CANADIAN MEDICAL AND BIOLOGICAL ENGINEERING SOCIETY SOCIÉTÉ CANADIENNE DE GÉNIE BIOMÉDICAL

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The CMBES Newsletter

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

2012 has been a very busy and successful year for our society. We implemented some of the most important strategic initiatives. We started up an active social presence and network, organized many events that includes 8 Webinars, an amazing conference, increased membership numbers, and we managed to strengthen our society financially in these difficult times. This wouldn't have happened without our members' support and increasing participation. Thank you!

Our annual conference, which was a shared event with Atlantic Canada Clinical Engineering Society in Halifax, was one of the best conferences. Excellent delegate participation and outstanding vendor support made the event a success from all perspectives. We can't thank the organizing committee enough for their outstanding efforts and long hours of volunteer, selfless work!

The 2013 Conference is already underway! An exciting shared event and collaboration with CMBES affiliated society APIBQ. Thanks to organizing committee under the leadership of Tim Zakutney. I look forward to see you all in Ottawa.

CMBES Network is live! CMBES Network database now have more than 1000 accounts of which 250 are current members. We are working on expanding our collaboration with other societies "affiliation" and "Chapter" using models. Some of our student members will be forming one of the first CMBES student chapters, very soon.

CMBES Forums have more than 120 members, more than 60 topics and discussions started. We have started assigning volunteer Subject Matter Experts to monitor and help out the discussions and questions in our forums. Slowly, but surely CMBES forums will become one of the knowledgebase in our profession. Check it out: ask your questions, start discussions, share your knowledge and experience.

Season's Greetings!

CMBES Network

Connect, interact, share, learn and expand your limits!



CMBES Discussion Forums are open to everyone working or studying in biomedical engineering and technology field. Join us! Collaborate with your peers, ask questions, share and discuss with subject matter experts. Some of the forum topics are:

Surgical Technology
Medical Imaging Technology

- Dialysis Technology
- Health Care Technology Management Clinical Networking and Medical Device Integration
- Academic and Research Education and Certification



Biological Engineering Society cmbes.ca

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CMBES Executive

President: Murat Firat

Vice President: Dr. Adrian D. C. Chan Past-President: Dr. Donald Russell Executive Secretary: Anne Stacey Treasurer: Kyle Eckhardt Membership: Martin Poulin Professional Affairs: Gord McNamee **Conference Planning: Sarah Kelso** Awards: Dennis Len **Publications: Mike Capuano** Editors: Mike Capuano, Anne Stacey

Web Master: Michael Hamilton

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CMBEC36: Ottawa, Canada

36th Canadian Medical and Biological Engineering Society Conference (CMBEC36)



www.cmbes.ca for further information and updates on CMBEC36

Visit

CMBEC 36 / APBIQ42 In 2013, the CMBES and the APBIQ (Association des physiciens et ingénieurs biomédicaux du Québec) will be hosting the CMBEC 36 / APBIQ42 Conference in Ottawa May 21st to 24th, 2013.





2013 ANNUAL CONFERENCE IN OTTAWA

By Tim Zakutney

The Canadian Medical and Biological Engineering Society is pleased to announce their 36th Annual Conference, CMBEC36 May 21 – 24, 2013 in conjunction with l'Association des physiciens et ingénieurs biomédicaux du Québec (APIBQ). **The 2013 CMBEC36 / APIBQ42 Joint Conference** will be held at the Hampton Inn & Conference Centre in Ottawa, ON.

The Conference offers a national forum for information exchange among researchers and practitioners working in the medical technology industry and biomedical engineering. Don't miss this excellent opportunity to showcase some of the important work that you are currently engaged in.

Click here for conference details as they are confirmed.

Timothy Zakutney, Conference Chair, 2013 CMBEC36/APIBQ42 Joint Conference

Partnership and Exhibitor Opportunities

The main objective of the 2013 CMBES/APIBQ Joint Conference is to improve communication and encourage collaboration among all healthcare professionals through the presentation and discussion of best practices, new research and current challenges within the medical technology industry and biomedical engineering.

Since its inception, hundreds of suppliers have considered the CMBEC conference a premium opportunity to showcase their products and services. Participation in this event can provide you opportunities to:

Position your business as an Industry leader, aligned with well respected associations;

Network with a hard-to-reach audience on an intimate level;

Gain insights into new trends in within the medical technology industry and biomedical engineering.

Academic Stream – Call for Papers

You are invited to submit an abstract for the 36th Annual Conference of the Canadian Medical and Biological Engineering Society, to be held jointly with l'Association des physiciens et ingénieurs biomédicaux du Québec (APIBQ42). Successful authors will be invited to submit a full 4-page paper which will undergo a rigorous peer review process. Selected papers presented at the conference will be invited to submit an extended manuscript for possible publication in a Special Issue of the Journal of Medical and Biological Engineering.

See full details at: http://CMBEC36-APIBQ42.cmbes.ca/

Key Dates:	
January 8, 2013	Final date to submit abstracts *** Deadline extended!!!
January 15, 2013	Notification of abstract acceptance
February 1, 2013	Final date to submit full papers
March 1, 2013	Notification of paper acceptance
May 21-24, 2013	2013 CMBES/APIBQ Joint Conference

Continued next Page...

Clinical Stream: Call for Presentations

Interested in sharing your work with your colleagues and fellow clinical engineers from across the country? The Organizing Committee invites submissions for presentations for the Clinical Engineering Track at 2013 CMBES / APIBQ Joint Conference, being held in Ottawa, ON, May 21 – 24, 2013.

Please send your submission by February 1, 2013 to:

2013 CMBES / APIBQ Joint Conference 1485 Laperriere Avenue, Ottawa ON K1Z 7S8 Telephone: 613.728.1759 Fax: 613.729-6206 E-mail: <u>secretariat@cmbes.ca</u>

Key Deadlines:

February 1, 2013Final Date to Submit AbstractsMarch 1, 2013Notification of Abstract Acceptance and Confirmation of Lead Presenter(s)April 5, 2013Final Confirmation of All Presenter(s) and/or Panel MembersMay 21-24, 20132013 CMBES/APIBQ Joint Conference

Meet the CMBES Executive!



Murat Firat, MSc., P.Eng., CCE University Health Network Manager, Medical Engineering Department

Toronto, ON <u>E-mail</u> Vice President



Adrian Chan Associate Professor, Dept Systems & Computer Eng Associate Director, Ottawa-Carleton Institute of Biomedical Engineering Carleton University <u>E-mail</u> **Past President**



Donald Russell, PhD, PEng Associate Dean, Faculty of Engineering and Design Professor, Department of Mechanical and Aerospace Engineering Carleton University Ottawa, ON E-mail

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Publications



Mike Capuano, CBET, CCE Manager, Biomedical Technology Hamilton Health Sciences Hamilton, ON <u>E-mail</u>

Membership



Martin Poulin, M.Eng., P.Eng. Manager, Biomedical Engineering -VIHA Vancouver Island Health Authority Victoria, BC <u>E-mail</u>

Treasurer



Kyle Eckhardt MEng Clinical Engineer Health Sciences Centre, Winnipeg, MB <u>E-mail</u>



Professional Affairs

Gordon McNAmee Manager, Biomedical Engineering Brandon Regional Health Authority Brandon, MB E-mail

Conference Planning



Sarah Kelso Regional Manager, Clinical Engineering Program Winnipeg, MB E-mail





Dennis Len Director, Biomedical Engineering Regina Qu'Appelle Health Region Regina, SK <u>E-mail</u>

EXECUTIVE MEMBER PROFILE: KYLE ECKHARDT, CMBES TREASURER

Hello to all!

This is my first submission as the new Treasurer for CMBES. It has been a busy fall at work and also with the Society. Transition of the Treasurer responsibilities is virtually complete and I look forward to fulfilling my duties on behalf of the Society and all its members.



Conference planning for the upcoming CMBEC 36 in Ottawa is in full swing. This year we are doing a joint conference with APIBQ in Quebec and I am working closely with their group on the financial plan for the conference. It's shaping up to be a great event. I am most looking forward to the awards dinner at the War Museum. Being an Ottawa native, the War Museum is one of my favourite spots in the city, second to the Library at Parliament Hill (please note I am not trying to downplay the conference sessions themselves and I am excited to be a part of this event in my home town).

I am presently based out of Winnipeg working with the Cardiac Sciences and Surgery Programs as a Clinical Engineer. I have been in Winnipeg for just over 2 years now and enjoying the tremendous opportunities presented to me as well as the unique environment and landscape. An example of some of the work being done under my portfolios are the deployment of a regional MUSE EKG system, a regional EEG system (also the subject of my Master's thesis), assisting with the procurement of navigation and microscope equipment for our almost complete IMRIS Suite, EKG carts, and ultrasound units.

The Winnipeg Regional Health Authority recently started a pilot project to explore the possibility of deploying the IEC 80001 standard for patient critical ventilator alerts and monitoring systems. As the transition of the Treasurer role nears completion I look forward to learning and building off of the excellent progress and leadership of our outgoing Treasurer, Mr. Martin Poulin. I look forward to filling the big shoes left for me.

Sincerely,

Kyle Eckhardt, MEng, Regional Clinical Engineer, EIT Winnipeg Regional Health Authority, c/o Health Sciences Centre GE-512 - 820 Sherbrook Street, Winnipeg, MB, R3A 1R9 Tel. 204.787.7541, Fax. 204.787.7017

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The **CMBES Forum** is up and running!

Check out the Forum by going to <u>cmbes.ca</u> and logging into your account. Recently implemented earlier this year, the discussion board promotes networking with peers similar to a Listserv but more comprehensive. It supports categories established by the CMBES to allow focused discussions in several areas like imaging, dialysis, research, medical IT networks, and general biomedical topics. The system is currently being upgraded to allow email alerts whenever a message is posted. All will be notified when this is launched.

TECHNICAL DISCUSSIONS (CMBES MEMBERS ONLY) POSTS LAST POST Surgical Instrumentation & Technology by MuratF 🖪 4 6 Fri Nov 09, 2012 11:09 am Medical Imaging by Michael Hamilton 🖪 4 6 Tue Oct 16, 2012 11:02 am Moderator: chunster General Medical Devices / Systems hy Jeant ouisSala B 3 3 Thu Oct 18, 2012 12:27 pm **Dialysis Technology & Water Systems** by MedTex 🖪 З 4 Tue Oct 23, 2012 1:28 pm Management, Standards and Regulatory Issues by MuratF 🗛 4 4 Tue Jun 26, 2012 12:51 pm **Clinical Networking and Device Integration** by Michael Hamilton 🔒 1 1 Fri Jun 01, 2012 10:14 am Academic / Research by Albey 😡 2 2 Fri Nov 16, 2012 4:03 pm CMBES (CMBES MEMBERS ONLY) LAST POST TOPICS **CMBES General Discussion** by Michael Hamilton 🖪 1 Fri Jun 01, 2012 10:15 am Certification by Michael Hamilton 😡 1 1 Fri Jun 01, 2012 10:16 am Moderator: pattersong Careers by dien 🖪 3 З Fri Nov 09, 2012 11:20 am **Discussion Français** No posts 0 0 PUBLIC TOPICS POSTS LAST POST **Biomedical Engineering General Discussion** by ORBiomed B 8 14 Thu Oct 11, 2012 10:19 am **Conference & Webinar Discussion** by MedTex 🖪 4 6 Tue Oct 23, 2012 3:58 pm Education by Jeremy 🗛 2 2 Wed Sep 19, 2012 4:52 am

No posts

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IUPESM 2015: The World Congress on Medical Physics and Biomedical

Engineering

CMBES Forum Categories

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Upcoming Events 2012/2013

Electrical Inspections of Medical Equipment in Canadian Healthcare Facilities [R.Evans] - WEBINAR	01/18/2013
Clinical Engineering Productivity Benchmarking [B.Wang] - WEBINAR	03/22/2013
Actionable Alarm or Crying Wolf: Using Data to Drive Physiologic Monitor Alarms [M.Cvach] - WEBINAR	04/12/2013
Multiple Infusions: Study Findings and Safety Overview [M.Fan, S.Pinkney] - WEBINAR	05/03/2013
CMBEC36 - 2013	05/21/2013

CMBES Peer Review Update

Based on the CMBES Clinical Engineering Standards of Practice (CESOP), the CMBES Peer Review is an excellent way for biomedical/clinical engineering centres to obtain recognition for their work and accomplishments. This on-site multi-discipline review focuses on clinical engineering programs specifically. If you think you are ready to be surveyed, please contact me (<u>capuamik@hhsc.ca</u>) or the secretariat(<u>secretariat@cmbes.ca</u>).

Mike Capuano, CBET/CCE; Chair, Peer Review Committee

Committee Membership

Mike Capuano (Hamilton Health Sciences Corporation) - Chair*** <u>capuamik@hhsc.ca</u> Michael Dixon (Mackenzie Health, North York) <u>Michael.Dixon@mackenziehealth.ca</u> Murat Firat (University Health Network, Toronto)** <u>murat.firat@uhn.on.ca</u> Bill Gentles (BT Medical Technology Consulting, Toronto)** <u>gentles@btmtc.com</u> George Schidowka (St. Joseph's Healthcare, Hamilton) <u>gschidow@stjosham.on.ca</u> Fernando Lebron (London Health Sciences Centre, Retired)* <u>lebronf@gmail.com</u> Gord McNamee (Brandon Regional Health Authority) <u>McNameeG@brandonrha.mb.ca</u> Jean Ngoie (Smiths Medical) <u>jean.ngoie@smiths-medical.com</u> Mario Ramirez (Hospital for Sick Children, Toronto)*** <u>mario.ramirez@sickkids.ca</u> Gurpreet Saini (Alberta Health Services, Edmonton) <u>Gurpreet.Saini@albertahealthservices.ca</u> Petr Kresta (Health Sciences Centre, Winnipeg) <u>pkresta@hsc.mb.ca</u>

Surveyed/Surveyor*** Surveyor** Surveyed*

Planned Reviews

Trillium/CVH Hospital, Mississauga Ontario (February 2013) Eastern Health, St. John's Newfoundland (TBA)

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CMBES Soapbox

Viewpoints on Soapbox may not reflect those of the CMBES.

Medical Device Serviceability

There is something occurring in our field that may be a concern to many of us. In case you haven't noticed, you are spending more time trying to get manufacturers and vendors to provide supports for in-house servicing than ever before. It appears that an increasing number of medical device manufacturers and vendors are taking a blind eye to the existence of healthcare technology management programs in hospitals. These programs were initially deployed some decades ago to save hospitals (and healthcare) money and to provide quick and necessary support for healthcare technology. This very program is now being consistently challenged by many of our commercial partners; the vendors and manufacturers. I don't have exact numbers at this point but I can guess that almost every other acquisition of medical equipment in your organization involves the need to negotiate some kind of support for in-house services like technical training, service documentation, access codes, software, and availability of replacement parts. These are likely met with a balance of some success and failure.

Manufacturers are designing equipment without considering the customer's option or desire to service it. Is this a good idea? Hospitals are large organizations that have the capacity, economies of scale, and know-how to create and sustain clinical engineering departments. Vendor revenue is increasing likely due to expensive service agreements being offered in lieu of the more efficient and less expensive option of in-house services. Some of them offer shared service arrangements but are often not viable due to poor discount offerings. With these, vendors typically omit critical supports like software updates. Then there are the marketing strategies that coerce customers into thinking there is huge risk in assigning technical support to anyone but the vendor. Clinical and purchasing stakeholders buy into this thinking which makes our role more challenging. We are having to advocate for our organizations by providing them with what is real and what is possible. Working closely with clinical leaders, purchasing, and IT provides a kind of 'filtering' needed to stave off this type marketing offensive.

Some say, 'Well, it's the way technology is going. We can't do much about it.' I think we can in fact do something about it. I've looked around and have seen many Health Technology Management (HTM) departments that put some manufacturing support programs to shame. There is no reason why we cannot put a signal out there; a gentle reminder that says 'Hey, we are here, we solve problems for hospitals that use technology, we save millions of dollars doing it, and we make patients much safer in this highly technology-driven environment. We should be utilized as much as possible.

Just saying this is a good thing but it can only go so far. As many of you know, there are many companies out there that indeed provide good support for in-house servicing. I think we need to highlight these so that when we deal with companies that put up barriers, we can make reference to what they should be doing. It should be done in a way that most people are familiar with; a standard - possibly an AAMI standard on 'Medical Equipment Serviceability.' It would be an opportunity to address the issue once and for all. I believe a standard (not a regulation or a law) is the right way because it promotes collaboration and a common objective without throwing mandates and must-haves out there. I also think AAMI is the right group to tackle this because it has consistently been the central hub for all things HTM.

After obtaining several opinions on the subject, I presented a sample draft to the AAMI Equipment Management Committee last June. There is interest there with the possibility of it going to AAMI Standards for development; but we need more support. If you would like to jump on the bandwagon, please contact me. Check out my Blog at aamiblog.org - HTM for more on the topic. You will see that I am not the only one that feels that something needs to be done (and soon). Myself and 3 formidable supporters struck a panel to present at AAMI 2013.

About the Author

Mike Capuano, CBET, CCE, is manager of Biomedical Technology Services at Hamilton Health Sciences in Hamilton, Ontario, Canada. Email: <u>capuamik@hhsc.ca</u>



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Durham College implements Biomedical Knowledge Portal at two community hospitals

Health-care information repository now live at Lakeridge Health Oshawa and Ross Memorial Hospital

September 19, 2012

Oshawa, Ont. – Durham College announced that its state-of-the-art Biomedical Knowledge Portal (BKP) is now live at two Ontario community hospitals after being implemented at Lakeridge Health Oshawa (LHO) on May 22 and Ross Memorial Hospital (RMH) in Lindsay on June 25.



Developed in conjunction with the college's Office of Research Ser-

<u>vices and Innovation (ORSI)</u>, and lead by principal investigator and <u>Biomedical Engineering Technology</u> program professor Rick Tidman, the BKP is an all-inclusive health technology management system designed to assist hospitals in achieving considerable cost savings on an annual basis by enabling them to manage the purchasing and life cycle of their biomedical devices more efficiently and effectively.

It is also intended to support patient safety through the tracking of biomedical devices to ensure they are available at the point of care. Health-care workers type the name of the device (e.g. IV pump, bladder scanner, wheel chair, stretcher, etc.) they are trying to locate into a search bar and information on the device, including its location, is provided immediately, reducing the amount of time spent locating equipment.

"It is arguable that the growth of and dependency on medical technology is one of health care's biggest challenges, but medical technology also offers unprecedented opportunities for improved health outcomes," said Tidman. "The BKP squarely takes aim at organizing and sharing information associated with the entire life cycle of a technology and could optimize medical device decisions at shared services organizations, hospitals and Local Integration Health Networks (LIHN), to the benefit of both taxpayers and patients."

First created in April 2011 via a research collaboration between Durham College and software development and IT consulting firm Dapasoft Inc., the BKP is designed to meet the ongoing need for a comprehensive database of information related to biomedical equipment. Until now, equipment has been purchased through a series of non-standardized, stand-alone systems resulting in an absence of shared information between hospitals. "We couldn't be happier that Durham College's research team – right here in our community – has chosen Lakeridge Health Oshawa to pilot the Biomedical Knowledge Portal," said Darrell Sewell, vice-president, Human Resources and Hospitality Services, Lakeridge Health.

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"The portal is helping our medical team access the right equipment at the right time, which is a critical aspect of patient safety."

The BKP is also supported by Durham College's research collaboration with Infonaut Inc., a Torontobased health-care/information technology company, which manufactures Hospital Watch Live, the software the portal uses to supply the information regarding the location, cleanliness and tracking of the mobile medical equipment. Cappstone, in association with Expesite LLC, a clinical maintenance management system, is providing the daily asset management and routine maintenance schedules associated with the medical technology inventory.

"Effectively tracking and maintaining medical devices across the health-care system in the Central East LHIN is very important and we were glad to partner on this initiative," said James Meloche, senior director, System Design and Implementation, Central East Local Integration Health Network. "Based on the results to date, the LHIN will be exploring opportunities to include additional hospitals in this promising venture and sharing this best practice with our colleagues in other parts of the province."

Following on the heels of its first two successful implementations, the BKP is also scheduled to rollout at Southlake Regional Health Care Centre in Newmarket in the coming weeks.

"Durham College is pleased to offer our students an opportunity to gain real world experience while working directly with the project team auditing and tagging devices in the pilot hospitals," added Tidman. "Graduates of our Biomedical Engineering Technology program will be the only health-care professionals entering the biomedical field that are 'BKP-ready'."

About Durham College

At Durham College, the student experience comes first. In September 2012, the college welcomed more than 30,000 students to campus including approximately 9,000 full-time post-secondary students as well as part-time and continuing education students; apprentices; and online learners. The college offers a wide range of market-driven programs in a number of different disciplines including business, information technology, media, art, design, general arts, science, skilled trades, justice, emergency services, health and engineering technology, enabling students to develop the skills required to meet the demands of today's job market.

A three-phase expansion of the college's Whitby campus is currently underway. Phase 1 opened in September 2009 followed by Phase 2 in May 2011. Phase 3 will see the creation of a 36,000-square-foot building focused on agriculture, culinary, hospitality and tourism. Accommodating approximately 900 new students, it will house new classrooms and labs and offer a full-service, green-certified restaurant and lounge and see the creation of a greenhouse – all of which will be open to the general public. In addition, a new Student Services building opened at the Oshawa campus in January 2011.

Allison Rosnak Durham College 905.721.2000 ext. 2333 <u>alllison.rosnak@durhamcollege.ca</u>



Photo Gallery

Celebrating National Biomedical/Clinical Engineering Appreciation Week (NBCEAW) May 2012



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Professional Affairs by Gord McNamee



Banner

Celebrating Biomedical and **Clinical Engineering Week**



CMBES salutes the biomedical engineers, clinical engineers, biomedical engineering technicians, and technologists who make valuable contributions to Canadian healthcare institutions in the areas of





CMBES The Canadian Medical and **Biological Engineering Society** cmbes.ca

Thank you to our sponsor: CMEPP Canadian Medical Equipment Protection Plan

x 78 roll up banner (right) and an 8-page society brochure (below). These professionally designed developed for resources were awareness and NBCEAW campaigns and will be made available to all member institutions affiliated with our members. They elegantly display our key strengths and are designed to be visually eye-catching. Look for these coming your way hopefully just in time for NBCEAW, May 19 - 25, 2013.

CMBES has a new 33

Brochure







Thank you to our sponsor: CMEPP Canadian Medical Equipment Protection Plan

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CMBES AWARDS



Awards Chairman Dennis Len

Dr. Kevin Englehart



2012 CMBES Outstanding Canadian Biomedical Engineer

Dr. Kevin Englehart has established himself as a valuable and notable figure in the field of Biomedical Engineering as a leader in prosthetic control systems and powered prostheses, bringing his work at the University of New Brunswick to an international level. Kevin's work has resulted in significant advances in the functionality and robustness of real-time multifunction prosthesis control. It is of no surprise, therefore, that Dr. Englehart is this year's recipient of the Canadian Medical and Biological Engineering Society's Outstanding Canadian Biomedical Engineer Award for 2012-13.

A native of New Brunswick, Dr. Englehart serves as Associate Director of the Institute of Biomedical Engineering at the University of New

Brunswick. His research and leadership abilities are outstanding, and he has been well cited for his work. One nominator noted, "His scientific publications are widely cited in the literature, and his goal-oriented approach has led to national and international collaborative projects, both fundamental and clinical, with such institutions as the Rehabilitation Institute of Chicago and the US Defense Advance Research Projects Agency."



The significance of this work and Dr. Englehart's transformation and advancement of a much needed technology is something the Society and the rest of the country values and recognizes; to remove the stigma while offering state of the art options to those with limb displacement takes Biomedical Engineering to a

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 <u>click here</u>.

Andrew Ibey

2012 CMBES Early Career Achievement Award



A vibrant, well rounded professional and winner of this year's Early Career Achievement Award, Andrew Ibey comes well complimented by his peers in Biomedical Engineering. "(Andrew) has always exemplified professionalism in all his professional capacity," says one nominator. "He is well grounded in the ethics of the profession and operates from a sound set of principles in all decision making." Yet another nominator commented, "Andrew has demonstrated his eagerness and energy to contribute to the growth of the biomedical engineering profession."

Andrew is a Professional Engineer and received 1st Class Honors in a Masters of Engineering (Clinical Engineering) at the University of British Columbia, taking a job with St. Paul's Hospital in Vancouver, Canada immediately after graduation. As an active Biomedical Engineer, Andrew has contributed to numerous hands-on activities including investigation of over

40 adverse events, evaluation of a multidisciplinary review of epidural smart pumps, as well as production of a business plan for database consolidation, to name a few.

Prior to Vancouver, Andrew provided mechanical design and project engineering expertise to AMEC Americas Ltd. in Halifax, Nova Scotia and Oakville, Ontario as a follow up to acquiring his Bachelor's Degree in Mechanical Engineering at Queens University.

"As a relatively new engineer to the field, Andrew has accomplished far more than most in his first four years," notes his nominator.

Andrew has been an interventional and active participant of CMBES since his membership. One particular area of note was his role in leading the clinical engineering program for CMBEC 33 in Vancouver 2010.

We welcome Andrew as this year's recipient of the CMBES Early Career Achievement Award. "Andrew truly reflects what we want our profession to be and has been an inspiration to those already in the field and to those following him."

Society Awards – Special Membership Recognition/Honours

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EXECUTIVE MEMBER PROFILE: MARTIN POULIN, MEMBERSHIP CHAIR

Greetings/Bonjour CMBES Members,

I'm your new membership chair, but I've been busy divesting my Treasurer role these past few months so don't' yet have much to publish. I'm the Manager of Biomedical Engineering for the Vancouver Island Health Authority out in Victoria, BC, and I've been active with the CMBES since 2004. I've met many of you at our an-



nual conferences, but hope to meet many more and facilitate discussions that affect our profession.

The Membership Committee has its first meeting in December and I plan to have our strategic priorities established at that time. We're always looking for more volunteers, so if you have an interest in helping to promote membership in CMBES or you have some ideas on services we can/should provide to members, please give me a call.

Martin Poulin, M.Eng., P.Eng.

Manager, Biomedical Engineering - VIHA & Membership Chair - CMBES Vancouver Island Health Authority Royal Jubilee Hospital Site 1952 Bay St., Victoria, BC, Canada V8R 1J8 Tel: 250-370-8063 Fax: 250-370-8806





MANAGEMENT TIPS TO PERFORM BETTER IN A CLINICAL ENGINEERING DEPARTMENT WORKSHOP Une stratégie mise en oeuvre pour sensiblement améliorer la performance de l'atelier GBM

> Gnahoua Zoabli, Pierre Cadieux, Stéphane Leblanc, and Philippe Thibodeau CSSS du Lac-des-Deux-Montagnes, St-Eustache, Québec

Introduction

Is your biomedical engineering workshop overwhelmed with the repair of tons of medical equipment? Do you seem to be losing control? If so, do not close the shop, and see how the CSSS of Lac-des-Deux-Montagnes, with the use of small strategic decisions, enables the medical devices to be more often in use rather than being in repair. As a result, these benefits are passed on to the patients.

A performance strategy easy to implement

Our visitors are always surprised to see that the BME workshop has little or no equipment to repair. The idea is simple: why fix the equipment when you can work with the user to prevent breakdowns. Here are some simple and effective strategic decisions.

No specialization! The training of biomedical technicians is such that it enables them to work on a variety of devices, including those on a full service contract. On that account, the devices that enter the workshop are, first and foremost, prioritized, and then, repaired by the first available technician. Accordingly, this type of practice prevents a decrease in performance that can be caused by a routine job. In that regard, the technicians state the following: "When we feel fed up, we can work on anything else to change our mind".

Supplies, we take care of! The BME department has powerful tools to establish the obsolescence of the medical supplies, and to manage, in a consolidated manner, the inventory of spare parts so as to optimize their use in all the clinical departments. As a consequence, less time is lost to restore a malfunctioning equipment. More precisely, by being in charge of the supplies, such as blood pressure cuffs, cables, thermometers, and saturation probes, the BME department ensures that the accessories being used are in an acceptable state. This is the reason why this type of practice makes it easier to detect a misuse or to even prevent one.

Logistics is an asset ... We keep the parts that are more often used nearest to the workshop in order to minimize the travel time.

<u>**Requests for repairs**</u>... All the service requests are made through the computer unless the situation is very urgent.

We will collect the broken device or supply ...

We will go on the site. Minor breakdowns will be fixed on the spot, and we will seek to understand the reason behind the problem. Thus, the clinical staff has more time to work on the quality of care.

<u>*Priority to preventive!*</u> A properly maintained device is less likely to breakdown.

Work should be a source of pleasure and inspiration!

Biomedical technicians cooperate in the smooth functioning of the institution. The goal is to encourage ideas, creative thoughts, and to give the techs a certain functional flexibility. In short, doing more with less is possible if enough attention is paid to detail and quality, and if the biomedical technical staff is directly involved with the end user.

Introduction

Votre atelier de génie biomédical est débordé d'équipements médicaux à réparer et vous semblez en voie de perdre le contrôle! Ne fermez pas boutique. Voyez comment par de petites décisions stratégiques, le CSSS du Lac-des-Deux-Montagnes est en voie de maintenir ses équipements médicaux plus souvent en fonctionnement qu'en réparation; contribuant ainsi à les rendre plus disponibles pour les patients.

Une stratégie de performance facile à mettre en œuvre

Nos visiteurs s'étonnent de voir l'atelier GBM avec très peu ou pas d'équipements en réparation. La recette est simple: pourquoi réparer des équipements quand on peut œuvrer avec l'utilisateur à éviter les pannes. Voici quelques décisions stratégiques simples et efficaces qui en découlent.

Non à la spécialisation! La formation continue des techniciens est organisée de façon à les rendre interchangeables et aptes à travailler sur la plupart des équipements, incluant ceux ayant un contrat de service complet. Ainsi, les appareils entrant dans l'atelier se font réparer par ordre de priorité par le premier technicien qui peut s'en occuper. De cette façon nous empêchons un ralentissement général du rendement dû à la perte d'intérêt d'un individu face à un travail routinier. « Quand on se sent blaze, on peut faire autre chose pour se changer les idées » témoignent-ils.

Les fournitures, on s'en occupe! Le GBM dispose d'outils performants pour établir la désuétude des fournitures médicales et gère de façon consolidée l'inventaire des pièces de rechange pour en optimiser l'utilisation pour tous les départements cliniques. On perd ainsi moins de temps pour rétablir l'équipement en panne. En s'occupant des fournitures comme les brassards d'appareils à pression, les câbles, les sondes de thermomètres et de saturation, on s'assure que les bons accessoires sont utilisés en tout temps. Il est ainsi plus facile de déceler un problème d'utilisation ou d'en prévenir.

La logistique, un atout ... On garde proche de l'atelier les pièces qu'on utilise le plus souvent pour minimiser les pertes de temps de déplacement.

Les demandes de réparations... Toute demande de service est faite par voie informatique à moins qu'elle soit très urgente.

Nous irons chercher l'appareil ou la fourniture brisée...

Nous allons chercher les appareils sur les départements. Les bris mineurs peuvent être réglés sur place! On cherche à comprendre le problème pour mieux l'éviter la prochaine fois. Le personnel clinique a ainsi plus de temps pour le patient.

Priorité au préventif! Un appareil bien entretenu brise moins.

Le travail doit être une source de plaisir et d'inspiration!

Les techniciens GBM sont des collaborateurs au bon fonctionnement de l'établissement. Il faut encourager les idées, les pensées créatives et leur laisser une latitude de fonctionnement. En somme, en faire plus avec moins est possible si on fait attention aux détails, à la qualité et si le personnel technique GBM est directement impliqué auprès de l'utilisateur final.



2015 World Congress in Medical Physics and Biomedical Engineering, Toronto.

CMBES is proud to co-host the next World Congress in Medical Physics and Biomedical Engineering, to be held at the Toronto Convention Centre, June 7th – 12th, 2015. CMBES is joining forces with the Canadian Organization of Medical Physicists (COMP) to host this international event. This conference is sponsored by the International Union for Physical & Engineering Sciences in Medicine (IUPESM) and its member organizations, the International Federation for Medical and Biological Engineering (IFMBE) and the International Organization for Medical Physics (IOMP). The Congress will also serve concurrently as the annual meetings for both CMBES and COMP in 2015.

The World Congress attracts biomedical engineers and physicists from around the world, and WC2015 offers an exceptional opportunity to showcase the breadth and calibre of biomedical engineering here in Canada. The Congress embraces all aspects of biomedical engineering and welcomes everyone who is working in the field or has an interest in it. The Toronto Convention Centre is located right in the heart of downtown Toronto and provides a truly exceptional venue while offering a superb variety of restaurants, accommodation and tourism opportunities close by.

The conference is co-chaired by David Jaffray (Physics) and Tony Easty (Biomedical Engineering), who are committed to organizing a truly memorable event. Conference planning activities get underway in the New Year with the establishment of the Conference Committee, so please don't hesitate to contact the co-chairs or the Conference Committee to suggest areas of focus that you would like to see covered at the Congress. Plan to attend this world-class event. Your active contribution is welcome.

Submitted by Tony Easty

2015 World Congress on Medical Physics and Biomedical Engineering **JPESM 2015** WORLD CONGRESS ON MEDICAL PHYSICS AND BIOMEDICAL ENGINEERING CO-HOSTED BY CANADIAN MEDICAL AND BIOLOGICAL ENGINEERING SOCIETY CANADIAN ORGANIZATION OF MEDICAL PHYSICISTS CMBES, along with the Canadian Organization of Medical Physicists (COMP), will be hosting the 2015 World Congress on Medical Physics and Biomedical Engineering June 7 to June 12, 2015 in Toronto, Ontario, More information on the Congress will be forthcoming, for more information or questions and comments please join our

forum. If you're interested in joining the Organizing Committee contact the Secretariat at secretariat@cmbes.ca.

Conference Planning

by Sarah Kelso, Conference Planning Chair

Future Conference Locations

Our national Conference is held in locations across Canada from year to year.

The schedule of future Conferences is:

- 2013 CMBEC36, Ottawa, ON
- 2014 CMBEC37, Vancouver, BC
- 2015 CMBEC38, Toronto, ON [2015 World Congress]
- 2016 CMBEC39, Calgary, AB

Elevate your profile - become a CMBES committee member!

The CMBES executive is interested in building our committees. If you think you have the right stuff, have a desire to contribute, and want become part of a dynamic team; then this is for you.

Contact the CMBES Secretariat or any of the executive members if you are interested in any of the following portfolios:

- Membership •
- Awards
- Professional Affairs (Peer Review, CE/Biomed Week, Standards of Practice) •
- Publications and Marketing •
- Future Conference Planning
- **Conference Organizing Committees**

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