

The CMBECA6 CESO 2024 schedule matrix and programs are under development and are subject to change. The schedule is current as of May 15, 2024. Please check the website regularly for updates.

	CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower level 2	INDUSTRY INNOVATION PROGRAM by EERI Mandarin Ballroom B Lower level 2	ACADEMIC PROGRAM Denver Room 26th Floor	POSTER PRESENTATIONS Ottawa Room Mezzanine Level	MEDICAL DEVICE TRADE SHOW Toronto/Victoria/Vancouver Rooms 2nd Floor	CONTINUING EDUCATION PROGRAM Shanghai Room 29th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 26th Floor	LOCAL HOSPITAL TOURS
7:30 AM - 8:30 AM	Registration Light Breakfast Sponsored by:							
8:30 AM - 8:40 AM	Welcoming Remarks 2024 Conference Chair: Murali First							
8:40 AM - 10:00 AM	Keynote 1: Generative AI in Healthcare Speaker: Dr. Bo Wang Sponsored by							
10:00 AM - 10:20 AM						Refreshment Break (served in Tradeshow) Sponsored by:		
10:20 AM - 12:00 PM	<b>C1: CLINICAL ENGINEERING PROGRAM</b> Chair: Anthony Chan 10:20 - 10:40AM: CCE Certification Speakers: Kim Greenwood, Arif Subhan 10:40 - 12:00PM: Biomedical Engineering Technology in Canada Speakers: Anthony Chan, Dave Gretzinger, Carol Park, Rick Tidman, Roy Sharplin, Arif Subhan	<b>B1: INDUSTRY INNOVATION PROGRAM</b> by EERI Chair: Jon Schmid Innovations in Medical Imaging and Diagnostic Technologies. Speaker: Francisco Rodriguez-Campos (in person)	<b>A1: ACADEMIC PROGRAM</b> Chairs: Azadeh Yaddollahi & Faleh Bahget Sensors & Monitoring A1.1 Sound Level Within Transport Incubator During Use of Ambulance Siren Keely Gibb, Carleton University A1.2 Influence of Body Posture and Electrode Placement on the Measurement of Electrocardiogram Using Textile Electrodes Delaram Sablami, University of Toronto A1.3 A Smart Recommender System to Stratify Heart Attack Risk Dr. Dilbar Salaman, Thompson Rivers University A1.4 Upper Airway Resistance Measurement with Esophageal Catheter and Oscillometry Shaghayegh Chavoshian, 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	<b>P1: POSTER PRESENTATIONS</b> P1.1 H3K Gene Signatures Predict Survival Outcomes of Glioblastoma Patients Yasin Mamatjan P1.2 Capillary Microfluidic Systems for Precise Microparticle Separation Mohsen Hassani, University of Calgary P1.3 HALO CT Phantom: Successful Implementation for Continuous Dose Monitoring Douglas McTaggart, University Health Network P1.4 Raman Microspectrometry and Machine Learning: Accelerated Bacterial Identification Jesse Levine, Carleton University P1.5 Modeling Fibroblast Cells Movement Guillaume Cortesini-Dios Santos, Carleton University P1.6 Experimental Investigations on Thermal Necrosis of Bone in Conventional and Torsional Ultrasonic Drilling Khurshid Alam, Sultan Qaboos University P1.7 The Synthesis and Biodegradability of Silver Nanoparticles Doped ZIF-8 Composites Injectable Hydrogel Weng Chi Jong P1.8 The Adhesion Behaviour of Schwann Cells on PVA-based Hydrogel Substrates: Investigating Cellular Interactions for Nerve Regeneration Larissa Marlene Yakam Djomachoua, UNSW Sydney P1.9 Metabolic Reprogramming of Host Cells Induced by Cancer Cells: Implications for Premetastatic Niche Formation Maryam Vatani, University of Calgary P1.10 Innovative Strategy for Quality Control of Preparing Molecularly Imprinted Polymer Biosensor for Oral Filibillary Acidic Protein Detection Mohammedzaqar Garoobina, 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	<b>MEDICAL DEVICE TRADE SHOW</b>	<b>CE1: CONTINUING EDUCATION PROGRAM</b> Chair: 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) Sponsored by:		
1:00 PM - 2:10 PM	<b>C2: CLINICAL ENGINEERING PROGRAM</b> 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	<b>Visit Trade Show &amp; Posters</b> No Sessions: Please visit Trade Show	<b>Visit Trade Show and Posters</b> No Sessions: Please visit Trade Show	<b>P2: POSTER PRESENTATIONS</b> P2.1 Development and Assessment of a Wearable Biofeedback System to Elicit Gait Changes using Rhythmic Auditory Stimulation Alaa Gouda, 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 Marim Japaneida, Queen's University P2.4 Developing an Avatar in Virtual Reality for Mental Health Treatment Amir Bari Saad, University of Manitoba P2.5 Predict Knee Kinematics During Stationary Cycling via Machine Learning Regression Models Alouza Parsael, University of Calgary P2.6 Exploring the Impact of In-House 3D Printing in Surgery – A Biomedical Engineer's Perspective Quynh Ferreira, Sinai Health P2.7 Application of Quality Function Deployment for Design and Development of Artificial Muscle Fabrication Device Bilhanu Adida, Queen's University P2.8 Precise Recognition and Prediction of COPD by CNN-LSTM Ying-shi Zhang P2.9 The Development of a Head and Neck Support Device for Children with Cerebral Palsy Hannah Cooke, Queen's University P2.10 Pedaling Force Profile When Providing Assistive Torque Seyed Hamidreza Heshty, University of Calgary	<b>MEDICAL DEVICE TRADE SHOW</b>	<b>Visit Trade Show and Posters</b> No Sessions: Please visit Trade Show		
2:10 PM - 2:20 PM	Transition time							

Tuesday, May 28 - Day 1

Tuesday, May 28 - Day 1

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Tuesday, May 28 - Day 1

	CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower level 2	INDUSTRY INNOVATION PROGRAM by ECR Mandarin Ballroom B Lower level 2	ACADEMIC PROGRAM Denver Room 26th Floor	POSTER PRESENTATIONS Ottawa Room Mezzanine Level	MEDICAL DEVICE TRADE SHOW Toronto/Victoria/Vancouver Rooms 2nd Floor	CONTINUING EDUCATION PROGRAM Shanghai Room 29th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 26th Floor	LOCAL HOSPITAL TOURS
2:20 PM - 3:20 PM	<b>C3: CLINICAL ENGINEERING PROGRAM</b> Chair: Umakhair Ahmed Incubator Vibrations & Large Scale Patient Monitoring Implementation C3.1 Incubator Vibration Robert Langlois, Carleton University C3.2 Modern Healthcare: Integrating Patient Monitoring and Medical Devices Interoperability Jean Ngole, Children's Hospital of Eastern Ontario Rahim Chahki, Drexel Medical	<b>B2: INDUSTRY INNOVATION PROGRAM</b> Chair: Jon Schmid & Kent Brunen Innovations in Neuro Engineering & Brain-Computer Interfaces Speaker: Francisco Rodriguez-Campos (In person)	<b>A2: ACADEMIC PROGRAM</b> Chairs: Azadeh Yadollahi & 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 Taghizaylou, University of Toronto A2.2 Sex-Stratified Analysis of Airway Collapsibility Among Individuals Undergoing Chronic Opioid Therapy Aloussa Assadi, University of Toronto A2.3 Strategies to Load Curcumin into Poly(2-Hydroxyethyl Methacrylate)-based Disks to Increase Controlled Release Time for Intraocular Lenses Christopher A. Payne, Queen's University A2.4 Examining the Effect of Supraphysiological Insulin in an In Vitro Insulin Infusion Cannula Host Response Model Grace Riddell, Queen's University	<b>P3: POSTER PRESENTATIONS</b> 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 Babaei, University of Calgary P3.3 Optimizing Storage Condition for Graphene@PEDOT: PSS-Carbon Screen-Printed Electrodes Seydeh Zeinab Mousavizani, University of Calgary P3.4 A Neural Learning-Based Approach for EOG Artifact Removal from EEG Fatemeh Bagheri, University of Toronto P3.5 A Smart Bill-wraper: 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 Sonja Bonar, Queen's University P3.7 Raman Microspectroscopy and Machine Learning: A Perspective for Tissue Remodelling Characterization Natasha Kunchur, Carleton University P3.8 Evaluating the Impact of Biomaterials on Modulating Tumour-Associated Macrophages Aroosha Fareghdeh, Carleton University P3.9 Evaluation of cochlear implant trajectories relative to the basilar membrane Ashley Micuda, Western University P3.10 The Role of Oxygen in ECM remodeling Nadia Abzan, Carleton University	<b>MEDICAL DEVICE TRADE SHOW</b>	<b>CE2: CONTINUING EDUCATION PROGRAM</b> 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)							
3:35 PM - 3:45 PM	Transition time							
3:45 PM - 4:45 PM	<b>C4: CLINICAL ENGINEERING PROGRAM</b> Chair: Bill Genting Technical Problem Solving by BMETICE Speaker: Kamallesh Carjimagavadi	<b>B3: INDUSTRY INNOVATION PROGRAM</b> Chair: Jon Schmid & Kent Brunen The Art of the Possible- 3D Printing in Healthcare Speakers: Jason Stock and Mark Gillingham	<b>A3: ACADEMIC PROGRAM</b> Chairs: Jan Andrysek & Alias Gouds Prosthetics & Orthotics A3.1 Examining the Integration of Digital Technology for Ankle-Foot Orthosis Registration and Quantitative Shape Comparison Connor Matton, University of Toronto A3.2 Preliminary Characterization of Rectification for Three-quarter Transradial Prosthetic Sockets Clavin Nigan, University of Toronto A3.3 Creation of a Smart Template Library for Digital Transradial Prosthetic Socket Design Vishal Pendse, University of Toronto A3.4 3D Printing Method for Upper-Limb Diagnostic Sockets: A Technical Note Katrina Meng, University of Toronto	<b>P4: POSTER PRESENTATIONS</b> Self-directed viewing	<b>MEDICAL DEVICE TRADE SHOW</b>	<b>CE3: CONTINUING EDUCATION PROGRAM</b> Chair: Dan Zikovitz - Director of Digital Innovation & AI - GE HealthCare AF's Impact on Healthcare		<b>LOCAL HOSPITAL TOUR - 1</b> 3:15 PM - 4:30 PM University Health Network: Hyperbaric Chamber Sign-up before May 3
4:45 PM - 6:30 PM	Transition time							
6:30 PM - 9:30 PM	<b>Awards Gala Dinner &amp; Banquet: Toronto Harbour Boat Cruise</b> Sponsored by:							

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Wednesday, May 29 - Day 2

	CLINICAL ENGINEERING PROGRAM Mandarin Ballroom A Lower level 2	INDUSTRY INNOVATION PROGRAM by ECR Mandarin Ballroom B Lower level 2	ACADEMIC PROGRAM Denver Room 26th Floor	POSTER PRESENTATIONS Ottawa Room Mezzanine Level	MEDICAL DEVICE TRADE SHOW Toronto/Victoria/Vancouver Rooms 2nd Floor	CONTINUING EDUCATION PROGRAM Shanghai Room 26th Floor	CLINICAL ENGINEERING & CONTINUING EDUCATION Seattle Room 26th Floor	LOCAL HOSPITAL TOURS
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 Firat							
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:		
10:30 AM - 10:40 AM	Transition time							
10:40 AM - 12:00 PM	<b>C5: CLINICAL ENGINEERING PROGRAM</b> Chair: Andia Tooman Clinical Engineers Papers Presentations C5.1 Improving Bed Repair Turn Around Time through Parts Management Emily Ruddenham 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 Razzavi C5.4 Optimizing Biomedical Engineering Test Equipment Inspection Frequencies Sara MacCullivry 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 Fize	<b>I4: INDUSTRY INNOVATION PROGRAM</b> Chair: Jon Schmid & Kent Brunen Wearable Health Technologies: Monitoring, Wellness, and Fitness Speakers: Piyanka Shah (Virtual) and Jillian Hillman (In person)  Note: Virtually enabled session	<b>A4: ACADEMIC PROGRAM</b> Chairs: Jan Andrysek & Sebastian Silva Biomechanics A4.1 Evaluating Slips on Ice Surfaces: A Data Collection Protocol Davood Dadkhah, 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 Mohsin Al-Shimari, University of Calgary A4.4 Integrating Biomechanics and Probability: A Novel Framework for Helmet Impact Evaluation in Sports Injury Reza Deabae, University of Calgary A4.5 Wearable microfluidic biosensor for real-time cortisol monitoring: sweat biomarker monitoring Fereshteh Vajhadin, University of Calgary	<b>P5: POSTER PRESENTATIONS</b> P1.1 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 Retable and Reproducible Biosensors Bahareh Babamiri, University of Calgary P3.3 Optimizing Storage Condition for Graphene@PEDOT: PSS-Carbon Screen-Printed Electrodes Seyedeh Zeinab Mousavizani, University of Calgary P4.4 A Neural Learning-Based Approach for EOG Artifact Removal from EEG Fatemeh Bagheri, University of Toronto P3.5 A Smart Bill-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 Soraja Bonar, Queen's University P3.7 Raman Microspectroscopy and Machine Learning: A Perspective for Tissue Remodelling Characterization Natasha Kunchur, Carleton University P3.8 Evaluating the impact of biomaterials on modulating tumour-associated macrophages Aroosha Fareghdeh, Carleton University P3.9 Evaluation of cochlear implant trajectories relative to the basilar membrane Ashley Micuda, Western University P3.10 The Role of Oxygen in ECM remodeling Nadia Abzan, Carleton University	MEDICAL DEVICE TRADE SHOW	<b>CE4: CONTINUING EDUCATION PROGRAM</b> Chair: Building and Leveraging a Connected Ecosystem for Improved Clinical Communication, Workflow, and Data Insights  Rich Mayoras – Director of Connected Solutions – Stryker	<b>CE13: CONTINUING EDUCATION PROGRAM</b> Cybersecurity in Healthcare: Fundamentals and Role of CE Professionals  Kajerwan Rajanyagam Director of Cybersecurity, UHN	
12:00 PM - 1:00 PM						Lunch (served in Tradeshow) Sponsored by:	LOCAL HOSPITAL TOUR -2 12:45 PM - 2:01 PM	
12:30 PM - 2:10 PM	<b>CMBS AGM</b> 12:30 PM - 2:10 PM: CMBS AGM	<b>Visit Trade Show &amp; Posters</b> No Sessions: Please visit Trade Show	<b>Visit Trade Show and Posters</b> No Sessions: Please visit Trade Show	<b>P6: POSTER PRESENTATIONS</b> P1.1. High level signatures predict survival outcomes of uroepithoma patients Yasin Mamajani P1.2 Capillary Microfluidic Systems for Precise Microparticle Separation Mohsen Hassani, University of Calgary P1.3 HALO CT Phantom: Successful Implementation for Continuous Dose Monitoring Douglas McTaggart, University Health Network P1.4 Raman Microspectrometry and Machine Learning: Accelerated Bacterial Identification Jesse Levine, Carleton University	MEDICAL DEVICE TRADE SHOW	<b>Visit Trade Show and Posters</b> No Sessions: Please visit Trade Show	Sponsored by: KITE Research Institute KITE Research Institute  Sign-up before May 3	
2:10 PM - 2:20 PM	Transition time							

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Wednesday, May 29 - Day 2

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2:20 - 3:20 PM	<b>C6: CLINICAL ENGINEERING PROGRAM</b> Chair: Adeel Alam <b>Right to Repair: CMBEES Work Over on The Past Year: CMPEP and Right to Repair; Dr. Rosborough on Bill C-244-C246, Tied Selling and Right to Repair Research with a Q&amp;A</b>  Speakers: Murray Rice, TJ Jarvis and Dr. Anthony Rosborough (Virtual)  Note: Virtually enabled session	<b>B5: INDUSTRY INNOVATION PROGRAM</b> Telehealth and Remote Monitoring: The Future of Healthcare Delivery  Speakers: Piyanka Shah (Virtual) and Jillian Hillman (In person)  Note: Virtually enabled session	<b>A5: ACADEMIC PROGRAM</b> Chair: Azadeh Yadollahi Biomedical Engineering Societies and Their Role in Integrating Science and Profession Worldwide  Speaker: Prof. Ratko Magjarevic, President, FBME	<b>P7: POSTER PRESENTATIONS</b>  P2.1 Development and Assessment of a Wearable Biofeedback System to Elicit Gait Changes using Rhythmic Auditory Stimulation Aliaa Gouda, 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 Marum Japanwala, Queen's University  P2.4 Developing an Avatar in Virtual Reality for Mental Health Treatment Amir Bassi Saeed, University of Manitoba  P2.5 Predict Knee Kinematics During Stationary Cycling via Machine Learning Regression Models Alouisa Parsani, University of Calgary  P2.6 Exploring the Impact of In-House 3D Printing in Surgery – A Biomedical Engineer's Perspective Owynn Ferreira, Sinai Health  P2.7 Application of Quality Function Deployment for Design and Development of Artificial Muscle Fabrication Device Birhanu Addis, Queen's University  P2.8 Precise Recognition and Prediction of COPD by CNN-LSTM Ying-shi Zhang  P2.9 The Development of a Head and Neck Support Device for Children with Cerebral Palsy Hannah Cooke, Queen's University  P2.10 Pedaling Force Profile When Providing Assistive Torque Seyed Hamidreza Haidary, University of Calgary	<b>MEDICAL DEVICE TRADE SHOW</b>  Free tradeshow pass	<b>CES CONTINUING EDUCATION PROGRAM</b> Healthcare's unique medical device cybersecurity challenges: What you need to know  Presenter: Steve Trevino	<b>CE14 CONTINUING EDUCATION PROGRAM</b> Alarm Management – A Clinical Perspective and Lessons Learned  Nely Amrani – Senior Director, Nursing Practice & Clinical Quality and Magnet Program Director – Sinai Health	<b>LOCAL HOSPITAL TOUR 3</b> 2:15 PM - 3:30 PM  University Health Network: Healthcare Human Factors
3:20 PM - 3:35 PM	Refreshment Break (served in Tradeshow)					Sponsored by:		
3:35 PM - 3:45 PM	Transition time							
3:45 PM - 5:05 PM	<b>C7: CLINICAL ENGINEERING PROGRAM</b> Chair: Adeel Alam <b>Right to Repair: A working session to collaboratively define what are reasonable service element costs (i.e., service training, software, etc.)</b>  Speakers: Kevin Taylor and Ted MacLaggan	<b>B6: INDUSTRY INNOVATION PROGRAM</b> Chair: Jon Schmid Digital Health Ecosystems: Interoperability and Data Security  Speaker: Chad Waters (In Person)	<b>A6: ACADEMIC PROGRAM</b> Chairs: Azadeh Yadollahi & Alouisa Assadi Sleep Apnea  A6.1 Postoperative Opioid-Induced Respiratory Depression: Who are at the Greatest Risk? Mohammad Goudarzi 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 Bryan Vogt, 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  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 Astraf, 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	<b>P8: POSTER PRESENTATIONS</b>  Self-directed viewing	<b>MEDICAL DEVICE TRADE SHOW</b>	<b>CEE: CONTINUING EDUCATION PROGRAM</b> Medical Imaging Journey - An Inside Story  Presenter: Ravindra Anand	<b>CE15: CONTINUING EDUCATION PROGRAM</b> Medical Device Integration – Streaming Clinical Data and Contextual Insights for Enhanced Patient Care Management  Cathleen Ogilivie, Solutions Consultant Leader – Clinical Integration and Insights, 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:		

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7:30 AM - 8:30 AM	Registration							
	Light Breakfast Sponsored by:							
8:30 AM - 8:40 AM	Welcoming Remarks (Mandarin Ballroom) 2024 Conference Chair: Murat Firat							
8:40 AM - 10:00 AM	<b>Keynote 3: The drive to encourage Women in STEM</b> Sponsored by:  Speaker: Roslyn Bern, Leacross Foundation in partnership with IFMBE		<b>A7: ACADEMIC PROGRAM</b> Chair: Azadeh Yaddollahi & Asma Gouda Biomaterials & 3D Digital Technology  <b>A7.1 3D Printing for Biomedical Technologists: An Ounce of Prevention is Worth a Pound of Cure</b> Larry Cortez, University Health Network  <b>A7.2 In Vitro Screening of Inflammatory Responses to Polypropylene-based Surgical Mesh Used in the Treatment of Pelvic Organ Prolapse</b> Kiyul Lee, Queen's University  <b>A7.3 Synthesis of Bacteriostatic Materials from Quaternary Ammonium Salts</b> Kazi Naziba Tahsin, School of Biomedical Engineering, Western University  <b>A7.4 SAM Zero-Shot Detection of Vertebral Surfaces from Freehand 3D Ultrasound: SAM ZS Detection of Vertebral Surfaces from FH 3D US</b> Sen Li, École de technologie supérieure  <b>A7.5 Finite Element Modeling of an Uncolled Cochlea Using Synchrotron Radiation-Phase Contrast Imaging</b> Nastaran Shaloukar, School of Biomedical Engineering, Western University			<b>CE7: CONTINUING EDUCATION PROGRAM</b> Incident Investigation Andrew Ibey, Manager of Biomedical Engineering (CHEO)  Colleen Turpin, RN BScN, M Ed. Problem Report Information Specialist Marketed Health Products Safety and Effectiveness Information Bureau Health Canada-MHPD	<b>CE16: CONTINUING EDUCATION PROGRAM</b> Imaging Technology - Ultrasound Probes Workshop Taylor Baillie, 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							
10:25 AM - 11:45 AM	<b>CE: CLINICAL ENGINEERING PROGRAM</b> Chair: Andrew Cheung Peer Review and Outreach Speakers: Jean Ngole, Bill Gentles & Martin Poulin	<b>B7: INDUSTRY INNOVATION PROGRAM</b> Chair: Jon Schmid From Base Pairs to Personalized Care: Does Precision Medicine Improve Patient Outcomes?  Speakers: Matthew Manso-Share (virtual) Vajjayalakshmi Iyer (in-person)  Note: Virtually enabled session	<b>A9: ACADEMIC PROGRAM</b> Chair: Jan Andrysek & Atousa Assadi Machine Learning  <b>A9.1 Fine-tuning an Automatic Speech Recognition Model for a Canadian Indigenous Counselling Program</b> Emmanuel Olaniyana, University of Manitoba  <b>A9.2 Time Domain Cluster Analysis of Human Activity Using Triaxial Accelerometer Data</b> Krunoslav Juric, University of Zagreb  <b>A9.3 Deep Learning for The Chronic Obstructive Pulmonary Disease Assessment using Lung CT</b> Halimah Absurayhi, Western University  <b>A9.4 Thermography-based Breast Abnormality Detection using Siamese Network</b> Ankita Dey, Carleton University  <b>A9.5 Fractional Fourier Time-Frequency Representation for Heart Sound Classification</b> Ebrahim A. Nehary, Carleton University	POSTER PRESENTATIONS  Self-directed viewing	TRADE SHOW - CLOSED	<b>CE8: CONTINUING EDUCATION PROGRAM</b> Blueprints for Health: Understanding the Basics of 3D Printing in Surgical Scenarios Qaym Fereia - Biomedical Technologist, EIT - Sinai Health  GeEngineer 3D Printing Solutions: Richard Cromwell - Senior Application Engineer	<b>CE5: CLINICAL ENGINEERING PROGRAM</b> Chair: Ibtisam Al-Tahrir Clinical Engineers Papers Presentations  <b>CE5.1</b> Essential elements of a modern Clinical Engineering Internship: Ottawa-Carleton Institute for Biomedical Engineering Andrew Ibey, Children's Hospital of Eastern Ontario  <b>CE5.2</b> Bridging Borders: Training & Educating Clinical Engineering Workforce - A Canadian & American Perspective Arif Subhan & Anthony Chan  <b>CE5.3</b> Applications of 3D Printing in Healthcare - Challenges and Considerations in Biomedical Engineering Nicholas Jerne  <b>CE5.4</b> Benefits of Biomedical Engineering Internships Conducted in Biomedical Engineering Departments in Hospitals Sarah Grenier, Carleton University  <b>CE5.5</b> An Update on the Development of Cybersecurity Practices for Biomedical Engineering Departments Adele Alam, Sinai Health  <b>CE5.6</b> Developing Future In-House Radiology Service Technologists Emily Rose, Lower Mainland Biomedical Engineering	<b>LOCAL HOSPITAL TOUR 4</b> 10:45 AM - 12:00 PM  Mount Sinai Hospital  Sign-up before May 3
11:45 AM - 12:00 PM	Transition time							
12:00 PM - 1:30 PM	Luncheon Session: <b>Women-in-STEM Round Table</b> In partnership with IFMBE Sponsored by: GE Healthcare Panelists: Roslyn Bern, Stephanie Liddle, Delhia Blanchard, Firdous Hadj-Moussa, Nika Momeni							
1:30 PM - 1:40 PM	Transition time							
1:40 PM - 3:00 PM	<b>C19: CLINICAL ENGINEERING PROGRAM</b> Chair: Becky Ng Clinical Engineers Papers Presentations  <b>C19.1</b> Best and Final Offer (BAFO) Procurement of Clinical Medical Equipment Andia Toomari, The Hospital for Sick Children  <b>C19.2</b> Predictive Capital Equipment Replacement Planning through Equipment Life Cycle Management Umair Ahmad, The Hospital for Sick Children  <b>C19.3</b> Development of a Methodology for Imaging Equipment Replacement Prioritization Rebecca Austman, Winnipeg Regional Health Authority  <b>C19.4</b> Implementation and Maintenance of a Smart Bed System Becky Ng, Sinai Health  <b>C19.5</b> Enabling Secondary Alerting for Patient Monitoring Becky Ng, Sinai Health		<b>A9: ACADEMIC PROGRAM</b> Chair: Jan Andrysek & Sebastian Silva Cancer, Cell & Tissue Engineering, and Other  <b>A9.1</b> Development and Initial Evaluation of Novel Tourniquet Apparatus for Improved Safety Through Optimization of Tourniquet Inflation Time Matthew Yee, Western Clinical Engineering  <b>A9.2</b> Semi-Automation Of The Ki-67 Proliferative Index Quantification Method in Breast Cancer Karen Parente, Federal University of Paraná  <b>A9.3</b> Gold Nanoparticles Loaded with Cannabinoids for Targeted Cancer Therapy Anshuman Jakhmola, Department of Physics, Toronto Metropolitan University  <b>A9.4</b> Combining Morphological and Textural Features to Characterize Mitochondrial Structure Anujya Kishanathbhatta, Department of Systems and Computer Engineering, Carleton University  <b>A9.5</b> Breaking Down Silos: Engineering Team Drop-In Sessions Alice Casagrande Cesconetto, Lower Mainland Biomedical Engineering	POSTERS - CLOSED (tear down)	TRADE SHOW - CLOSED	<b>CE9: CONTINUING EDUCATION PROGRAM</b> Mechanical Ventilation from a Clinical Perspective Michael Long - Charge Respiratory Therapist - UHN	<b>LOCAL HOSPITAL TOUR 5</b> 2:45 PM - 4:00 PM  SickKids Hospital  Sign-up before May 3	
3:00 PM - 3:10 PM	Transition time							
3:10 PM - 4:00 PM	Closing Remarks, Paper Competition Awards (Mandarin Ballroom)							

Thursday, May 30 - Day 3

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