



ACCE News

Newsletter of the American College of Clinical Engineering

January — February 2017

Volume 27 Issue 1

ACCE Award Recipients

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President's Message



Warm greetings everyone from Orlando, the site of this year's Healthcare Information and Management Systems Society's (HIMSS) 2017 Conference & Exhibition. I had the opportunity to attend the event for the first time in several years and I was struck by a number of things but especially by its size and scope. The west concourse of the Orange County Convention Center was reported to be one mile in length and was completely consumed by symposia, concurrent education sessions, special sessions, the interoperability showcase and the vendor exhibits. The program and venue offered the opportunity to exercise the mind as well as the body; I walked the length of the concourse many times while going between concurrent sessions and vendor booths. Over 1,300 vendors exhibited their products to approximately 42,100 attendees. It truly was a big event.

The opening day of HIMSS 2017 offered a variety of pre-conference symposia. I attended the Medical Device Security Symposium: Medical Device Security Information Sharing – Clarity for Action. This session was jointly endorsed by ACCE and AAMI and included a host of presentations related to the cyber-security vulnerabilities created when medical devices operate on networks. The fundamental premise was that medical device security is a recognized public health problem and needs to be approached from this perspective. Compelling evidence was offered to support this thesis and the immediate need to begin openly sharing vulnerability information across the spectrum of medical device users. Initiatives like MD-VIPER were featured and promise to arm working professionals with valuable information, but only if they are used. In addition to being an endorser, ACCE provided presentations from Steve Grimes, Purna Prasad, Axel Wirth and Dale Nordenberg in the "Vulnerability Information Sharing: Challenges, Methods and Impact" portion of the day. A number of individuals with whom I spoke felt that there was genuine momentum built during the session to openly share vulnerability information. I had two key take-aways from this day long symposium. First, IT leaders increasingly refer to medical devices as "another edge device" on their network. While this is true from a strict IT perspective, it does not convey the true importance of the medical device to patient care. Second, the message that medical devices pose a substantial cybersecurity risk to health care organizations and to patients needs to be delivered to senior leaders by clinical engineers, not by others. But direct access to these senior leaders for clinical engineering leaders is limited in many, if not most, health care organizations whereas the access to these leaders by CIOs is routine. The combination of medical devices being referred to increasingly as IT edge devices and lack of access to senior leaders by CEs is a problem that the CE community needs to address. Nascent plans were formulated at the HIMSS meeting amongst several ACCE leaders in the CE-IT community to make a start on this. More will be communicated in the future.

(Continued on page 2)

President's Message (Continued)

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I was impressed by the quantity of clinical content at the HIMSS meeting. I attended a number of education sessions in the Precision Medicine track and noted that many of the presentations were made jointly by IT professionals and physicians, nurses, pharmacists, etc. This close collaboration between IT and clinicians is something that the CE community and ACCE needs to think about and find ways to incorporate in its initiatives given the inherent importance of medical devices to patient care. I noted also that the Board Chair of HIMSS is a physician and the Vice-Chair is a nurse. Powerful allies to have for a technology management organization.

Monday Feb 20, the CE-IT/ACCE hosted an evening reception generously sponsored by MDISS, which is led by Dr. Dale Nordenberg. The reception offered attendees the chance to network and to hear updates from several ACCE committees including Membership (Chaired

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Monroe Pattillo (left) receiving CE-IT Synergies award from HIMSS and ACCE



Monroe Pattillo (center) with past Synergies Award winners: Elliot Sloane, Steve Grimes, Erin Sparnon, Todd Cooper and Jennifer Jackson

ACCE News

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More ACCE at HIMSS 2017



Steve Juett, ACCE Advocacy Chair, volunteering at the Interoperability Showcase at HIMSS 17 conference as a Program Assistant to guide and educate attendees on the progress of IHE.



Steve Grimes and Mario Castaneda enjoying the CE-IT Community's, ACCE Annual Reception



A few words from Dale Nordenberg, MD, Executive Director, MDISS. And thanks to MDISS for sponsoring ACCE's CE-IT Community reception!

President continued

(Continued from page 2)

by Jeanette Thielen), Education (co-chaired by Jennifer Defrancesco and Rodney Nolan), International (Chaired by Antonio Hernandez) and Advocacy (Chaired by Steve Juett). Most significantly, the reception was a chance for ACCE to recognize the leading work of many in the CE community. I was proud to be able to present award plaques to Monroe Pattillo, Dr. Ricardo Silva, Kim Greenwood and Dr. Dale Nordenberg. Details of the awards are written further on in this newsletter.

The HIMSS Awards Gala took place on the third evening of HIMSS 17. Each year, ACCE and HIMSS jointly award the Excellence in Clinical Engineering and Information Technology Synergies Award. The award recognizes leadership in promoting and implementing synergies between the clinical engineering and information technology professions. This year, Mr. Monroe Pattillo was honored for his work in healthcare interoperability through work he has done with IHE. It was my great honor to be able to take the stage alongside the Board Chair of HIMSS to announce and present the award to Monroe. Of the 34 awards presented that evening, ACCE was amongst only 4 speakers invited to share the stage with HIMSS during award presentations. We need to work hard to strengthen our ties with HIMSS as we are made stronger through collaboration with our partner organizations.

I will end with a reflection on some of the words shared by Ms. Ginni Rometty, CEO of IBM, during her opening key note presentation at HIMSS 17. She said that "growth and comfort never co-exist". While we all know this instinctively, it is a powerful message to hear spoken out loud. If we strive to be comfortable, then growth is very likely to happen elsewhere. We need to embrace being challenged, get accustomed to feeling uncomfortable and find ways to grow. This is true for ourselves individually and true for our professional organization, the ACCE. More to come on this in the future...

Petr Kresta, President, ACCE
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AAMI Update

AAMI Celebrates 50 Years of Supporting Safe, Effective Healthcare Technology

Fifty years ago, a group of pioneering medical device manufacturers, physicians, and inventors banded together to guide the development of healthcare technology. Today, AAMI—the result of their vision—stands as the preeminent organization in developing standards for medical devices, supporting the professionals who work in the healthcare technology field, and promoting the safe and effective use of this technology.

AAMI kicked off its golden anniversary celebration with the launch of a new website and the unveiling of a commemorative logo designed to honor its rich 50-year history. The celebration will continue throughout the year with special events, educational opportunities, and publications.

“This anniversary is really about the extraordinary talents of our members and partners who have committed themselves to improving healthcare technology, supporting patient safety every step of the way,” said AAMI President Robert Jensen. “As healthcare technology evolves ever faster, AAMI is poised to have an even bigger role in shaping that evolution—through its standards; training, certification, and education programs; resource development; and its many patient safety initiatives.”

Today, AAMI is made up of a diverse community of approximately 7,000 professionals, providing a critical forum for healthcare technology management (HTM) professionals, physicians, nurses, hospital administrators, educators, scientists, manufacturers, distributors, government regulators, and others with an interest in safety in healthcare technology.

To learn more about AAMI's history and the events and activities planned throughout 2017, please visit www.aami.org/50. You can also join in the celebration by using #AAMI50.

Three Healthcare Technology Execs Tapped to Join AAMI Board of Directors

The AAMI Nominating Committee has selected three leading executives with diverse backgrounds in healthcare technology to serve on the association's Board of Directors. The Board is made up of 18–19 representatives who are responsible for reviewing, revising, and approving strategic and business plans; establishing and approving policies; and providing guidance on strategic issues affecting the association.

“The Nominating Committee had a slate of 11 outstanding candidates at the upper echelons of their fields who are passionate about AAMI's mission. AAMI is fortunate to have such talented and active members who also are capable of providing their leadership and vision to the organization as Board members,” said AAMI Board Chair Phil Cogdill, senior director of sterilization and microbiology QA at Medtronic. “Our selection was based on what the Board needed at this time. We also wanted to add additional diversity and strengths in areas that are needed to meet the challenges faced by the healthcare community.”

The nominees are **Pamela Arora**, senior vice president and chief information officer for the Children's Health System of Texas; **Rollin J. "Terry" Fairbanks**, director of the National Center for Human Factors in Healthcare and associate director of the MedStar Institute for Innovation in Washington, D.C.; and **Heidi Horn**, vice president of clinical engineering service for SSM Health in St. Louis, MO.

The official election of these individuals will occur during the association's annual business meeting, which will be held during the AAMI 2017 Conference & Expo in Austin, TX, June 9–12. Their terms will begin immediately thereafter.

AAMI Standard Offers Solution to Hospitals Facing New Cyber Risks

Hospitals around the world face potentially costly and devastating risks to their patients and financial bottom line because of the vulnerabilities introduced when medical devices are connected to information technology (IT) networks.

Those risks, however, could be signifi-

cantly mitigated through the application of thoughtful and comprehensive risk management practices, according to a new resource from AAMI—called *Health IT Risk Management*—that lays out the business case for the use of a series of standards known as 80001.

Whether it's a software patch that takes down an entire fleet of life-critical infusion pumps or a network upgrade that winds up crashing a patient monitoring system, the threats posed by the highly technical and interconnected nature of modern healthcare are real and consequential.

“Imagine having a plan in place that would help your staff know what to do under such alarming circumstances and help prevent such disruptions from happening in the first place,” reads *Health IT Risk Management*. “Fortunately, a standard was developed by a distinguished committee of medical device manufacturers, IT experts, and others with a keen understanding of medical devices and IT systems—and how they must work together.”

The 80001 series of standards provides IT and healthcare technology management (HTM) professionals working in hospitals with detailed guidance on how to safely incorporate medical devices into IT networks, as well as a solid framework to manage the ever-changing risks associated with these networks.

Network troubles are serious matters in modern healthcare. According to the Ponemon Institute, the average cost of a data breach in the healthcare industry is a sobering \$2.2 million. Another study by Emerson Network Power estimates that unplanned data center downtime costs close to \$9,000 per minute for healthcare organizations.

The 80001 series of standards defines the roles, responsibilities, and activities of health delivery organizations in managing health IT risks. Several of the key benefits of the 80001 series, according to *Health IT Risk Management*, include:

- Providing a framework for analyzing

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International Report: Third International Congress on Clinical Engineering in Colombia

A consortium of six universities from Medellin, the “City of the Eternal Spring” in Colombia, will host the 3rd International Congress on Clinical Engineering (CONIIC 2017 www.coniic.com) at the Center for Business and Innovation, also known as “Ruta N”, from March 15th through March 18, 2017. Participating institutions include: The Bolivarian Pontifical University (UPB), the University of Antioquia (UA), the School of Engineers of Antioquia (EIA), the University Foundation Maria Cano (FUMC), and the Metropolitan Technology Institute (ITM). All of these institutions have programs in the biomedical engineering field. They decided that the best strategy is to join efforts and have a common approach for the management of the technology deployed in the healthcare facilities. Also, they understand the role and responsibility for the academia in preparing the human resources that will manage and operate healthcare technologies in a safe and responsible way.

The conference is held every two years; each year a university is responsible for leading the organization. This time it is the UPB under the leadership of Beatriz Janeth Galeano Upegui IM, MSc, President of the Organizing Committee of the Congress with the collaboration of the members of the Committee Javier Garcia, UA; Juan Guillermo Barreneche, UA; Javier Camacho, EIA; and Nelson Escobar, UPB.

The main objective of CONIIC 2017 is to provide a space for the health stakeholders - hospitals, clinics, health enterprises, industries, academic sector, health professionals, health authorities and researchers - to share knowledge and experiences to improve the health care services to the population. This year there is an additional outcome expected from the event: to bring together the interested parties to organize a HTM network to promote and advance CE in the region and in the country.

As has been the tradition, ACCE is an endorsing organization of the event, and invited to participate. ACCE is collaborating in the organization, and ACCE members Mario Cas-

taneda, Frank Painter, and Antonio Hernandez will be keynote speakers. ACCE members will be attending scheduled meetings and technical session with local CE, students, and hospital/healthcare authorities to discuss strategies to strengthen the HTM field.

ACCE has been collaborating with the Colombian Clinical Engineering community for more than twelve years. ACCE keeps track of the developments and advances after each one of the ACEWs. The ACEW in 2007 in Medellin was focused on developing and strengthening CE and HTM in the academic environment. Since then, the universities increased the work with the health care facilities and helped to reinforce the clinical engineering departments in hospitals. From these interactions, the next

logical step was to organize events to follow-up in the diffusion and exchange information and knowledge on Healthcare Technology Management and Clinical Engineering.

A group of six universities coming together to advance CE and HTM is an important development that could be used as a model and that could have a strong impact for the future of the profession. ACCE has special interest in this development due to the fact that, at this time, the international education activities and the ACEW activities are under review.

Information on CONIIC 2017 is included on the ACCE website and has been posted on ACCE's Twitter and Facebook.

Antonio Hernandez

internationalchair@ACCEnet.org

Bauld Newest ACCE Fellow

Congratulations to ACCE's newest Fellow Member, Thomas J Bauld III, PhD, CCE, FACCE.

Fellow status in the ACCE is a unique honor which recognizes distinguished service to the profession or achievement in the field of Clinical Engineering. We are pleased to welcome our newest Fellow Member, Tom Bauld.

According to ACCE President, Petr Kresta: in discussing Tom's success: “Your *pioneering efforts in creating the Michigan Society for Clinical Engineering and the American College of Clinical Engineering testify to your passion for the value of clinical engineering in the health care system. Your professional work at many leading healthcare institutions, such as Mt. Sinai in Detroit and the University of Michigan Hospitals attest to your ability not only to lead the CE profession but to also apply your skills and knowledge in practice. Your desire to share your experience and knowledge through many publications in leading*



Thomas J Bauld III, PhD, CCE, FACCE.

CE journals such as Biomedical Engineering and Technology and the Journal of Clinical Engineering. Your contributions have been recognized through numerous awards from your peers and national organizations, such as the Association for the Advancement of Medical Instrumentation.”

International Report: Mongolia

Editor's Note: ACCE International Committee member Bill Gentles has traveled to many developing countries to teach Clinical Engineering topics. Bill recently completed his fourth trip to Mongolia. Here is his report on Clinical Engineering in Mongolia.

Mongolia Background

In 1206, Genghis Khan founded the Mongol Empire, which became the largest contiguous land empire in history. The empire included China, parts of Russia, and extended as far as eastern Europe. Although Genghis Khan has been reviled in western history books, he was an enlightened ruler. He implemented the rule of law, that applied to all citizens, including the emperor. He created history's largest free trade zone, and the world's first international postal system. There was religious freedom in the Mongol empire.

Today, Mongolia is an independent democratic state sandwiched between China and Russia. It is governed as a semi-presidential representative democratic republic, with a multi-party system and an independent judiciary. In a peaceful revolution in 1990, Mongolia declared independence from the Soviet Union.

The population is approximately 3 million, of which 1.5 million live in the capital city of Ulaanbaatar. Approximately 30% of the population is nomadic or semi nomadic.

The economy has been traditionally based on livestock, but today is making a slow transition to a resource-based economy, because of extensive deposits of copper, coal, molybdenum, tin, tungsten, and gold. Mongolia is listed as a lower-middle income country by the World Bank.

The life expectancy at birth is (m/f) 65/73 years. The per capita total expenditure on health per year in 2014 was \$565. The most common causes of death are, in order, heart disease, stroke, liver cancer, cirrhosis of the liver, lower respiratory tract infections, and chronic obstructive pulmonary disease (WHO Data). There is a public health care system which is inadequately funded, and a number of private hospitals.

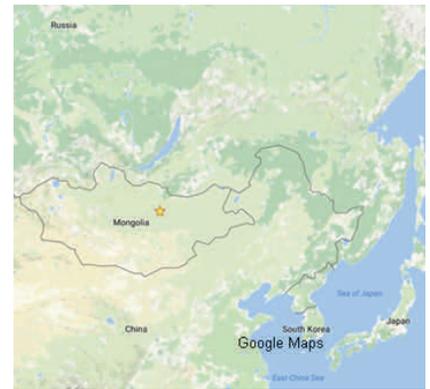
Alcoholism and air pollution are two causative factors leading to a shortened life span.

Mongolia's capital, Ulaanbaatar has many features of a modern city, including luxury hotels, fine restaurants, traffic jams and air pollution. The air pollution is made worse by the fact that all heating and power generation plants burn coal.

The project that I am working on is funded by the Asian Development Bank. It is a 3 1/2 year project entitled the "Fifth Health Sector Development Project". The Canadian Society for International Health, a Canadian NGO, bid on the project and was the successful bidder in 2013.

The project has three components: Component 1 is entitled Safe Blood Transfusion, Component 2 deals with medical waste management and Component 3 deals with hospital hygiene and infection prevention and control.

Component 1 involves establishing a new National Center for Transfusion Medicine in Ulaanbaatar, and equipping it with \$25 million (USD) of equipment. There is a major allocation of funds to the clinical engineering aspects, including writing procurement specifications for equipment, improving management systems, training existing staff in clinical engineering topics,



and setting up a model maintenance department in the new Center. There is myself and one other Canadian filling the role of International Biomedical Engineering Consultants. In addition, we work with a Mongolian Biomedical Engineer who is fluent in English. He provides simultaneous translation during our seminars.

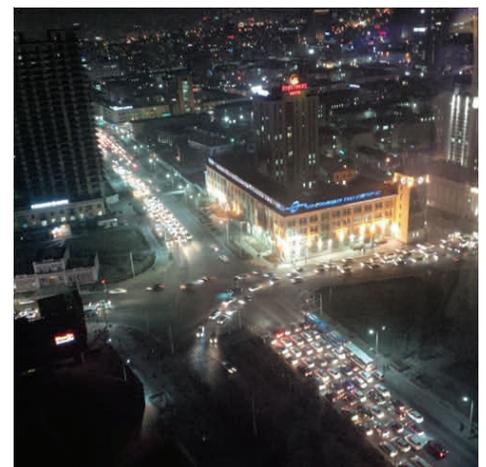
To date we have presented a total of 24 seminars on equipment maintenance and health technology management topics. We have travelled to a number of hospitals in the Aimags (provinces) and experienced nomad hospitality.

On one of our field trips, we had driven for five hours and were approaching the city of Bulgan. Our driver pulled over to the side of the road, and we all got out of the car. There was a car stopped in front of us, and three people got out of that car. One of them was dressed in a traditional Mongolian nomad garment, and carried a plate of food. We learned that it is a nomadic custom when visitors are coming from afar, to meet them on the road, offer them food, and escort them into town so

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Bill Gentles in Mongolia with a Mongolian Golden Eagle.



Mongolian capital, Ulaanbaatar, at night

Mongolia continued

(Continued from page 6)

they don't get lost. This was just one of many delightful and surprising encounters with nomad hospitality.

Another one of our deliverables is to assess existing hospital infrastructure and assess the skills of existing staff.

The public hospitals are equipped with a wide range of old and new equipment, much of it out of service for lack of parts, or lack of funds to buy consumables. The picture shows a Soviet era autoclave used in one of the labs. The newer equipment is mostly donated from a number of different countries, including Japan, Korea, Germany and China. As a result, there is a confusing diversity of makes and models, with user manuals in many different languages, but few in the Mongolian language.

The Mongolian Clinical Engineering staff are referred to as maintenance staff. The profession of Clinical Engineering has not yet been acknowledged here, although there is a recently established Mongolian Society of Biomedical Engineering listed on the IFMBE web

site. There is a University Biomedical Engineering program, but it doesn't seem to provide the graduates with many practical skills. The concept of equipment grounding was

quite new to many of the engineers in a recent seminar on grounding. We are continually surprised by the gaps in their knowledge that we discover.

To date I have traveled to Mongolia four times on this project, with two more trips being planned for 2017. It has been a sometimes frustrating, often rewarding project, but a tremendous learning experience. I encourage others who read this article to consider whether they might contribute their skills and knowledge to colleagues in a low-resource country.

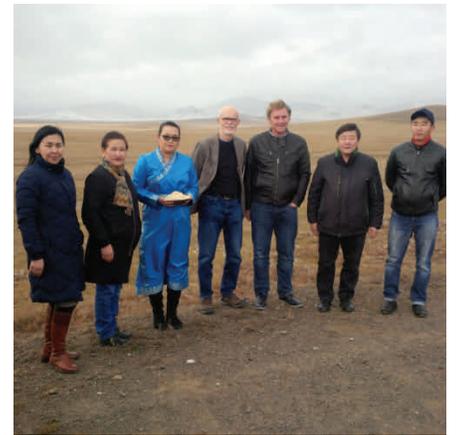
Bill Gentles

billgentles@sympatico.ca

Bill Gentles is vice president of BT Medical Technology Consulting. He is a member of the ACCE International Committee and chair of the International Outreach Committee for CMBES. He has travelled to many developing countries to teach Clinical Engineering topics on a volunteer basis. For 28 years he served as Director of Biomedical Engineering at Sunnybrook Health Science Centre in Toronto. He has a PhD in Biomedical Engineering from the University of Toronto.



HTM Seminar in Ulaanbaatar



Welcoming party outside Bulgan



Soviet era Autoclave in a hospital in Mongolia

New Membership Committee Chair

Please welcome Jeanette Thielen, CCE as the new ACCE Membership Committee chairperson.



Jeanette Thielen, CCE

And a big THANK YOU to James Wear, outgoing membership committee chairman, who served as chair since January 2011.



James Wear, PhD, CCE, CHSP, FASHE, FACCE FAIMBE

Healthcare Technology Foundation News

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



HTF Alarms Group Update

The HTF Alarms group has been working diligently on a survey for home health agencies. We are hoping this will assist in developing future projects for alarms and the patient safety group.

HTF partnered with AARC to develop an article specific to the alarm data and respiratory therapists. The article has been released. Please see our website for a link.

HTF Patient Education Group

This group is looking for a volunteer to assist our team in identifying opportunities and areas for the group to work on for a Home Care Project. Work includes:

Task one- Performs a literature search related to medical equipment use at home; in particular, attention to possible safety issues, training issues and related areas. We are looking for problem areas, gaps in support for the home caregiver and the home care patient. What has been published related to patient safety in the home

in the last four years?

Task two- Review the literature to identify gaps and problems, and prioritize the issues for further review.

Task three- After review with the team, develop a preliminary plan to address key issues.

If you are interested in assisting, please contact Paul Coss. See contact information below.

HTF Board Member Yadin David Instrumental in Global CE Day

Yadin David worked closely with IFMBE to host the first Global Clinical Engineers (CE) Day on October 21, 2016. He was recently notified that this will now be an annual event!

HTF Board Looking for New Members

HTF will be having their annual meeting in June. We are looking for addi-

tional board members to assist with our mission. If you are interested, please contact Tobey Clark at Tobey.Clark@its.uvm.edu

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 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
coss.paul@gmail.com

Jennifer C. Ott, MSBME, CCE, FACCE
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Technology Guidance Needed for Home Equipment

As hospital-based people we are quite reasonably biased toward the equipment that is used within our facilities. In fact much medical equipment has in its "intended use" limitations that the equipment is only to be used in a hospital.

We need to recognize that today 80% of patient care is delivered at home. This involves a lot of equipment such as beds, ventilators, infusion pumps, dialysis systems and various monitors. Other equipment, not often seen in hospitals, such as oxygen concentrators and liquid oxygen are also present and require attention and care.

Patients and their families can be sent home from the hospital with their equip-

ment or it can be prescribed for them while at home either due to a deteriorating condition or recognition of an unmet need.

Issues for this equipment include training on its use, its support, how to deal with problems, and trouble shooting them, as well as patient safety concerns. The equipment is often rented, can be provided as part of treatment protocol (chemotherapy pumps) or can be owned outright.

At an FDA conference several years ago it was apparent that there was little regulation of home equipment, that training was often given by the driver delivering the equipment, or not

at all, and that in many cases the equipment had been obtained online (e.g. eBay) and had the wrong accessories and no operator manuals. Making sure the equipment is operating properly is hit and miss at best and often exposes the users to unnecessary risks.

So keep in mind if you know of a patient going home with equipment see what is being done to address the above issues and see what you can do to help.

Both The Healthcare Technology Foundation and AAMI have efforts around this topic and will be publishing guidance.

Paul Coss, RN, President HTF
coss.paul@gmail.com

Perspectives from ECRI Institute: Travels

It has been almost two years since I took on a very interesting and exciting new ECRI Institute responsibility as Vice President of International Market Development. After almost twenty years running ECRI's Health Devices evaluation program and several of our other health technology management-related services I was ready to try something new.

The main responsibility of my new position is to help ECRI's three overseas offices grow our international business. Our European office is located just outside of London in the UK. In addition to covering Europe, it is responsible for the Africa and Middle East regions. Our office in Dubai in the United Arab Emirates covers the Middle East Region along with India. The third office covers the Asia Pacific region and is located in Kuala Lumpur, Malaysia. ECRI Institute also has very active business operations in Latin America, which are managed from our home office in Pennsylvania.

For about the first six months in my new role I was planted in our home office getting oriented to our international operations. Since then I have been "flying the friendly skies" about every two months and have travelled to thirteen different countries, in some cases multiple times. Hong Kong wins the prize. I've been there seven times since September of 2015 and am heading back in March of 2017.

I have spent most of my travels interacting with clinical engineers and other healthcare professionals learning about their various challenges and discussing how ECRI can best support them. Not surprisingly, doing more with less while maintaining patient safety and quality is high on almost everyone's agenda. Of course, in some places this is more challenging than others.

In January 2017, one of my

ECRI European office colleagues and I visited a government hospital in Tirana Albania. The hospital's director, Dr. Perlat Kapisyzi, was very proud to tour us through his facility. It was a contrast of new and old world. We saw patient rooms with over fifty-year-old summer camp-style patient beds in the old section of the hospital. In the brand new section, which is still partly under construction, Dr. Kapisyzi showed off their new CT scanner. Dr. Kapisyzi spoke about the many challenges of running a hospital in a developing nation like Albania. He commented that the annual service costs for the hospital's angiography system, CT scanner, and gamma camera represented 10% of the hospital's annual operating budget – not including salaries. That is hard to imagine. To save on maintenance costs the hospital decided not to sign service contracts for its ventilators, patient monitors, and basic X-ray machines. The hospital had just started a service contract for its gamma camera. The service contract was previously on hold because it had not been able to find qualified staff to operate the gamma camera.

After Albania, I traveled to the huge Arab Health Exhibition in Dubai, UAE. Arab Health is the largest gathering of healthcare and trade professionals in the



Jim Keller exploring the streets of Tirana Albania

Middle East and North Africa (MENA) region. Over 4,000 vendors from more than 70 countries are there to exhibit everything from clinical laboratory services to catheters. Some reports claim that over 100,000 people attended this year's meeting. I'm not sure if it's actually that many, but for some perspective, HIMSS seems quaint compared to Arab Health.

Despite the low price of oil, a lot of hospital building is going on in the MENA region. Capacity building was a big theme at Arab Health, in part to help staff and support the many new healthcare facilities under construction and yet to be built. From a health technology management perspective, there was a lot of demand for training on medical device service and support, on adverse event investigation, and on technology assessment and procurement. I met new clinical engineering director-level colleagues who were very interested in having their staff learn how to develop specifications for capital medical equipment tenders (or RFPs) and on how to objectively analyze manufacturer responses to the tenders. I heard about similar needs during my visit to Albania.

Regardless of where I have traveled I have consistently seen signs of a strong and growing clinical engineering community. In Albania, Ledina Picari, the 2016 winner of ACCE's Antonio Hernandez International Clinical Engineering Award has been doing excellent work of incorporating best practices for health technology assessment, planning, and procurement into the operation of her Ministry of Health. Last year Tony Tai from the Hong Kong Hospital Authority, who some of you may have met at the 2016 AAMI conference, showed me a brand new and very sophisticated endoscopy suite that he helped design. The Hospital Authority runs all of Hong Kong's public hospitals. The new endoscopy suite utilizes RFID tracking of its endoscopes throughout the reprocessing cycle to help minimize the risk of endoscope-related infections. The endoscopy staff are able to track when a scope entered and left the reprocessor, when it entered and exited the endoscope drying cabinets, and when they were subsequent-

(Continued on page 10)

Monroe Pattillo: CE-IT Synergies Award

Congratulations to Monroe Pattillo, the 2016 ACCE-HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award Recipient.

Pattillo is an independent consultant in healthcare interoperability for alarm/event notification, equipment management, and location services using IHE Profiles. He is a planning committee co-chair for the IHE Patient Care Device Domain, a co-lead of the ACM Working Group, and lead of the Medical Equipment Management Device Management Communication and Location Services Working Group.

“We are proud to honor Mr. Pattillo with

ECRI continued

(Continued from page 9)

ly ready for use. If scopes lie around for too long before being used on patients, they are automatically pulled from the ready-for-use state and are returned to reprocessing. Tony is also heavily involved in planning for the Hospital Authority’s future medical device integration projects.

I plan to share more perspectives from my travels in upcoming issues of ACCE News, particularly regarding the excellent work of our clinical engineering colleagues like Ledina and Tony. Many of those I have met to-date are well acquainted with ACCE and are tremendously grateful for the support we provide to the international clinical engineering community.

*Jim Keller, MS, FACCE;
VP International Market Development, ECRI,
Past President for ACCE
jkeller@ecri.org*

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 have activities or ideas to share, please consider JCE as one of your outlets. One type of article not seen recently 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 ACCE member William Hyman, w-hyman@tamu.edu, who is one of the editors of JCE, or send them to Michael Leven-Epstein at: michael.levinepstein@gmail.com.

this award. Mr. Pattillo’s many years of work creating and advancing technology for medical device and information systems interoperability exemplify the award’s goal of recognizing leadership in promoting synergies between the clinical engineering and information management disciplines. Mr. Pattillo’s leadership roles in several IHE Patient Care Device Domain areas has contributed significantly to improving interoperability, and his active roles in IHE North America Connectathons and Interoperability Showcases have allowed him to bring to life his work in front of his clinical engineering and IT colleagues. Mr. Pattillo truly is a deserving recipient of the award,” said Petr Kresta, President, ACCE.

“Monroe’s vast experience with health information exchange, including the development of IHE profiles, makes him a valuable resource for the HIMSS community,” said Carla Smith, MA, FHIMSS, CNM, Executive Vice President, HIMSS North Ameri-



2016 ACCE/HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award was presented to Monroe Pattillo

ca. “His unique expertise and collaborative efforts with HIMSS, and other governing bodies in the field of interoperability have helped advance interoperability, patient safety, and medical device integration.”

AAMI continued

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and controlling health IT risks related to safety, effectiveness, and data and system security:

- Helping mitigate constant cybersecurity threats with proactive control measures
- Ensuring “ownership” for every component of systems and networks

• Promoting shared responsibility and partnerships for the safety of health IT among healthcare systems and vendors

• Complementing quality system implementation and improvements

• Reducing reactive labors and disaster-mode situations

Helping reduce costs associated with downtime and inefficiencies

Health IT Risk Management can be downloaded for free at www.aami.org/HealthITRisk. AAMI has adopted all parts of the 80001 series as American National Standards or AAMI Technical Information Reports, which can be purchased through the AAMI Store, www.aami.org/store, or by calling 877-249-8226.

AAMI Staff

Notes from a Global CE Update: The IFMBE/CE Division Partnership with WHO

Global Clinical Engineering: new waves are happening!

There were two articles in the Nov-Dec 2015 issue of ACCE News about IFMBE / CED (the International Federation for Medical and Biological Engineering / Clinical Engineering Division) highlighting key 2015 activities, including a Global CE Summit (downloadable at <http://global.icehtmc.com/aboutus>) and 2015 Awards <http://accenet.org/about/Pages/Advocacy15.aspx>.

The following is an update on the progress since Global CE Day described in the last issue of ACCE News including several important events and projects in 2016, and exciting 2017 plans. We hope you will choose to participate in 2017!

2016

January: CED submission to International Labor Organization (ILO) via the World Health Organization (WHO) CE Leader Adriana Velazquez, MS, CCE; to result in 2018 recognition of BMEs by Ministry of Health (MoH) resulting in annual WHO member country measurement of CE-HTM metrics.

February: Yadin David convened a Global CE Summit Advisory Board to identify professional challenges and develop CE Success Stories in response; 50 countries were represented

March: ACCE/CED member Fred Ho-

sea & CED President Ernesto Iadanza (Italy) introduced a new CED website: <http://cedglobal.org/>

April: ACCE members – Jim Keller, Elliot Sloane, Yadin David, & Tom Judd - presented at Italy's CE Society (AIIIC 2016) meeting in Bari; The ACCE 2016 Antonio Hernandez International CE Award was presented to Ledina Picari, MoH.

May: Mario Castañeda gave keynote presentation at the Japan Association for Clinical Engineers 26th Annual Meeting, in Kyoto

May: CE Success Stories white paper² presented to WHO World Health Assembly (WHA) to enhance MoH recognition of CEs

Success Story Categories: (1) Innovation; (2) Improved Access; (3) Health Systems; (4) HTM; (5) Safety & Quality; (6) e-Technology (CE-IT)

June: ACCE member Saide Calil met with ACCE-HTCC in Tampa to learn from HTCC how to set up a CE certification program in Brazil.

July: CED Global Survey a- Body of Knowledge (BOK) & Body of Practice (BOP) sent; partnered with ACCE through Frank Painter

July: Jim Wear honored at China CE Society (CCCE) annual meeting in Suzhou for long-term efforts promoting CE Certification and other professional activities; Yadin David and Tom Judd also presented at the conference

of 500 Chinese CE participants

August: The 2016 CED Awards announced: *CE Teamwork:* (1) Nicholas Adjabu & John Zienaa - Ghana, Ghana & Bill Gentles – CMBES www.cmbes.ca; (2) The Children's Hospital of Eastern Ontario (CHEO), Canada. *Best Paper:* (1) Binseng Wang, Zheng Kun, & Qingyi Feng – US & China: *Benchmarking Comparison Between Zhejiang Province and American Hospitals*; (2) John Robson, Australia – *Introduction of HTM Programs in Remote Locations.*

September: Human Factors Engineering (HFE) Guidebook³ book, by Tony Easty et al, is being translated into Spanish & Portuguese

October 21: Global CE Day, Global CE stories shared via live webinars, text, videos, on Dropbox & YouTube around the world. Led by Yadin David and facilitated by Tom Judd, see <http://global.icehtmc.com/>. See the table below for examples of Global CE Day leadership by country.

December: *E-course:* CE-HTM training pilot plans finalized for 3 African countries beginning Q2 2017; includes Tobey Clark on-line 15-week CE-HTM training, as well as topical 1-day programs with Moodle-based CE-HTM content and supporting videos; pilots in Zambia, The Gambia, & Mozambique, led by CED's Anna Worm, Shauna Mullally, and Mladen Poluta, an E-course Advisory Committee, University of Vermont, and

(Continued on page 12)

<ul style="list-style-type: none"> • Zhou Dan, Zheng Kun in China • Paolo Lago, Stefano Bergamasco in Italy; Ledina Picari in Albania • Dan Clark, Abdul Basit & team in UK • Jitendar Sharma & team in India • Adrian Richards & team in Australia 	<ul style="list-style-type: none"> • Lucio Flavio Brito & team, Saide Calil in Brazil • Andrea Garcia, Marcela Morales in Colombia • Roberto Ayala in Mexico, with Claudia Cardenas, Maria Moreno, etc. • Rossana Rivas in Peru • Mulugeta Mideksa in Ethiopia
<ul style="list-style-type: none"> • Website resources via China Medical Device Press (CMD) <ul style="list-style-type: none"> ◦ Jin Dong (CEO) and Hanzhong Zhang (Asst. VP) • Ernesto Iadanza for IFMBE CED • James Goh for IFMBE 	<ul style="list-style-type: none"> • Petr Kresta, Suly Chi, Antonio Hernandez, Elliot Sloane, Jennifer DeFrancesco Rodney Nolen, & Pipper White for ACCE • Sam Wanda, Sam Byamukama in Uganda • Jun Yoshioka, Keiko Fukata, Hiro Igeta from Japan

Country leadership for Global CE Day

The View from the Penalty Box

As we enter 2017 we have some major concerns, problems or possibly conflicts staring at us. This is frustrating, confusing and making our profession more difficult. We are being fed facts, alternate facts, lies and exaggerations from many that we have to deal with. The politicians keep saying that healthcare here in the US is too expensive, which is true. They also say that they can correct the problem with new legislation. Just remember one of the great lies, "I'm from the government and I am here to help solve your problems". I am a firm believer in term limits for all politicians. Two terms in office and one in jail. Also, we cannot pay politicians what they are worth as that would be in violation of the minimum wage laws.

As many of you know I have had a run of spending a lot of time in hospitals, physician offices and labs. One complaint I heard, almost everywhere, is that the computer systems from various groups do not talk to each other without a lot of keystrokes and time, and sometimes not even then.

The surprising thing I learned is that while my history and current problems are difficult to share across several specialties, the billing is always quick and crosses all groups. This got me thinking. Several of you are saying "that's dangerous, Harrington's thinking". I'm thinking about what clinical engineers can do to get the data flowing to everyone quickly and accurately. I hate to admit it but there is very little we can do, by ourselves, to solve the problem. We have to work with the IT people; the vendors of all devices, the users and the financial people to come up with the answers that are the best for the patients and easily useable by all others who need the information.

Some of you spent time at the HIMSS conference in Orlando in February. I can only hope that you found something of benefit for your work. The last time I was there it felt like I needed an interpreter because what was said did not fit my knowledge base and the presenters and sales people did not care. I could not understand what some of

the vendors were talking about, how could the physicians and nurses understand and use their systems? We all need to speak the same language as everyone needs to understand what is being said. How many times have you talked with equipment users and changed how you were communicating with them when they did not understand what you were telling them? What did you do? If you are like most Clinical Engineers you presented the problem and/or solution in terms that they understood and could use effectively for better patient results. What I am also seeing is that some physicians have people with them that put everything into the computer that is said and then shows the text to the physician, but physician questions and comments are all too often not understood by the patient and nobody seems to be addressing that problem. As an engineering group leader hammered into our heads many years ago, good questions get you good answers which often lead to more

questions and answers. With effective communication between people most problems can be solved without lawyers, guns or other weapons.

Our profession is vital to good healthcare and we can do a lot to hold costs down but we have to communicate with the users and the C-Suite. Yes, I still am convinced that C-Suite stands for clueless. But we need to communicate with them in their language which is how much money will it take or generate,

If the Patriots can come back from a 25 point deficit in the 4th quarter to win the Super Bowl, we can get our message to all that need to hear them. Keep talking and publishing as we are getting close to a breakthrough.

Dave Harrington
dave@sbtttech.com

IFMBE/CED continued

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Engineering World Health
www.ewh.org

2017

10-12 May: WHO's 3rd Global Forum on Medical Devices, Geneva, Switzerland. http://www.who.int/medical_devices/global_forum/3rd_gfmd/en/

21-23 September: CED's 2nd International Clinical Engineering and Health Technology Management Congress - ICEHTMC 2017, São Paulo, Brazil, <http://www.icehtmc.com>. Congress call for papers is now open. Third conference day (September 23) set aside to meet with Brazil, PAHO, and other Latin American health leaders as well as to have additional CE-HTM workshops.

21 October: Global CE Day; an opportunity for many countries & CE Societies to showcase how: *Together We Can Make It Better*. https://youtu.be/uFTIQnDN9_U.

Tom Judd
CED Secretary
Tom.Judd@gmail.com

²**Global CE Success Stories**, 150+ from 90 countries, downloadable at <http://cedglobal.org/?s=Health+Technologies+Resource>

³**HFE book**, downloadable at <http://2016.ifmbe.org/organisation-structure/divisions/clinical-engineering-division/>

ACCE Job Website Job Postings

For posting job opportunities, contact Dave Smith at advertising@accenet.org



2017 CCE Oral Exam Review Webinar

**Prep for the 2017 CCE Oral Exam which will be given
pre- AAMI 2017 in Austin, Texas**

**Date: May 10, 2017, WEDNESDAY
Time: 12:00 pm - 1:15 pm, Eastern Time
Faculty: Frank Painter, MS, CCE, FACCE**

**Cost: \$ 75.00 (ACCE member) / \$ 100.00 (Non-Members)
Registration Deadline: May 01, 2017**

**To register, complete the [registration form](#) and email it to secretariat@accenet.org
or fax it to (480) 247-5040**

Disclaimer:

This webinar is prepared and offered by individuals who are not involved in the preparation of the CCE Exam.

Note: Anyone taking the Oral exam must have previously passed the CCE written exam and have scheduled the oral exam with the HTCC secretariat at certification@accenet.org

Help Advance Professionalism in Clinical Engineering



The HTCC is Looking for an At-Large Member

The Healthcare Technology Certification Commission (HTCC), responsible for Clinical Engineering Certification, is looking for some new at-large members.

At-Large Members represent a broad base of healthcare, including engineering, physical and healthcare sciences as well as users of clinical engineering services. Individual members must be one of the relevant healthcare technology professionals, namely technicians/technologists, engineers, physicians, nurses, educators, and manufacturers. The commitment is for a three (3) year term.

As a voting committee member, one would work to fulfill the responsibilities of the Commission which include

- Formulate general policies on certification;
- Direct or advise the respective Boards of Examiners (Boards) in matters of certification;
- Provide certification to individuals upon review of the Boards' recommendations in each discipline.
- Communicate with the public related to any certification activities, including answering any correspondence and keeping the database on certified individuals.

Interested individuals should submit a copy of their resume to Sandy Allen, Secretariat for HTCC, by March 31, 2017:

Email: certificationchair@accenet.org

Fax: 815-642-0658



June 8-9, 2017 – Austin, TX

PREP FOR CERTIFICATION IN CLINICAL ENGINEERING EXAM (CCE) @ PRE-AAMI 2017

Clinical Engineering and CCE Review Course

Prepare for the November Certification in Clinical Engineering Written Exam. This class will be presented by a group of ACCE Faculty who are experienced CCEs. The class will outline and present the material in each of the main subject areas covered on the exam. A mock exam as well as a session on the oral exam will be presented.



This course is prepared and offered by individuals who are NOT involved in the preparation of the CCE Exam.

Going to AAMI?

Thinking about Getting your CCE but need a refresher?

Sign up Today for our CCE Prep Course to learn from the experts!

[Click here to download the registration form!](#)

**Thursday and Friday –
June 8 and 9, 2017
Time: 8:30AM-4:30PM
Austin, Texas**

ACCE's 2017 Advocacy Awards Recipients

For more information about the ACCE Awards Recipients, visit the [ACCE website](#).

ACCE 2017 Challenge Award



F. Mike Busdicker, MBA, CHTM

ACCE/HTF 2017 Marv Shepherd Patient Safety Award



Tim Ritter, CBET, CCE

ACCE 2017 Tom O'Dea Advocacy Award



Tom Bauld III, PhD, FACCE, CCE

ACCE 2017 Lifetime Achievement Award



Emanuel Furst, PhD, CCE



J. Tobey Clark, CCE, CHTM, FACCE

ACCE 2017 Professional Achievement in Technology Award



Monroe Pattillo

ACCE's 2017 Advocacy Awards Recipients

For more information about the ACCE Awards Recipients, visit the [ACCE website](#).

ACCE 2017 Professional Achievement in Management Award



**Kim Greenwood, MS, PEng,
CBET, CET, CCE**



Omer Iqbal, MS, PE



Ricardo Silva, PhD, CCE

ACCE 2017 Antonio Hernandez International Clinical Engineering Award



Kang-Ping Lin, PhD

ACCE/HTF 2017 International ACEW Award



Federal Ministry of Health, Ethiopia

ACCE's 2017 Advocacy Awards Recipients

For more information about the ACCE Awards Recipients, visit the [ACCE website](#).

ACCE 2017 HTM Champion Award



Dale Nordenberg, MD



Tom Judd, MS, CCE, FACCE, FHIMSS

Congratulations to the 2017 Award Winners!

2017 Awards Reception



Saturday, June 10, 2017 @ 7:30PM

Location: JW Marriott Austin Hotel, Austin, TX

Join ACCE at AAMI 2017, Austin



[Click here to Register](#) (Early Discount ends on March 20th)

Clinical Engineering Symposium Diagnostic Imaging: The Next Frontier

Saturday, June 10, 2017, 7AM-11AM

Austin Convention Center

Description: Experts will discuss the current and upcoming trends in diagnostic imaging. Pertinent topics will allow attendees to have an in-depth view of current issues and the future of imaging. Increasing regulatory compliance and dose management considerations will be evaluated and discussed with a focus on Clinical Engineering professionals can aid the healthcare team in their management. Experts will offer practical solutions for cost-effective management for radiological modalities and enhancing patient outcomes through improved diagnostic imaging support. Finally, the convergence of health information systems and imaging modalities and how organizations can manage them moving forward through support, industry innovations and future technology trends will be explored.

27th Members Meeting/Awards Reception

Saturday, June 10, 2017, 7:30PM-10PM

JW Marriott Austin – Ballroom E

Network with your peers and congratulate the [2017 Advocacy Awards recipients](#) and the 2017 Clinical Engineering Hall of Fame inductees

[RSVP today!](#)

Visit us at the Exhibit Floor, **Booth # 1314**

- Learn about new webinar series
- Learn about the CCE exam
- Learn about the membership programs
- Learn about ACCE activities
- Connect with old and new friends
- Check/update your membership status



Welcome New Members

Name	Class	Job Title	Organization	Country
Jon Jensen	Associate	Chief Integration Officer	Doc Halo	OH/USA
Robert Painter	Candidate	Graduate Student/CE Intern	UCONN/Denver Health	CO/USA
Sultan Naji Alzah-rani	Associate	End User Training Biomedical Eng	Security Forces Hospital Riyadh (SFH)	Saudi Arabia
Nimmy Christo-pher Samraj	Associate	Assistant Officer	FORTIS Hospital, Mumbai	India
Kang-Ping Lin	Associate	Biomedical Engineer	ENGISYS Limited	Taiwan, China
Robert M. Scheffer	Institutional/Associate	Sr. Vice President	ABM Healthcare Support Services	MI/USA
Charles Harrison	Institutional/Associate	Regional Director, Operations	ABM Healthcare Support Services	MI/USA
Stephen Santos	Institutional/Associate	Technical Operations Manager	ABM Healthcare Support Services	MI/USA
Michael Ahmad	Institutional/Associate	System Director	ABM Healthcare Support Services	MI/USA
Dale Nordenberg	Institutional/Associate	Founder/CEO	MDISS	NY/USA
Donald Mayes	Institutional/Associate	Manager of Clinical Engineering	University of Michigan Hospitals	MI/USA
Marty Gibson	Institutional/Associate	Director of Clinical Engineering	University of Michigan Hospitals	MI/USA

Welcome to our newest Institutional Member:
Medical Devices Innovation, Safety & Security Consortium



ACCE Calendar

March 9, 2017

ACCE Webinar: Translational Medicine

[More Info](#)

March 19,-20 2017

AIMBE Annual Event

See <http://annualevent.aimbe.org/#schedule>

Washington, DC

April 13, 2017

ACCE Webinar: Health Technology Equity: A Global Value

[More Info](#)

May 10, 2017

CCE Oral Exam Review Webinar

[Register](#)

May 11, 2017

ACCE Webinar: HTM 2.0: Where is CE 5 Years Later

[More Info](#)

June 8, 9

CCE Prep course (prior to AAMI conference)

Austin TX

[Register](#)

June 10 – 12, 2017

AAMI Annual Conference

Austin TX

[Register](#)

June 10, 2017

ACCE Members Meeting and Awards Reception

Austin TX

[RSVP](#)

June 15, 2017

ACCE Webinar: Patient Safety: Case Studies

[More Info](#)

ACCE

AMERICAN COLLEGE OF CLINICAL ENGINEERING

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