity for her to connect with other patients and give feedback to researchers.



Benjamin Haibe-Kains

Dr. Benjamin Haibe-Kains is a senior scientist at the Princess Margaret Cancer Centre (PMCC), University Health Network, and professor in the Department of Medical Biophysics, University of Toronto. Dr. Haibe-Kains earned his PhD in bioinformatics at the Université Libre de Bruxelles (Belgium). Supported by a Fulbright Award, he did his post-doctoral fellowship at the Dana-Farber Cancer Institute and Harvard School of Public Health. He is now the Canada Research Chair in computational pharmacogenomics and the scientific director of the Cancer Digital Intelligence Program at PMCC. Dr. Haibe-Kains' research focuses on the integration of high-throughput data from various sources to simultaneously analyze multiple facets of carcinogenesis. Dr. Haibe-Kains' team analyzes large-scale radiological and (pharmaco-)genomic datasets to develop new prognostic and predictive models to improve cancer care.



Heather Hogan

Heather Hogan (BA, BEd and MEd) is a retired teacher and school administrator from Woodstock, New Brunswick. Diagnosed with stage 3A non-small cell adenocarcinoma lung cancer in 2012, Heather knows firsthand the importance of access to potential life-saving treatments, early detection and research, advocacy and education. She has worked with other patients, caregivers and stakeholders to create a community for those who have been affected by lung cancer. Heather is currently a patient partner with the Marathon of Hope Cancer Centres Network and the Lung Health Foundation, and a member of the Beatrice Hunter Cancer Research Institute's Management Advisory Council and its Research Committee.



Kristin Hope

Dr. Kristin Hope carried out her doctoral training with Dr. John Dick, University of Toronto, followed by postdoctoral studies with Dr. Guy Sauvageau, Université de Montreal. She began her independent research program at McMaster University in 2010 and joined the University Health Network and Princess Margaret Cancer Centre in 2020 where she is a senior scientist. An associate professor in the Department of Medical Biophysics at the University of Toronto, she holds an Ontario Institute for Cancer Research Investigator Award and is a Medicine by Design Investigator.



Benjamin H. Kann

Dr. Benjamin H. Kann, MD, is an assistant professor at Harvard Medical School, principal investigator within the Mass General Brigham Artificial Intelligence in Medicine (AIM) Program and a clinical faculty member, radiation oncology department, at Dana-Farber Cancer Institute/Brigham and Women's Hospital. He is a graduate of Tufts University School of Engineering with degrees in electrical and biomedical engineering. He received his MD from the Icahn School of Medicine at Mount Sinai and completed residency in radiation oncology at Yale School of Medicine. He is board-certified in radiation oncology and clinical informatics. He leads a computational imaging lab focused on the development and application of machine learning and deep neural networks for cancer imaging analysis and the development of digital biomarkers to guide clinical decision-making and improve care for people with cancer. He is interested in the use of artificial intelligence and cancer imaging to develop clinical decision-making tools that advance personalized cancer care and can be effectively translated into the clinic.



Aly Karsan

Dr. Aly Karsan is a clinician-scientist at BC Cancer, professor of pathology at UBC and Tier 1 Canada Research Chair in myeloid cancers. His current research aims to understand the post-transcriptional mechanisms of resistance and relapse in myeloid cancers. His lab uses various omic, *in vitro* and *in vivo* models, with a focus on single cell approaches, to understand normal and leukemic stem cell function. His clinical interest centres on developing genomic methodologies and improving automation and quality assurance in clinical genomics. In 2010 he established the first clinically accredited next-generation sequencing lab in Canada, and one of the first in the world, to deliver clinical genomic results. He has worked with BC Cancer, the Provincial Health Services Authority and government to bring new genomic assays into the clinical realm. He is a member of several international consortia including the International Working Group for Prognosis in Myelodysplastic Syndromes, and he represents the Canadian Cancer Trials Group as the co-chair/study champion of the National Cancer Institute Myelomatch clinical trials.



Rama Khokha

Dr. Rama Khokha is a senior scientist at the Princess Margaret Cancer Centre (PMCC) and professor in the Department of Medical Biophysics, University of Toronto. She received her MSc from Delhi University (India), PhD from Western University and was awarded von Humboldt Fellowship for post-doctoral training at EMBL (Germany). She began her independent program at the London Regional Cancer Centre, and moved to Princess Margaret Cancer Centre, where she was the vice-chair biology, medical biophysics program, and interim director of PMCC. Her lab studies tissue homeostasis and adult stem cell niches. Her work was recognized by the Robert L Noble Prize from the Canadian Cancer Society in 2014. She is an elected Fellow of the Royal Society of Canada and currently holds a Tier 1 Canada Research Chair.



Michael Kolios

Dr. Michael Kolios is a professor in the Department of Physics, Toronto Metropolitan University and the associate dean of research innovation and external partnerships in the Faculty of Science. He is co-director of the Institute for Biomedical Engineering, Science and Technology (iBEST) and was a Canada Research Chair in biomedical applications of ultrasound (2004–14). His work focuses on the biomedical use of ultrasound and optics in diagnosis and therapy, and he directs the Advanced Biomedical Ultrasound Imaging and Spectroscopy Laboratory, exploring the interaction of ultrasound and light with biological materials for imaging and therapy. He leads many projects focusing on optical and ultrasound methods to characterize tissues and diseases, including machine learning methods for analyzing biomedical images and data. He has published over 200 journal publications with an h-index of 51. He received the 2016 American Institute of Ultrasound in Medicine Joseph H. Holmes Basic Science Pioneer Award and the 2023 IEEE Carl Hellmuth Hertz Ultrasonics Award.



Marianne Koritzinsky

Dr. Marianne Koritzinsky has a PhD from the University of Oslo (Norway) and completed post-doctoral training at the University of Maastricht (The Netherlands). She is a senior scientist at the Princess Margaret Cancer Centre, associate professor and director of research in the Department of Radiation Oncology, with cross appointments to the Department of Medical Biophysics and the Institute of Medical Science, University of Toronto. She holds the Weekend to End Breast Cancer Chair in Breast Cancer Research. The aim of her research program is to increase our understanding of molecular and cellular responses to hypoxia, altered metabolism and redox homeostasis in the tumour microenvironment, with the ultimate goal of targeting these responses to improve patient outcomes. Her research is supported by the Canadian Institutes of Health Research and the National Sciences and Engineering Research Council, and she co-leads a Terry Fox New Frontiers Program Project Grant.



Julian Lum

Dr. Julian J. Lum is a professor of biochemistry and microbiology, at the University of Victoria, and a distinguished scientist with BC Cancer. He graduated with a PhD in immunology from the University of Ottawa, then trained for five years at the University of Pennsylvania in the field of cancer biology, with special emphasis on tumour metabolism. In 2008, Dr. Lum returned to Canada and joined the Deeley Research Centre in Victoria where his current research interest focuses on the relationship between metabolism and its impact on immune responses in ovarian cancer. His lab published one of the first studies delineating the metabolomes of T-cells in human cancer. The broader goal of his lab is to identify potential metabolic targets that can be used to enhance cell-based immunotherapy. Dr. Lum directs the Metabolomics Consortium BC (Metabo-BC) and leads a Terry Fox New Frontiers Program Project Grant to uncover novel tumour-immune interactions with high-resolution spatial metabolite imaging.



Karl Martin

Karl Martin is the chief technology officer at integrate.ai, a company that builds data science tools and federated data infrastructure to enable privacy-safe data science and machine learning workloads across siloed, sensitive data. Integrate.ai is deployed across many industries, but with a specific emphasis on powering use cases in health care and financial services. Previously, Karl was the co-founder and CEO at Nymi, which makes biometric wearable devices. He has a PhD in electrical and computer engineering from the University of Toronto.



Michael Mazza

Michael Mazza is executive director at Terry Fox Foundation and has formerly held senior executive positions at Scarborough Health Network Foundation, Canadian Cancer Society and Renascent Foundation. Michael has a deep passion for healthcare philanthropy and is inspired by Terry Fox's bold vision as much today as in 1980 to achieve a world without cancer through radical collaboration in research and fundraising. Like Terry, Michael believes everybody has a role to play from community-based supporters at Terry Fox Runs to large philanthropists. He also believes that advances in technology and science will drive a renaissance in cancer research that will ensure that we do not have to accept cancer as an inevitable threat, but instead, significantly improve diagnosis, treatment and outcomes for cancer patients and their families.



Long Nguyen

Dr. Long Nguyen is a scientist and staff medical oncologist in the Breast Site Group at Princess Margaret Cancer Centre and is an assistant professor at the University of Toronto in the Departments of Medicine and Medical Biophysics. His research laboratory is focused on studying clonal heterogeneity in human breast cancer to understand how rare malignant clones contribute to disease progression and treatment resistance. He completed his MD/PhD in experimental medicine at the University of British Columbia with Dr. Connie Eaves on the topic of normal and malignant mammary stem cell biology. He trained in internal medicine and specialized in medical oncology at the University of Toronto. He then pursued a clinical/research post-doctoral fellowship in functional breast cancer genomics with Dr. Carlos Caldas at the University of Cambridge (United Kingdom) for which he received both a Translational Research Fellowship from the European Society for Medical Oncology, and a Young Investigator Award from the American Society of Clinical Oncology.



Ana Nikolic

Dr. Ana Nikolic is a neuropathologist and clinician-scientist at the University of Calgary where she is an assistant professor in the pathology and lab medicine and biochemistry and molecular biology department. She is a recipient of the 2022 Marathon of Hope Cancer Centres Network Clinician-Scientist Award. Her research focuses on improving our understanding of high-grade glioma, with a focus on adult glioblastoma, by applying emerging epigenetics and genomics technologies to explore the relationships between cell states and cell fates in this disease.



Kathy Palmer

Kathy is a three-year pancreatic cancer survivor (diagnosed stage 2B in late 2020). Now retired from her last professional role as city auditor for the City of Calgary, she enjoys "joie de vivre" with her husband in Grand Bend, Ontario. She is actively involved with Canadian Cancer Society, the Marathon of Hope Cancer Centres Network (MOHCCN) Patient Working Group, is a PSC research grant reviewer and provides peer support for recently diagnosed pancreatic patients and their families.



Darrin Park

Darrin Park, 56, is a husband, father of two, retired junior high teacher, life member of the Kinsmen Club of Edmonton, run organizer for the Terry Fox Run in Edmonton, member of the Marathon of Hope Cancer Centres Network Patient Working Group and community volunteer. Darrin was diagnosed with primary central nervous system lymphoma of the T-cell at age 44. He was told he had two weeks to live without treatment and if he made it through treatment (which was highly unlikely), he could expect to live 16 months. Thanks to the efforts of the Terry Fox Foundation and Terry Fox Research Institute, Darrin still has two spots that light up, but he is thriving today!



James Pereira

James Pereira was born in Bombay, India, and migrated to Canada in 1995. James has an undergraduate degree in zoology and biochemistry and a graduate degree in biochemistry and molecular biology. He worked in toxicology research and taught undergraduate programs. He began working with the Canadian Cancer Society in 2018 as a volunteer driver for its Wheels of Hope program, and his research engagement started as a patient/ survivor/caregiver (PSC) reviewer for Action grants in September 2021. Since then, he's helped develop Health Equity Grants as a program advisor. and has also worked on reviewer panels for the last two and a half years. James volunteers with the Marathon of Hope Cancer Centres Network (MOHCCN) as part of the Patient Working Group, and works in the arts industry, providing subscription sales and fundraising services to arts organizations.



Denis Petitclerc

Denis Petitclerc earned his PhD in animal physiology/endocrinology from Michigan State University and holds a Master's of Business Administration from Sherbrooke University. Married to Angie, the love of his life, he is the proud father of Kristen, Nicolas and Michael. During his career, he was a researcher, an entrepreneur and business owner, and an executive in the private and public sectors. Now retired, he volunteers for several not-for-profit organizations. He is passionate about life sciences, agriculture, protecting our lakes, forests and wetlands and fighting cancer. Thanks to awareness and early detection, he has survived three cancers so far: colon, skin and prostate. To promote prostate cancer awareness among hockey players and support fundraising, he has been the instigator of « Les Soirées du hockey Procure » in Quebec. Always active for better health, he enjoys his favourite hobbies (hockey, golf, scuba diving and fishing) with friends, and landscaping and gardening with Angie.



Laszlo Radvanyi

Dr. Laszlo Radvanyi is the president and scientific director of the Ontario Institute for Cancer Research (OICR), bringing over 30 years of oncology research background in academia and leadership experience in international pharma and biotech. He is also a professor in the immunology department at the University of Toronto, where he performs research on the expression and role of "non-coding regions" including retro-elements/ retrotransposons, human endogenous retroviruses and other repeat sequences in anti-tumour immunity and in driving early tumour initiation and progression. Dr. Radvanyi joined OICR from EMD Serono (Merck KGaA), where he was senior vice president global head of the Immuno-Oncology Translational Innovation Platform and senior scientific advisor for immunology and immunotherapy. Prior to this, he was a professor in the Department of Melanoma Medical Oncology at the University of Texas, MD Anderson Cancer Center in Houston., and was instrumental in launching lovance Therapeutics , a pioneering company commercializing cell therapies for melanoma and other cancers.



Dean Regier

Dr. Dean Regier is a senior scientist at the BC Cancer Research Institute, associate professor at the School of Population and Public Health, University of British Columbia (UBC), and associate director of the Academy of Translational Medicine, Faculty of Medicine, UBC. Over the past 15 years, Dr. Regier's research has examined the economics of precision medicine, focusing on generating real-world evidence for sustainable healthcare. He has presented his work at leading institutions, with invitations from Genomics England, the US National Academies of Sciences, Harvard and Oxford. He is principal investigator for the Canadian Network for Learning Healthcare Systems and Cost-Effective 'Omics Innovation (CLEO), funded by Genome Canada and Genome British Columbia. Dr. Regier is an associate editor at the journal Value in Health and serves as the economist for BC's Drug Benefit Council.



Bertrand Routy

Dr. Bertrand Routy (MD, PhD) is a clinician-scientist and associate professor in the Department of Hemato-Oncology at the CHUM Research Centre (CRCHUM), University of Montreal. Upon his recruitment to the CRCHUM in 2018 after completing his PhD with Prof. Laurence Zitvogel, Dr. Routy quickly established himself as the scientific director of the CHUM Microbiome Centre where he began his work to develop novel microbiomebased therapeutics in oncology. His work contributed to the discovery of the gut microbiome as a novel prognostic biomarker for immune checkpoint inhibitors (ICI) in various cancers. He characterized the deleterious impact of antibiotic-related gut dysbiosis on ICI outcomes, which led to pivotal changes in clinical oncology practice. Moreover, he demonstrated that modulation of the microbiome by fecal microbiota transplantation, probiotics and prebiotic supplementation had the potential to circumvent ICI resistance. His team currently leads several microbiota-centred trials in oncology (ranging from Phase I to Phase II), with the aim of decreasing primary ICI resistance.



Rosalie C. Sears

Dr. Rosalie Sears received her bachelor's degree in biology from Reed College (Oregon), received her PhD in cell biology from Vanderbilt University ,(Tennessee) and conducted her postdoctoral studies at Duke University in the genetics department. Dr. Sears is a full professor in the Department of Molecular and Medical Genetics at Oregon Health & Science University. She is co-director of the Brenden-Colson Center for Pancreatic Care and the inaugural Krista L. Lake Chair in Cancer Research. Dr. Sears is also a senior member in the Knight Cancer Institute. Dr. Sears' research expertise is in cancer systems biology focused on dynamic regulation of cellular signaling pathways that control tumour cell phenotype and tumour-stromal cell cross-talk underlying tumour fitness. Her lab uses complex patient-derived 3D bioprinted tumour models, human tumour xenografts and genetically engineered mouse tumour models to reveal underlying tumour biology and mechanisms of drug resistance.



Isabel Serrano

Dr. Isabel Serrano serves as the managing director for the Marathon of Hope Cancer Centres Network (MOHCCN) program at the Terry Fox Research Institute. With a profound dedication to cancer research and a background in molecular biology and cancer cell signaling and driven by a commitment to make tangible advancements in the fight against cancer, Isabel transitioned into the realm of clinical oncology trials where she's proven adept leadership in steering cross-functional teams toward common goals. In 2021, Isabel embraced a pivotal role within the Terry Fox Research Institute, inspired by the enduring values and dreams of Terry Fox from his very first step in his Marathon of Hope. Isabel plays a crucial role in managing the operations and research initiatives of the MOHCCN and advancing collaborative efforts that bring together the strategic vision of the Network, which is linking cancer hospitals and research centres in the country to accelerate the implementation of precision medicine for cancer for all of Canada's populations.



Natalie Szudy

Dr. Natalie Szudy is the managing director for the Digital Health and Discovery Platform. She is an experienced analytical and collaborative leader passionate about supporting human-centered health care innovations. Dr. Szudy has extensive experience leading the development, management and evaluation of pan-Canadian programs that connect patients, clinical research, industry and technology partners. She holds a PhD from Western University and certifications in ethics, design thinking, change management and knowledge translation.



Susanna Tan

Susanna completed her BSc and MSc in pharmacology and toxicology at the University of Toronto, before receiving her PhD from the University of British Columbia in 2023. Under the supervision of Dr. Connie Eaves, her thesis and postdoctoral work focused on developing and characterizing a de novo model of triple-negative human breast cancer. She discovered that the forced expression of several oncogenes in normal human primary breast epithelial cells rapidly and reproducibly produced human tumours in transplanted immunodeficient mice. Susanna recently joined STEMCELL Technologies in 2024 as a scientist working on cancer-related projects on the reproductive tissues team.



Adrian Thorogood

Adrian Thorogood (BA and Sc, BCL and LLB, LLM) serves as the data governance manager for the Terry Fox Research Institute. In this role he supports the development of data sharing policy and ethical and legal data governance for the Marathon of Hope Cancer Centres Network and the Digital Health and Discovery Platform. His research focuses on how genomic sequencing platforms, information and networking technologies, open science practices and patient empowerment movements are disrupting research and health care. Adrian has assisted numerous cross-border data sharing initiatives with ethical and legal issues, including the EU 1+ Million Genomes Initiative and the Global Alliance for Genomics and Health (GA4GH). Previously, Adrian has held senior researcher positions at the Luxembourg Centre for Systems Biomedicine at the University of Luxembourg, and the Centre of Genomics and Policy at McGill University. Adrian holds a joint common law / civil law degree from McGill University and completed his Master of Laws at the University of Toronto.



Anastasia Tikhonova

Dr. Anastasia Tikhonova completed her dissertation research in the laboratory of Dr. Alfred Singer at the National Cancer Institute, as part of the NIH-University of Pennsylvania Graduate Partnership in Immunology. There, she became interested in how microenvironmental factors dictate cell fate choices. Dr. Tikhonova continued her training in the laboratory of Dr. lannis Aifantis (New York University Medical School), where she identified niche factors that govern hematopoietic stem cell differentiation and leukemia progression. In 2020 she joined Princess Margaret Cancer Centre as a scientist and as an assistant professor in the Deptartment of Medical Biophysics at the University of Toronto. Dr. Tikhonova has received a number of awards for her work, and she holds a Tier 2 Canadian Research Chair in stem cell niche biology. She is also committed to addressing gender bias within research and is a co-chair of Gender Equity Committee at Princess Margaret Cancer Centre.



Laurent Tillement

Laurent Tillement is the director of partnerships, AI and health at Mila-Quebec AI Institute. He is a Doctor of Pharmacy (Paris, France) and holds a PhD in biochemistry and molecular biology (Georgetown University, Washington DC, United States). He has several years of experience in academia and the pharmaceutical industry in France, the US and Canada. He was trained as a life sciences researcher and involved in the different processes of drug development, from exploratory to clinical research, with a focus on the positioning and impact of innovations in pharmaceutical processes. Laurent is representing Mila in the life sciences ecosystem to establish close relationships with stakeholders, to instigate partnership opportunities and to develop research collaborations.



André Veillette

Dr. André Veillette is the executive director of the Marathon of Hope Cancer Centres Network (MOHCCN). He is a world-recognized immunologist and medical oncologist interested in signal transduction mechanisms in the immune system. Over the past three decades, he has identified and characterized numerous intracellular molecules and receptors that play a crucial role in normal immune regulation. A number of these molecules are directly or indirectly involved the pathogenesis of leukemias, lymphomas and other malignancies. They have also been linked to the development of immunodeficiencies and auto-immunity. These proteins are potential targets for therapeutic immunoregulation in the treatment of cancer, auto-immune diseases and viral infections. Dr. Veillette uses state-of-the-art genetic, molecular, biochemical and cellular approaches to study these molecules. His work has resulted in numerous publications in top scientific journals, and in the awarding of several prizes and prestigious grants.



Ly Vu

Dr. Vu is a Tier 2 Canada Research Chair in RNA biology in hematological malignancies. Dr. Vu is a scientist at the Terry Fox Laboratory, BC Cancer and an assistant professor in the pharmaceutical sciences Faculty at University of British Columbia (UBC). Dr. Vu is originally from Vietnam and holds a Bachelor of Science in biology from Vietnam National University. Dr. Vu completed both her PhD and post-doctoral training at Memorial Sloan Kettering Cancer Center, NYC, US. At BC Cancer, Dr. Vu's laboratory aims to understand control of stem cells and pathogenesis of hematological malignancies with a focus on RNA-centric mechanisms including non-coding RNAs and RNA modifications. The ultimate goal is to develop innovative therapeutic approaches for treatment of leukemia and other cancers.



lan Watson

Dr. Ian Watson is a member of the Goodman Cancer Institute (GCI), an investigator at the Research Institute of the McGill University Health Centre (MUHC) and an associate professor in the Department of Biochemistry at McGill University. He is a Canada Research Chair II in functional genomics of melanoma, the co-chair for the Melanoma Disease Working Group for the Canadian Cancer Trials Group (CCTG) and the former co-chair for The Cancer Genome Atlas (TCGA) melanoma project. In 2018, he co-led a successful Terry Fox Research Institute (TFRI) Marathon of Hope Cancer Centre Network (MOHCCN) pilot project that brought together investigators from seven research institutes in Montreal to study mechanisms of immune therapy response mechanisms in melanoma. His lab utilizes an inter-disciplinary approach combining molecular characterization of melanomas and circulating immune cells, functional genomics and bioinformatic approaches.



Deirdre Weymann

Deirdre Weymann is a senior health economist in the Department of Cancer Control Research at BC Cancer, an adjunct professor in the Faculty of Health Sciences at Simon Fraser University and a founding member of the MOHCCN Health Technology Assessment Working Group. Deirdre's research is advancing real-world evidence and life-cycle health technology assessment for healthcare decision-making.



Jim Woodgett

Jim Woodgett, PhD, is a cancer researcher at the Lunenfeld-Tanenbaum Research Institute in Toronto where he was previously director of research (2005–2021). He was appointed President and Scientific Director of TFRI in 2021. He particularly enjoys Program Project Grant site visits and designed funding programs that promote collaboration between Canada's excellent community of researchers and clinicians.



Peter Zandstra

Dr. Peter Zandstra focuses his work on the progression of regenerative medicine and immunotherapy. His education includes a BEng in chemical engineering from McGill University, a PhD in chemical engineering and biotechnology from the University of British Columbia and a post-doctoral fellowship in bioengineering from MIT. Dr. Zandstra's research, which incorporates engineering design principles, computational modeling and stem cell biology, is geared towards understanding cell fate control mechanisms and developing new therapeutic strategies for diseases such as cancer and auto-immunity. His lab has produced 172 publications, garnered nearly 22,000 citations and developed commercially applicable technologies for cell and gene therapies. Recognized with over 30 awards, including as a Member of the Order of Canada, Dr. Zandstra's influence is seen in his students and postdoctoral fellows who have achieved success in various sectors. Beyond his academic contributions, he co-founded the Centre for Commercialization of Regenerative Medicine (CCRM), Medicine by Design (MbD) and helped establish UBC's School of Biomedical Engineering

Bio for Lincoln Stein unavailable.

Rapid-Fire Talks to be held in Osgoode Ballroom East and the Poster Sessions take place in Sheraton Hall E.

The following posters will be presented at TFRI's 10th Scientific Meeting. Poster and Rapid-Fire Plenary winners will be announced on Saturday, May 25, at 3:15 pm in Sheraton Hall D and E.

All abstracts appear in our online Abstracts Book (located on our website). See the corresponding page and poster number within this book to view the full submissions. Not all posters are eligible for awards. This year both TFRI and MOHCCN trainee abstracts (talks and posters) will be judged together. Only MOHCCN trainee posters will be judged by members of the Patient Working Group in this new category.

RAPID-FIRE PLENARY SELECTION COMMITTEE

Drs. Rama Khokha (Chair), Jim Woodgett, Sonia del Rincon, Christopher Paige, Laura Evgin, Stephen Lam, Scott Bratman, Sorana Morrissy, Ana Nikolic

POSTER JUDGES

Drs. Rama Khokha (Chair), Sheela Abraham, Lilliana Attisano, Sylvie Clairefond, Gerardo Ferbeyre, Shane Harding, Marianne Koritzinsky, Ben Lok, Hanne Ostergaard, Teresa Purzner, Amber Simpson, Julie St-Pierre, Anastasia Tikhonova, Michael Underhill, Yemin Wang, Gang Zheng

MARATHON OF HOPE CANCER CENTRE NETWORK PATIENTS' CHOICE AWARD JUDGES

Natalie A-K, Debbie Duclos, Kirsten Efremov, Jennifer Graham, Heather Hogan, Sarah Hunt, Anne Marie Ireland, Kathy Palmer, James Pereira, Dr. Denis Petitclerc, Beverley Riediger, Kathleen Smith, Patricia Turnbull, Dr. Christine Wu

Friday, May 24 / 3:30 – 5:30 p.m.

Rapid Fire and Poster Session #1 / LIGHT RECEPTION

This will be a 30-minute rapid-fire session followed by 90 minutes for poster viewing and a light reception.

Felix Kommoss, Kiera Lee, Shiksha Dutta, Abhijith Kuttanamkuzhi, Lesley Hill, Mona Teng, Andrew Garven, Sumaiyah Rehman

Saturday, May 25 / 9:30 – 11:00 a.m.

Rapid Fire and Poster Session #2 / BREAK

This will be a 30-minute rapid-fire session followed by 60 minutes for break and viewing posters.

losifina Fotiadou, Shaocheng Wu, Gillian Savage, Khadjah Al Shankati, Gibran Edun, Holly Lee, Edward Chen, Rong Ma

PAGE & POSTER		PRESENTER	TITLE
1		HAMIDREZA AFTABI	RESTORATION OF MASTICATION FUNCTIONALITY POST-MANDIBULAR RECONSTRUCTION: INSIGHTS FROM DYNAMIC COMPUTER MODELLING
2		ALYSSA APILAN	EXAMINING THE THERAPEUTIC POTENTIAL OF PORPHYRIN-LIPID NANOPARTICLES FOR HEPATOCELLULAR CARCINOMA
3		MARYAM ASADI	THE USE OF ARTIFICIAL INTELLIGENCE-BASED HISTOPATHOLOGY IMAGE ANALYSIS TO IDENTIFY A NOVEL SUBTYPE OF ENDOMETRIAL CANCER WITH UNFAVOURABLE OUTCOME
4		ALEXANDER BAHCHELI	ULTRA-DEEP SEQUENCING TO IDENTIFY DRIVERS OF GLIOBLASTOMA RECURRENCE AND EVOLUTION
5		ROHAN BIRK	VIRTUAL INTERACTIVE PATIENT FOR OPTIMAL MANDIBULAR RECONSTRUCTION
6		BIANCA BOSSÉ	CHARACTERIZATION OF ESCAPE MECHANISMS FROM FOLFIRINOX-INDUCED SENESCENCE OF PANCREATIC TUMOUR CELLS
7		JULYANNE BRASSARD	AN ANTIBODY-DRUG CONJUGATE TARGETING A TUMOUR-SPECIFIC GLYCOEPITOPE OF PODOCALYXIN FOR THE TREATMENT OF P53 ABNORMAL ENDOMETRIAL CANCER
8	RF2	EDWARD CHEN	IMMUNE MODULATION IN HIPPO PATHWAY REGULATED BREAST TUMOUR MICROENVIRONMENTS
9		MATHEW CORMIER	INTERFERON-SIGNALLING NEIGHBOURHOODS WITHIN HUMAN CANCERS
10		SIMONA DAMIANI	MOLECULAR TRIAGE OF SUSPECTED NEUROENDOCRINE LUNG CANCER LESIONS THROUGH MICRORNA- BASED LIQUID BIOPSY
11	RF1	SHIKSHA DUTTA	EXPLORING THE ROLE OF THE ACETYLTRANSFERASE TIP60 (KAT5) DURING DNA DAMAGE-INDUCED CELL FATE DECISIONS
12	RF2	GIBRAN EDUN	IRF5 DEFINES A NEW HIGH-RISK INFLAMMATORY T-LINEAGE ACUTE LYMPHOBLASTIC LEUKEMIA SUBTYPE
13		AHMED ELBASSIOUNY	CHRONIC HYPOXIA DRIVES EPIGENETIC REPROGRAMMING AND ACQUISITION OF AGGRESSIVE BEHAVIOUR IN EWING SARCOMA

RAPID-FIRE TALKS (RF) / ATTENDED POSTER SESSIONS

Rapid-Fire Talks to be held in Osgoode Ballroom East and the Poster Sessions take place in Sheraton Hall E.

PAGE & POSTER		PRESENTER	TITLE
14	RF2	IOSIFINA FOTIADOU	EVALUATING INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN 3 (IGFBP3) AS A NOVEL DRUG TARGET IN HEAD AND NECK SQUAMOUS CELL CARCINOMA (HNSCC)
15		DEBAJEET GHOSH	INVESTIGATION OF HLTF LOSS IN PATHOGENESIS OF ACUTE MYELOID LEUKEMIA
16		LINGWEI (STEPHANIE) HAN	INVESTIGATING THE ROLE OF CHD4 IN THE MTOR/AR TRANSCRIPTIONAL CROSSTALK IN PROSTATE CANCER
17		RACHEL HAUSMAN	INCREASED SENSITIVITY TO FERROPTOSIS AND EMT IN BREAST CANCER CELLS SURVIVING APOPTOSIS
18	RF1	LESLEY HILL	CELL-OF-ORIGIN EPIGENOME UNDERLIES SS18-SSX-MEDIATED TRANSFORMATION
19		SAMANTHA HOLMES	SEX DIFFERENCES PRIMARILY ALTER PRIMITIVE HAEMATOPOIETIC PROGENITORS IN WILDTYPE AND GENETICALLY MODIFIED MICE
20		YONGJIA HU	DIFFERENCE IN PULMONARY MICROBIOME BETWEEN NON-SMALL CELL LUNG CANCER PATIENTS AND CANCER-FREE PATIENTS
21		THEO HUSBY	COMPARING IN VIVO PORPHYSOME QUANTIFICATION USING DIFFUSE OPTICAL SPECTROSCOPY AND TI MAPPING
22		ALPAMYS ISSANOV	RISK PREDICTION MODELS FOR LUNG CANCER IN PEOPLE WHO HAVE NEVER SMOKED: A SYSTEMATIC REVIEW
23		DEOK HYUN JANG	PRE-TREATMENT PREDICTION OF BREAST CANCER RESPONSE TO NEOADJUVANT CHEMOTHERAPY USING MR AND CT RADIOMICS
24		ZHEN JIN	UNCOVERING THE ROLE OF LONG NON-CODING RNA LNC-35682/PAN3-AS1 IN ACUTE MYELOID LEUKEMIA
25		KRISTIAN KILAND	BREATH BIOMARKER DISCOVERY IN LUNG CANCER
26		KIM KOBAR	TP53 R217H AND R242H MUTANT ZEBRAFISH DISPLAY DYSFUNCTIONAL P53 HALLMARKS AND RECAPITULATE LFS PHENOTYPES
27	RF1	FELIX KOMMOSS	MULTI-OMIC ANALYSIS IDENTIFIES DEVELOPMENTAL HIERARCHIES OF RENAL SARCOMAGENESIS IN A TRANSGENIC MOUSE MODEL OF DICER1 SYNDROME
28		NIKA KOOSHKI ZAMANI	GENERATION OF CHIMERIC MVA VIRUS FOR GLIOBLASTOMA TREATMENT
29		NILAKSHI KULATHUNGA	ELUCIDATING THE ROLE OF HIGH MOBILITY GROUP BOX 3 (HMGB3) IN TUMOUR PROGRESSION AND RESPONSE TO RADIATION THERAPY IN PANCREATIC NEUROENDOCRINE TUMOURS
30	RF1	ABHIJITH KUTTANAMKUZHI	PROFILING LINEAGE-DEFINED CELL CYCLE DYNAMICS AND DNA DAMAGE RESPONSE IN PRIMARY BREAST EPITHELIAL CULTURES
31		GEORGIO MANSOUR NEHMO	EDITING NK CELLS TO OVERCOME THE ADENOSINE PATHWAY DEPLOYED BY SENESCENT CELLS
32		SPENCER MARTIN	IMMUNE INFILTRATION IS ASSOCIATED WITH IMPROVED SURVIVAL IN P53 ABNORMAL ENDOMETRIAL CARCINOMA
33		AMIR MOSLEMI	HEAD AND NECK CANCER OUTCOME TREATMENT PREDICTION USING FEATURE LEVEL FUSION AND MACHINE LEARNING: MRI, CT AND QUANTITATIVE ULTRASOUND IMAGING MODALITIES FUSION
34		SHAGHAYEGH NOURUZI	ASCL1-DRIVEN EPIGENETIC AND METABOLOMICS PROGRAMS IN NEUROENDOCRINE PROSTATE CANCER
35		NIRVANA NURSIMULU	UNVEILING METABOLIC REWIRING ASSOCIATED WITH RECURRENCE IN DUCTAL CARCINOMA IN SITU
36		OLADAPO ONABOTE	UNCOVERING MOLECULAR FEATURES OF HIGH-RISK BREAST TISSUE TO PREVENT BREAST CANCER
37		DIANE PAN	VIRUTAL PREPLANNING OF MANDIBULAR RECONSTRUCTION: UPDATE ON A PHASE II/III RANDOMIZED CONTROL TRIAL
38		KARAN PAREKH	LEVERAGING LIQUID BIOPSY CIRCULATING TUMOUR DNA (CTDNA) ANALYSIS TO PREDICT TREATMENT RESPONSE IN POOR-PROGNOSIS METASTATIC PROSTATE CANCER PATIENTS
39	RF1	SUMAIYAH REHMAN	DECIPHERING THE ROLE OF DRUG TOLERANT PERSISTERS IN CANCER RELAPSE

RAPID-FIRE TALKS (RF) / ATTENDED POSTER SESSIONS

Rapid-Fire Talks to be held in Osgoode Ballroom East and the Poster Sessions take place in Sheraton Hall E.

PAGE & POSTER		PRESENTER	TITLE
40		FRANCESCO RUSO	TARGETING THE YAP-DEPENDENT REVIVAL STEM CELL TO IMPROVE COLORECTAL CANCER THERAPIES
41		RIFAT SAJID	GLOBAL PROTEOMICS REVEALS BIDIRECTIONAL INTEGRIN SIGNALLING AS A DRIVER OF GLIOBLASTOMA INVASION
42	RF2	GILLIAN SAVAGE	INVESTIGATING CAR T CELL EFFICACY AND PHENOTYPE ACROSS DISTINCT EXTRANODAL SITES OF DIFFUSE LARGE B CELL LYMPHOMAS
43		GABRIELA SEGAT	MYCN IS AN ESSENTIAL IMMATURE T-ALL ONCOGENIC DRIVER MARKED BY BROAD H3K4ME3
44		CATHERINE SONG	DLG5 AS A NUAK2 INTERACTOR AND REGULATOR OF THE HIPPO SIGNALLING PATHWAY
45		MAHA TAGELDEIN	CELL-FREE DNA FRAGMENTOMICS FOR CANCER DETECTION IN LI-FRAUMENI SYNDROME
46	RF1	MONA TENG	CIRCULAR RMST COOPERATES WITH LINEAGE-DRIVING TRANSCRIPTION FACTORS TO GOVERN NEUROENDOCRINE TRANSDIFFERENTIATION
47		SYDNEY VALLATI	COMBINING ONCOLYTIC VIRUS AND TUMOUR-INFILTRATING LYMPHOCYTE (TIL) THERAPIES FOR THE TREATMENT OF COLORECTAL CANCER
48		MATTHEW WAAS	DROPLET BASED PROTEOMICS REVEALS CD36 AS A MARKER FOR PROGENITORS IN MAMMARY BASAL EPITHELIUM
49		PEIYAO WANG	UNDERSTANDING THE IMPACT OF AIR POLLUTION ON THE GENOMIC LANDSCAPE OF LUNG CANCER IN NEVER SMOKERS
50		JASPER WONG	PLASMABLASTIC LYMPHOMA (PBL) DOES NOT RELY ON B-CELL RECEPTOR SIGNALLING FOR SURVIVAL
51	RF2	SHAOCHENG WU	INTEGRATED SINGLE CELL ANALYSIS REVEALS CO-EVOLUTION OF MALIGNANT B CELLS AND THE TUMOUR MICROENVIRONMENT IN TRANSFORMED FOLLICULAR LYMPHOMA
52		XIN XU	THE TRANSCRIPTIONAL AND FUNCTIONAL LANDSCAPE OF N6-METHYLADENOSINE IN LOCALIZED PRIMARY PROSTATE CANCER
53		FUMI YOKOTE	ULTRA MINIMALLY INVASIVE TRANSBRONCHIAL NANOPARTICLE ENABLED THERANOSTICS AND IMAGE GUIDANCE FOR PERIPHERAL LUNG CANCER
54		BOWEN ZHANG	AMINO ACID METABOLISM DISTINCTIONS IN MAMMARY EPITHELIAL CELL TYPES
55		DIGITAL HEALTH AND DISCOVERY PLATFORM (DHDP)	
56		KHANH LINH TRAN	INTRAOPERATIVE REAL-TIME IMAGE-GUIDED FIBULAR HARVEST AND MANDIBULAR RECONSTRUCTION: A FEASIBILITY STUDY ON CADAVERIC SPECIMENS
57		STEPHANIE XIE	CD83 MARKS ACUTE INFLAMMATORY STRESS ACTIVATION IN HUMAN HEMATOPOIETIC STEM CELLS AND ITS DEPLETION DAMPENS INFLAMMATION RESPONSE

Posters 55-57 not judged.

RAPID-FIRE TALKS (RF) / ATTENDED POSTER SESSIONS

Rapid-Fire Talks to be held in Osgoode Ballroom East and the Poster Sessions take place in Sheraton Hall E.

PAGE & POSTER		PRESENTER	TITLE
58		AKINOLA ALAFIATAYO	ESTABLISHING A COMPREHENSIVE LOGISTICS AND SEQUENCING FRAMEWORK FOR MICROBIOME ANALYSIS IN COLORECTAL CANCER PATIENTS IN NEWFOUNDLAND
59	RF2	KHADJAH AL SHANKATI	COMPREHENSIVE WHOLE GENOME AND TRANSCRIPTOME ANALYSIS OF ADVANCED SOLID TUMOUR PATIENTS TREATED WITH IMMUNE CHECKPOINT INHIBITOR THERAPY IN THE PAN-CANCER COHORTS FROM THE MARATHON OF HOPE CANCER CENTRES NETWORK STUDY (MOHCCN)
60	RF1	ANDREW GARVEN	OUTLINING THE ROLE OF HYPOXIA IN BLADDER CANCER DEDIFFERENTIATION AND PROGRESSION
61		CATIA GASPAR	IMMUNE PROFILING BY BULK RNA-SEQ AND MULTIPLEXED IMMUNOHISTOCHEMISTRY IMAGING ACROSS MULTIPLE CANCER TYPES
62		NOÉMIE LEBLAY	A HIGH-RISK SUBGROUP MULTIPLE MYELOMA CLASSIFICATION BASED ON THE DETECTION OF PR MINOR SUBCLONES
63	RF2	HOLLY LEE	MECHANISMS OF RESISTANCE TO T-CELL IMMUNOTHERAPIES IN MULTIPLE MYELOMA
64	RF1	KIERA LEE	HETEROGENEITY IN CHROMATIN STATES DEFINE A DISEASE SPECTRUM IN SYNOVIAL SARCOMA
65	RF2	RONG MA	MULTI-OMIC ANALYSIS OF LONGITUDINAL LIQUID BIOPSIES FROM MELANOMA PATIENTS UNDERGOING IMMUNE OR TARGETED THERAPY
66		FRANZISKA MEY	UTILIZING AN IPSC-DERIVED BONE MARROW-LIKE ORGANOID MODEL TO INVESTIGATE DRUG RESISTANCE MECHANISMS IN ACUTE MYELOID LEUKEMIA
67		PRASANTA PAUL	UNDERSTANDING THE MOLECULAR BASIS OF IMMUNE DYSREGULATION IN CHRONIC LYMPHOCYTIC LEUKEMIA (CLL)
68		JORGE PINZON MEJIA	DEFINING THE SPATIAL ORGANIZATION OF IMMUNE INFILTRATES IN COLORECTAL CANCER AND ITS RELATIONSHIP WITH TUMOUR SUBTYPES
69		ALISA POULLET	SYMPTOM BURDEN IN 784 PATIENTS WITH MYELOPROLIFERATIVE NEOPLASMS: CORRELATION WITH INFLAMMATORY/GENETIC BIOMARKERS AND REDUCED SURVIVAL
70		SAMIRA RAHIMIRAD	SEQUENCING OF PRIMARY TUMOURS AND CELL-FREE TUMOUR DNAS REVEALS GENOMIC ALTERATIONS RELATED TO AGGRESSIVE PROSTATE CANCER
71		CARALYN REISLE	ARTIFICIAL INTELLIGENCE FOR EFFICIENT, HIGH FIDELITY VARIANT INTERPRETATION IN PRECISION ONCOLOGY
72		TAYAH SOMMER	DEFINING DIFFERENCES IN KYNURENINE METABOLISM ACROSS BREAST CANCER TUMOURS
73		HYOJIN SONG	PREDICTING RESPONSE TO IMMUNE CHECKPOINT BLOCKADE IN SOFT TISSUE SARCOMA
74		MARIE-CLAIRE WASSON	PROFILING THE TRANSCRIPTOME TO IDENTIFY NOVEL GENETIC MEDIATORS OF BREAST TUMOUR IMMUNE SUPPRESSION
75		FARNOOSH ABBAS- AGHABABAZADEH	INTEGRATIVE BIOMARKER DISCOVERY IN IMMUNOTHERAPY AND DEVELOPMENT OF AN INFORMATIC TOOL
76		RILEY ARSENEAU	INTEGRATING CANCER GENETICS AND IMMUNOLOGY TO INFORM PRECISION THERAPIES FOR PANCREATIC CANCER
77		CARYN GEADY	INTEGRATING GENOMIC AND MEDICAL IMAGING DATA FOR PRECISION ONCOLOGY
78		MICHAEL GEUENICH	HIGH-THROUGHPUT DRUG SCREENING IN PANCREATIC DUCTAL ADENOCARCINOMA
79		PETER HER	INTEGRATING GENOMIC AND MEDICAL IMAGING DATA FOR PRECISION ONCOLOGY
80		EMMANUELLE ROUSSELLE	CHARACTERIZING THE MOLECULAR LANDSCAPE OF NON-V600 BRAF MUTANT COLORECTAL CANCER: TOWARD THE IDENTIFICATION OF NOVEL THERAPEUTIC VULNERABILITIES

Posters 75–80 not judged.

GLOSSARY

BCCA	BC Cancer Agency	NIH	National Institutes of Health
BCCRC	BC Cancer Research Centre	NSERC	Natural Sciences and Engineering Research Council
CBCF	Canadian Breast Cancer Foundation		
ccs	Canadian Cancer Society	OCI	Ontario Cancer Institute
CCSRI	Canadian Cancer Society Research Institute	OHRI	Ottawa Hospital Research Institute
CFI	Canadian Foundation for Innovation	OICR	Ontario Institute for Cancer Research
CHUM	Centre hospitalier de l'Université de Montréal	PMCC	Princess Margaret Cancer Centre
CHUQ	Centre hospitalier de l'Université de Quebéc	Twice	
CIHR	Canadian Institutes of Health Research	SFU	Simon Fraser University
CPAC	Canadian Partnership Against Cancer	TEE	Terry Fox Foundation
CRCHUM	Centre de recherche du Centre hospitalier de l'Université de Montréal	ТВСС	Tom Baker Cancer Centre, Calgary
DHDP	Digital Health and Discovery Platform	UBC	University of British Columbia
	International Cancer Concere Concertium	UdeM	Université de Montréal
ICGC	International Cancer Genome Consortium	UHN	University Health Network
IWK	Izaak Walton Killam	UofC	University of Calgary
MOHCCN	Marathon of Hope Cancer Centres Network	UofM	University of Manitoba
MSFHR	Michael Smith Foundation for Health Research	UofT	University of Toronto
MSGSC	Michael Smith Genome Sciences Centre	VGH	Vancouver General Hospital
		VPC	Vancouver Prostate Centre

RUN MAP & HOTEL FLOOR PLANS



TERRY FOX EARLY MORNING RUN / WALK ROUTE

Saturday, May 25, 2024

5km and 1km routes offered!

This year's Early Morning Run, led by Terry's younger brother Darrell Fox, goes to Queen's Quay and along the waterfront to the new Terry Fox memorial installed by the Legacy Art Project and Toronto's City Council. It's 2.5km out to the memorial and back! There's also a 1km route with a turnaround halfway to return to the hotel.

Time: Meet at 6:15 am

Where: By the Escalators/Queen St. hotel entrance on Lobby Level for a group photo

Departure time: 6:30 am sharp

Maps of route supplied. Please obey all road signs and signals, there are several crosswalks/ lights to navigate. Be safe! Hot breakfast to follow at the hotel.

Meeting information:

tfri.ca/10th-tfri-scientific-meeting





28 | <u>Return to Table of Contents</u>

The Terry Fox Research Institute continues to grow from coast to coast

BC AB SK MB

TFRI is an Institute without walls linking the capabilities of 132 leading cancer care and research institutes, hospitals and universities organized through six regional "nodes" and numerous Marathon of Hope Cancer Centres Network partners and Digital Health and Discovery members.

NATIONAL PARTNERS

Amplitude Ventures Capital Management Inc Canadian Partnership Against Cancer Canadian Tumour Repository Network (CTRnet) Genome Canada Health Canada Illumina Canada Illumina Canada Innovation, Science and Economic Development Medtech Canada Mitacs Myeloma Canada Pancreas Cancer Canada Foundation The C17 Council The Terry Fox Foundation

BRITISH COLUMBIA

BC Cancer Canada's Michael Smith Genome Sciences Centre Centre for Drug Research and Development David and Dorothy Lam Foundation Deeley Research Centre Genome BC Northern Health Authority Simon Fraser University Team Finn Foundation University of British Columbia University of Northern British Columbia University of Victoria Vancouver Coastal Health Research Institute Vancouver General Hospital . Vancouver Island University Vancouver Prostate Centre

ALBERTA

Alberta Health Services AMII - Alberta Machine Intelligence Institute Cancer Research Institute of Northern Alberta Clark H. Smith Brain Tumour Centre Cross Cancer Institute

HEADQUARTERS

675 West 10th Ave Vancouver / BC / Canada / V5Z 1L3 604.675.8222 / info@tfri.ca / **www.tfri.ca**

Genome Alberta Tom Baker Cancer Centre University of Alberta University of Calgary

MANITOBA

CancerCare Manitoba University of Manitoba

NEW BRUNSWICK

Atlantic Cancer Research Institute Horizon Health Network New Brunswick Health Research Foundation New Brunswick Innovation Foundation University of New Brunswick Vitalité Health Network

NEWFOUNDLAND AND LABRADOR

Department of Industry, Energy and Technology, Government of Newfoundland Eastern Health Memorial University of Newfoundland

NOVA SCOTIA

Beatrice Hunter Cancer Research Institute Dalhousie University IWK Health Centre Nova Scotia Health Authority QEII Health Sciences Centre Foundation Research Nova Scotia

ONTARIO

BioCanRx Bitnobi Brock University Children's Hospital of Eastern Ontario Research Institute Integrate.ai Juravinski Cancer Centre Lakehead University Lawson Health Research Institute London Health Sciences Centre Lunenfeld-Tanenbaum Research Institute McMaster University Mount Sinai Hospital

ON

Ontario Institute for Cancer Research Ottawa Hospital Research Institute Princess Margaret Cancer Centre Queen's Cancer Research Institute Queen's University Queen's University Canadian Cancer Trials Group Sinai Health System Southlake Regional Health Centre St. Michael's Hospital Sunnybrook Health Sciences Centre Sunnybrook Research Institute The Hospital for Sick Children Toronto General Hospital Research Institute Toronto Metropolitan University Unity Health Toronto University Health Network University of Guelph University of Ottawa University of Toronto University of Western Ontario Vector Institute Women's College Hospital

QUEBEC

Centre de Recherche du Centre hospitalier de l'Université saite-Justine Centre de Recherche Hôpital Maisonneuve-Rosemont Centre hospitalier de l'université de Montréal Centre hospitalier universitaire de Québec-Université Laval Centre Quebecois d'Innovation en Biotechnologies CHU-Sainte-Justine CHUM et CRCHUM CHUS - CIUSS

CQDM

OC

École Polytechnique and TransMedTech Institute Fonds de recherche du Quebec FROS Genome Québec Hôpital du Sacré-Coeur de Montréal Hôpital Maisonneuve-Rosemont Institut Universitaire de Cardiologie et de Pneumologie de Québec Institute for Research in Immunology and Cancer IVADO lewish General Hospital L'Institut de Recherches Cliniques de Montreal McGill University McGill University Health Centre McGill University Health Centre (MUHC) - RI **McPeakSirois** MEDTEQ+ Mila Montreal InVivo Oncopole Optina Diagnostics Inc. Procure Prompt Quebec Breast Cancer Foundation Rosalind & Morris Goodman Cancer Research Centre Université de Montréal Université de Sherbrooke

PRINCE EDWARD ISLAND

University of Prince Edward Island

SASKATCHEWAN

Saskatchewan Cancer Agency Saskatchewan Health Authority Saskatchewan Health Research Foundation University of Saskatchewan

OTHER

Pacific Biosciences

O Digital Health & Discovery Platform Digital + Hôpital Découverte • Platefori



THE TERRY FOX RESEARCH INSTITUTE



MARATHON OF HOPE CANCER CENTRE RÉSEAU DES CENTRES D'ONCOLORIE DU MARATHON I