

смвеѕ/scgв Monthly e-Bulletin 🦟 🦫

April 2019

Message From the President

From the desk of the President, Mike Capuano

Greetings to all members of the CMBES.

I'd like to take this opportunity to update our members with some of the actions currently taking place. The Executive is continuing its efforts to make CMBES the go-to society for Biomedical and Clinical Engineering in Canada. We also strive to become as efficient as possible. For example, we're trying to increase assignments to volunteers hoping to reduce billed services. We will be announcing soon that full members outside of Canada will be getting a special rate [Associate's Rate]. We have plans to develop the MOU with EMBS-IEEE for the joint conference in July of 2020. We're working on rebooting the CMBES Webinar Series this year. We are currently piloting a special tool on our website for members only. This is in the form of a central repository, which will hold end-of-life information for medical devices. We hope to have this completed by October 2019. Again, the CMBES 50th Anniversary Journal has been released. Get your copy now from the CMBES Store (no charge for members, \$25 for non-members).

Message du président

Du bureau du président, Mike Capuano

Salutations à tous les membres du CMBES.

J'aimerais profiter de la présente pour informer nos membres de certaines activités présentement en cours.

L'exécutif poursuit ses efforts pour faire du CMBES la société incontournable du génie biomédical et clinique au Canada. Nous nous efforçons également de devenir aussi efficaces que possible. Par exemple, nous tentons d'augmenter le nombre de tâches confiées à des volontaires dans l'espoir de réduire les services achetés auprès de fournisseurs. Nous annoncerons bientôt que les membres titulaires à l'extérieur du Canada bénéficieront d'un tarif spécial [tarif associé]. Nous prévoyons élaborer un protocole d'entente avec l'EMBS-IEEE pour la conférence conjointe de juillet 2020. Nous travaillons au redémarrage de la série de webinaires du CMBES cette année. Nous testons actuellement un outil spécial sur notre site Web réservé aux membres. Cela se présente sous la forme d'un référentiel central, qui contiendra les informations de fin de vie des dispositifs médicaux. Nous espérons que cela sera terminé en octobre 2019. Encore une fois, le journal du 50e anniversaire de la CMBES a été publié. Obtenez votre copie dès maintenant dans la boutique CMBES (sans frais pour les membres, 25 \$ pour les non-membres).

MEMBERSHIP UPDATES

From the desk of the Membership Committee Chair, Gad Acosta

Life support and monitoring equipment are an integral part of the daily work for various

Biomedical, Medical and Clinical Engineers and Technologists all across Canada. How can we best support healthcare systems that become a new responsibility in our jobs? One proven option is by reaching out to other members of CMBES who have substantial years of practical experience in the field. Individuals like these can provide pointers as to which items we need to have in consideration for known and new systems, the approaches they have tried, and which ones are the most successful ones.

Posting our questions in the CMBES forums, engaging in conversations during webinars, meetings and particularly, the CMBEC42, are great ways to reach out about our topics of common interest.

Help us welcome the newest members of our Society:

Emma Farago Yangyu Shi Celine Girard Douglas McTaggart Nicholas Betancourt Tintu Elizabeth Varghese Peter Meireles Thi Kieu Hanh Than Rachel Zhang Foustina Nithiyanatham Ludny Lemi Ciceron Alanna Betaman

CMBEC 42 Update

From the desk of the Organizing Committee Chair, Kim Greenwood

INVITATION TO CMBEC42



Call for Papers:

The call for papers closed on February 1st, 2019. Thank you to all who submitted papers you will see follow up as the reviewers start their work approving papers for the conference.

CMBEC42 Registration:

Registration for the conference is now open. Don't delay; the early bird deadline is only available until April 8th, 2019. <u>Book now</u> to get 10% off!

Reminder:

Don't forget to book your hotel before April 20th For more information, please see here

Continuing Education:

The Continuing Education stream is set. There is a broad range of courses available for only \$20 each! Sign up for one or two courses! The list includes:

- Introduction to Diagnostic Imaging & PACS
- Entrepreneurship Workshop (Intellectual Property Lawyer)
- Shop3D Printing
- AED/Defibrillator
- ESU Training
- Olympus (Endoscopy Inspection Training)
- Water System Standards
- Philips V60 and V680
- Ultrasound Probe Repairs

Schedule at a Glance is available here for CE dates/times

Twitter:

If you are a Twitter user, be sure to follow @CMBESociety. We can use your to help to promote the Conference by retweeting, liking and using the handle #cmbec42 in your posts.

KeyNote Speakers:

The committee is very excited to announce 3 of our Keynote Speakers Dr. Molly Shoichet, Tiago Falk and Dr. Carl-Eric Aubin!

Dr. Molly Shoichet

University Professor and Canada Research Chair, Tissue Engineering Senior Advisor to President on Science & Engineering Engagement Chemical Engineering & Applied Chemistry Donnelly Centre University of Toronto.

"Delivering the Promise of Regenerative Medicine"

Two key challenges in regenerative medicine are survival and integration of exogenous transplanted cells or endogenous stimulated cells. To address these issues, we have designed bioengineered materials that both promote cell survival and enhance the environment in which the cells are transplanted. Using pro-survival factors incorporated into the design of injectable hydrogels and innovative biomolecule delivery strategies, we have had some success in animal models of blindness, stroke and spinal cord injury.

Tiago Falk, PhD, SMIEEE

Associate Professor, INRS-EMT Director, MuSAE Lab

Artificial Intelligence, Signal Processing, and Wearables: Building Blocks for Healthcare Technologies of the Future Advances in biosensor technologies have enabled the development of new low-cost wearable devices, which are now being explored for remote health monitoring applications. Advances in artificial intelligence, in turn, have resulted in algorithms capable of assisting clinicians improve diagnostic accuracy. Exploration of these elements in combination with advanced signal processing tools to develop healthcare technologies of the future for applications such as gait analysis of the elderly to predict/prevent falls, Alzheimer's disease diagnostics using videogames, and remote stress monitoring of nurses in hospitals will be showcased.

Dr. Carl-Éric Aubin, Ph.D., ScD (h.c.), P.Eng.

Full Professor, Dept. Mechanical Engineering, Polytechnique Montreal

Chief Executive and Scientific Officer – Montreal TransMedTech Institute

Scientist & Head, Musculoskeletal Health, Rehabilitation and Medical Technologies Axis-Sainte-Justine University Hospital Center

Assistant Director – Rehabilitation Technopole & Applied innovation, Sainte-Justine University Hospital Research Center

Tier 1 - Canada Research Chair in Orthopedic Engineering

NSERC-Medtronic Industrial Research Chair in Spine Biomechanics "From Scoliosis Treatment Simulators to the Montreal TransMedTech Institute"

- TransMedTech Institute: an open interdisciplinary innovation ecosystem for the development of next generation medical technologies
- Medtech development: driven by users and the dynamics of needs, up to the innovative product implemented in the health system
- Technologies that change the treatment trajectory of children with complex spine deformities

Sponsorship:

CMBEC42 would like to thank our first sponsor SciCan.

Please use this link to book your sponsorship opportunity!

Exhibitors

If you have to discuss equipment needs why not come to CMBEC42 and get all the vendors at the same time?

Our current exhibitors include: Spacelabs Healthcare Canada, Bracco Imaging Canada, McArthur Medical Sales Inc., Acertara, Amico Corporation, Shop3D.ca, SciCan Ltd., Northern Optotronics Inc, Elite Biomedical Solutions, Summit Imaging, DirectMed, Draeger Medical, Philips, High Purity Water Services, Roxon, Ultra Solutions, Masimo, Keir Surgical, Umano Medical and B Braun, MedSet Specialties, Technical Prospects, The Stevens Company Limited, Datrend Systems, Spectramedx Inc, Dixon Med, Zoll Medical Canada Inc, Novatech, Medical Inc., ICU Medical, Getinge, Tekniscience, BOMImed, Olympus, CHS Ltd., GE Healthcare, Medical PM, Baxter Corporation, Avante Patient Monitoring, Fresenius Kabi, BBM Battery

Biomedical Engineering in Victoria, BC

The Biomedical Engineering Department at Island Health in Victoria, BC, was profiled recently to support the local hospital foundation's fundraising drive. The department has supported the foundation over the years to help identify priorities for funding and often just to explain the technology. In recognition of the role we play to support medical technology, they decided to publish this article.

Clinical Engineers: An Untapped Resource

A February 2019 article was published in Hospital News aimed at senior executives to promote the work done by Certified Clinical Engineers (CCE) in hospital. Often this scope of work is either not well understood or blurred between Project Management Professionals (PMP) and Certified Healthcare Technology Managers (CHTM) and the article clears misconceptions and defines the role for managing healthcare technology in a clinical setting. Click here to enjoy the read and be sure to send along to your hospital's executive team!



Interested in publishing your story in the monthly e-Bulletin or the quarterly Newsletter? Contact us to discuss your topic!