



The CMBES Newsletter

Message from the President of the CMBES,
Murat Firat, M.Sc., P.Eng., CCE

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CMBES Strategic Directions 2015:

CMBES, Connected!

Without a doubt we are at the dawn of a new era: “**Social Age.**” And, not surprisingly, CMBES Strategic Directions 2015 embraces the new era by making the “CMBES Network” its highest-priority initiative.

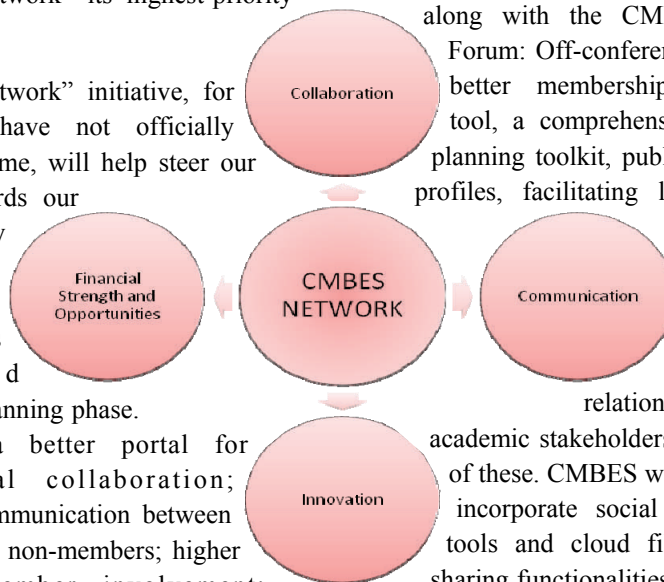
“CMBES Network” initiative, for which we have not officially selected a name, will help steer our society towards our vision by addressing many priorities identified during the planning phase.

Such as, a better portal for professional collaboration; increased communication between members and non-members; higher volunteer/member involvement; opportunity for stakeholder participation; member retention and growth tool; and, last but not least, an opportunity to increase the financial strength of our society.

“CMBES Network” will include forums that are moderated by subject-matter experts, who are Biomedical/Clinical Engineering professionals working in the field. You and/or your colleagues could/will be these CMBES experts. You will share your knowledge and expertise with others, trigger discussions, answer

questions, and build a reliable and solid knowledge base to form an innovation incubation platform! We will be knocking on your doors to invite you to be a part of this exciting new era.

We identified 19 more strategic initiatives along with the CMBES Network/Forum: Off-conference activities, a better membership management tool, a comprehensive conference planning toolkit, publishing member profiles, facilitating local activities, promoting professional certification, building and improving relationship with our academic stakeholders are just a few of these. CMBES website will soon incorporate social network style tools and cloud file storage and sharing functionalities along with the forum. Please stay tuned for the updates.



Congratulations to JAMES McEWEN: I’m sure you have all heard that James McEwen, CMBES Fellow Member, received the Order of Canada Honours for his contributions to biomedical engineering. Please join me in congratulating James McEwen for this well-deserved honour.

CMBEC35/ACCES17: Please join me in Halifax for the future of Biomedical/Clinical Engineering.

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CMBEC35: Halifax, Nova Scotia

35th Canadian Medical and Biological Engineering Society Conference (CMBEC35)



Lake Banook

Halifax Harbour

Halifax Citadel National Historic Site

Peggy's Cove

CMBEC 35 / ACCES 17

A VISION for the Future of Biomedical Engineering

In 2012 CMBES and the Atlantic Canada Clinical Engineering Society (ACCES) will be hosting the CMBEC 35 / ACCES 17 conference June 19-22, 2012 in Halifax, Nova Scotia.

Visit www.cmbes.ca for further information and updates on CMBEC35



Halifax CMBEC 35 agreement signing pictures.



Pictured above is Murat Furat (President CMBES), Sarah Kelso (CMBES Long Term Planning Coordinator), Jeremy Dann (ACCESS Chair), and Steve Smith (CMBEC 35/ACCES17 Chair) signing the agreement to host the joint CMBEC35/ACCESS 17 Conference in Halifax, in June, 2012.

Mark your calendars!!
CMBEC35, Halifax, NS
June 20-22, 2012



2012 ANNUAL CONFERENCE IN HALIFAX

By **Steve Smith**

Chair, ACCES/CMBES Joint Conference 2012 Planning Committee

As many CMBES members have already heard, this year's annual conference will be jointly hosted by the Atlantic Canada Clinical Engineering Society (ACCES) and the Canadian Medical and Biological Society (CMBES) in the modern port city of Halifax, Nova Scotia. The ACCES/CMBES Joint Conference (ACJC) Planning Committee has been working very hard to bring you ACJC 2012 "A Vision for the Future".

This joint conference will be a great opportunity for members of both ACCES and CMBES to meet, network, and share information with friends, colleagues, researchers, and industry partners from across the country. The combined ACCES / CMBES conference is a first for Atlantic Canada and it is anticipated that this year's conference will present a unique experience for local and national participants, attracting well in excess of 160 delegates from coast to coast and all areas of our profession.

ACJC 2012 will be held from Wednesday, June 20th to Friday, June 22nd, 2012. The Conference's opening Keynote Address will be delivered by Dave Carroll who achieved instant fame with his United Breaks Guitars trilogy of YouTube videos. He now shares, at venues worldwide, his "Customer Experience" and what it means for each of us as employers and employees in today's workplace.

This year's trade show floor will accommodate 48 booths and will be the focus of the Grand Opening on Wednesday. Wednesday evening, the vendor hall will be open until 8pm and will be followed by a Halifax Harbour Cruise open to all delegates. The Awards Banquet featuring local entertainment will take place on Thursday evening. The ACCES General Meeting is planned for Tuesday evening (June 19th) and the CMBES AGM follows the conference closing, in the early afternoon of Friday, June 22nd.

To appeal to the wide Clinical Engineering audience, from the front line tech, to manager or researcher, we have tentatively organized almost a dozen varied Continuing Education sessions touching on relevant topics including:

- Standards – IEC 60601, CSA Z32
- Equipment Maintenance – Endoscopes, Infant Radiant Warmers, Lasers, Microscopes, and
- Information Systems – N+ and A+ Networking

The Continuing Education program will tentatively begin on Monday, June 18th.

In addition, the Planning Committee has lined up a strong roster of fascinating speakers and presentations that will appeal to the broad Clinical Engineering community. These sessions are organized into the following three streams:

1. Academic Stream – Addressing topics such as biomechanics, signal / data processing, assistive / prosthetic technologies, medical informatics, tomography, tissues engineering, and biomechanical modeling;
2. Clinical Engineering Stream – Focusing on leadership frameworks, IEC 80001, a Cross-Canada Check-up, strategic planning, shared services, best practices, lean practices, DI services, and everyone's favourite iconoclasts' debate; and
3. Medical Devices Stream – Dealing technologies in neural surgery / transplantation, robotics, natural orifice surgery, electromechanical technology, lasers, medical optics, electrosurgery, privacy, and MIS and integrated OR suites.

The web site link for registration is: <http://tinyurl.com/6lsrdgj>. Early Bird pricing will be in effect until April 16 and an Early Bird prize of an iPad, kindly provided by Philips Medical, will be drawn from all those who register on or before that date. Please don't hesitate to contact Dee Hinson at dee.hinson@healthassociation.ns.ca if you have any questions at all regarding the upcoming events.

Finally, participating in ACJC 2012 is also a great opportunity for visitors to come experience what the East Coast has to offer! The expanded audience and scope of this year's event will be accommodated by the Westin Hotel and Conference Center venue, which provides a truly professional facility designed to encourage learning and networking. As a side benefit, it also puts us next to the Seaport Market, fine restaurants, Point Pleasant Park, and the harbour front boardwalk. This setting promises a fantastic experience for all!

Hope to see you there!

BEDSIDE MONITOR INTEGRATION WITH THE CERNER ELECTRONIC HEALTH RECORD**VANCOUVER ISLAND HEALTH AUTHORITY – ROYAL JUBILEE HOSPITAL, VICTORIA, BC****Martin Poulin, PEng., Manager – Biomedical Engineering - VIHA**

As part of the construction and implementation of the new Patient Care Centre at the Royal Jubilee Hospital in Victoria, BC (March, 2011), there was an initiative supported by the organization to automate the transfer of vital signs data from bedside monitors to the Cerner electronic health record. The Patient Care Centre is a new 8 floor, 500 bed facility designed for medical/surgical, mental health and cardiology patient support. The outcome of the project was to improve the efficiency with which nursing document vital signs data and to improve the accuracy of the vital signs data. This project was championed by the IM/IT clinical informatics group, but Biomedical Engineering was an integral partner on the implementation team.

Two patient monitor vendors were chosen to meet the networking and clinical functionality required for the project. The Welch Allyn CVSM 6000 was chosen for the balance of the medical/surgical beds and the Philips MP5 was chosen for the cardiology units. The Philips monitor was chosen to augment the cardiac telemetry monitored patients by providing an ECG waveform in addition to vital signs data at the bedside. This is possible on the Philips system because of the ability of the system to “partner” the telemetry obtained ECG waveform with the MP5 patient monitor. The Welch Allyn CVSM 6000 was chosen primarily due to the new touch screen interface and its new network connection capabilities.

Vital signs data that populate the electronic health record include pulse rate, temperature, NIBP, and SpO2. Temperature is primarily obtained via Braun tympanic thermometers which transfer their data via a docking station connected to the Welch Allyn CVSM 6000. The temperature must be manually entered for those beds supported by the Philips MP5 monitors.

A patient/vital signs monitor was located at each bedside to ensure a wired network connection and to reduce the potential transmission of infections between patients.

An interface was also established between Philips monitors and the Vocera communication system to broadcast critical patient alarms to specific nurses. The Connexall system was utilized as the interface engine and only the following alarms are transmitted: asystole, bradycardia (< 50 bpm), tachycardia (> 120 bpm), leads off, and ventricular fibrillation.

Although we still have some recurring data transfer issues with the thermometers related to the Welch Allyn docking stations, we are working through them. The project was considered a success and nurses acknowledge they have more time they can spend with the patient due to some of the efficiencies realized; infection rates have also dropped in the new facility. The infrastructure of servers and software licenses enables the expansion of this interface technology to other sites as they purchase new patient monitors with the networking capability.

Biomedical Engineering acts as the frontline troubleshooter for patient monitor problems including data transmission, but we have established communication protocols with IM/IT to resolve these issues in a collaborative manner. One of the outstanding actions is to obtain access and train Biomedical Engineering staff on how to use the Cerner electronic health record system so that they can verify data transmission issues.

A new reality for us, which has also been a challenge, is the need to qualify new software revisions with IM/IT prior to implementation to ensure the data transmission system still works. This has proved a challenge, because the vendor’s protocol is to send back any repaired devices with the most recent release of software. As the software qualification takes time, we have had to downgrade the software in a number of monitors prior to putting them back into service.



VANCOUVER INVENTOR JAMES McEWEN RECEIVES ORDER OF CANADA HONOURS

By Medha, Vancouver Sun, December 30, 2011



A Vancouver researcher, inventor and entrepreneur has been named to the Order of Canada.

James McEwen received the honour for his contributions to biomedical engineering, notably as an inventor and entrepreneur.

"I am delighted with the award. It is the highest honour nationally and means a lot to me," said McEwen, who in 2006 was appointed Fellow of the Canadian Medical and Biological Engineering Society.

Widely credited as the founding father of the Canadian biomedical engineering industry, McEwen set up the department of biomedical engineering at Vancouver General Hospital in 1976 and is best known for his invention of automatic surgical tourniquet systems that are now standard equipment in operating rooms worldwide.

The tourniquets help protect patients from injury by improving the safety, precision and speed of surgical procedures, he explained.

In addition, the adjunct professor in the Department of Orthopedics and the Department of Electrical and Computer Engineering at the University of British Columbia holds more than 160 patents, many of which have enhanced health care in several fields, said longtime colleague Michael Jameson, who has been working with McEwen since the time he established the biomedical department at VGH.

"He is very intelligent and creative. He doesn't let go of problems and most of all genuinely cares about patients and improving patient safety," said Jameson, vice-president at Western Clinical Engineering Ltd., an organization set up by McEwen.

McEwen also founded the Medical Device Development Centre (MDDC) in Vancouver, a not-for-profit centre that facilitates collaboration among companies, hospitals and universities to develop and evaluate new medical technologies. Building and nurturing connections between universities, the public and private sectors has been one of the main aims, he said.

He has been closely associated with UBC and Simon Fraser University; he has been a member of industry advisory committees at both universities and is believed to have played an instrumental role in the setting up of each of their biomedical engineering programs.

McEwen is vice-president of the board of trustees of the Ernest C. Manning Awards Foundation, a former member of the B.C. Premier's Advisory Council on Science and Technology, and president of the ALS Society of British Columbia.

At the moment he is working with his team to develop new kinds of tourniquets for surgery. His motivation? "The development medical technology that improves the quality of diagnosis and treatment, while also controlling health care costs."

medha@vancouversun.com

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Read more: <http://www.vancouversun.com>

Centre de santé et de services sociaux
du Lac-des-Deux-Montagnes

PRECAUTIONS TO MANAGE STERILIZER WET PACKS PROBLEMS: A CASE STUDY AT SAINT-EUSTACHE HOSPITAL

Gnahoua Zoabli¹, Arthur Henderson², Sylvain Pomerleau¹,
Laurette Aubé¹, André Émond¹, and Julianne Desforges³

¹CSSS du Lac-des-Deux-Montagnes, Montréal; ²Steris, California; ³École Polytechnique de Montréal

ABSTRACT

Saint-Eustache Hospital started a process for replacing its two steam sterilizers by two machines of a new technology with larger chambers and hopefully a larger charge load. Before both old steam sterilizers being dismantled, routine tests have been conducted to certify the functionality of the new systems. During these tests, wet packs have been observed early and the effective use of the new sterilizers has then been delayed till the wet pack problem being solved completely. Naturally, we began additional tests by verifying the steam first, then the steam transport and steam delivery to the sterilizers, and finally the load configuration. All these tests revealed no significant change to the previous results, and after four months, we have no conclusive reference to determine the cause of the wet packs. Our new sterilizers' technology being the first installation by Steris in Canada, tests were conducted in other hospitals on a single-door steam sterilizer in Montreal region and on double-doors (same) systems at Vanderbilt facility in Nashville (TN, USA). Our findings revealed that the charge configuration at Saint-Eustache Hospital was simply overloaded considering the precautions that have to be taken to facilitate steam transport during a steam-sensitive sterilizer technology such as ours.

INTRODUCTION

The sterilization process of surgical materials is essential to assure the quality of the care given to patients in operation rooms (Weber, 1999). If some packs are wet after sterilization for any reasons, microorganisms living on the instruments can probably contaminate the patient on which they are used (Clement, 2005). Re-sterilizing such instruments before being used can lead to a lack of productivity which is hardly accepted in a hospital. Hence, this study provides recommendations on how to avoid wet packs problems, based on our own experience.

MATERIALS AND METHODS

As we can see on Figure 1, before we had the new Steris Evolution, at CSSS du Lac-des-Deux-Montagnes (CSSS LDDM), our Eagle sterilizers were usually loaded by squeezing all the packs together to assure the maximum productivity of the sterilization. At this time, all packs went dry after the sterilization process. When we started to use the new Steris Evolution sterilizers with larger chambers, we were supposed to be able to sterilize at least the same load as in the Eagle ones or 33% more (Philippe Dormoy, 2011). However, when we loaded the Evolution like on figure 2 (similar load configuration as with Eagle), we found some wet packs after sterilization which was problematic.

At this point, we supposed that the problem came from the steam sterilizer itself. However, after an exhaustive technical verification process done by both teams (Steris and CSSSLDDM), the steam didn't seem to be part of the humidity presence in the packs.



Figure 1. Load setup on an Amsco Eagle sterilizer



Figure 2. Initial load configuration on an Amsco Evolution sterilizer

Design

Our new sterilization unit is open since October 24, 2010. But the wet packs problem was initially observed on November 3, 2010 at the first clinical use. Steris came at the end of January and at the beginning of March to help us solve our problem of wet packs. Even with their recommendations, we weren't able to obtain dry packs sterilization.

We decide to visit other sterilization units to compare the way they use their Steris Evolution sterilizers. First, we went at Anna-Laberge Hospital Center (April 8, 2011) to see the way they used their one-door Evolution sterilizers. A week later (April 13-14, 2011), we went to Nashville to observe the way double-doors Evolution sterilizers like ours were used with methods compliant with Steris best practices. We saw that they put an average of 12 items per load, which was a lot less compared to our average of 30 items per load. Indeed, they didn't have problem of wet packs which gave us a good clue of what we were doing wrong.

RESULTS

Four-finger space between packs

Following our observation at Vanderbilt facility, one solution to assure a reasonably light load is to keep spaces between packs so they don't reheat and condense (Figure 3). The practical technique recommended by Steris is to keep about four-finger space between packs. It only helps keep the load as lighter as necessary to assure better circulation of steam and a dryness at the end of the sterilization process.

Enhance steam circulation and install humidity trap

Instrument trays should lay flat with adequate holes and instruments open to allow adequate steam penetration. Some dense materials have difficulties to dry (Stéris, 2003). Therefore, it is necessary to install some humidity traps and facilitate the evaporation of condensed water during the sterilization process. It is also recommended to install corner materials beneath the tray to enhance steam circulation around it.



Figure 3. Distance of 4 fingers between the packs

Summary of the findings for eliminating wet packs in Evolution sterilizer

- 1 – Keep a space of four fingers between each pack (load reduction);
- 2 – Reduce the charge of packs as shown in the figures (brick wall);
- 3 – Place a disposable towel under the cases in the wrapping to avoid the accumulation of water;
- 4 – Use a triangle wrapping method;
- 5 – Use metal flat trays with holes while loaded horizontally;
- 6 – Wait one hour instead of 20 minutes before the opening of the trays or till room temperature is reached;
- 7 – Prevent airflow directly onto hot packs in sterile area.

DISCUSSION

Humidity seemed to be due to our original load setup (Figure 2), which was at least three times the volume of materials that can be loaded according to above recommendations setup (Figure 3).

The best way to ensure proper and timely functionality of newly acquired steam sterilizers is to reduce the load in the sterilizer and to keep some space (four fingers) between packs. We can also reduce the air circulation to avoid any condensation on the packs by the contact of cold and hot air and to prevent rapid cooling (the packs should not be touched until they come to room temperature).

CONCLUSION

When a facility experiences a wet pack problem, people used to look at steam quality first. After our six-month experience with wet pack problems in our Evolution sterilizers, we recommend to implement reduced load technique (four-finger space or brick wall protocol) before questioning steam or the equipment itself.

ACKNOWLEDGMENTS

Special thanks to M. Philippe Dormoy and Mario Lesage for coordinating the participation of Steris team.

REFERENCES

- Clement, L. (2005, July). *Wet pack problem-solving for rigid sterilization containers*. June 17, 2011, on Healthcare Purchasing News.
- Philippe Dormoy. (2011). *Système de stérilisation à la vapeur*. (p. 21). Steris.
- Sterilblue. (s.d.). *Steris Amesco 3013,3023,3033,3043 Sterilizer*. On www.sterilblue.com
- Steris. (2003). *Preparing instruments, ustensils, and textiles for sterilization and wet pack problem solving*.

CMBES Member Highlight

CMBES Executive Board has decided recently to include a “Member Highlight” in each upcoming issue of the CMBES newsletter. If you are interested, you will need to give information such as your name, current function, professional experiences, awards mentions and general notes. For this issue, and as the first CMBES member highlighted, let’s discover Mr. Petr Kresta.



NAME :

Mr. Petr Kresta M.H.Sc., P.Eng

CURRENT FUNCTION

Regional Director, Clinical Engineering Program and Technical Director, Diagnostic Imaging Program, Winnipeg Regional Health Authority

PROFESSIONAL EXPERIENCES

Board Member, Canadian Medical Equipment Protection Plan Board Member, Certification Commission, American College of Clinical Engineering

Steering Committee Co-Chair, Manitoba Provincial RIS/PACS/Billing Project Faculty in 5 International Clinical Engineering Practice education workshops

AWARDS OR MENTIONS

CMBES Outstanding Canadian Biomedical Engineer, 2010

Recognised for leadership role in WRHA Cardiac Services Enhancement Project

GENERAL NOTES

Recently led development of provincial strategy for adoption of digital mammography across all providers in Manitoba– public and private.

Developed a vibrant multi-hospital, multi-sector clinical engineering program with engineering, technical and surgical instruments staff numbering over 50.

Active in a humanitarian relief organization volunteering time to rebuild homes for victims of natural disasters.

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Interested in sharing your story?
Contact us at secretariat@cmbes.ca



Pictures from CMBEC34



Organizing Committee



CMBEC34
Toronto

A great
conference
!





Biomedical/Clinical Engineering

by Mike Capuano CBET, CCE



Professional Affairs

As Chair of Professional Affairs, I would like to thank all members for their contributions and support over the past year whether it be volunteering, writing, presenting, conference attendance, sponsorships, and, of course, sharing your ideas. I hope this issue of the newsletter finds all of you well as we look forward to a successful 2012. Over the last year or so, the executive has been working hard to lay out the strategic goals for the society. This has resulted in several objectives already being put in motion. Our president has been instrumental in guiding our direction and has initiated some important actions likely to benefit the CMBES. A marketing analysis was deemed an important strategy by the executive in order gauge the potential membership and ways to promote the society. We are in the process of looking at two proposals from university based business groups to conduct the analyses. Also in the works this year is a line up of 6 excellent webinars for clinical engineering scheduled from April 2012 to January 2013. We are still looking for our next peer review site. We had 2 potential sites last year but neither followed through. Let us know if your organization is interested. Also, if anyone is interested in joining the Professional Affairs subcommittee, please contact me or the secretariat office. We need to increase the committee membership. Finally, I would like to mention National Biomedical/Clinical Engineering Appreciation Week (NBCEAW). I have prepared the following for those interested in this important week of appreciation for the field and those who work and contribute:

National Biomedical/Clinical Engineering Appreciation Week (NBCEAW)

National Biomedical/Clinical Engineering Appreciation Week is being celebrated **May 20th to May 26th, 2012**. We encourage all organization departments to celebrate. The practice of Biomedical/Clinical Engineering is key to the safety, well being, and effective care of all patients across Canada. Today's healthcare significantly depends on technology innovation and management. The Canadian Medical and Biological Engineering Society (CMBES) along with their U.S. counterparts have proclaimed this week to create awareness of the related fields and acknowledge the tremendous dedication these individuals have. From engineers to technicians, students to professors, and other healthcare workers; their contribution is considered to be invaluable. Biomedical Engineers design and develop technologies for healthcare usually in an academic or manufacturing setting. Disciplines include Electrical/Electronics, Mechanical, Tissue, and Computer/Software Engineering. Clinical Engineers work in the field mostly in large hospitals solving medical device problems. They are also involved in equipment planning, acquisition, and deployment. Biomedical Equipment or Engineering Technicians and Technologists are those who primarily work on the front lines in healthcare facilities. They carry out the required maintenance and repair of equipment and technology found in large hospitals. Most are hospital employees hired by in-house Biomedical or Medical Engineering/Technology Departments. The field provides opportunities to work in a professional or academic environment and contributes to the health and safety of our citizens. Those interested in a rewarding career involving Biomedical Engineering should contact the Secretariat of the CMBES at www.cmbes.ca or any large healthcare facility in your area.

We encourage all organizational departments to celebrate National Biomedical and Clinical Engineering Appreciation Week. This can be done in the following ways:

- Look for the special CMBES celebration kit soon to be released for distribution
- Set up a booth and/or display with photos and information
- Have an open house
- Contact your local TV affiliate
- Do a presentation
- Celebrate at a department meeting
- Present at local high school for awareness

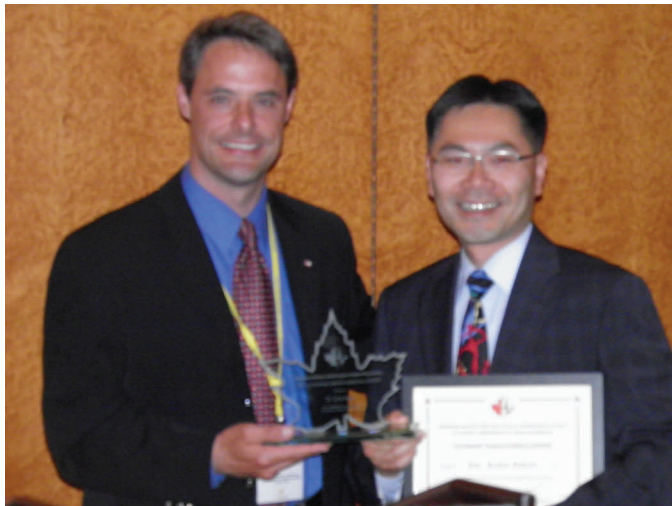
The NBCEAW page on the CMBES Website provides downloads of the following documents:

- Proclamation
- Poster
- Press Release Template

CMBES AWARDS



Awards Chairman
Tim J Zakutney, MHSc, PEng, CCE



Society Awards – Special Membership Recognition/Honours

The CMBES Awards Committee is seeking nominations of members eligible and deserving of the societies awards.

For more information on the Awards or to nominate a deserving individual [click here](#).

Membership Committee 2011

By Dennis Len, Membership Chair



The Executive Committee has developed a long-term strategic plan for CMBES up to 2015. There are a number of items that have been prioritized for the Membership Committee. These tasks are:

- Increase Volunteer and Committee Participation
- Promote Membership, Increase Collaboration via Improving Relationships with other Societies (i.e. Affiliation, Reciprocal Membership discounts and Chapters, Student Chapters)
- Develop a Member Retention Strategy, implement exit survey and interview process as part of this
- Create more detailed membership database (online)
- Create a List of Experts for Members
- Increase Membership by Offering Discounts for Members of Provincial Biomedical Associations

As indicated in the following chart the membership of CMBES has decreased in 2011.

General Membership Statistics - as of December 31, 2011			
	2011	2010	2009
Total Membership	176	287	269
New Members	27	65	48
Renewals	112	138	161
	139	203	209
Regular Members	68	115	209
Fellow	5	6	5
Emeritus	6	6	8
Honorary	2	2	4
Retired	7	8	6
Corporate	51	66	43
New Members (Student)	19	65	41
Renewals (Student)	18	19	19
	37	84	60
Student Members	21	66	50
Student Institutional	16	18	10

This is primarily due to a decline in new memberships around the 2011 FICCDAT / CMBEC 34 annual conference. In particular we did not have a mechanism to offer memberships with the conference registration. The membership committee is actively engaged in a number of processes to increase participation and membership in CMBES. Some of the activities in progress are:

- Increase volunteer involvement (membership coordinator, attract and recruit volunteers, offer membership fee discounts, etc.)
- Membership management (Create database, retention strategy, exit survey and interview process)
- Promote Certification, offer membership discounts to certified professionals, offer grants to be used towards certification fees

Student connection-relations

As always we are looking for additional committee members and new ideas that would promote the societies.

Please join me in welcoming Rajeev Yadav to the membership committee. Rajeev is a student / scholar / research scientist and is a current student member of CMBES.

The membership committee consists of:

Dennis Len
Murat Firat
Mike Capuano
Gord McNamee



Want to be up to date in biomedical engineering and Information technology used in clinical settings?

Visit the blog of Jean-François Talbot:

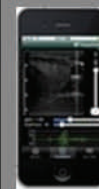
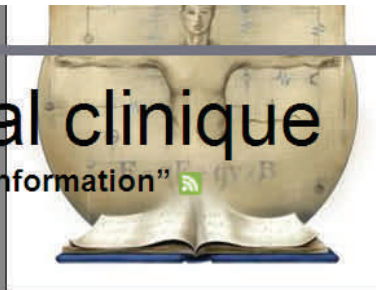
<http://www.scoop.it/t/genie-biomedical-clinique>



Génie biomédical clinique

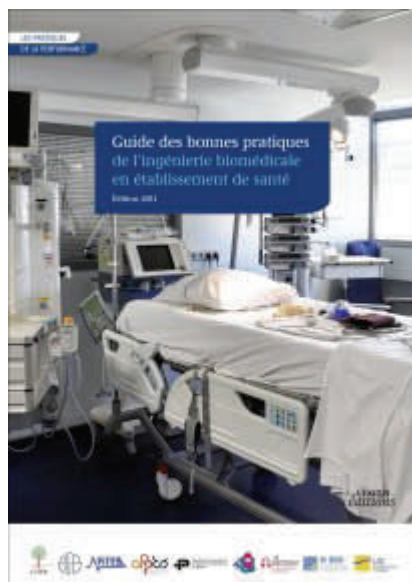
“Génie clinique et technologies de l'information”

Curated by Jean-Francois Talbot





GUIDE DES BONNES PRATIQUES DE L'INGÉNIERIE BIOMÉDICALE EN ÉTABLISSEMENT DE SANTÉ - EDITION 2011



Cette nouvelle édition 2011, validée après 2 ans de travail collaboratif par près de 90 pairs internationaux, est un outil exploitable par tous les services biomédicaux et adaptable à de nombreuses cultures ou contextes nationaux :

- La progressivité pour petits ou grands services biomédicaux est assurée par une approche modulaire des bonnes pratiques
- L'ouverture aux spécificités professionnelles est permise par le nouveau concept « d'activités connexes à l'ingénierie biomédicale ».
- L'adossement pérenne aux référentiels qualité internationaux est garanti par la structure de toute bonne pratique selon les fondamentaux généralisés de l'amélioration continue, par la mesure des performances et par l'évaluation du progrès dans la maîtrise des processus.

La créativité est promue, les innovations sont favorisées et la mutualisation est encouragée afin que les services biomédicaux hospitaliers puissent toujours mieux garantir la qualité et la sécurité des dispositifs médicaux en exploitation afin de contribuer, dans chaque établissement de santé, à la qualité et à la sécurité des soins délivrés aux patients.

Référentiel professionnel multinational francophone validé par les institutions et associations biomédicales suivantes :

AAMB : Association des Agents de Maintenance Biomédicale, France.

AFIB : Association Française des Ingénieurs Biomédicaux, France.

AFITEB : Association Francophone Interhospitalière des Techniciens Biomédicaux, Belgique.

AFPTS : Association Francophone des Professionnels des Technologies de Santé, Section France.

APIBQ : Association des Physiciens et Ingénieurs Biomédicaux du Québec, Québec.

ATD : Association des Techniciens de Dialyse, France.

ATGBM : Association des Technologues en Génie BioMédical, Québec.

H 360 : Association nationale des cadres et experts techniques hospitaliers (ex ANATH), France.

[Télécharger le bon de commande \(PDF\)](#)

Martin de Halleux
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CMBEC36 Ottawa



**Association des physiciens
et ingénieurs biomédicaux
du Québec**





CMBEC36 Ottawa



Interested in joining the Organizing
Committee,
apply at secretariat@cmbes.ca.



You are invited to send your best
movies and photos of CMBEC35 at
secretariat@cmbes.ca