## IGTxImNO 2025 Symposium Program at a Glance

	Wednesday, March 5, 2025		
	Meeting Room 1	Meeting Room 2	
08:00 - 09:00	Registration, Poste	•	
09:00 - 09:15	Opening Remarks		
09:15 - 10:00	Keynote I Pediatric Imaging – What We Need (and Don't Need) Al for Brigit Ertl-Wagner, The Hospital for Sick Children		
10:00 - 10:15	Bre	eak	
10:15 - 11:15	Oral 1 Cancer 1	Oral 2 MRI & Neuroimaging	
11:15 - 11:45	Pitch 1 Cancer	Pitch 2 MRI & Neuroimaging	
11:45 - 12:45	Poster Viewing (Pitch Sessions 1 & 2 presenting)		
12:45 - 13:00	Lunch Pickup		
13:00 - 13:45	Panel Session Lessons Learned From First-Time Founders and Leaders		
13:45 - 14:00	Lunch Wrap-up		
14:00 - 15:00	Oral 3 Device, Systems, and Robotic Development	Oral 4 Deep Learning/Machine Learning Methodology 1	
15:00 - 15:30	Pitch 3 Device, Systems, and Robotic Development	Pitch 4 Deep Learning/Machine Learning Methodology 1	
15:30 - 16:30	Poster Viewing (Pitch Sessions 3 & 4 presenting)		
16:30 - 17:30	Oral 5 General 1	Oral 6 Image Guided Intervention and Surgery 1	
17:30 - 17:45	Break		
17:45 - 19:00	Reception/Social Event		

Ī	Thursday, March 6, 2025		
	Meeting Room 1	Meeting Room 2	
08:00 - 09:00	Registration, Poster Setup, Breakfast		
09:00 - 10:00	Oral 7 Deep Learning/Machine Learning Methodology 2	Oral 8 Image Guided Intervention and Surgery 2	
10:00 - 10:30	Pitch 5 Deep Learning/Machine Learning Methodology 2	Pitch 6 Image Guided Intervention and Surgery	
10:30 - 11:30	Poster Viewing (Pitch Sessions 5 & 6 presenting)		
11:30 - 12:30	Oral 9 Cancer 2	Oral 10 Cardiac, Lung, and Musculoskeletal Imaging	
12:30 - 12:45	Lunch Pickup		
12:45 - 13:30	Panel Session Career Pathways for Graduates: Academic and Industry Advice on Talent Development		
13:30 - 13:45	Lunch Wrap-up		
13:45 - 14:45	Oral 11 Optical Imaging & Ultrasound Imaging	Oral 12 General 2	
14:45 - 15:15	Pitch 7 Optical Imaging & Ultrasound Imaging	Pitch 8 General	
15:15 - 16:15	Poster Viewing (Pitch Sessions 7 & 8 presenting)		
16:15 - 17:00	Keynote II The Abundant Promise of Ultrasound in Neurosurgery Amir Manbachi, Johns Hopkins University		
17:00 - 17:30	Closing and Awards		

## **IGTxImNO Joint Symposium 2025 Detailed Program**

## Wednesday, March 5, 2025

	Registration, Poster Setup Opening Remarks Dafna Sussman and Ali Tavallaei, Toronto Metropolitan University	Meeting Rooms 1&
	Keynote Session I	Meeting Rooms 1&
	Pediatric Imaging – What We Need (and Don't Need) AI for Brigit Ertl-Wagner, The Hospital for Sick Children	•
10:00 - 10:15		
10:15 - 11:15	Oral 1	Oral 2
	Cancer 1	MRI & Neuroimaging
	Meeting Room 1	Meeting Room 2
	O1-1: The Role of Flow and Microbubble-Induced Shear Stress in Endothelial Cell Immunobiology	O2-1: Fetoplacental Blood-Mimicking Phantoms for Optimizing Susceptibility Weighted Imaging
	Elahe Memari, Concordia University	Dylan Young, Toronto Metropolitan University
	O1-2: Using Computed Tomography perfusion (CTP) to Assess	O2-2: A Pulse Sequence for Single Breath Hold Saturation
	Changes in the Contrast Distribution Volume in Pancreatic	Transfer Imaging of the Entire Gravid Abdomen
	Cancer Patients: a Potential Biomarker for Patient Response to	
	Standard-of-care Therapy	
	Jin-Young Bang, Western University	Siddharth Sadanand, Toronto Metropolitan University
	O1-3: Advancing Treatment of Skeletal Metastases: Radiation-	O2-3: Laterally Oscillating Trajectory for Undersampling Slices
	Induced Photodynamic Therapy (RadioPDT) with Novel	(LOTUS)
	Nanoparticles	Manual Cathon at hear Wastern Haller with
	Azin Mirzajavadkhan, University of Toronto	Mayuri Sothynathan, Western University  O2-4: The Effect of MRI RF Coil Selection on Spatial Trends in
	O1-4: Differences in Radiologist Search Patterns when Assessing mpMRI for Prostate Cancer	T1 Relaxation
	Ryan Au, Western University	Sandra Alexander, Toronto Metropolitan University
1:15 - 11:45	Pitch 1	Pitch 2
	Cancer	MRI & Neuroimaging
	Meeting Room 1	Meeting Room 2
	P1-1: Automatic Gleason Grading for Better Prognosis	P2-1: Suppression of Lipid Contamination in Whole Brain Slice
	Prediction	Magnetic Resonance Spectroscopic Imaging using Two-
		Dimensional Selective Excitation
	Matthew McNeil, University of Toronto	Jason Rock, Sunnybrook Research Institute
	P1-2: LLM-Based Prostate Cancer Grading Through Reasoning	P2-2: Deep-Learning Based Detection of Placenta Previa from
	Segmentation	Fetal MRI: A Cascaded CNN Approach
	Emma Willis, Queen's University	Nika Momeni, Toronto Metropolitan University
	P1-3: Evaluating the Synergistic Effects of Antiangiogenic	P2-3: Accounting for Fat Contamination in Amine/Amide Concentration Independent Detection (AACID) CEST MRI of the
	Therapy and Stereotactic Body Radiation Therapy in Pancreatic Cancer using Multi-Modal Optical Coherence Tomography	Human Spinal Cord
	Hector Alejandro Contreras-Sanchez, University of Toronto	Victoria Little, Western University
	P1-4: Characterization of Osteosarcopenia Quantified With Al-	P2-4: Modelling 13C-Bicarbonate Signal Changes Due to Lactat
	Enabled Musculoskeletal Imaging Biomarkers in Patients	Oxidation Pathways in Hyperpolarized MRI
	Undergoing Spine SBRT	
	Yessica Castano Sainz, Sunnybrook Research Institute	Dylan Dingwell, University of Toronto
	P1-5: Assessing Diffuse Optical Spectroscopy and Magnetic	P2-5: Comparison of Lipid Suppression Techniques for in vivo
	Resonance Imaging for Quantification of Multimodal	Whole Brain MR Spectroscopic Imaging
	Gadolinium-Incorporated Porphysomes for Theranostic	
	Guidance of Oral Cancer in Mice Theodore Husby, University of Toronto	Kaito Hara-Lee, Queen's University
	P1-6: Designing an Endometrial Pathology Slide Classification	P2-6: Microscopic Fractional Anisotropy of the Hippocampus in
	User Interface for Efficient Diagnostics	Dementia Patients
	Matthew Lam, Toronto Metropolitan University	Ricardo Rios-Carrillo, Western University
	P1-7: Evaluating Osteosarcopenia Progression in a Preclinical	
	Model of Prostate Cancer Bone Metastases with Imaging	
	Biomarkers	
	Leanna Abraham, University of Toronto	
	P1-8: Leveraging Transformers to Improve Dose Prediction in	
	Complex Multi-lesion Lung SABR Plans	
	Edward Wang, Western University  P1 9: Procureor Proplet Extrusion for the Production of Size	
	P1-9: Precursor Droplet Extrusion for the Production of Size- Controlled Lipid-Stabilized Drug-Loaded Nanobubbles	
	Patrick Dong Min Chang, University of Toronto	
	P1-10: Photodynamic Therapy-Based Photochemical Immune	
	Stimulation for the Treatment of Ovarian Cancer in a Xenograft	
	Mouse Model Breana Shehetila, University of Toronto	
	BLOOM SUBDBUILD LUDWOCKETY OF LOCOPTO	

11:45 - 12:45 Poster Viewing – Pitch Sessions 1 & 2 above plus posters below presenting

**Poster Room** P2-7: Preliminary PET Imaging Reveals Reduced Synaptic

P1-11: Automated Detection of Lymph Node Metastasis in **Prostate Cancer Using Whole Slide Images** Kangdi Shi, University Health Network

P1-12: CollinsOral Epithelial Cell Quantification for Dysplasia **Grading Using Histopathology Images** Kangdi Shi, Mount Sinai Hospital

**Density in Autistic vs Non-Autistic Youth** Christin Schifani, Centre for Addiction and Mental Health

	Lunch Pickup	AA 11 D 100
13:00 - 13:45	Panel Session	Meeting Rooms 1&2
12.45 14.00	Lessons Learned from First-Time Founders and Leaders	
	Lunch Wrap-up	014
14:00 - 15:00	Oral 3	Oral 4
	Device, Systems, and Robotic Development  Meeting Room 1	Deep Learning/Machine Learning Methodology 1  Meeting Room 2
	O3-1: Generating and Measuring Flow for Hemodynamic	O4-1: Foundation Models for Cancer Tissue Margin Assessment
	Simulations of Interventional Vascular Procedures	with Mass Spectrometry
	David Ng, Robarts Research Institute	Mohammad Farahmand, Queen's University
	O3-2: Design and Testing of an MRI Phantom Faraday Cage	O4-2: From Text to Insight: Classifying Microcalcifications in
	using Rapid Prototyping Techniques	Radiology Reports with Al
	Alexander Dunn, Toronto Metropolitan University	Zardar Khan, Sunnybrook Research Institute
	O3-3: Resection Cavity Tracking Using a Bench-Top Robot and Electromagnetic Tracking	O4-3: Automatically Segmenting Curved Catheters in Prostate Brachytherapy Ultrasound Images with a Deep Learning and
	Electromagnetic fracking	Feature Extraction Pipeline
	Kian Hashtrudi-Zaad, University of Toronto	Jessica de Kort, The University of Winnipeg & University of
		Manitoba
	O3-4: Accurate Catheter Tracking for Image-Guided Therapy	O4-4: Evaluating the Use of Automatic Workflow Recognition
	Applications using Fiber-Bragg Grating	for Central Venous Catheterization Training
	Mahdi Tahmasebi, Toronto Metropolitan University	Catherine Austin, Queen's University
15:00 - 15:30	Pitch 3	Pitch 4
	Device, Systems, and Robotic Development	Deep Learning/Machine Learning Methodology 1
	Meeting Room 1	Meeting Room 2
	P3-1: Design and Ergonomic Assessment of Steerable Catheter Handles for the CathPilot System	P4-1: Comparative Analysis of Deep Learning Approaches for Urethral Segmentation in High-Dose-Rate Prostate
	Handles for the Cathellot System	Brachytherapy Using Transrectal Ultrasound Images
	Sina Keshavarz, Toronto Metropolitan University	Nicole Valencia, The University of Winnipeg
	P3-2: Validation of 3D Ultrasound Musculoskeletal System	P4-2: Predicting Inspiratory Chest CT Image Viability using
	•	Deep Learning
	Clara Duquette Evans, Western University	Sara Rezvanjou, Toronto Metropolitan University
	P3-3: Multi-Material Hand Fracture Model for Spatial Learning	P4-3: Involvement-Aware Foundation Models for Prostate
		Cancer Detection in Ultrasound
	Trinette Wright, Techna & University Health Network	Mohamed Harmanani, Queen's University
	P3-4: A Preclinical SPECT System Using Ultrahigh Energy	P4-4: Automated CNN-based Segmentation of Carotid Atherosclerotic Plaque and Morphological Characterization of
	Resolution CZT Detectors for Alpha and Beta Emitter Radiopharmaceutical Therapy Imaging	Carotid B-mode Ultrasound Images
	Aileen Ouyang, MH3D Inc.	Nahid Babazadeh Khameneh, McGill University & Research
		Institute of McGill University Health Centre
	P3-5: Design Optimizations of an Expandable Cable-Driven	P4-5: Automatic Prostate Segmentation in Micro-Ultrasound
	Parallel Mechanism for Minimally Invasive Cardiovascular	Imaging using the Segment Anything Model
	Interventions (CathPilot)	
	Sina Keshavarz, Toronto Metropolitan University	Olivia Radcliffe, Queen's University
	P3-6: Developing Low-Cost 3D-Printed Prosthetics with a	P4-6: Advancing Kidney Ablation Analysis in 3D CT Images: A
	Functional Wrist for Patients Along the Thai-Myanmar Border Emese Elkind, Queen's University	Deep Learning Segmentation Framework Maryam Rastegarpoor, Western University
	P3-7: Validating and Iterating the TRU-VU Wrist Positioning Aid	P4-7: Performing Prostate Segmentation Using SAM-Med2D
	and Educational Training to Improve the Standardization of	Across Multiple Ultrasound Modalities
	Wrist Radiography	
	Laura Vancer, Western University	Vivian Nguyen, Queen's University
		P4-8: Evaluating the Use Cases of 3D and 2D Segmentation in
		Fetal MRIs
15:30 - 16:30	Poster Viewing – Pitch Sessions 3 & 4 above plus posters b	Alejo Costanzo, Toronto Metropolitan University  elow presenting Poster Room
13.30 10.30	P3-8: Bridging the Gap with Customizable Above-Elbow	P4-9: Risk Stratification of Early-stage Non-small Cell Lung
	Prosthetic Designs to Balance Open-Source Models and	Cancer using PET-based Radiomics
	Patient-Specific Needs	
	Emese Elkind, Queen's University	Christine Santiago, Western University
	P3-9: Miniaturized Gamma-Imaging Probe for Lung Cancer	P4-10: Automatic Classification of Levator Ani Muscle Avulsion
	Detection	in 3D Transperineal Ultrasound Images
	Alysha Prem, Toronto Metropolitan University	Mihir Gokal, Western University
16:30 - 17:30	Oral 5	Oral 6
	General 1	Image Guided Intervention and Surgery 1
	Meeting Room 1	Meeting Room 2
	O5-1: A Sensorless Freehand 3D Ultrasound Solution with a	O6-1: A Feasibility Study on Enhanced Navigation in Breast-
	Novel Coupling Pad	Conserving Surgery through Haptic Feedback
	Libin Liang, Robarts Research Institute & Western University	Laura Connolly, Queen's University
	O5-2: A Motion Assessment and Image Quality Enhancement	O6-2: Physical Replication and Validation of Mathematical
	Technique using Retrospective Frame Averaging with Low-dose	Mitral Valve Models
	Volumetric 4D-CT for Radiation Therapy Simulation	Patrick Carnahan, Robarts Research Institute
	Timothy Yau, Western University  O5-3: A Dual-Camera Simulation of Markerless, Optical Head	O6-3: Non-invasive Ablation of Intra-abdominal Fetal Rabbit
	Pose Tracking Using Deep Learning for Motion Correction in	Umbilicus using Magnetic Resonance Guided High Intensity
	Magnetic Resonance Imaging	Focused Ultrasound Therapy
	Marina Silic, University of Toronto	Ava Danialy, University of Toronto
	O5-4: Image Database Creation for Improved Imaging of Mitral	O6-4: Radio-Ultrasound-Guided System for Real-Time
		· · · · · · · · · · · · · · · · · · ·
	Valve Surgery Training Phantoms	Intraoperative Localization: A Phantom Study
	Emma Zhang, Western University	Sydney Wilson, Western University
17:30 - 17:45	Emma Zhang, Western University	

09:00 - 10:00 Oral 7 Oral 8 Deep Learning/Machine Learning Methodology 2 **Image Guided Intervention and Surgery 2** Meeting Room 1 Meeting Room 2 **07-1: Micro-CT Anatomical Measurement of the Human O8-1: Feasibility of Three-dimensional Ultrasound for Cervical** Cadaveric Subaxial Cervical Vertebrae: Machine Learning **Cancer Treatment Planning Prediction of the Lamina Length** Joseph Umoh, Western University Tiana Trumpour, Western University O8-2: First Demonstration of Functional Connectivity Mapping **O7-2:** Automated Diaphragm Segmentation using Deep **Learning from Chest CT Images** using a 1.5T MR-Linac in Glioblastoma Mustansir Verdawala, Toronto Metropolitan University Eaman Almasri, University of Toronto & Sunnybrook Research Institute O7-3: A Deep Learning Pipeline for 3D Brain-Wide Mapping of **O8-3: Improving Success Rate of Navigated Breast-Conserving Local Neuronal Ensembles in Tera-Voxel Light Sheet** Surgery By Needle Stabilization Microscopy Ahmadreza Attarpour, University of Toronto Chris Yeung, Queen's University **O7-4: Evaluating Deep Learning Models to Classify Early-Stage O8-4: Assessment of a Mini Stereotactic Guidance System for Esophageal Cancer: A Preliminary Study Percutaneous Focal Liver Tumour Ablation** Marcus Milantoni, Western University Joeana Cambranis-Romero, Western University 10:00 - 10:30 Pitch 5 Deep Learning/Machine Learning Methodology 2 **Image Guided Intervention and Surgery** Meeting Room 1 Meeting Room 2 P5-1: Evaluating and Comparing the Surgical Tool Detection P6-1: Validation of an Electroanatomic Map Conversion Tool Performance of YOLO Object Detection Models in Simulated for Registration to Radiation Treatment Planning Images **Central Venous Catheterization** Aden Wong, Queen's University Sarah Konermann, McGill University P6-2: Thrombectomy Assist: Live Thrombus Detection P5-2: Machine Learning-Based Prediction of Vertebral Fracture Risk in SBRT Patients using Quantitative Imaging Data Dawit Gulta, Sunnybrook Research Institute Lola Assad, Queen's University P5-3: Predicting the Phase of Cataract Surgery with Deep P6-3: Development of A Novel System For Micro-Ultrasound-**Guided Focal Low-Dose-Rate Prostate Brachytherapy** David Contella, Western University Joshua Bierbrier, Queen's University P5-4: Automated MRI-Based Segmentation of Multiple Fetal P6-4: 3D Calyx Segmentation for the Volumetric Detection of **Brain Structures** Hydronephrosis Marina Music, Queen's University Yasmin Modarai, Toronto Metropolitan University P5-5: Leveraging Surgical Workflow Recognition for Skill P6-5: Predicting Patient-Specific Instantaneous Spatial **Assessment in Simulated Cataract Surgery** Temperature Maps for MR-Guided Laser Interstitial Thermal Therapy for Epilepsy using a Physics-Informed Neural Network Bining Long, Queen's University Saba Sadatamin, University of Toronto P5-6: Leveraging Convolutional Embeddings for AFib Detection P6-6: Assessing the Impact of a Magnetic Field Generator on in the Intensive Care Unit Setting Fluoroscopic Image Quality Nooshin Maghsoodi, Queen's University Mateen Mirzaei, Western University P5-7: Self-Supervised Parallel Transmit RF Pulse Design for 2D P6-7: Designing a 6-Axis Testbed for Accessible Image-Guided **Spatially Selective Excitation Robotics Research** Yuliang Xiao, University of Toronto & Sunnybrook Research Coleman Farvolden, Queen's University Institute P5-8: Ultrasound Probe Segmentation for RGB-D Object **Tracking in Central Line Insertion** Réna Hajjar, Queen's University 10:30 - 11:30 Poster Viewing – Pitch Sessions 5 & 6 above plus posters below presenting Poster Room P6-8: Evaluating Sensitivity Differences of Healthy Spinal Cord and Intramedullary Spinal Cord F98 Glioma in Response to Focused Ultrasound and Microbubbles Mahsa Mokhlesabadi, Sunnybrook Research Institute P6-9: The Impact of Propagation Pathways on Targeting **Accuracy in Transspinal Ultrasound Focusing** David Martin, Sunnybrook Research Institute 11:30 - 12:30 Oral 9 Oral 10 Cancer 2 Cardiac, Lung, and Musculoskeletal Imaging Meeting Room 1 Meeting Room 2 **O9-1:** Regional Predictors of Progression after Stereotactic O10-1: Ultrasound 3D Reconstruction of the Lower Spine for **Radiosurgery for Brain Metastases Facet Joint Injection** Robert Policelli, Western University Gaurav Ranjit, Queen's University **O9-2: Development of Cisplatin Prodrug-Loaded Microbubbles** O10-2: Enhanced Cardiac Imaging using Fixed-Filter Spectral for Ultrasound-Aided Targeted Cancer Therapy **Imaging with Anti-Correlated Noise Correction** Sean McGrath, University of Toronto Lisa Garland, Robarts Research Institute **O9-3: Adaptive Resource-Efficient Federated Learning for** O10-3: Development of a Tissue-Equivalent Lung Phantom **Prostate MRI using PCA and Early Stopping** Compatible for Proton Magnetic Resonance Imaging (MRI) for **Evaluation of Airway Size** Negin Piran Nanekaran, University of Guelph Razieh Enjilela, Toronto Metropolitan University O9-4: A Mechatronic Needle Guidance System for Prostate-O10-4: Examining the Bilateral Loading Relationship in Thumb Specific Positron Emission Tomography and 3D Transrectal Osteoarthritis **Ultrasound-Guided Trans-perineal Prostate Biopsy** Sule Karagulleoglu Kunduraci, Western University Jennifer Villeneuve, Western University 12:30 - 12:45 Lunch Pickup 12:45 - 13:30 Panel Session Meeting Rooms 1&2 Career Pathways for Graduates: Academic and Industry Advice on Talent Development 13:30 - 13:45 Lunch Wrap-up

13:45 - 14:45

Oral 11

**Optical Imaging & Ultrasound Imaging** 

Meeting Room 1

O11-1: Deep Learning-Enabled 3D Fluorescence Imaging for **Surgical Guidance: Assessing Surgical Margins** 

Hikaru Kurosawa, Princess Margaret Cancer Centre

O11-2: Three-Dimensional Ultrasound Synovial Blood Flow **Volume Assessment in Thumb Osteoarthritis Patients** Megan Hutter, Western University

O11-3: In Vivo Hyperspectral Ultra-Broadband Sub-MHz Photoacoustic Imaging: Volumetric Optical Contrast to 4 cm **Deep and Beyond** 

Ivan Kosik, Princess Margaret Cancer Centre

O11-4: Deep Learning Architecture Optimization for 3D Optical **Imaging in Early-Stage Oral Cancer Models** 

Rooaa Shanshal, Princess Margaret Cancer Centre & University Health Network

**General 2** 

Meeting Room 2

**O12-1**: Evaluating the Association Between Primary Motor **Cortex Metabolite Levels and Dexterity Following Spinal Surgery for Degenerative Cervical Myelopathy** Scott Wilson, Robarts Research Institute

O12-2: Accelerating Monte Carlo Light Propagation Models for Deep Learning-Enabled Fluorescence-Guided Surgery Matthew Siracusa, Princess Margaret Cancer Centre

O12-3: Role of Imaging Contrasts in the Volumetric Prediction of MT-NOE Attenuated Tumour Sub-Region

Céline Dubroy-McArdle, Toronto Metropolitan University

O12-4: Light-Based Pressure Monitoring Guidance in Neurosurgery Retraction: Development and Validation of an **Optical Sensing Algorithm** 

Lee Sikstrom, Robarts Research Institute & Western University

14:45 - 15:15

Pitch 7

**Optical Imaging & Ultrasound Imaging** 

Meeting Room 1

P7-1: Standardizing B-Line Annotation for Reproducible Lung **Ultrasound Metrics** 

Maha Kesibi, Queen's University

P7-2: Automated Liver Segmentation using Attention Models in Point-of-Care Ultrasound Images

Zachary Szentimrey, University of Guelph

P7-3: Influence of Laser Coherence Length in Polarization **Speckle-Based Tumour Detection** 

Daniel Louie, University Health Network

P7-4: Quantifying Tendon Excursion in the Shoulder using a 3D-**Ultrasound Musculoskeletal System** 

Marie Le, Western University

P7-5: Self-Supervised Learning for Retinal Disease Classification: Reducing Annotation Dependency with **Transformation-Based Pretext Learning with Limited Labels** Pramit Dutta, University of Guelph

P7-6: Polyvinyl Alcohol Cryogels (PVA-C): Fabrication Method for Homogeneous Multimodal Phantoms

Olivia Qi, Western University

P7-7: Spine Ultrasound Segmentation Trained on Registered CT As Ground Truth

Junhui Zong, Queen's University

P7-8: Ultrasound Based Evaluation of Stress Urinary Incontinence Pessaries on Bladder Neck, Bladder Descent, and **Retrovesical Angle** 

Helena Kunic, University of Guelph

P7-9: Polarization Speckle Analysis of Volumetric Scattering from Controlled Turbid Phantoms and Mouse Skin Tissues Carla Kulcsar, University of Toronto

Pitch 8 General

Meeting Room 2

P8-1: A Language-Audio Foundation Model for Characterization of Cancerous Tissue in Mass Spectrometry Images

Alon Gabriel, Queen's University

P8-2: Histology Hide-and-seek: Visually Navigating Latent Space Clustering for Pathology Exploration

Phoenix Wilkie, University of Toronto

P8-3: A Comparison of Uncertainty Techniques on Basal Cell Carcinoma Mass Spectrometry Data

Tyler Elliott, Queen's University

P8-4: 3D ABUS System with Breast Needle Biopsy Capability and Integrated MRI-guidance Lesion Localization

Amal Aziz, Western University

P8-5: Large Language Models are One-Shot Radiology Report Summarizers

Mahmoud Idlbi, Queen's University

P8-6: Accelerated 4D Flow with Respiratory Compensation and **Cardiac View Sharing in Pediatric Congenital Heart Disease** Fatemeh Rastegar Jooybari, University of Toronto

**P8-7: Forecasting Movement Patterns in Stroke Patients Utilizing Time Series Foundation Models** Dharsan Ravindran, Queen's University

15:15 - 16:15 Poster Viewing – Pitch Sessions 7 & 8 above plus posters below presenting

Poster Room

P7-10: Impact of Ambient Light on Spatial Frequency Domain **Imaging for Surgical Guidance** 

Jack Wunder, Princess Margaret Cancer Centre

P7-11: Tri-Modal Mosquito Bite Needle Endoscopy (MBNE) for **Breast Cancer Diagnostics** 

Alexandre Douplik, Toronto Metropolitan University

16:15 - 17:00 Keynote Session II

The Abundant Promise of Ultrasound in Neurosurgery

Amir Manbachi, Johns Hopkins University

17:00 - 17:30 Closing and Awards

Dafna Sussman and Ali Tavallaei, Toronto Metropolitan University

Meeting Rooms 1&2

Meeting Rooms 1&2