



CMBEC45 Clinical Engineering Program

Session	Session Name	Date	Time
C1	CMBES Clinical Engineering Standards of Practice - Overview of Changes in the 4th Edition	May 16	10:45 AM – 11:45 AM
C2	Right to Repair Workshop	May 16	1:30 PM – 3:15 PM
C3	Clinical Engineering Oral Presentations	May 17	10:45 AM – 12:25 PM
A/B/C 4	Combined Session: Innovative Medical Technologies and the Challenges They Pose	May 17	1:40 PM – 3:00 PM
C4B	Clinical Engineering Oral Presentations	May 17	1:40 PM – 3:20 PM
C5	Values of BMET Registration/Certification and related Challenges facing Educational Institutions and Employers	May 17	3:45 PM – 5:05 PM
A/B/C 6	Combined Session – Indigenous Reconciliation	May 18	8:40 AM – 10:00 AM
C7	Cross Canada Checkup	May 18	10:45 AM – 12:05 PM
C8	Clinical Engineering Oral Presentations	May 18	1:40 PM – 3:00 PM

Session Descriptions

C1: CMBES Clinical Engineering Standards of Practice - Overview of Changes in the 4th Edition

Speaker(s): Zoabli Gnahoua, Andrew Ibey, John Inch, Marie-Ang Janvier, Kelly Kobe, Ron Sturge

Chair: Anthony Chan

Date and Time: May 16, 10:45 AM – 11:45 AM

Description: The original Clinical Engineering Standards of Practice for Canada was published in 1998. Revisions were published in 2007 and 2014. The work on the 4th edition began in July of 2021 with 15 members in the working group. The final document was presented to the membership for review and comment. Comments were incorporated where possible. The final draft was approved by the CMBES Executive on February 23, 2023. This session will present the major changes in this revision. A panel of working group members will be available to answer questions.



Speaker Bio(s):

Anthony Chan (Chair), PhD, PEng, CEng, CCE, FCMBES
Program Head, Biomedical Engineering Technology
School of Health Sciences, British Columbia Institute of Technology
Adjunct Professor, School of Biomedical Engineering, University of British Columbia
Burnaby, B.C.

Zoabli Gnahoua, P.Eng., M.Eng., PhD, EMBA
Chef de service du génie biomédical – volet immobilisation des équipements médicaux
Direction des services multidisciplinaires
Centre intégré de santé et de services sociaux des Laurentides
St-Jérôme (Québec)

Andrew Ibey, M.Eng., Adv. Cert. (Forensics), P.Eng., CCE (C), SMIEEE
Manager, Clinical Engineering Services
Adjunct Research Professor, Department of Systems and Computer Engineering, Carleton University,
Adjunct Professor, Department of Mechanical Engineering, University of Ottawa,
CHEO, Ottawa, ON

John Inch, CET, CBET(C)
Manager Clinical Engineering
IWK Health
Halifax, NS

Marie-Ang Janvier, PhD, P.Eng., CCE,
CHEO Clinical Engineer Clinical Engineering,
Adjunct Research Professor, Department of Systems and Computer Engineering, Carleton University,
Adjunct Professor, Department of Mechanical Engineering, University of Ottawa,
Ottawa, ON

Kelly Kobe, P.Tech.(Eng.), CBET(C)
Director, Clinical Engineering
Alberta Health Services
Calgary Zone, AB

Ron Sturge, P.Eng./ing., MBA
Executive Director/ Directeur exécutif
Clinical Engineering / Ingénierie Clinique
Service New Brunswick / Service Nouveau-Brunswick
Moncton, NB.



C2: Right to Repair Workshop

Speaker(s): Adeel Alam, Kevin Taylor, Ted MacLaggan

Chair: Ted MacLaggan

Date and Time: May 16, 1:30 PM – 3:15 PM

Description: The ability for Biomedical Engineering professionals to provide in-house or 3rd party repair service is vital to the efficient, safe, and effective use of medical technology in the provision of patient care.

Unfortunately, Biomedical Engineering professionals are facing growing challenges and roadblocks in our ability to repair and support medical equipment from manufacturers.

This workshop will provide a brief update to CMBES current work on the Right to Repair and brainstorm ideas and methods of ensuring the reparability and supportability of medical equipment.

C3: Clinical Engineering Oral Presentations

Speaker(s): Sonia Pinkney, Maciej Bauer, Anthony Salmon, Dave Gretzinger, Alice Casagrande Cesconetto, Alanna Bateman, Gnahoua Zoabli

Chair: Pej Namshirin

Date and Time: May 17, 10:45 AM – 12:25 PM

Description: Oral presentation of clinical engineering papers/abstracts.

A/B/C 4: Combined Session: Innovative Medical Technologies and the Challenges They Pose

Speaker(s): Marc Saab, Emil Sosnowski, Jon Bracken, Carol Park

Chair: Garrett Kryt

Date and Time: May 17, 1:40 PM – 3:00 PM



Description: While the demand for emerging technology in healthcare applications continues to grow at an exponential rate, the supply seems to be stalled by familiar factors. The requirements to ensure patient safety and to show compelling clinical validation have always been imposed by regulatory agencies like Health Canada and the FDA. When new technology is introduced into the clinical environment, and even directly into the hands of the patients at times, issues around inter-operability, usability, data integrity, cybersecurity, and data privacy arise.

The amazing possibilities offered by medical wearables, artificial intelligence, and remote patient monitoring applications are exciting. This presentation will address some of the considerations for tech companies and clinical organizations alike to overcome new challenges, such that real-world medical applications based on these exciting new technologies can be integrated into existing clinical frameworks and used reliably.

This session will feature a presentation by Marc Saab followed by a panel discussion with experts in cybersecurity, clinical engineering, regulatory and medical device development.

Speaker Bios



Marc Saab, MEng

Founder and Managing Director, BML Technology

LinkedIn: <https://www.linkedin.com/in/marc-saab-6048263/>

Marc is a passionate business leader with 20 years' experience in Medical Device, Digital Health and Consumer Wearables. His expertise is in all aspects of medical device and wearable product development from conception R&D to launch, clinical validation, and commercialization for international markets, including regulatory compliance and strategic business development. Marc is an expert in biometrics and a thought leader on the technical aspects of Digital Health. He is a speaker on a variety of digital health topics, including product development, clinical application development and technology adoption. He also serves on the Strategic Advisory board of Henri&Wolf, a boutique data governance and cyber security law firm, the Medical Advisory Board of Alto Design, an award-winning industrial design firm, and the Science Advisory Board of ABI Wellness, a unique brain injury recovery provider. Marc holds a Bachelor of Applied Science from the University of Waterloo, with a major in Electrical Engineering and a minor in Biology, and a Master of Biomedical Engineering from McGill University and the Montreal Neurological Institute. He currently lives in Montreal, Canada with his two daughters and their two dogs.

2023 CMBES CONFERENCE



Vancouver, BC
May 16-18, 2023



Emil Sosnowski, MSc

Regional Clinical Engineer, Interior Health Authority

Emil is a clinical engineer with Interior Health Authority, with a background in medical device asset management, cybersecurity risk assessment, and device discovery platform implementation. He also brings considerable experience in medical device development, with previous research endeavours being focused on additive manufacturing of medical devices and applications of biocompatible polymers. Emil has been involved in a number of cybersecurity-centric committees at both the regional and national levels, and is committed to furthering the development of medical device cybersecurity guidance materials for application in the clinical environment.

C4B: Clinical Engineering Oral Presentations

Speaker(s): Bruce Morrison, Kerry Newlin, Marie-Ange Janvier, Ishtar Al-Tahir, Kim Greenwood, Adeel Alam, Kamran Samanian, Qwynn Ferreira, Arif Subhan, Frank Painter

Chair: Sundeep Bath

Date and Time: May 17, 1:40 PM – 3:20 PM

Description: Oral presentation of clinical engineering papers/abstracts.

C5: Values of BMET Registration/Certification and related Challenges facing Educational Institutions and Employers

Speaker(s): Pej Namshirin, Denis Painchaud, Roy Sharplin, Arif Subhan, Michael Thain, Shripal Parikh

Chair: Anthony Chan

Date and Time: May 17, 3:45 PM – 5:05 PM

Description: In this panel discussion session, a panel of representatives from different sectors will make presentations on the landscape of BMET registration and certification in Canada, its impacts on employers, the roles of educational institutions, and the costs and benefits to the public. Time will be set aside for questions from and discussions with participants.



Speaker Bio(s):

Anthony Chan (Chair), PhD, PEng, CEng, CCE, FCMBES
Program Head, Biomedical Engineering Technology
School of Health Sciences, British Columbia Institute of Technology
Adjunct Professor, School of Biomedical Engineering, University of British Columbia
Burnaby, BC

Pej Namshirin, BTech (TMGT), ASCT
Manager, VA/Richmond Operations & Regional Initiatives
Vancouver, BC

Denis Painchaud
District Service Manager – Alberta/British Columbia
Philips Canada
Edmonton, Alberta

Roy Sharplin, CET (ASET)
Chair Biomedical Engineering Technology
Northern Alberta Institute of Technology
Edmonton, Alberta

Arif Subhan, MS, CCE, FACCE, AAMIF
Chief Biomedical Engineer
VA Greater Los Angeles Healthcare System
Los Angeles, CA, USA

Michael Thain
Registrar and General Counsel
Applied Science Technologists & Technicians of British Columbia
Surrey, BC

Shripal Parikh, cdt, ASCT
Co-Chair – The Canadian Board of Examiners for Biomedical Engineering and Dialysis Technologists and Technicians

A/B/C 6: Advancing Reconciliation: The Role of the Biomedical Community

Speaker(s): Gary Housty, Lauren Brown, Karen Mooder, Miguel Antonio, Brendan Gibbons, Murray Rice
Sarah Kelso



Chair: Sundeep Bath

Date and Time: May 18, 8:40 AM – 10:00 AM

Description: This conference session is a valuable opportunity to learn about the negative impacts of colonialism on Indigenous peoples' health outcomes and the role that the biomedical community can play in supporting reconciliation efforts. By promoting collaboration and action-oriented approaches based on respect, humility, and honesty, the biomedical community can help to improve Indigenous health outcomes and contribute to the ongoing process of reconciliation.

The session will begin with dialogue on factual information about the negative impacts of colonialism on Indigenous peoples' health outcomes. Disparities in Indigenous health outcomes and the root causes of these disparities will be discussed, such as the ongoing effects of colonial healthcare policies.

Next, the panelists will explore some key principles related to reconciliation, such as respect, humility, and collaboration. They will discuss how these principles can be applied in the context of the biomedical community to support reconciliation efforts and improve Indigenous health outcomes.

The panelists will then provide an example of action-oriented work within the biomedical community towards reconciliation. They will discuss a collaborative initiative between FNHA and B.C. biomedical engineering departments to improve support for medical technologies in Indigenous communities, demonstrating the principles of reconciliation in action.

The CMBES President and Vice President will share the society's perspectives on reconciliation, and the session will conclude with Q&A with the panelists. Attendees will have the opportunity to ask questions and engage in a dialogue about reconciliation efforts within the biomedical community.

C7: Cross Canada Checkup

Speaker(s):

Alberta – Kelly Kobe
British Columbia – Carol Park
Manitoba – Rebecca Austman
New Brunswick – Ronald Sturge
Nova Scotia – Michael Barton
Ontario – Dave Gretzinger

Chair: Jane Boal

Date and Time: May 18, 10:45 AM – 12:05 PM



Description: This session involves a cross country view and update from each provincial region. Presenters will share news of achievements and challenges they are facing in their neck of the woods, with an opportunity to learn and share best practices, efficiencies and innovative ideas.

Speaker Bio(s)



Kelly Kobe, P.Tech (Eng.), CBET(c)

Director, Clinical Engineering, Alberta Health Services

Kelly Kobe is the Director for Clinical Engineering from the Calgary Zone within Alberta Health Services, which is Canada's first and largest province-wide, integrated health system, responsible for delivering health services to more than 4.4 million people living in Alberta, with more than 112,000 direct AHS employees. With 35 years in the field of Biomedical Engineering has experienced the ever-changing technology field. Kelly became certified through the Canadian Board of Examiners for Biomedical Engineering Technologists and Technicians in 1994 and achieved certification as the first P.Tech (Eng.) designation as a Professional Technologist under the Biomedical discipline in Alberta. Volunteering in many different capacities supporting the industry, Kelly received the CMBES Outstanding Canadian Biomedical Engineering Technologist Award in 2017.



Carol Park, M.Eng., MA, P.Eng

Executive Director, Lower Mainland Biomedical Engineering

Carol Park is the Executive Director of Lower Mainland Biomedical Engineering in British Columbia, one of the largest biomedical engineering departments in Canada, providing services for 27 hospitals across the lower mainland of British Columbia. The biomedical engineering department has over 200 staff supporting approximately 100,000 medical devices. Carol has over 30 years experience in the healthcare system, in both biomedical engineering and primary and community care. She volunteers with Engineers and Geoscientists BC, the regulatory body for engineering in BC, recently completing a term as the Council President. She is also a board member for the Medical Device Development Centre in Vancouver, BC. Her training includes a Bachelor of Applied Science in Engineering Chemistry from Queen's University, a Masters in Clinical Engineering from the University of British Columbia, and a Masters in Leadership & Training from Royal Roads.



Rebecca Austman, Ph.D., P.Eng

Regional Manager of Imaging Technology, Shared Health

Rebecca holds a Bachelor's degree in Biosystems Engineering from University of Manitoba and a Ph.D. in Biomedical Engineering from The University of Western Ontario. She began her career in Clinical Engineering with the Winnipeg Regional Health Authority in 2011, with a focus on technology management and planning for imaging equipment. In her current position of Manager of Imaging Technology with Shared Health, Rebecca helps plan and implement imaging projects throughout the province of Manitoba, guides the imaging equipment service strategy, and manages an In-House service team. She is a part of the leadership team that is moving Clinical Engineering from a regional to a provincial service through Manitoba's health system transformation. Rebecca is a part of the CMBES Executive as the Publications Chair, and sits on the Board of the Canadian Medical Equipment Protection Plan.



Ronald Sturge, MBA, P.Eng

Executive Director, Clinical Engineering, Service New Brunswick

Ron is the Executive Director of Clinical Engineering for the Health Service Division of Service New Brunswick. He has been in Clinical Engineering Management since 2007. Prior to joining civil service in 2007, Ron worked for 10 years as a service engineer with Siemens Canada.

Ron is a professional engineer (P. Eng) with a Bachelor of Engineering (Electrical) from Memorial University of Newfoundland and holds a Master of Business Administration (MBA) from UdeM.

C8: Clinical Engineering Oral Presentations

Speaker(s): Penny Longman, Eduardo Alcala, Emil-Peter Sosnowski, Jonnathan Quintero, Elana Wood, Nathan Hind, Chris Van Demark, Andrew Ibey

Chair: Jane Boal

Date and Time: May 18, 1:40 PM – 3:00 PM

Description: Oral presentation of Clinical Engineering papers

Speaker Bio(s)

2023 CMBES CONFERENCE



CMBES/SCGB

Vancouver, BC
May 16-18, 2023



Penny Longman, CISSP, CISA, CDPSE, CIPP/C, ITIL

Director, Information Security & Data Stewardship

Penny is a security leader with experience in healthcare, M&A, mining, manufacturing, environmental sciences, project management, data analytics, consulting and academia. She has a broad technical background and brings that unique perspective to her work. Penny is passionate about generating real organisational change around cyber security and safety, and focuses on moving people forward into new ways of interacting securely with technology. Pronouns: she/her.