

# ACCE News

Newsletter of the American College of Clinical Engineering

November—December 2017

Volume 27 Issue 6



## Call for Nominations! CE Hall of Fame

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## President's Message



It is hard to believe that two months have passed since I wrote my first message to the membership. The ACCE Board and the committees were involved in a lot of activities in the last two months. A summary of major activities is listed below.

### **2<sup>nd</sup> Global Clinical Engineering (CE) Day**

On October 21, 2017, ACCE participated in the 2<sup>nd</sup> Global CE day. We had a lot of active participation from the clinical engineering community around the world. I, along with Clarice Holden (Chair, Advocacy Committee) participated on behalf of ACCE. Our presentation included messages from our institutional members, the Department of Veterans Affairs Office of Healthcare Management, Brigham and Women's Hospital, and Intermountain Healthcare. Many thanks to all for participating and contributing to its success. Special thanks to Suly for acting as the producer of the ACCE presentation. If you missed this event, you can view the content at <http://global.icehtmc.com/> (the ACCE's presentation is at: [ACCE@GlobalCEDay](mailto:ACCE@GlobalCEDay)).

### **BOK Committee**

The Body of Knowledge (BOK) Committee has been actively reviewing the current BOK Survey questions. The 2018 BOK Survey will be released early next year with plans to compile and analyze survey results by June/July 2018. The BOK Committee is also working to review and update the Certification in Clinical Engineering Study Guide. The new version 7.0 will be released around June 2018. This guide will be an invaluable tool for those clinical engineers who will be pursuing CCE next year.

### **Advocacy Committee**

The Advocacy Committee was seeking nomination for the Advocacy Awards in ten different categories for outstanding achievements in Clinical Engineering and a student paper competition. The deadline for submission was December 18, 2017. The Advocacy Committee will be reviewing the nominations and announce the Award winners early next year.

### **2017-2018 ACCE Educational Webinar Series**

ACCE Webinar Series which started in September 2017 is well underway. In this Webinar Series, ACCE has lined up experienced and well known professionals addressing current topics of interest to the clinical engineering community. The upcoming topic that everyone is looking forward to is the "2018 Joint Commission Update" by John Maurer from The Joint Commission on January 11, 2018. For future topics see the link <http://accenet.org/NewsEvents/Pages/Webinars.aspx#accetele>

### **NEMA MITA 2-201X: Requirements for Servicing of Medical Imaging Equipment**

Steve Grimes (who is a Canvass Member representing ACCE) has been very active and has developed the response/ACCE position to the Draft Document: A NEMA Medical Imaging & Technology Alliance (MITA) Division Document: NEMA MITA 2-201X: Requirements for Servicing of Medical Imaging Equipment. The ACCE Board recently approved the position developed by Steve Grimes. For more details see the link <http://accenet.org/Shared%20Documents/ACCE%27s%20BALLOT%20re%20adoption%20of%20NEMAMITA%202-201X%20Requirements%20for%20Servicing%20of%20Med%20Imaging%20Equip.pdf>

(Continued on page 2)

# President's Message (Continued)

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## **2018 Class of Clinical Engineering Hall of Fame**

Nominations are open for the 2018 Clinical Engineering Hall of Fame that recognizes and honors the individuals who have made extraordinary contributions to the profession of clinical engineering. The deadline for the submitting the nominations is February 17, 2018 <http://accenet.org/HallofFame/Pages/Default.aspx>.

## **HIMSS 18**

ACCE is an official collaborator of HIMSS 18. ACCE Members receive the members' discount to attend HIMSS, <http://accenet.org/NewsEvents/Pages/HIMSS18.aspx>.

Our own Ilir Kullolli (President-Elect, ACCE) is leading an education session titled "Partnering for Medical Devices Security and Patient Safety" on March 8, 2018 at HIMSS 18. Please join us on March 6 at the "Clinical Engineering & IT Community/ACCE Awards Reception" and the "HIMSS 18 Awards Banquet" on March 8 in congratulating the winner of the **2017 ACCE/HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award recipient**.

## **Membership Committee**

**Thirty new members joined ACCE in various categories. We welcome three new Institutional Members** - Hospital

Israelita Albert Einstein, Brazil; TecSaude Engenharia Hospitalar, Brazil; and Beth Israel Deaconess Medical Center, MA, USA.

## **International Committee**

The International Committee actively participated in Global CE Day. They are collaborating with the clinical engineers in Columbia in helping form Colombian College of Clinical Engineering. They are also supporting the profession by providing speakers to the Clinical Engineering webinars in Colombia.

## **Clinical Engineering Handbook**

Many ACCE members are actively participating in leading Sections and reviewing chapters for the second edition of Clinical Engineering Handbook (Elsevier). The 2<sup>nd</sup> edition author is Ernesto landanza, Ph.D., Chairman of IFMBE/CED, Clinical Engineering consultant and advisor, Adjunct Professor of Clinical Engineering, University of Florence, Italy.

## **ACCE Goals for 2017/2018**

I am encouraging our members to please take some time to review the goals and see how they can assist the Board and various committees in achieving these goals. I look forward to hearing your suggestions. Thanks for volunteering your time and your support to ACCE.

Arif Subhan  
President, ACCE  
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## ACCE News

ACCE News is the official newsletter of the American College of Clinical Engineering (ACCE).

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## **ACCE Job Website Job Postings**

For posting job opportunities, please contact Dave Smith at [advertising@accenet.org](mailto:advertising@accenet.org)

## Journal of Clinical Engineering Subscriptions for ACCE Members

The Journal of Clinical Engineering is a compilation of articles, papers, and extensive manuscripts relevant to clinical/biomedical engineering or biomedical technology. Subject matter directly relates to the engineering or technology involved in patient care and treatment or technology in the broad field of health care delivery.

ACCE members receive a discounted subscription to the [Journal of Clinical Engineering](#) for only \$99! (Originally \$265). You must [login](#) to the ACCE website to view the code. Then visit [LWW.com](http://LWW.com) to enter code.



# Welcome New Members

We welcome our newest members, approved by Membership Committee and supported by the Board of Directors:

Name	Class	Job Title	Organization	Country
Zeev Katz	Corporate- Associate	Operations Director	TecSaude Engenharia Hospitalar	Brazil
Iliane Cardoso Alencar	Corporate- Associate	Resources Director	TecSaude Engenharia Hospitalar	Brazil
Anne F. Stegmann	Corporate- Associate	Regional Operations Manager	TecSaude Engenharia Hospitalar	Brazil
Daniel B. Veras	Corporate- Associate	Regional Operations Manager	TecSaude Engenharia Hospitalar	Brazil
Felipe A. Suassuna	Corporate- Associate	Regional Operations Manager	TecSaude Engenharia Hospitalar	Brazil
Carolina S. Bastos	Corporate- Associate	Regional Operations Manager	TecSaude Engenharia Hospitalar	Brazil
Yuri C. Silva Araujo	Corporate- Associate	Regional Operations Manager	TecSaude Engenharia Hospitalar	Brazil
Sergio Lomachinsky	Corporate- Associate	Diretor Comercial	TecSaude Engenharia Hospitalar	Brazil
Ana Teresa C. de Freitas Gama	Corporate- Associate	Operations Manager	TecSaude Engenharia Hospitalar	Brazil
Diogo Costa Braga	Corporate- Associate	Regional Operations Manager	TecSaude Engenharia Hospitalar	Brazil
Antonio Gibertoni Jr.	Institutional- Associate	Manager, Clinical Engineering	Hospital Israelita Albert Einstein	Brazil
Berthone V. Soares	Institutional- Associate	Coordinator Engineer, Clinical Engineering	Hospital Israelita Albert Einstein	Brazil
Petrick M. Davoglio	Institutional- Associate	Clinical Engineer Specialist	Hospital Israelita Albert Einstein	Brazil
Kleber Cardoso	Institutional- Associate	Clinical Engineering Coordinator	Hospital Israelita Albert Einstein	Brazil
Wesley Ramkissoo	Institutional- Associate	Clinical Engineering Manager	Beth Israel Deaconess Medical Center- BIDMC	MA/USA
Dillon Florence	Institutional- Associate	Clinical Engineer	Beth Israel Deaconess Medical Center- BIDMC	MA/USA
Juan De Jesus	Institutional- Associate	Clinical Engineering Manager	Beth Israel Deaconess Medical Center- BIDMC	MA/USA
Jeffrey Smith	Institutional- Associate	Clinical Engineering Manager	Beth Israel Deaconess Medical Center- BIDMC	MA/USA
Mohamed Rezgui	Individual	Director Facilities Programs & Quality	The Cleveland Clinic Abu Dhabi	VA/USA
David Braeutigam	Individual	Principal Consultant	Braeutigam Enterprises LLC	TX/USA
Ian R. Garcia	Candidate	Graduate student/Clinical Engineering Intern	UCONN/Brigham and Women's Hospital	MA/USA
Virag Borsai	Candidate	Graduate student/Clinical Engineering Intern	UCONN/Boston Children's Hospital	MA/USA
Joseph S. Gucciardi	Candidate	Graduate student/Clinical Engineering Intern	UCONN/VA Los Angeles	CA/USA
Gary Lorden Jr.	Candidate	Graduate student/Clinical Engineering Intern	UCONN/UMASS Memorial Healthcare	MA/USA
Kate Rescsanszky	Candidate	Graduate student/Clinical Engineering Intern	UCONN/Yale New Haven Hospital	CT/USA
Ozgun Aydin	Candidate	Graduate student/Clinical Engineering Intern	UCONN/Mass General Hospital	MA/USA
Jomo Tendai Moyo	Associate	Clinical Technician	Healthyard Enterprises	Zimbabwe
Hossam Elsemany	Associate	Clinical Engineering Specialist III	Yale New Haven Hospital	CT/USA

(Continued on page 4)

# Welcome New Members (Continued)

(Continued from page 3)

Name	Class	Job Title	Organization	Country
Alexandra Stowe	Corporate-Associate	Graduate student/Clinical Engineering Intern	UCONN/ISS Solutions	MA/USA
Frank Rubino	Corporate-Associate	VP Clinical Engineering	ISS Solutions	MA/USA
Adham R. Ismail AbdelMoneim	Individual	Regional Adviser HMD	World Health Organization St.	Egypt

Congratulations to the following members who upgraded to individual member status:

**Lisa M. Bradley**—Supervisory Clinical Engineer, VA Boston Healthcare System, MA/USA

Welcome to our newest Institutional Members:

## Hospital Israelita Albert Einstein



## TecSaude Engenharia Hospitalar



## Beth Israel Deaconess Medical Center



Beth Israel Deaconess  
Medical Center



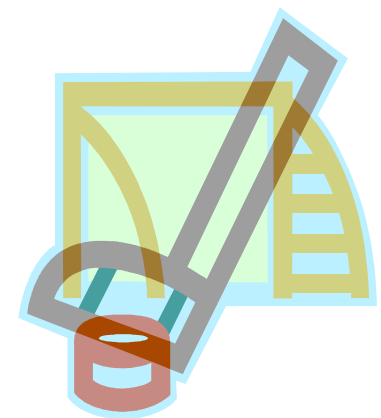
HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL

## View from the Penalty Box

The year 2017 will go down in history as one that while the worst was happening, many people stepped up and did great things. The impact on healthcare in the US from natural disasters will last for quite a while. The hurricanes left a lot of people without power, clean water, and normal sewers for up to several months. They were also subject to floods, landslides and price gouging for some of the basic supplies needed for a normal life. But progress is being made, unless you need IV solutions, pharmaceuticals or gas at reasonable prices. While all this is going on, our congress seems to be more concerned with which bathroom some people are allowed to use rather than working on healthcare costs and availability, changes to our environment, our roads and general infrastructure. These issues are appar-

ently not important to our congress. They seem to be more interested in press releases, living the good life, and being in session only 3 days per week for about 40 weeks a year. On top of that, they get paid the same for life. Maybe we should all run for congress.

Turning to another topic, EHR or EMR. If clinical engineering did what is happening with some of the installation of these systems, we would be looking for work. In a recent install, at a local healthcare system, the two biggest hospitals went “live” the same week. In the press releases the system said that non-emergency surgery and admissions were postponed, and the patient population was lowered so the work could get done quickly and smoothly. About a week after the “go live” starting



date it was reported that there were over 18,000 trouble calls during the “go live” week. There have been no reports on the other three hospitals in the system and what their problems are or were. I guess it is better to hide the facts than to bring them out. But maybe things went well; it was only a \$720,000,000.00 installation.

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# CE Advancing Well in Arab Countries

The Third International Conference on Biomedical and Clinical Engineering in the Arab Countries (BioClinic 3) was held in Beirut, Lebanon, October 25-26, 2017. It congregated over 300 professionals and students from Arab countries with numerous invited speakers from Europe and the United States. It also hosted an exhibit with the presence of some companies active in the Middle East. ACCE material was distributed by its Secretariat, Suly Chi.



Opening Ceremony: Dr. Zohair Bin Mohammad Al Sarraj, Ms. Adriana Velazquez, Dr. Bahig Arbid, and Dr. Ibrahim Andijani.

The Patron of the Opening Ceremony was Dr. Bahig Arbid, Advisor to the Lebanese Minister of Public Health for Planning and Health Systems. The opening ceremony featured a sweeping overview of the importance of biomedical engineering for healthcare worldwide by Adriana Velazquez, Senior Advisor on Medical Devices at the World Health Organization (WHO) and an ACCE member.



Opening keynote session: (from left to right) Faraj Adbelnour, Adham Ismail, Bahig Arbid, Ibrahim Andijani, Binseng Wang & Bassam Tabshouri.

On the next day, the opening session was also presided by Dr. Bahig Arbid and included keynote speeches by Bassam Tabshouri – Director, Medical Engineering, American University of Beirut Medical Center (AUBMC) and an ACCE member;



Adriana Velazquez (2<sup>nd</sup> from left - 1<sup>st</sup> row) & Suly Chi (3<sup>rd</sup> from left) joined the women CEs in the Arab Countries at the BioClinic 3.



Closing panel discussion. From left to right: Riad Farah, Rami Rajab, Patrick Lynch, Ahmed Al Barrak, Ibrahim Andijani, Adham Ismael & Hashem Al Fadel

Dr. Faraj Adbelnour - Lead Auditor CE Marking & President of l'ACIDIM France; and me. Numerous biomedical and clinical engineering experts also made presentations and conducted workshops, including Dr. Iyad Mobarek – GE Education Solutions; Dr. Hashem Al-Fadel – Temos Int'l; Dr. Ibrahim Andijani – Prince Sultan Military Medical City, Kingdom of Saudi Arabia (KSA); Abdullah Al Aqeel – Ministry of National Guard, Health Affairs KSA and

an ACCE member; Patrick Lynch – Biomedics Without Borders USA and an ACCE fellow; Riad Farah – St George Hospital Beirut; and Rami Rajab – Mecomed.

The presentations were of very high quality and enthusiastically attended, with numerous questions and heated discussions. I was particularly impressed by the high number of young professionals and students, especially females that made almost 40% of the audience. Most of them have full engineering degree, and a few years of experience.

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## CE Advancing Well in Arab Countries (Continued)



From left to right: Iyad Mobarek, Binseng Wang, Adriana Velazquez, Mahmoud Madani, Adham Ismail & Bassam Tabshouri

(Continued from page 5)

Lebanon is clearly one of the most advanced in CE among the Arab countries, especially considering its small geographical size and population (~ 4 million). It currently has approximately 800 biomedical engineers, with about 250 working in healthcare organizations. Currently there is no registration requirement and no professional association, but there is a biomedical engineering committee in the Order of Engineers. Also, an association is being planned under the leadership of Bassam Tabshouri and Riad Farah. I had the privilege of discussing CE activities with both of them in detail and visited the impressive Medical Engineering department of AUBMC. It is obvious that CE practiced in some facilities in Lebanon is comparable with what is currently being practiced in North America. Actually, they seem to be even more involved with facility and equipment planning and acquisition than us.

Several resolutions were made by the participants at the end of the conference as summarized below:

- 1) Continue to hold additional conferences with more participants and international experts;
- 2) Establish an "Arab Biomedical Engineering Society" that will establish guidelines and standards for this field;
- 3) Urge Arab ministries of health and healthcare organizations to prioritize education and training of biomedical

engineers and technicians, and focus on smart apps and cybersecurity;

- 4) Urge medical device dealers and service companies to support the creation of specialized training centers;
- 5) Elevate and unify the standards of education, training and practice to meet international standards and consider regional experiences;
- 6) Engage biomedical and clinical engineering professionals in all phases of technology management, starting from architectural design, going through equipment incorporation and maintenance, and ending with device retirement;
- 7) Commend KSA for creating a biomedical engineering society, a chapter for biomedical engineers in the Saudi Engineering Society, control of medical devices by Saudi Food and Drug Administration, and including specific requirements for biomedical engineering services in the Saudi Accreditation of Healthcare Facility;
- 8) Adopt health technology assessment as the methodology to acquire and deploy technologies according to the actual needs, and consider the possibilities of group purchasing and privatization of medical equipment maintenance; and
- 9) Collaborate with patient care staff in the development of guidelines and training to ensure safe and proper use of medical equipment.

This greatly successful conference is the fruit of hard work by Dr. Zohair Bin Mohammad Al Sarraj – Chairman of the Organizing Committee, Dr. Ibrahim Adjijani - Chairman of the Scientific Committee, and the staff of Exicom International Group, with invaluable collaboration provided by Mahmoud Madani, formerly with King Faisal Specialist Hospital KSA and an ACCE charter member.

Binseng Wang  
International Committee Member  
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## View from the Penalty Box (Continued)

(Continued from page 4)

What could prove very interesting is that the largest hospital group has budgeted some \$2,000,000,000.00. That's right 2 billion, to bring their EHR on line sometime in 2018. There is a proposed merger of two hospital systems in the greater Boston area, but they have run into a problem with their systems not being able to talk to each other. The administrations of both systems are trying to work out a solution, but it might take quite a while.

Some of our more senior ACCE members might think back to the battles of Microsoft and Apple over the word processing that each installed, plus other systems that talked to one or the other but not both. That got worked out quickly once the buyers got into the mix. We would only buy systems that talked the most to other systems. After a drop in sales Apple did the modifications to their system to talk to the other systems. Remember the golden rule, **"Those that have the gold make the rules"**. So if a vendor will not offer training or manuals, do not buy that product. Simple enough for our politicians to understand, if they cared for something, other than their money from salary plus "speaking fees".

After attending too many funerals and wakes this year and being past 75, I got tired of hearing "Rest in Peace". I think that we should all have a modified version of that, and it is "Live in Peace". Same number of words and letters but much more positive, so please Live in Peace.

Please take a positive attitude towards our problems as we can fix them if we work together. Hopefully 2018 will be better than 2017. Have a great holiday season and do a good deed for someone.

Dave Harrington  
[Dave@sbtech.com](mailto:Dave@sbtech.com)



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## Perspectives from ECRI Institute

At the conclusion of Top Ten Hazards season, we got to talking about unintended consequences. Cleaning of medical equipment has always been a Top Ten issue, usually focusing on making sure complex equipment like endoscopes are properly cleaned. But, over the past few years, we've seen a good-news-bad-news situation develop: facilities must be doing a better job at making sure devices are being cleaned, because we're getting a lot of reports of equipment damage caused by or related to the cleaning process.

A few memorable cases that we've seen

- Several infusion pumps with electrical connections have become corroded or damaged if exposed to the wrong cleaners/disinfectants or overzealous cleaning methods, or if re-connected while wet.
- A wide range of medical devices from infusion pumps to temporal thermometers to cell counters were degraded
- over repeated exposure to incompatible cleaning materials. In one very expensive case, a hospital had switched from a three-minute wipe to a one-minute wipe from the same supplier in order to follow a recommendation from their state department of health. This change in wipe formulation caused widespread damage to devices throughout the facility, including the disintegration of labeling on keypads, cracking of plastic imaging grids slid under patients, damage to ultrasound probes, cracking of components in electrosurgical devices, and cracking of tympanic thermometers.
- A powered headwall that caught on fire after incompatible cleaning methods caused fluid to enter a power outlet, causing a short.
- Last but not least, the winner in the "really disgusting stuff we hope never happens to us" category. Mattress and support surface covers became permeable with repeated incorrect clean-

ing, leading to situations where body fluids passed through the cover into the mattress itself, and then "oozed" back up to contaminate a subsequent patient.

So if we can't just wipe everything down with whatever wipe is at hand, what can we do to avoid these problems?

- Collect approved cleaning and disinfection methods for all medical equipment that requires cleaning or reprocessing between patients, including (if applicable) how to safely use the equipment in an isolation room and prepare it for use on subsequent patients.
- Get these approved methods to the correct staff and make sure they have the right equipment and materials to follow them.
- Be on the lookout for device damage that could be caused by cleaning, like

*(Continued on page 8)*

# THE CONNECTED MEDICAL DEVICE & IOT

## ... SECURITY SUMMIT ...



January 25-26, 2018 • Baltimore, MD

ACCE is a supporting organization of the 2018 Connected Medical Device & IOT Security Summit.

ACCE members may use discount code 93 to receive a \$100 discount on the registration fee.

The Summit will offer practical solutions to many of the daunting security challenges facing medical device and connected health companies, healthcare providers, payers and patients.

**Date/Time:** January 25-26, 2018, starting at 8:00am

**Location:** Best Western Plus Hotel & Conference Center, Baltimore, MD

Registration: [click here](#) For Event details: [click here](#)

## Perspectives from ECRI Institute (Continued)

*(Continued from page 7)*

premature wear and tear, cracking, hazing, or other visible damage to plastic components. Report these to the supplier and ECRI Institute so we can let other facilities know about possible incompatibilities. More information can be found at [https://www.ecri.org/components/HDJournal/Pages/Top\\_10\\_hazards\\_2018\\_No\\_5\\_cleaning.aspx?tab=1](https://www.ecri.org/components/HDJournal/Pages/Top_10_hazards_2018_No_5_cleaning.aspx?tab=1)

Bonus Feature: Farewell and Thanks for all the Fires

We're marking the end of an era in our Accident and Forensic Investigations team this season: Mark Bruley is retiring on January 15 after 42 years with ECRI. Over the years, he's generously shared his knowledge, experience, magic tricks, and too many pictures of things we'll never be able to un-see. Before he sails his kiteboard off into the sunset, we're asking him to distill everything he's taught us about surgical fires into an hour-long webinar on December 20. Surgical fires, though rare, can have devastating consequences for patients, staff, and the healthcare facility. Among the 65 million annual surgical cases in the United States, ECRI Institute estimates that around 200 to 240 surgical fires

occur, making the frequency of their occurrence comparable to that of other low-incidence surgical mishaps (e.g., wrong-site surgery or retained instruments). For guidance on surgical fires and tips on how to get executive-level administrator support for prevention, register at [https://www.ecri.org/events/webinars/Pages/HD\\_Fires\\_Webinar\\_2017-12/home.aspx?tab=1](https://www.ecri.org/events/webinars/Pages/HD_Fires_Webinar_2017-12/home.aspx?tab=1).

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# AAMI Update

## New Resource Takes Mystery Out of Developing an AEM Program

In the healthcare technology management (HTM) field there is a lot of confusion surrounding three little letters—AEM—starting with what the abbreviation even stands for, according to Matt Baretich, president of Baretich Engineering based in Fort Collins, CO.

“The Centers for Medicare & Medicaid Services [CMS] (the originator of the AEM concept) says that AEM is an abbreviation for ‘alternate equipment management,’” Baretich wrote in the introduction to his new *AEM Program Guide*. On the other hand, “The Joint Commission [TJC] ... says it stands for ‘alternative equipment maintenance.’ ... And that’s just the beginning.”

In the *AEM Program Guide*, Baretich, who has been consulting on HTM-related issues for three decades, seeks to address AEM-related terminology, offer ideas for practical implementation, and explain how to remain compliant with applicable standards and regulations.

“Unfortunately, there is not yet a consensus on exactly how to create an AEM program,” Baretich wrote. “Some of the proposed AEM policies I have seen are, in my opinion, simply not compliant with CMS and TJC requirements. That’s why the *AEM Program Guide* goes into such (excruciating?) detail about those requirements.”

Eventually, there will be a formal AEM standard—one is currently in development—but many HTM departments need guidance now.

“This valuable document is designed to bridge from where we are today (limited resources) to a project that is just beginning and sponsored by AAMI: development of a formal standard focused on AEM,” George Mills, TJC’s former director of engineering, wrote in the foreword to the guide. “This document should begin to assure those curious enough to read it that implementing an AEM program is not only

possible, but will result in improved HTM program management.”

Those improvements? Saving time or money, or both, according to Baretich. “Adopting an AEM procedure is not an academic exercise; it’s good business,” Baretich wrote.

The *AEM Program Guide* can be purchased from the AAMI Store, [www.aami.org/store](http://www.aami.org/store).

## Nominate a Star in Your Organization for an AAMI Award

Each year, AAMI recognizes leaders and innovators in the healthcare technology community whose efforts have moved the field forward. Nominations for this year’s AAMI Awards are being accepted until Feb. 8, 2018.

Winners will be awarded monetary prizes and a plaque commemorating their achievements, and will be recognized during a special reception at the AAMI 2018 Annual Conference & Expo in Long Beach, CA in June.

The categories include:

- The **AAMI Foundation's Laufman-Greatbatch Award**, which honors an individual or group that has made a unique and significant contribution to the advancement of healthcare technology and systems, service, patient care, or patient safety. This is AAMI's most prestigious award.
- The **AAMI Foundation & ACCE's Robert L. Morris Humanitarian Award**, which recognizes individuals or organizations whose humanitarian efforts have applied healthcare technology to improving global human conditions.
- The **AAMI Foundation & Institute for Technology in Health Care's Clinical Solution Award**, which honors a healthcare technology professional (individual or group) that has applied innovative clinical engineering

practices or principles to solve one or more significant clinical patient care problems or challenges facing a patient population, community, or group.

- **AAMI & Becton Dickinson's Patient Safety Award**, which recognizes outstanding achievements by healthcare professionals who have made a significant advancement toward the improvement of patient safety.
- **AAMI's HTM Leadership Award**, which recognizes individual excellence, achievement, and leadership in the healthcare technology management profession.
- **AAMI & GE Healthcare's BMET of the Year Award**, which is given to a biomedical equipment technician to recognize individual dedication, achievement, and excellence in the field of healthcare technology management.
- **AAMI's Young Professional Award**, which is presented annually to a professional, under the age of 35, who exhibits exemplary professional accomplishments and a commitment to the healthcare profession.
- **AAMI's HTM Association of the Year Award**, which recognizes an HTM association that distinguishes itself during the course of the year through outstanding society operations and meetings as well as a commitment to elevating the HTM profession at the local level.

More information, including nomination forms and guidelines, can be found at [www.aami.org/awards](http://www.aami.org/awards).

AAMI Staff

# Clinical Engineering in Argentina—SABI 2017



ACCE was an official supporting organization for the 21st Argentinian Bioengineering Congress and 10th Clinical Engineering Meeting from Sociedad Argentina de Bioingeniería - **SABI**. It was held in the historical and beautiful city of Córdoba, on October 24-27.

The event, hit a new record of participants (about 750 from 13 countries), with important international keynote speakers, including Dr. Shankar Krishnan (IFMBE President-Elect, ACCE member); Luis Kun, PhD, FAIMBE, FIEEE, Editor in Chief at Journal of Health Technology - Springer; Prof. Maria Teresa Arredondo, Director of Life Supporting Technologies from Madrid Polytechnic University (UPM-Spain); and Prof. Dr. Renato Garcia, Biomedical Engineering Institute-Florianopolis University (IEB/UFSC-Brazil, ACCE Member); among others.

ACCE International Committee Chair, Eng. Antonio Hernandez, remotely partici-

pated in a panel called “Societies related to Bioengineering”, with local support of two Argentinian ACCE members, German Giles and Cristian Sapp. The importance of collaboration between Societies and the role of Clinical Engineers, was enhanced. Members from Argentina’s Medical Physics Society, Cardiology Society, and Association of Architecture and Hospital Engineering, completed the venue. SABI authorities expressed their desire to work synergistically with ACCE in the near future and appreciated ACCE’s participation.

The SABI Clinical Engineering Chapter was relaunched with Eng. Eduardo Fernandez Sardá, (Clinical Engineering Director at Garrahan Children’s Public Hospital) as the new President. Many Clinical Engineering topics will be updated through the **SABI website**, to promote CE education, HTM initiatives, Government sensitization, and CE needs in Argentina.

Participation from Universities, Societies,



Panels—CE in LatinAmerica (From left to right): Marcelo Lencina/Argentina, Rossana Rivas (Peru), German Giles (Argentina), Shankar Krishnan (USA/IFMBE), Renato Garcia (Brazil), and Antonio Hernandez (USA/ACCE) (Remotely) for Societies related to Bioengineering.

Government, and Providers sharing developments and experiences from Bioengineering to Clinical Engineering, was part of the Congress success.

*German Giles  
ACCE Member, Argentina*

## IFMBE CED—2nd International Clinical Engineering and HTM Congress

In September the IFMBE Clinical Engineering Division (CED) held its Second International Clinical Engineering and Health Technology Management Congress (II ICEHTMC) in Sao Paulo, Brazil.

The Congress Chair, Dr. Saide Jorge Calil and Vice Chair, MSc. Jose Alberto Ferreira led a multi-country faculty team in a year-long planning effort to prepare for this successful 2.5 day event. There were 400 attendees with faculty from over 30 countries sharing best practices, highlighted by special presentations made by MSc. Adriana

Velazquez Berumen from the World Health Organization (WHO).

The Congress was preceded by a one day Latin America and Caribbean (LA&C) Regional CE-HTM Summit with over 100 representatives present from MOH Brazil, WHO/PAHO, ACCE, hospitals, industry, and regulatory leaders. It was a globally unprecedented event with faculty from 12 LA&C countries. The Congress was followed by a half-day of the 2nd Global CE Summit, with 60 attendees from 27 countries, the first having occurred in Hangzhou

China in 2015 conjunction with the ICEHTMC.

CED now works with over 100 countries. During the Congress, the value of CED in supporting the global development of Clinical Engineering was recognized by AAMI with a prize, given by Dr. Bradley Schoener, AAMI VP of Innovation, to Ernesto Iadanza, IFMBE/CED chair.

The Global CE Summit affirmed earlier Summit findings for CE-HTM priorities to  
*(Continued on page 11)*



# IFMBE CED (Continued)

(Continued from page 10)

address recognition/influence as well as education and training challenges around the world. For example as a result of this focus, CED has seen an increase in CE-HTM units at the Ministry of Health levels in several countries, as well as the founding of new national societies, creation of new books, has conducted a global Body of Knowledge/Body of Practice survey, and is creating a new global CE journal.

These events were hosted by the Hospital Sirio-Libanes and included presentations, workshops, and a medical device expo. Marcello Dias Bonfim, the Manager of the hospital's Clinical Engineering Department provided tours of their facilities, highlighting the hospital's practices in medical device acquisition, installation, maintenance, repair and investigation.

The program's success energized the global CE-HTM community for CED's participation in WC2018 in Prague - <http://www.iupesm2018.org/> - for June 3-8, 2018, as well as the third ICEHTMC in Rome, Italy in October 2019.

Congratulations to the planning team, the sponsors, and CED for a tremendous success in spotlighting and advancing practice in the safe and effective use of medical devices, and for advancing the profession of CE-HTM.

Tom Judd  
CED Secretary  
[Tom.Judd@gmail.com](mailto:Tom.Judd@gmail.com)



2nd Global CE Summit participants



2nd ICEHTMC participants, Hospital Sirio Libanes, Brazil

## University of Connecticut: Class of 2018

The University of Connecticut will graduate eleven new clinical engineers in May 2018. These students will have taken seven clinical engineering courses, three graduate engineering courses and will have spent 22 months in an internship at one of the following hospitals: Los Angeles VA Medical Center, Hartford Hospital, Mass General Hospital, Baystate Medical Center, Yale-New Haven Hospital, Middlesex Memorial Hospital, Brigham and Woman's Hospital, Lifespan-Rhode Island Hospital, UConn Health Center and UMass Memorial Medical Center.



If you know of an opening for a clinical engineer, please forward it to Frank Painter ([frpainter@engr.uconn.edu](mailto:frpainter@engr.uconn.edu)) so he can let the group know. If you are interested in reading their resumes, they are posted on the class website at [www.ceeducation.org](http://www.ceeducation.org).

Pictured left to right: Nehal Kapadia, MGH; Kate Rescsanszky, Yale New Haven; Shane Waltsak, Brigham & Woman's; Brandon Low, Los Angeles VA; Angelina Chiaracane, Baystate; Alexis Henry, Rhode Island Hospital; Maraquia Atwood, UConn Health; Ahmad Ateyat, UMass Memorial; Brittany Guerrero, Hartford Hospital; Brittany Pack, Middlesex; and Ben Ford, UMass Memorial

UConn will be accepting applications for 14 fully funded clinical engineering internship positions starting in August 2018. The applications for these positions is due in early January 2018. Interviews will take place in March 2018. More information is available on the [www.bme.uconn.edu](http://www.bme.uconn.edu) website.





**We wish you all a  
Joyous Holiday and a  
Very Happy New Year!**

*Jim Keller, Ted Cohen, Jared Ruckman, July Chi*

**The ACCE News editorial and circulation team**

### **Journal of Clinical Engineering Call for Papers**

The Journal of Clinical Engineering prints selections of the ACCE News in each issue and is interested in papers from you. If you have an urge to write, and good clinical engineering activities or ideas to share, please consider JCE as one of your outlets. One type of article not seen in a while is the Department Overview which presents how your department is structured and how it performs its functions. Shorter "Perspective" pieces are also welcome. You can discuss manuscript ideas with fellow member William Hyman, who is one of the editors of JCE. Contact: [w-hyman@tamu.edu](mailto:w-hyman@tamu.edu). Send manuscripts to William or Michael Leven-Epstein at: [michael.levinepstein@gmail.com](mailto:michael.levinepstein@gmail.com)

# Colombian College of Clinical Engineering

As a result of the need generated by the incorporation of technologies in the Colombian healthcare system, some universities in the country developed programs for education in the field of Biomedical Engineering and Bioengineering. These programs began as early as 1998. Currently, professionals graduating from Biomedical Engineering programs and related areas, such as electricity, electronics, mechanics, among others, work in the field of clinical engineering (CE), applying the engineering concepts to the management of healthcare technology.

Colombia has made developments and progress in addressing CE issues. It has also developed guidelines on medical device licensing and post-market surveillance from the Ministry of Health (MoH). These guidelines emphasize the safe use of technology for patients and users. Healthcare facilities have improved their use of technology and technology-related processes. The universities are at the forefront of expanding CE knowledge as they continuously monitor global progress. They are also developing research processes for technical and management level clinical engineers.

Despite these advances, the lack of integration among the different stakeholders, such as government, healthcare facilities, academic institutions and industry, has led to delays in the generation and implementation of CE policies, decreases in the exchange of information and the development of management practices for standardized and appropriate technologies. Additionally, it discourages the generation of applied research and innovation projects. Furthermore, the non-existence of CE associations or reference institutions, contributes to these problems.

In 2011, a Colombian regulation established the MoH's responsibility to generate policies for medical devices. In 2013, collaborative work started between the government and healthcare facilities to fulfill this responsibility, especially in the areas of technology management adapted to the local context. Likewise, a networking and benchmarking strategy was initiated with regional nodes for the generation and integration of the knowledge of all the stake-

holders. It became possible to connect more than 250 engineers, dedicated to the management of medical technology in hospitals through these strategies.

In 2013, the universities of the city of Medellín (UPB, the U of A, the EIA and the ITM), recognized the importance of working together to enhance individual capabilities and encouraged the creation of opportunities and international events as new training methods. An example of this is the International Congress of Clinical Engineering-CONIIC.

In March 2017, at a meeting attended by leading engineers from the universities, the healthcare reference institutions, the collaborative group of the MoH and with the support of the engineers Antonio Hernández and Mario Castañeda, the gaps and challenges of Colombian clinical engineers were analyzed. The meeting identified the importance of the connection of CE stakeholders. As a result, the creation of an associative group of CE was proposed.

Ten leaders linked to 7 institutions: 3 hospitals, 3 universities and one government institution, joined together. They were motivated by the dream of consolidating this association. In August of 2017, the founders approved the bylaws of the Colombian College of Clinical Engineering – COLCINC. In November 2017, the legal recognition was achieved to officially start working towards positioning and developing CE in Colombia with high quality standards, promoting the rights and duties of CE, strengthening Colombian practices in CE and becoming a national and international CE reference institution.

Since August 2017, COLCINC has reached a pre-registration of 120 engineers in 10 Colombian departments. With pre-registered people, in the framework of the Global CE Day, the College developed activities such as the dissemination of technical documentation to motivate participation in this new strategy.

For 2018, the society is planning to have an official launch of its website and registrations opening. Collaboration with ACCE is planned. A portfolio of digital materials is planned to distribute technical documenta-



tion, ideas in engineering and technological publications, and education activities covering training and support.

COLCINC seeks to respond to Colombian needs, with a goal to impact the global field of CE, with an emphasis on the contribution CE in patient safety.

*Paula Andrea Berrío Molina,*  
*International committee member*  
[pberrio@hptu.org.co](mailto:pberrio@hptu.org.co)

**IT'S TIME TO  
RENEW YOUR  
MEMBERSHIP!**

ACCE members are urged to check their records of dues payment. If you have not paid your ACCE Membership dues for 2018, please do so now.

[Renew it online](#) or send your check made out to ACCE to:

ACCE/Secretariat  
5200 Butler Pike  
Plymouth Meeting, PA 19762

If you need an invoice, please email your request to: [secretariat@accenet.org](mailto:secretariat@accenet.org)

# Healthcare Technology Foundation News

I had the opportunity to do a presentation in Washington DC recently. We were presenting to BARDA, a group I had known very little about, but which plays a very important role in our lives. BARDA stands for Biomedical Advanced Research and Development Authority. They are part of The US Dept. of Health and Human Services and within that they are part of the Medical Countermeasures Organization ([MedicalCountermeasures.gov](http://MedicalCountermeasures.gov)).

BARDA is responsible for Research and Development of Medical Countermeasures for Pandemic Influenza, Infectious Diseases, and Chemical, Biological, Radiological and Nuclear Threats. When we walked into the building they have on display information on the projects that they have been involved with and the solutions they helped develop. BARDA works with industry, academia, and other government groups to develop solutions to problems that are likely (Flu, disasters and humanitarian crisis) as well as things that hopefully won't happen, but that we need to be prepared for. In situations when the Federal Government gets involved when things go wrong, BARDA has probably been part of developing the response. It is an amazing organization.

From flu epidemics, to how to deal with decontamination in the case of a chemical, biological, or nuclear incident, BARDA has been doing the testing to figure out the best ways to deal with the situation. If you go the web site above, there are all sorts of publications you can download. Some of you may already have these as part of your hospital disaster plans. If you don't, they are worth looking at.

The whole site is an interesting look at what can go wrong and how to deal with it. Current investigations include trying to deal with antimicrobial drug resistance a major issue in healthcare today. There are other initiatives ongoing and its an interesting site worth visiting.

So stay safe and have a nice holiday.

*Paul Coss, RN  
President, HTF*

## November/December 2017 News

### [HTF Board Member Blog Posts](#)

Bridget Moorman, HTF Board Member, has a blog posts that may be of interest to ACCE members.

An interview with Dr. J. Randall Moorman and Dr. Matthew Clark about their company, research and the device that was featured at the keynote at AAMI this year - details on how they built a virtual medical device:

<http://medicalconnectivity.com/2017/11/13/data-driven-predictive-medical-devices-an-interview/>

<https://www.linkedin.com/pulse/its-all-data-ii-virtual-medical-device-amp3d-bridget-moorman/>

### [HTF Alarms Group](#)

The HTF Alarms group is finalizing a survey on home health and alarms. The goal is to gather information for future projects. The paper on the survey results has been accepted and we are awaiting specific publication information from the American Association of Critical-Care Nurses.



Improve healthcare delivery outcomes  
by promoting the development,  
application and support of safe and  
effective healthcare technologies.

### [HTF Patient Education and Home Health](#)

The Patient Education and Home Health group continues to review the results of the literature search on materials. Educational material development, content and method will be the focus of this group. We are also looking at continued partnerships to move projects forward.

### [HTF Future Projects](#)

Have a great idea to share? Please let us know if you have any suggestions on projects for HTF that will meet our mission:

Be sure to visit the HTF website, [www.thehtf.org](http://www.thehtf.org) to see our programs and resources. While you are there, feel free to hit the DONATE NOW button. We will accept them anytime and they are always tax deductible!

*Paul Coss, RN  
President, HTF  
[president@thehtf.org](mailto:president@thehtf.org)*

*Jennifer C. Ott, MSBME, CCE, FACCE  
Secretary, HTF  
[secretary@thehtf.org](mailto:secretary@thehtf.org)*

## Call for Contributors - AAMI Summer 2018 Horizons Issue

AAMI is asking ACCE members to contribute to their Summer 2018 Horizons Issue, which ACCE is a supporter of. This edition of Horizons is on "Decisions Through Data". Healthcare Facilities are generating and collecting a wealth of data, which are being used to inform patient care decisions, improve the management of healthcare technology, and monitor the performance of medical devices on the market. AAMI is sending out a call for papers to its members and ACCE members for this specific edition. The deadline to submit is January 31, 2018.

For more information please visit: [http://s3.amazonaws.com/rdcms-aami/files/production/public/FileDownloads/Horizons/2018\\_Spring\\_Call\\_for\\_Papers.pdf](http://s3.amazonaws.com/rdcms-aami/files/production/public/FileDownloads/Horizons/2018_Spring_Call_for_Papers.pdf)

*Ikir Kulloli, President Elect, ACCE  
[presidentelect@accenet.org](mailto:presidentelect@accenet.org)*



## ACCE is an official Collaborator of HIMSS18

As such, ACCE Members receive the members discount to attend! To receive the discount, go to [Register Now](#). Select our organization from the "Conference Collaborating Organizations" drop down in the registration process, and enter the code "H18PARTNER"

## Attend these can't miss ACCE endorsed events at HIMSS18

### Pre-conference symposia: HIMSS/SHIEC Interoperability & HIE Symposium

#### Facilitating Person-Centered Interoperable HIE to Manage Complex Populations

**Date:** Monday, March 5, 8:00 AM – 4:30 PM

**Location:** Venetian-Palazzo-Sands Expo Center

**Description:** There have been major advancements in interoperability, standards development and health information exchange, but significant barriers remain to fully access, capture and manage the health of complex populations. Grounded in a real-world scenario involving a complex patient, explore the future of interoperability and its impact on digital health and realizing a true person-centered health system. Challenge today's proven solutions and frameworks, and explore cutting-edge ideas that could disrupt the future of healthcare. Current strengths, weaknesses, opportunities and threats will be examined, along with a closer look at the interaction of policies, payment reform, emerging standards, and use cases that are furthering our progress toward true healthcare transformation.

**Additional registration required: \$350**

### Pre-conference symposia: Compliance Symposium

#### Mastering Compliance: What You Must Know

**Date:** Monday, March 5, 8:00 AM – 4:30 PM

**Location:** Venetian-Palazzo-Sands Expo Center

**Description:** A well-designed compliance approach is critical to success in healthcare delivery and health IT. This approach is important across the continuum of healthcare, including home care, provider offices, acute care settings, retail pharmacies and medical devices. Stakeholders who must be held accountable include health system leaders, healthcare providers, vendors and manufacturers, consultants, and quality and compliance personnel. Uncover the challenges of identifying the major areas of compliance risk, how to address them leveraging your IT resources, and how to effectively support proper compliance programs across the entire health delivery system.

**Additional registration required.**

### ACCE Education Session # 272: Partnering for Medical Device Security and Patient Safety

**Time:** Thursday, March 8, 2018, 4:00 PM - 5:00 PM

**Location:** Venetian Convention Center, Room Delfino 4004

**Description:** As healthcare has become more dependent on applications and software, and medical devices are getting networked and integrated, attacks previously targeted for IT systems are now a possibility for medical devices. Such attacks may place mission critical (and sometimes life critical) systems at jeopardy. The focus of this session will be to discuss a few areas of opportunity for IT and Clinical Engineering to partner on management privacy and security areas including policies and management techniques for server management, patching, and MDS2 (manufacturer disclosure statement for medical device security) documents.

**Speakers:**

**Ilir Kullolli**, MS, Director of Clinical Technology and Biomedical Engineering at Stanford Children's Health.

**Lisa Grism**, VP & Associate Chief Information Officer at Lucile Packard Children's Hospital Stanford.

**Auston Davis**, Chief Information Security Officer at Lucile Packard Children's Hospital Stanford

### Health Technology Alliance/ACCE Awards Reception

**Date:** Tuesday, March 6, 2018; 6:00 PM– 8:30 PM PST

**Location:** Sands Expo Center/ Lido 3105/3106

Network with ACCE members, experts from Clinical Engineering, Health Technology Management, and Medical Device Domain - all are welcome to attend!

## Special Thanks to our Sponsor

### RSVP Today!

### HIMSS18 Awards Banquet

**Date:** Thursday, March 8, 2018, 6:30 PM - 9:00 PM

**Session ID#** NETAWD

**Location:** Wynn Hotel and Resort, Latour Ballroom

**Additional Registration Required:** Individual Tickets: \$ 175

The HIMSS awards Banquet is a time for celebration & recognizing members who have added their unique sparkle and verve to the industry. Come toast their accomplishments at this year's elegant event.

**Join Arif Subhan, ACCE President in congratulating the 2017 ACCE/HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award recipient**

# Call for Nominations!

## Clinical Engineering Hall of Fame Class of 2018



The American College of Clinical Engineering—Hall of Fame (CE-HOF) is now seeking nominations of individuals who have made outstanding and notable contributions to the evolution and/or advancement of Clinical Engineering. See the links below for further information.

Please submit your completed nomination form and supporting information to [CE-HOF@accenet.org](mailto:CE-HOF@accenet.org) by February 17, 2018.

Induction of the Class of 2018 will be in June in Long Beach, CA.

[Eligibility Requirements](#)

[Nomination form](#)

[2017/2016/2015 Inductees](#)

### ACCE Calendar

#### January 11, 2018

ACCE Webinar: The Joint Commission 2018 Update

[More Info](#)

#### January 25-26, 2018

The Connected Medical Device & IOT Security Summit  
Baltimore, MD

[Registration](#)

#### February 8, 2018

ACCE Webinar: Relying on Reliability Maintenance

[More Info](#)

#### March 5-9, 2018

HIMSS18 Conference & Exhibition  
Venetian-Palazzo-Sand Expo Center, Las Vegas, NV

[Schedule at a glance](#)

#### March 6, 2018, 6-8PM

HTA/ACCE Awards Reception  
Venetian-Palazzo-Sands Expo Center, Lido 3105/3106, Las Vegas

#### March 8, 2018, 6:30-10PM

HIMSS18—Awards Gala  
Wynn Hotel and Resort - Latour Ballroom, Las Vegas

[More info & tickets](#)

#### March 8, 2018

ACCE Webinar: Service Contracts and Continuous OEM Training—How to Leverage Cost Effective Agreement

[More Info](#)



AMERICAN COLLEGE OF CLINICAL ENGINEERING

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