

The CMBEC46 CESO 2024 schedule matrix and programs are under development and are subject to change. The schedule is current as of May 24, 2024. Please check the website regularly for updates.

Monday, May 27 - Day 0

Wednesday, May 28 - Day 1

Wednesday, May 28 - Day 1

2:10 PM - 2:20 PM

	CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower Level 2	INDUSTRY INNOVATION PROGRAM by ECRl Mandarin Ballroom B Lower Level 2	ACADEMIC PROGRAM Denver Room 28th Floor	POSTER PRESENTATIONS Mandarin Ball Room Foyer 2nd Floor	MEDICAL DEVICE TRADE SHOW Toronto/Victoria Rooms Mezzanine Level	CONTINUING EDUCATION PROGRAM Shanghai Room 28th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 28th Floor	LOCAL HOSPITAL TOURS	MULTI-PURPOSE Chestnut Room Lower level 1
7:30 AM - 8:30 AM	Registration Light Breakfast Sponsored by:					Refreshment Break (served in Tradeshow) Sponsored by:			
8:30 AM - 8:40 AM	Welcoming Remarks 2024 Conference Chair: Mural First								
8:40 AM - 10:00 AM	Keynote 1: Generative AI in Healthcare Speaker: Dr. Bo Wang Sponsored by:								CCE Exams 1: 8:45 - 12:15
10:00 AM - 10:20 AM						Refreshment Break (served in Tradeshow) Sponsored by:			
10:20 AM - 12:00 PM	C1: CLINICAL ENGINEERING PROGRAM Chair: Anthony Chan 10:20 - 10:40AM: CCE Certification Speakers: Kim Greenwood, Afif Subhan 10:40 - 12:00PM: Biomedical Engineering Technology in Canada Speakers: Anthony Chan, Dave Gretzinger, Carol Park, Rick Tidman, Roy Sharplin, Afif Subhan, Josellio (Jesse) Espinosa	B1: INDUSTRY INNOVATION PROGRAM Chair: Jon Schmid Innovations in Medical Imaging and Diagnostic Technologies. Speaker: Francisco Rodriguez-Campos (In person)	A1: ACADEMIC PROGRAM Chairs: Azadeh Yadollahi & Fatemeh Bazerji Sensors & Monitoring A1.1 Sound Level Within Transport Incubator During Use of Ambulance Siren Keely Gobb, Carleton University A1.2 Influence of Body Posture and Electrode Placement on the Measurement of Electrocardiogram Using Textile Electrodes Delaram Sadalamini, University of Toronto A1.3 A Smart Recommender System to Stratify Heart Attack Risk Dr. Dilbar Saliman, Thompson Rivers University A1.4 Upper Airway Resistance Measurement with Esophageal Catheter and Oscillometry Shaghayegh Chavastian, University of Toronto-University Health Network A1.5 Synergizing Spectrotemporal Dynamics and Filterbank Common Spatial Pattern for Decoding Imagined Speech from EEG Behrad Taghizadeh, University of Toronto	P1: POSTER PRESENTATIONS P1.1 HOX Gene Signatures Predict Survival Outcomes of Glioblastoma Patients Dr. Dilbar Saliman, Thompson Rivers University P1.2 Capillary Microfluidic Systems for Precise Microparticle Separation Mohsen Hassan, University of Calgary P1.3 HALO CT Phantom: Successful Implementation for Continuous Dose Monitoring Douglas MacTaggart, University Health Network P1.4 Raman Microspectrometry and Machine Learning: Accelerated Bacterial Identification Jesse Levine, Carleton University P1.5 Modeling Fibroblast Cells Movement Guilherme Cortesini Dos Santos, Carleton University P1.6 Experimental Investigations on Thermal Necrosis of Bone in Conventional and Torsional Ultrasonic Drilling Khazim Alami, Sultan Qaboos University P1.7 The Synthesis and Biodegradability of Silver Nanoparticles Doped ZIF-8 Composites Injectable Hydrogel Weng Chi Iong P1.8 The Adhesion Behaviour of Schwann Cells on PVA-based Hydrogel Substrates: Investigating Cellular Interactions for Nerve Regeneration Larissa Marlene Yakam Djomatchoua, UNSW Sydney P1.9 Metabolic Reprogramming of Host Cells Induced by Cancer Cells: Implications for Stromal Niche Formation Maryam-Vahidi, University of Calgary P1.10 Innovative Strategy for Quality Control of Preparing Molecularly Imprinted Polymer Biosensor for Glial Fibrillary Acidic Protein Detection Mohammadreza Farokhnia, University of Calgary P1.11 The Supraphysiological Insulin Levels Amplify Pro-Inflammatory Response and Induce Apoptosis in Macrophages: An In Vitro Cell-Material Interaction Model Yuxi Zhang, Queen's University	MEDICAL DEVICE TRADE SHOW	CE1: CONTINUING EDUCATION PROGRAM Chair: Nima Esmailzadeh The Evolution of Medical Device Integration - More Than Just Automated Vital Signs Charting Jennifer Jackson - Senior Director Business Development - Masimo			
12:00 PM - 1:00 PM						Lunch (served in Tradeshow & Ottawa Room) Sponsored by:			
1:00 PM - 2:10 PM	C2: CLINICAL ENGINEERING PROGRAM Chair: Bill Gentles 1:00 - 1:30PM: CESO AGM 1:30 - 2:10PM: Clinical Engineering Paper Presentation *1: Optimizing Preventive Maintenance Strategy at The Ottawa Hospital through the Application of Alternative Equipment Maintenance 2: Evolution of Clinical Engineering with the Growing Pressures on Healthcare and the Changing Landscape of Information, Communication and Automation Technology 1: Maryam Sangargir 2: Nima Esmailzadeh	Visit Trade Show & Posters No Sessions: Please visit Trade Show	Visit Trade Show and Posters No Sessions: Please visit Trade Show	P2: POSTER PRESENTATIONS P2.1 Development and Assessment of a Wearable Ambulatory System for Heart Rate Monitoring using Rhythmic Auditory Stimulation Alina Gode, University of Toronto P2.2 Effects of Sex and Footwear Stiffness on Lower Limb Running Biomechanics Vivian Nguyen, University of Calgary P2.3 Lending a Hand: Improving the Ergonomics of the Colonoscope Marium Japarwalla, Queen's University P2.4 Developing an Avatar in Virtual Reality for Mental Health Treatment Amir Beni Saeed, University of Manitoba P2.5 Predict Knee Kinematics During Stationary Cycling via Machine Learning Regression Models	MEDICAL DEVICE TRADE SHOW	Visit Trade Show and Posters No Sessions: Please visit Trade Show		CCE Exams 2: 12:45pm - 4:15pm	
2:10 PM - 2:20 PM	Transition time								

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Wednesday, May 28 - Day 1

Wednesday, May 29 - Day 2

	CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower level 2	INDUSTRY INNOVATION PROGRAM by ECRI Mandarin Ballroom B Lower level 2	ACADEMIC PROGRAM Denver Room 28th Floor	POSTER PRESENTATIONS Mandarin Ball Room Foyer 2nd Floor	MEDICAL DEVICE TRADE SHOW Toronto/Victoria Rooms Mezzanine Level	CONTINUING EDUCATION PROGRAM Shanghai Room 28th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 28th Floor	LOCAL HOSPITAL TOURS	MULTI-PURPOSE Chestnut Room Lower level 1	
2:20 PM - 3:20 PM	C3: CLINICAL ENGINEERING PROGRAM Chair: Umakhair Ahmed Incubator Vibration & Large Scale Patient Monitoring Implementation C3.1 Reducing Vibrations to Improve Infant Patient Safety During Transportation Robert Lengua, Carleton University C3.2 Modern Healthcare: Integrating Patient Monitoring and Medical Devices Interoperability Jean Ngole, Children's Hospital of Eastern Ontario Rahim Chakri, Draeger Medical	B2: INDUSTRY INNOVATION PROGRAM Chair: Jon Schmid & Kent Brunen Innovations in Neuro Engineering & Brain-Computer Interfaces Speaker: Francisco Rodriguez-Campos (Hyperion)	A2: ACADEMIC PROGRAM Chairs: Azadeh Yaftehfar & Fatemeh Bagheri Sleep Apnea + Drug Delivery A2.1 Statistical Analysis of Distribution-based Spectral Features of Low-Sampled Snoring Vibrations in Predicting Treatment Outcomes in Obstructive Sleep Apnea Behrad Taghizadeh, University of Toronto A2.2 Sex-Stratified Analysis of Airway Collapsibility Among Individuals Undergoing Chronic Opioid Therapy Abous Assad, University of Toronto A2.3 Strategies to Load Curcumin into Poly(2-Hydroxyethyl Methacrylate)-based Disks to Increase Controlled Release Time for	P3: POSTER PRESENTATIONS P3.1 A Machine Learning Based Algorithm to Determine Unloaded Geometry of the Breast Using MRI Image Data Xi Feng, Western University P3.2 Electro-fabrication of Molecular Imprinted Polymer Biosensor: Efficient Approach to Achieve Reliable and Reproducible Biosensors Bahareh Babami, University of Calgary P3.3 Optimizing Storage Condition for Graphene@PEDOT: PSS-Carbon Screen-Printed Electrodes Seyedeh Zeinab Mousavizani, University of Calgary	MEDICAL DEVICE TRADE SHOW	CE: CONTINUING EDUCATION PROGRAM Chair: Nima Esmalizadeh Theranostics: Revolutionizing Personalized Medicine through Integrated Diagnostics and Therapy Craig Shelley – Strategic Business Leader, Theranostics – GE Healthcare				
3:20 PM - 3:35 PM						Refreshment Break (served in Tradeshow) Sponsored by:		LOCAL HOSPITAL TOUR -1 3:15 PM - 4:30 PM Sponsored by:		
3:35 PM - 3:45 PM	Transition time									
3:45 PM - 4:45 PM	C4: CLINICAL ENGINEERING PROGRAM Chair: Bill Gentes C4.1 Rapid Infuser, Non-rapid Solution Thomas Franz, Sick Kids Hospital C4.2 Exploring the Experimental Process for Modifying an Adapter for a Defibrillator Due to a Technical Deficiency Kamalesh Caramjavadivel, Sinai Health C4.3 Intraoperative Loss of Patient Data During Cardiac Surgery Esteban Rivera, Sick Kids Hospital C4.4 A Better Gasket for the Baxter Sigma Spectrum Infusion Pump Grag Kishimoto, London Health Sciences Centre C4.5 How to Troubleshoot an Infusion Pump Motor Mohit Kumar, The Ottawa Hospital	B3: INDUSTRY INNOVATION PROGRAM Chair: Jon Schmid & Kent Brunen The Art of the Possible- 3D Printing in Healthcare Speakers: Jason Stock and Mark Gillingham	A3: ACADEMIC PROGRAM Chairs: Jan Andrysek & Alaa Gouda Prosthetics & Orthotics A2.1 Examining the Integration of Digital Technology for Ankle-Foot Orthosis Registration and Quantitative Shape Comparison Connor Matton, University of Toronto A2.2 Preliminary Characterization of Rectification for Three-quarter Transradial Prosthetic Sockets Caitlin Kager, University of Toronto A2.3 Creation of a Smart Template Library for Digital Transradial Prosthetic Socket Design Vishal Pendse, University of Toronto A2.4 3D Printing Method for Upper-Limb Diagnostic Sockets: A Technical Note Katrina Meng, University of Toronto	P4: POSTER PRESENTATIONS Self-directed viewing	MEDICAL DEVICE TRADE SHOW	CE: CONTINUING EDUCATION PROGRAM Chair: Nima Esmalizadeh AI's Impact on Healthcare Dan Zikrovic – Director of Digital Innovation & AI – GE Healthcare		University Health Network: Hyperbaric Chamber Sign-up before May 3		
4:45 PM - 6:30 PM	Transition time									
6:30 PM - 9:30 PM	Awards Gala Dinner & Banquet: Toronto Harbour Boat Cruise Sponsored by:									
7:30 AM - 8:30 AM	Registration Light Breakfast Sponsored by: SpaceLabs									
8:30 AM - 8:40 AM	Welcoming Remarks (Mandarin Ballroom) 2024 Conference Chair: Mural First									
8:40 AM - 10:00 AM	Keynote 2: Precision Child Health Speaker: Dr. Ronald Cohn Sponsored by:									
10:00 AM - 10:30 AM						Refreshment Break (served in Tradeshow) Sponsored by:			CCE Exams 3: 8:45 - 12:15	
10:30 AM - 10:40 AM	Transition time									
10:40 AM - 12:00 PM	C5: CLINICAL ENGINEERING PROGRAM Chair: Andia Toomari Clinical Engineers Papers Presentations C5.1 Improving Bed Repair Turn Around Time through Parts Management Emily Rudenham C5.2 Improving BME Support by Remotely Locating Third Party Systems in Catheterization and Electrophysiology Labs Sarah Deschamps, University of Ottawa Heart Institute C5.3 Remote Biomedical Services Support Program Seyedeh Aida Riazavi C5.4 Optimizing Biomedical Engineering Test Equipment Inspection Frequencies Sara MacGillivray C5.5 Canadian Biomedical Technologists: Exploring Gender Diversity to Build Inclusivity Sonia Pinkney, University Health Network C5.6 Women in Science and Engineering: The Importance of Visibility Dr. Monique Prize	B4: INDUSTRY INNOVATION PROGRAM Chair: Jon Schmid & Kent Brunen Wearable Health Technologies: Monitoring, Wellness, and Fitness Speakers: Priyanka Shah (Virtual) and Jillian Hillman (In person) Note: Virtually enabled session (Willow)	A4: ACADEMIC PROGRAM Chairs: Jan Andrysek & Sebastian Silva Biomechanics A4.1 Evaluating Slips on Icy Surfaces: A Data Collection Protocol Devid Doodhah, University of Toronto A4.2 Predicting Hip Kinematics during Cycling Task with CNN Reza Ahmadi, University of Calgary A4.3 Effect of Co-contraction and Muscle Strength on Muscle-tendon Dynamics Bamin Mohan Al-Shimari, University of Calgary A4.4 Integrating Biomechanics and Probability: A Novel Framework for Helmet Impact Evaluation in Sports Injury Reza Deaee, University of Calgary A4.5 Wearable microfluidic biosensor for real-time cortisol monitoring: sweat biomarker monitoring Fereshteh Vighasin, University of Calgary	P5: POSTER PRESENTATIONS P3.1 A Machine Learning Based Algorithm to Determine Unloaded Geometry of the Breast Using MRI Image Data Xi Feng, Western University P3.2 Electro-fabrication of Molecular Imprinted Polymer Biosensor: Efficient Approach to Achieve Reliable and Reproducible Biosensors Bahareh Babami, University of Calgary P3.3 Optimizing Storage Condition for Graphene@PEDOT: PSS-Carbon Screen-Printed Electrodes Seyedeh Zeinab Mousavizani, University of Calgary P3.4 A Neural Learning-Based Approach for ECG Artifact Removal from EEG Fatemeh Bagheri, University of Toronto P3.5 A Smart Billi-wrapper: A Low-cost Phototherapy device for Low Resource Setting Williams Kwaku Baah, Rice University P3.6 Understanding Covert Speech: Experiences with and Usability of Covert Speech for AAC Systems Sorga Bonar, Queen's University P3.7 Raman Microspectroscopy and Machine Learning: A Perspective for Tissue Remodelling Characterization Nehasha Kunchur, Carleton University P3.8 Evaluating the impact of Biomaterials on modulating tumour-associated macrophages Ainozha Farooqzai, Carleton University P3.9 Evaluation of cochlear implant trajectories relative to the basilar membrane Ashley Mouda, Western University P3.10 The Role of Oxygen in ECM remodeling Nadia Azcan, Carleton University	MEDICAL DEVICE TRADE SHOW	CE4: CONTINUING EDUCATION PROGRAM Chair: Nima Esmalizadeh Building and Leveraging a Connected Ecosystem for Improved Clinical Communication, Workflow, and Data Insights Rich Mayoras – Director of Connected Solutions – Stryker	CE13: CONTINUING EDUCATION PROGRAM Chair: Milad Mosabebi Cybersecurity in Healthcare: Fundamentals and Role of CE Professionals Kajeevan Rajanayagam Director of Cybersecurity, UHN			

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Wednesday, May 29 - Day 2

	CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower level 2	INDUSTRY INNOVATION PROGRAM by ECRl Mandarin Ballroom B Lower level 2	ACADEMIC PROGRAM Denver Room 28th Floor	POSTER PRESENTATIONS Mandarin Ball Room Foyer 2nd Floor	MEDICAL DEVICE TRADE SHOW Toronto/Victoria Rooms Mezzanine Level	CONTINUING EDUCATION PROGRAM Shanghai Room 28th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 28th Floor	LOCAL HOSPITAL TOURS	MULTI-PURPOSE Chestnut Room Lower level 1
12:00 PM - 1:00 PM									
12:30 PM - 2:10 PM	CMBES AGM 12:30 PM - 2:10 PM CMBES AGM							LOCAL HOSPITAL TOUR - 2 12:45 PM - 2:00 PM Sponsored by: KITE Research Institute	
		Visit Trade Show & Posters No Sessions: Please visit Trade Show	Visit Trade Show and Posters No Sessions: Please visit Trade Show	P6: POSTER PRESENTATIONS P1.1 HOX Gene Signatures Predict Survival Outcomes of Glioblastoma Patients <i>Dr. Dilbar Salman, Thompson Rivers University</i> P1.2 Capillary Microfluidic Systems for Precise Microparticle Separation <i>Mohsen Hassani, University of Calgary</i> P1.3 HALO CT Phantom: Successful Implementation for Continuous Dose Monitoring <i>Douglas McTaggart, University Health Network</i> P1.4 Raman Microspectrometry and Machine Learning: Accelerated Bacterial Identification <i>Jesse Levine, Carleton University</i> P1.5 Modeling Fibroblast Cells Movement <i>Guilherme Contesini Dos Santos, Carleton University</i> P1.6 Experimental Investigations on Thermal Necrosis of Bone in Conventional and Torsional Ultrasonic Drilling <i>Khurshid Alam, Sultan Qaboos University</i> P1.7 The Synthesis and Biodegradability of Silver Nanoparticles Doped ZIF-8 Composites Injectable Hydrogel <i>Weng Chi-kuang</i> P1.8 The Adhesion Behaviour of Schwann Cells on PVA-based Hydrogel Substrates: Investigating Cellular Interactions for Nerve Regeneration <i>Larissa Marlene Yekani Oponatchou, UNSW Sydney</i> P1.9 Metabolic Reprogramming of Host Cells Induced by Cancer Cells: Implications for Prometastatic Niche Formation <i>Maryam Yekani, University of Calgary</i> P1.10 Innovative Strategy for Quality Control of Preparing Molecularly Imprinted Polymer Biosensor for Glial Fibrillary Acidic Protein Detection <i>Mohammadreza Farrokhi, University of Calgary</i>	MEDICAL DEVICE TRADE SHOW Free tradeshow pass	Visit Trade Show and Posters No Sessions: Please visit Trade Show		KITE Research Institute Sign-up before May 3	
2:10 PM - 2:20 PM	Transition time								
2:20 - 3:20 PM	C6: CLINICAL ENGINEERING PROGRAM Chair: Aqeel Alam Right to Repair: CMBES Work Over on The Past Year: CMEPP and Right to Repair; Dr. Rosborough on Bill C-244/C-264, Tied Selling and Right to Repair Research with a Q&A Speakers: Murray Rice, TJ Jarvis and Dr. Anthony Rosborough (Virtual) Note: Virtually enabled session (Willow)	B5: INDUSTRY INNOVATION PROGRAM Telehealth and Remote Monitoring: The Future of Healthcare Delivery Speakers: Priyanka Shah (Virtual) and Jillian Hillman (In person) Note: Virtually enabled session (SLCan)	A5: ACADEMIC PROGRAM Chair: Azadeh Yasoltani Biomedical Engineering Societies and Their Role in Integrating Science and Profession Worldwide Speaker: Prof. Ratko Magjarevic, President, IFBME	P7: POSTER PRESENTATIONS P2.1 Development and Assessment of a Wearable Biofeedback System to Elicit Gait Changes using Rhythmic Auditory Stimulation <i>Aliaa Gouda, University of Toronto</i> P2.2 Effects of Sex and Footwear Stiffness on Lower Limb Running Biomechanics <i>Vivian Nguyen, University of Calgary</i> P2.3 Lending a Hand: Improving the Ergonomics of the Colonoscope <i>Mariam Japanwala, Queen's University</i> P2.4 Developing an Avatar in Virtual Reality for Mental Health Treatment <i>Amir Bani Saeed, University of Manitoba</i> P2.5 Predict Knee Kinematics During Stationary Cycling via Machine Learning Regression Models <i>Aousa Parsael, University of Calgary</i> P2.6 Exploring the Impact of In-House 3D Printing in Surgery – A Biomedical Engineer's Perspective <i>Owynn Ferreris, Sinai Health</i> P2.7 Application of Quality Function Deployment for Design and Development of Artificial Muscle Fabrication Device <i>Birhanu Addis, Queen's University</i> P2.8 Precise Recognition and Prediction of COPD by CNN-LSTM <i>Ying-shi Zhang</i> P2.9 The Development of a Head and Neck Support Device for Children with Cerebral Palsy <i>Hannah Cooke, Queen's University</i> P2.10 Pedaling Force Profile When Providing Assistive Torque <i>Seyed Hamidreza Haidary, University of Calgary</i>	MEDICAL DEVICE TRADE SHOW Free tradeshow pass	CE5 CONTINUING EDUCATION PROGRAM Healthcare's unique medical device cybersecurity challenges: What you need to know Presenter: Scott Trevino	CE14 CONTINUING EDUCATION PROGRAM Chair: Nima Esmailzadeh Alarm Management – A Clinical Perspective and Lessons Learned Nely Amarat – Senior Director, Nursing Practice & Clinical Quality and Magnet Program Director – Sinai Health	LOCAL HOSPITAL TOUR - 3 2:15 PM - 3:30 PM University Health Network: Healthcare Human Factors	

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Wednesday, May 29 - Day 2

Thursday, May 30 - Day 3

	CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower level 2	INDUSTRY INNOVATION PROGRAM by ECRl Mandarin Ballroom B Lower level 2	ACADEMIC PROGRAM Denver Room 28th Floor	POSTER PRESENTATIONS Mandarin Ball Room Foyer 2nd Floor	MEDICAL DEVICE TRADE SHOW Toronto/Victoria Rooms Mezzanine Level	CONTINUING EDUCATION PROGRAM Shanghai Room 28th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 28th Floor	LOCAL HOSPITAL TOURS	MULTI-PURPOSE Chestnut Room Lower level 1	
3:20 PM - 3:35 PM						Refreshment Break (served in Tradeshow) Sponsored by:			Sign-up before May 3	
3:35 PM - 3:45 PM	Transition time									
3:45 PM - 5:05 PM	C7: CLINICAL ENGINEERING PROGRAM Chair: Adeel Alam Right to Repair: A working session to collaboratively define what are reasonable service element costs (i.e., service training, software, etc.) Speakers: Kevin Taylor and Ted MacLaggan	I6: INDUSTRY INNOVATION PROGRAM Chair: Jon Schmid Digital Health Ecosystems: Interoperability and Data Security Speaker: Chad Waters (in Person)	A6: ACADEMIC PROGRAM Chairs: Azadeh Yadollahi & Abousa Assadi Sleep Apnea A6.1 Postoperative Opioid-Induced Respiratory Depression: Who Are at the Greatest Risk? Mohammad Goudari Rad, University of Toronto-University Health Network A6.2 Detecting Apnea and Hypopnea During Sleep by Measuring Heart Rate Changes and Assessing Out-of-Sample Performance Shaghayegh Chavoshian, University of Toronto A6.3 A Scoping Review of Current Methodologies of Measuring Cardiopulmonary Coupling and their Limitations in Sleep Apnea Detection Shaghayegh Chavoshian, University of Toronto Mahnoor Memon, University of Toronto A6.4 An Experimental Investigation on the Effect of Airflow on the Sound Generated in a Simplified Tube with a Constriction Representing Trachea for Obstructive Sleep Apnea Diagnosis During Wakefulness Walid Ashraf, Biomedical Engineering Graduate Program, University of Manitoba A6.5 Assessing the Impact of Asthma on Cardiopulmonary Metrics in Patients with Obstructive Sleep Apnea Shaghayegh Chavoshian, University of Toronto	P8: POSTER PRESENTATIONS Self-directed viewing			CE7: CONTINUING EDUCATION PROGRAM Chair: Erica BueNow Medical Imaging Journey - An Inside Story Presenter: Ravindra Anand	CE16: CONTINUING EDUCATION PROGRAM Chair: Nima Esmalizadeh Medical Device Integration - Streaming Clinical Data and Contextual Insights for Enhanced Patient Care Management Cathleen O'glin, Solutions Consultant Leader - Clinical Integration and Insights Enterprise Informatica, Philips Chris Richard, Solutions Consultant - Clinical Integration and Insights, Philips		
5:05 PM - 5:10 PM	Transition time									
5:10 PM - 7:00 PM						Trade Show Closing Reception Sponsored by:				
7:30 AM - 8:30 AM	Registration Light Breakfast Sponsored by:							CMBES Executive Meeting 7:00 am - 8:30am		
8:30 AM - 8:40 AM	Welcoming Remarks (Mandarin Ballroom) 2024 Conference Chair: Mural First									
8:40 AM - 10:00 AM	Keynote 3: The drive to encourage Women in STEM. Sponsored by: Speaker: Rosilyn Bern, Lescross Foundation <i>In partnership with IFMBE</i>		A7: ACADEMIC PROGRAM Chair: Azadeh Yadollahi & Alisa Gouds Biomaterials & 3D Digital Technology A7.1 3D Printing for Biomedical Technologists: An Ounce of Prevention is Worth a Pound of Cure Larry Cortez, University Health Network A7.2 In Vitro Screening of Inflammatory Responses to Polypropylene-based Surgical Mesh Used in the Treatment of Pelvic Organ Prolapse Kaylee Fennell, Queen's University A7.3 Synthesis of Bacteriostatic Materials from Quaternary Ammonium Salts Kaci Naziba Tansiri, School of Biomedical Engineering, Western University A7.4 SAM Zero-Shot Detection of Vertebral Surfaces from Freehand 3D Ultrasound: SAM ZSI Detection of Vertebral Surfaces from FH 3D US Sen Li, Ecole de technologie supérieure A7.5 Finite Element Modeling of an Uncolled Cochlea Using Synchrotron Radiation-Phase Contrast Imaging Nasrann Shakourfar, School of Biomedical Engineering, Western University				CE7: CONTINUING EDUCATION PROGRAM Incident Investigation Andrew Ivey, Manager of Biomedical Engineering (CHED) Coleen Turpin, RN BScN, M Ed. Problem Report Information Specialist Marketed Health Products Safety and Effectiveness Information Bureau Health Canada-MHPD	CE16: CONTINUING EDUCATION PROGRAM Imaging Technology - Ultrasound Probes Workshop Taylor Bailie, General Manager-Keir Surgical		
10:00 AM - 10:15 AM	Refreshment Break (served at Mandarin rm. Foyer) Sponsored by:									
10:15 AM - 10:25 AM	Transition time									

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Thursday, May 30 - Day 3

Thursday, May 30 - Day 3

CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower level 2	INDUSTRY INNOVATION PROGRAM by ECRl Mandarin Ballroom B Lower level 2	ACADEMIC PROGRAM Denver Room 28th Floor	POSTER PRESENTATIONS Mandarin Ball Room Foyer 2nd Floor	MEDICAL DEVICE TRADE SHOW Toronto/Victoria Rooms Mezzanine Level	CONTINUING EDUCATION PROGRAM Shanghai Room 28th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 28th Floor	LOCAL HOSPITAL TOURS	MULTI-PURPOSE Chestnut Room Lower level 1	
10:25 AM - 11:45 AM	C8: CLINICAL ENGINEERING PROGRAM Chair: Andrew Cheung Peer Review and Outreach From Base Pairs to Personalized Care: Does Precision Medicine Improve Patient Outcomes? Speakers: Matthew Manso-Share (virtual) Vajjayalshmi Iyer (in-person) Speakers: Jean Ngole, Bill Gentles & Martin Poulin	A8: ACADEMIC PROGRAM Chair: Jan Andrysek & Alousa Assadi Machine Learning A8.1 Fine-tuning an Automatic Speech Recognition Model for a Canadian Indigenous Counselling Program Emmanuel Olaniyan, University of Manitoba A8.2 Time Domain Cluster Analysis of Human Activity Using Triaxial Accelerometer Data Krunoslav Juric, University of Zagreb A8.3 Deep Learning for The Chronic Obstructive Pulmonary Disease Assessment using Lung CT Hatem Alkuraym, Western University A8.4 Thermography-based Breast Abnormality Detection using Siamese Network Ankita Dey, Carleton University A8.5 Fractional Fourier Time-Frequency Representation for Heart Sound Classification Ebrahim A. Nehary, Carleton University	POSTER PRESENTATIONS Self-directed viewing	TRADE SHOW - CLOSED	CE8: CONTINUING EDUCATION PROGRAM Chair: Kamallesh Canjinavadvel Blueprints for Health: Understanding the Basics of 3D Printing in Surgical Scenarios Owynn Ferreira - Biomedical Technologist, EIT - Sinai Health GoEngineer 3D Printing Solutions: Richard Cromwell - Senior Application Engineer	C8: CLINICAL ENGINEERING PROGRAM Chair: Ihtar Al-Tahr Clinical Engineers Papers Presentations C8.1 Essential elements of a modern Clinical Engineering Internship: Ottawa-Carleton Institute for Biomedical Engineering Andrew Bey, Children's Hospital of Eastern Ontario C8.2 Bridging Borders: Training & Educating Clinical Engineering Workforce - A Canadian & American Perspective Arif Subhan & Anthony Chan C8.3 Applications of 3D Printing in Healthcare - Challenges and Considerations in Biomedical Engineering Nicholas Jenne C8.4 Benefits of Biomedical Engineering Internships Conducted in Biomedical Engineering Departments in Hospitals Sarah Greiner, Carleton University C8.5 An Update on the Development of Cybersecurity Practices for Biomedical Engineering Departments Adeel Alam, Sinai Health C8.6 Developing Future In-House Radiology Service Technologists Emily Rose, Lower Mainland Biomedical Engineering	LOCAL HOSPITAL TOUR - 4 10:45 AM - 12:00 PM Mount Sinai Hospital Sign-up before May 3		
Transition time									
11:45 AM - 12:00 PM	Luncheon Session: Women-In-Siem Round Table In partnership with FIMSE Sponsored by GE Healthcare Panelists: Roslyn Bern, Stephanie Lisdie, Delhia Blanchard, Firoozeh Haqi-Moussa, Nika Momeni								
Transition time									
12:00 PM - 1:30 PM									
1:30 PM - 1:40 PM	Transition time								
1:40 PM - 3:00 PM	C10: CLINICAL ENGINEERING PROGRAM Chair: Becky Ng Clinical Engineers Papers Presentations C10.1 Best and Final Offer (BAFO) Procurement of Clinical Medical Equipment Andra Toomari, The Hospital for Sick Children C10.2 Predictive Capital Equipment Replacement Planning through Equipment Life Cycle Management Umairah Ahmed, The Hospital for Sick Children C10.3 Development of a Methodology for Imaging Equipment Replacement Prioritization Rebecca Austman, Winnipeg Regional Health Authority C10.4 Implementation and Maintenance of a Smart Bed System Becky Ng, Sinai Health C10.5 Enabling Secondary Alerting for Patient Monitoring Becky Ng, Sinai Health	A9: ACADEMIC PROGRAM Chair: Jan Andrysek & Sebastian Silva Cancer, Cell & Tissue Engineering, and Other A9.1 Development and Initial Evaluation of Novel Tourniquet Apparatus for Improved Safety Through Optimization of Tourniquet Inflation Time Matthew Yee, Western Clinical Engineering A9.2 Semi-Automation Of The Ki-67 Proliferative Index Quantification Method in Breast Cancer Karen Parente, Federal University of Paraná A9.3 Combining Morphological and Textural Features to Characterize Mitochondrial Structure Amulya Kalanahobita, Department of Systems and Computer Engineering, Carleton University A9.4 Breaking Down Silos: Engineering Team Drop-in Sessions Alice Casagrande Cesconetto, Lower Mainland Biomedical Engineering	POSTERS - CLOSED (tear down)	TRADE SHOW - CLOSED	CE9: CONTINUING EDUCATION PROGRAM Chair: Miad Mossabeh Mechanical Ventilation from a Clinical Perspective Michael Long - Charge Respiratory Therapist - UHN	LOCAL HOSPITAL TOUR - 5 2:45 PM - 4:00 PM SickKids Hospital Sign-up before May 3			
Transition time									
3:00 PM - 3:10 PM									
3:10 PM - 4:00 PM	Closing Remarks, Paper Competition Awards (Mandarin Ballroom)								