ACCE News

Newsletter of the American College of Clinical Engineering

November-December 2015 Volume 25 Issue 6

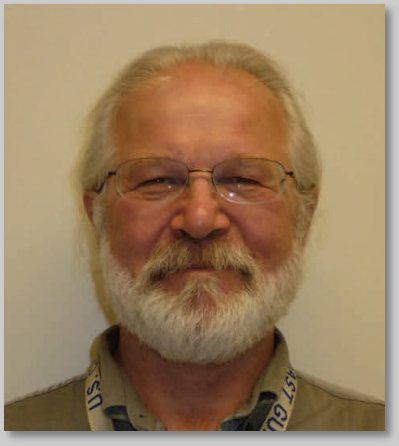
CLINICAL ENGINEERING Hall of Fame

Call for Nominations!

See Page 15 for details.

In this Issue:

President's Message



When you read this, many of us will be in the depth of winter. Perhaps my updates will bring a little warmth, if for no other reason than talking about a conference in a warm place. I'll also discuss some changes and updates underway.

In late October, I had the honor to represent ACCE at the first International Clinical Engineering Forum in Mazatlan, Mexico. The conference was held at their new Convention Center.

There were a few familiar faces there, including Jim Wear and Frank Painter. The faculty came from all over North and South America and from different healthcare specialties, providing a wide range of education opportunities. Except for the opening and closing activities, there were generally four to five sessions occurring simultaneously, including a large student paper competition.

We were lucky enough to have a translator for the opening and closing ceremonies. Most attendees understood English perfectly well, but the process of speaking it requires a different part of the brain. Even so, almost everyone spoke English enough for us to talk, and I had barely enough Spanish to stumble through conversations.

As to what I discussed: my keynote topic was on Why Clinical Engineering is Important. My goal was to convince them of the importance of Clinical Engineering in the healthcare field with the hope that they will pass this information onto others in healthcare as well. I discussed the history of medical technology, as well as the beginnings of Clinical Engineering including Dr. Joel Nobel's findings on how safe and effective resuscitators were (not). I also went over a number of real life issues where Clinical Engineering made a major impact in patient safety and hospital operations, as well as examples of how working with each other we can make our operations stronger. I also emphasized that we can use our expertise outside of our familiar territory; our problem solving skills work in areas that we may not be familiar with. I suggested letting others know how important we are by using social media, having open houses, offering to help with others challenges, etc. Finally, I wrapped up with some well-known fictional Biomedical Engineers as evidence that we have good reason to be proud.

Shortly before I headed to Mazatlan, Ken Maddock contacted me. He was scheduled to present on behalf of AAMI, but he had to cancel. He asked if I'd be willing to help them out with that session. I agreed and was VERY glad I did so. The session was entitled "Clinical Engineering Challenges for the US and Mexico". Our hosts had sent a list of their challenges, hoping we could provide some help and guidance. There were eight concerns; the funny thing was, I only had good complete responses for two of them. I shared what we had on those two with some suggestions. I next went over the remaining six with some basic ideas, then split the attendees into six groups to focus on a topic each and present on what they found. That went fantastically. They had great ideas and suggestions, and for some it was there first time presenting to a large group. Of course they were nervous, but everyone did great and seemed to find it rewarding.

(Continued on page 2)

President's Message (Continued)

(Continued from page 1)

One minor logistical mistake actually worked out well. The faculty had a separate bus to go from the hotel to the convention center. Not realizing that, I ended up riding over with a bus full of students the first morning. I was, by far, the oldest passenger and the only one that didn't speak Spanish. No matter; from that trip, I was treated to a LOT of enthusiasm and a popular song and got to know the students a bit.

The conference was a fantastic opportunity; I'm incredibly grateful for the experience and hope we can continue to participate.

New President Elect - most of you know now that we have a new President-elect, Petr Kresta. I was fortunate enough to work with Petr on the HTCC for several years, and it worked out that he was their Chair right after me. He was incredible at that position, particularly during the transition for the HTF to ACCE. I look forward to working with him again, and I hope you will support him as you have me. And I plan on saying THAT again in a few months.

By-Law review - Alan Lipschultz has been working very hard updating our bylaws, which needed to be done. He's looking for help, so if you're interested in ensuring we have a good framework for the Board and Committees to build on, please let him or I know. I also ask all Committees to look at the by-laws to see where they impact your committee and provide Alan and his group with as much impact as possible. One caveat: as an early supervisor told me long ago: "If you identify a problem and are for improvement, it's then your responsibility to act on it." By that she meant, don't just identify the changes, but provide the outline of what that change should be.

I see the by-laws as a basic outline for what we do. It takes a lot of work and time to update them, then get 2/3 of the membership to approve those changes. That can be too slow for much of the work that needs to be done. I hope that specific Committee and HTCC work can remain independent of, but tied to the by-laws. This allows them to make immediate decisions and quick policy changes without going through an entire by-law update.

HIMSS Synergies award - The fall is a time for the ACCE President to be part of a good, tough decision. This year we had three outstanding nominees for the ACCE-HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award. While I don't select the winner, I help in the process. I wanted all three to win, but that simply isn't possible. I want to congratulate all three candidates on their nomination and a special congratulations to Jennifer Jackson, this year's winner.

A final note. As I write this, my wife and I are learning a new side of healthcare. She was recently diagnosed with cancer, and now will experience that whole process. This is not an experience I would wish on anyone. Being who I am, I'll look at what she goes through with an eye on how this can be improved, and how others can learn from it. Still, her care and recovery will be my focus. Many of you have met Gini, and I know your thoughts are with her. Thank you for that.

Paul Sherman
president@accenet.org

Welcome New Members

Join us in welcoming our newest members, approved by the Membership Committee and supported by the Board of Directors:

Elkin Mejia—Clinical Engineering Manager, TriMedx, Indiana, USA—Individual Member

Augustus Oppong Akwaboah—Technical Manager, ENGISYS Limited, Accra, Ghana—Individual Member

German Barcenas—Chief of Biomedical Engineering, CAMO-Honduras, Honduras—Individual Member

Victoria Ann Orlowski—Clinical Engineering Intern/Graduate Student, UConn, UMASS Memorial Medical Center, Massachusetts, USA—Candidate Member

Alyssa Merkle—Clinical Engineering Intern/Graduate Student, UConn, UMASS Memorial Medical Center, Massachusetts, USA—Candidate Member

Jojj M. Jacob—Medical Equipment Planner, Kaiser Permanente, California, USA—Individual Member

ACCE News

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

ACCE News is a benefit of ACCE membership; nonmembers may subscribe for $75.

To subscribe e-mail Secretariat@accenet.org

Managing Editor
Jim Keller
jkeller@ecri.org
(610)825-6000

Co-Editors
Ted Cohen
tedcohen@pacbell.net
Jared Ruckman
Jared.ruckman@live.com

Circulation & Address Corrections
Suly Chi, ACCE Secretariat
Secretariat@accenet.org

Advertising
Dave Smith
advertising@accenet.org

View from the Penalty Box

Another year has passed, and here we are deep in political do-do. I still hope that there will be a box that we can check for None of the Above. I am not a liberal, socialist, conservative, or regressive. I'm a realist. That seems to put me at odds with almost all politicians and government employees. Why does everything coming from government or one of its agencies have to use so many words to define something, only to confuse us more? It reminds me of trying to deal with some of the administrators in hospitals. All they wanted was good news, good results and good publicity so they could move on to higher paying jobs elsewhere. That mind set has impacted patient care and employee morale while increasing costs in all too many hospitals. Now, we as clinical engineers are left to clean up the problems. We have to work with others to accomplish what needs to be done.

In recent months, there were articles in the local newspapers on two hospitals moving their IT departments to new locations for the 500 plus people in the departments. Note I did not use the term "workers". What really ticked me off was that one hospital is 385 beds, the other is 365, and they still cannot get things right. At Tufts we had 17 Biomeds to handle over 30,000 devices, which included the terminals and printers used throughout the hospital. What would happen to healthcare if we were like the IT people? As you can tell, by now, I am not a big booster of the IT people, but we have to work together if we are to get costs under control. So I bite my tongue when I have to listen to their self-promoting, and I move on to solve the problem.

A recent problem that got dropped into my in basket is the cost and availability of IV solutions. Why the clinical engineer and not the pharmacist or materials person? It will not be an easy problem to solve. Here are some of the items to consider. Before July 1st, the hospital was paying $0.62 for a liter of normal saline. After July 1st, it went to $2.08. In checking around with other hospitals, that was not as bad of a price as when their contracts ran out and their prices went as high as $3.14. At some clinics, the price was over $5.00. There is a shortage of the solutions. The next problem was to try to determine what else was tied to the IV solutions. We found that the cost of the IV sets also increased as did the costs of the IV pumps. Service plans changed in several hospitals where the pumps were being leased. Not a good situation to be in, but what can be done? We need to share information to try and get this under control. As some of you may know, I am involved with building facilities to make IV solutions in the developing world. We can make a liter bag of normal saline for $0.23. Yes labor costs are lower, but electric costs are much higher.

I recently did some consulting work on a problem with a linear accelerator. The tech often had to play with the doors to get the unit to deliver the dose. This was one of

the quickest fixes ever, I had seen the problem before, and it was a simple fix. The electrical shop was asked to wire in a new alarm system for the doors some months ago and used rubber jacket wire. The problem is that the radiation will push the rubber molecules into the wire creating a high resistance. These changes in resistance would sometimes send off the message that the doors were not closed. You should only use Teflon or similar insulation on any wiring around radiation emitting devices or areas.

Until next time.

Dave Harrington
Dave@sbttech.com

Are you a leader in the clinical engineering field?

Would you like to give back to your profession by becoming a mentor for a student or early careerist in clinical engineering?

Then complete the ACCE Mentor Form and send it to mentoring@accenet.org, we will contact you once we have matched you with your mentee.

If you have any question or interested in more information on how you can become involved, please contact us at mentoring@accenet.org

Be sure to share this with anyone else that you think might be interested.

For more about ACCE Mentoring Program, please click here

AAMI Update

AAMI President Announces Plan to Retire in a Year

AAMI President and CEO Mary Logan has announced her plan to retire at the end of 2016. Her departure will come almost eight years after she took the helm of the association.

Logan, only the second AAMI president and CEO in AAMI's 48-year history, said her decision was based on personal and professional reasons. Personally, Logan, who will be just shy of 63 when she retires, said she wanted to spend more time with her husband and family, and enjoy a new chapter in her life. Professionally, Logan said she believes the end of next year would be good timing for a leadership change because the association would be in the middle of a three-year strategic plan, providing a new president with a clear path forward.

"This was a difficult decision because I love AAMI and all that it represents. But it's the right decision," Logan said. "I think I've been the right president for AAMI during a pivotal period in its history. Looking ahead, AAMI will need a fresh perspective so that it can continue to grow and fulfill its mission in setting the standards—literally and figuratively—for healthcare technology and advancing the cause of patient safety."

Under Logan's leadership, AAMI has positioned itself as a champion of healthcare technology and patient safety, enjoyed robust financial health, and vastly expanded its portfolio of resources for members and others in healthcare technology.

"It didn't take very long for everyone to recognize that a new energy arrived at AAMI when Mary became president and CEO," said AAMI Board Chair Michael H. Scholla, global director of regulatory and standards at DuPont. "Mary quickly learned the subtleties of various membership constituents and put plans in place to add more value from being an AAMI member.

If I were to pick three major accomplishments, they would be: being a great voice for our association in all situations, reinventing the role of the AAMI Foundation by focusing on key problems not addressed by other organizations, and leading by example."

When making her announcement, Logan emphasized that her work was far from finished. "Anyone who knows me understands that I am not one to sit on the sidelines," she said. "It's been my honor to serve our members and work with AAMI staff, and I'm going to give it my all over the next 14 months."

The process to find a new president for AAMI will begin next year.

HTM Professionals, Industry Find Common Ground during Supportability Forum

Healthcare technology management (HTM) professionals have voiced concerns for years about the supportability of medical devices—from the availability of service manuals, documentation, and training to the cost of replacement parts. Last month, that discussion reached a new level when HTM professionals sat down with manufacturers to address one another's interests and concerns head on.

During the Nov. 2–3 Forum on Supportability of Healthcare Technology, more than 30 stakeholders representing HTM, original equipment manufacturers (OEMs), regulatory bodies, academic institutions, and service providers met at AAMI's offices.

Although the participants took time to identify the major supportability issues from both an HTM and manufacturer perspective, the workshop focused on developing solutions, not airing grievances. The major output was a "roadmap" that will guide future projects and initiatives.

The "low-hanging fruit" along this path—actions that would improve the situation with the least difficulty—included:

- Creating minimum competencies for servicing and supporting healthcare technology
- Remotely delivering training at lower cost
- Having HTMs and other device users provide manufacturers with feedback to improve device design
- Developing service manuals with parts lists and schematic diagrams and offering these resources online
- Creating and deploying templates for service licensing agreements and service strategies

The group also identified solutions that would have a major impact on supportability but would be much more difficult to implement. Such items included mutually agreed upon accreditation standards for individuals who support and maintain devices and a web portal to exchange data and other important information between HTMs and manufacturers.

Despite the difficulty of the road ahead, both HTMs and manufacturers said they are hopeful.

"Change is possible and will happen because HTMs and manufacturers are both committed to doing what is best for patients and the clinicians who care for them," said Michael L. Mestek, program manager, medical affairs at Medtronic.

Mike Capuano, manager of the biomedical technology department at Hamilton Health Sciences, agreed. "I consider the AAMI Forum on Supportability a success. Not because it resolved the issue then and there, but because it showed that it 'can' be resolved and that continued focus on the issue will give it momentum towards resolution," Capuano said. "Representatives of the OEM and HTM sectors interacted like colleagues. This is a very good sign, and I look forward to continued work with them on this important issue."

AAMI Foundation Releases Compendium to Help Hospitals with Alarm Management Goal

The AAMI Foundation has synthesized the knowledge, experience, and advice of leading practitioners into a toolkit designed to help healthcare organizations meet The Joint Commission's National Patient Safety

(Continued on page 5)

AAMI Update (Continued)

(Continued from page 4)

Goal on clinical alarms.

Starting Jan.1, The Joint Commission will expect hospitals to establish and implement policies and procedures for managing clinical alarms, as this is when surveyors will start documenting noncompliance to the second phase of the goal.

To assist in developing the necessary policies and procedures, the AAMI Foundation's complimentary Clinical Alarm Management Compendium provides specific tips and outlines practices already being used by leading institutions. Among them are the following 10 ideas for safe alarm management:

- Issuing a call to action, championed by executive leadership, which recognizes the challenges, risks, and opportunities of alarm management, and committing to solving them.
- Bringing together a multidisciplinary team to spearhead action and build consensus.
- Gathering data and intelligence to identify challenges and opportunities.
- Prioritizing the patient safety vulnerabilities and risks to target with alarm management improvements.
- Setting and sharing goals, objectives, and activities to address these vulnerabilities and risks.
- Developing and piloting potential solutions.
- Evaluating the effectiveness of improvements and making adjustments as needed.
- Developing policies and procedures.
- Educating staff to build and maintain competencies.
- Scaling up and sustaining by creating ownership at the unit level and with continuous improvement.

In addition to outlining ways to implement these ideas, the compendium provides a set of default alarm parameters that could be used to benchmark alarm system settings. These parameters were developed from information reported by members of the National Coalition for Alarm Management Safety.

"No single institution has the 'right' answer that can be turned into an off-the-shelf solution. However, there is a lot we can learn from the practitioners who have been leading the way in meeting the complex challenges of alarm management for years. Their insights and best practices can be used to launch and guide an alarm management initiative, or strengthen one that's already in progress," said Marilyn Neder Flack, senior vice president of patient safety initiatives at AAMI and executive director of the AAMI Foundation.

AAMI Kicks Off 'Reliability-Centered Maintenance' Project for HTM Field

AAMI is set to begin exploring whether an approach known as reliability-centered maintenance, or RCM, is a feasible strategy that could be adopted on a wide scale throughout the field of healthcare technology management (HTM). After longtime clinical engineer Malcolm Ridgway approached AAMI with the idea, AAMI enlisted the guidance of HTM consultant Ken Maddock to help explore the possibilities.

"In the 1950s, the civil aviation industry pioneered a means of maintaining aircraft based upon analyzing the exact nature of the failures that actually occur, then focusing their maintenance activities on areas where they would be truly beneficial," Ridgway said. "They called this method reliability-centered maintenance. Other high-reliability industries quickly followed suit, and during the latter part of the last century, military aviation, the entire aerospace industry, the nuclear submarine industry, and the nuclear power industry, among others, all adopted the RCM approach. HTM is the only high-reliability industry that has not yet adopted these very effective and highly efficient practices."

For this to become a reality in the HTM world, Ridgway said that a scientifically solid, but simple-to-understand and credible, RCM -based method must be developed for determining which specific types of medical devices can truly be made safer through periodic scheduled maintenance. He added that time spent "performing inefficient and ineffective maintenance" should instead be spent on activities that truly improve patient safety.

Maddock stressed that the approach must be "clear, specific, and achievable" and must meet regulatory guidelines. With some exceptions, the Centers for Medicare & Medicaid Services

(CMS) allow a hospital to "adjust its maintenance, inspection, and testing frequency and activities for facility and medical equipment from what is recommended by the manufacturer, based on a risk-based assessment by qualified personnel."

CMS further notes that "hospitals electing to adjust facility or medical equipment maintenance must develop policies and procedures and maintain documentation supporting their alternate equipment management (AEM) program" and that "they must adhere strictly to the AEM activities and/or frequencies they establish."

As a result, a scientifically sound RCM approach could presumably fit within the allowances on equipment maintenance offered by CMS.

Maddock has proposed establishing a task force "to review materials in terms of their practicality and ability to be implemented across different business units." The task force would also "help the plan to gain momentum and credibility."

AAMI Staff

UConn Class of 2016

The University of Connecticut has 21 graduate students in the Clinical Engineering Internship MS BME program this year. UConn will graduate eleven clinical engineering students in May 2016. These students will have completed seven graduate courses in clinical engineering subjects and have spent 20 months in nearly full time internship programs. During this period the hospitals who hosted these young clinical engineers provided funding to pay each student a graduate student stipend. Additionally, the University waived each student's tuition both years.

Because of this intensive training program all past graduates have been able to "hit the ground running" in their first job after graduation, providing useful clinical engineering support within a few days after starting their new jobs. Most get jobs in hospitals, although, CE services organizations, equipment planning organizations and medical equipment manufacturers have hired some UConn CE graduates.

The internships take place in 14 southern New England medical centers, although this year there is one student doing her internship at the Los Angeles VA Medical Center under the guidance of Arif Subhan. She attends most classes by video teleconference and visits the campus for 4-5 days each semester for additional face-to-face classes.

If you have an opening for a clinical engineer at your hospital, please forward the job opening details to Frank Painter, UConn CE Program Director at frpainter@engr.uconn.edu. The students are available for interviews starting in January 2016.

Top Row-Michele Manzoli, Yale New Haven Hospital; Abbi Arumugam, Brigham and Women's; Darshil Modi, UMASS Medical Center; Patrick Garzon, UConn Medical Center; Grete Gartz, Middlesex Memorial Hospital; Tyler Moxam, Connecticut VA Medical Center
Bottom Row- Jesus Quintero, Mass General Hospital; Emmelene Yuan, LifeSpan/Rhode Island Hospital; Ashley Stolarik, Hartford Hospital; Danielle Rowe, Baystate Medical Center; Max Velez, Boston VA Medical Center

1st International CE-HTM Congress, and Global CE Summit October 21-23, 2015, Hangzhou, China

"A historic event and set of events," "Long awaited," "Magical," "Significant ACCE participation," These are just some of the descriptions of the 1st International CE-HTM Congress (ICEHTMC) and the following one-day Global CE summit (www.ICEHTMC.com). The story follows.

Who was invited and who came?

First, this inaugural event was sponsored by the Chinese Society of Biomedical Engineering (BME) Clinical Engineering Branch (CEB) and the IFMBE/Clinical Engineering Division (CED). The organizer was the Journal Press of *China Medical Devices*, with other sponsors/endorsers including the World Health Organization (WHO), ACCE, AAMI, HTF, the Italian Clinical Engineering Society (AIIC), the Malaysian Society of Medical and Biological Engineering (MSMBE), the Chinese Society of Medical Engineering, the Chinese College of Clinical Engineers (CCCE), the Japan Association for Clinical Engineers (JACE), the (local Chinese) Zhejiang Society of Medical Engineering, and national BME or CE societies from Australia, Canada, Ethiopia, Korea, Mongolia, Portugal, Singapore, South Africa, and Taiwan.

All in all, there were 400 Chinese CEs and 60 foreign participants. ACCE attendees/presenters included: Yadin David, Adriana Velazquez (WHO), Zhou Dan (China), Mario Castañeda, Saide Calil (Brazil), Tobey Clark, Tony Easty (Canada), Tom Judd, Jitendar Sharma (India), Elliot Sloane, Yoshio Takagi (Japan), Suly Chi & Binseng Wang, and Jim Wear. Dr. Herb Voigt – friend to ACCE, ACEW faculty member, and past chair of IUPESM, as well as current IFMBE chair Dr. James Goh (Singapore) and IFMBE secretary Dr. KP Lin (Taiwan) also attended. Dr. Ernesto Iadanza, IFMBE CED chair, and Dr. Paolo Lago, CED board member, both from Italy, also joined, as did CE colleague John Robson from Australia.

Where was it held and why?

The CCCE was founded in recent years (http://accenet.org/publications/Newsletters/ACCENewsNovDec2014.pdf). It currently has over 1,000 members. Of those, nearly 300 are certified CEs. Yadin and Dr. Zhou Dan, chairman of CCCE, envisioned a Congress that brought a program celebrating global CE and HTM best practices from all over the world – including those from China. Yadin and others have been assisting the rise of China's CE the last 15 years, so it was great timing to bring the program to Hangzhou, a site on the beautiful West Lake on China's east coast, south of Shanghai. A place that Marco Polo once called "heaven on earth". The venue was the aptly named *Shangri-La Hotel*, across from the lake.

Magical … how?

For starters, after a Tuesday evening arrival, prior to the program's start on Wednesday, October 21, Yadin and Dan brought the Chinese and foreigner organizing teams together for dinner and to view an amazing performance on the lake (https://www.youtube.com/watch?v=3Qh5xKVCkug). At dinner for 50, Yadin broke the ice immediately with our hosts by introducing many of the foreign guests in his lovable, big brother fashion, setting a tone for CEs from around the globe to build relationships with new friends and colleagues throughout the week. There were several other smaller performances throughout our time that gave a peek into this amazing country and its unique culture.

(Continued on page 8)

1st International CE-HTM Congress, and Global CE Summit (Continued)

(Continued from page 7)

The ICEHTMC program

The first morning – after a time of introductions and global CE awards for teams and best manuscripts from IFBME CED leaders (http://ifmbe.org/organisation-structure/divisions/clinical-engineering-division/) was led by Yadin David announcing that October 21st annually would become *Global Clinical Engineering Day* (see pictures below). A declaration agreeing to this will be distributed and has been signed by various stakeholders. Adriana Velazquez began the Plenary session describing *WHO Tools and Resources for Improving and Outcomes of Health Care Services*. Other morning presentations included topics of *Technology Deployment to Improve Clinical Outcomes*, *Establishing HTM Programs in Challenging Locations*, *Integration and Innovation in CE, International Device Standards*, and *Use of Big Data.*

There were two afternoon concurrent sessions – one focused both on (1) *HTA of High Value Technologies* and (2) Best Practices in Device Evaluation and Procurement, the other on *(1) HTM Professional Development, Education, Certification and Training* as well as (2) Establishing Best Practice in Health Technology Regulation, Risk Management, and Disaster Preparedness. International vendor partners such as Philips, Johnson & Johnson, Storz, General Electric, and others also participated. ACCE members presented during all of these sessions.

There was a gala dinner that evening, both a time to further get acquainted with the Chinese and other colleagues, and to observe various cultural delights of "Beijing Opera performers" (www.travelchinaguide.com/intro/arts/beijing_opera/). Truly a time of international cooperation and celebration.

Day 2 of ICEHTMC on Thursday, October 22, was equally strong, with a full morning program moderated by Elliot Sloane on *Medical Device Support Models* and *Benchmarking*, including presentations by Binseng Wang, Elliot, Dr. Jitendar Sharma (Ministry of Health India) and others from China. The afternoon included a *Dragon Boat* ride on the lake (Page 7, bottom right) with further fantastic time to build relationships with Chinese and other global colleagues.

Many of those CE colleagues were able to participate on Friday, October 23, at the *Global CE Summit.* Convened by Yadin, facilitated by IFMBE CED and ACCE. The purpose of the Summit was to review various country approaches for:

- Clinical Engineering (CE), Biomedical Engineer (BME), & Health Technology Management (HTM) Definitions & Job Roles / Body of Practice (BoP)
- Value proposition and CE Recognition, including International Labor Organization (ILO) recognition of BME in 2018.
- CE Education (levels and content) Body of Knowledge (BoK)
- CE Certification (local and global)
- CE Licensing and Registration
- CE Education Accreditation
- CE Regulation

With Country and Organization Reports in the morning, an Action Plan and Initial Declaration was developed in the afternoon. There were 25 on-site attendees and another 10 global colleagues who gave input. The results follow.

Global Summit Declaration

1. This inaugural Global CE Summit group was convened in Hangzhou, China on October 23, 2015 for the purpose of improving global health and wellness for the growing world population…by identification of common issues, strengths, expanding opportunities and demand… for clinical and biomedical engineering (CE/BME) research and skills.

2. The Global CE Summit group included representatives from senior CE/BMEs, national societies, international federations, and WHO that agreed on the need to educate, advocate, articulate, and harmonize definitions, scope of practice of CE/BME body of knowledge (BOK), education, credentialing, certification, recognition, value, international collaboration, and interdisciplinary relationships.

3. We agree that a draft action plan will be developed and will work to find the resources needed by the end of March 2016.

We agree on goals, priorities and deadlines to include:

- Getting recognized by ILO http://www.ilo.org/ (ensures global and WHO recognition of our profession)
- A core of knowledge all CEs are expected to possess
    - Understand how systems engineering methods apply to CE/BME
    - Others, including management
- Categories of specialization of advanced skills
- Articulating our value proposition to address needs of our healthcare systems
- Promoting the creation of academic programs that deliver required BME/CE knowledge
- Identify appropriate Grand Challenges to encourage problem solving and innovation
- Promotional program to recognize the contribution of the CE profession to improvement of healthcare systems

Stay tuned for more work on this Action Plan to come.

See page 9 and 10 for a potpourri of other pictures from Hangzhou, a time to remember! Thanks to Suly Chi for providing photos.

Tom Judd
International Committee Member

1st International CE-HTM Congress, and Global CE Summit (Continued)

Celebrating International Clinical Engineering Day – October 21, 2015
"***Small Steps for Clinical Engineering, Giant leaps for Patient Safety***", Yadin David

Clinical Engineering Day

1st International CE-HTM Congress, and Global CE Summit (Continued)

ACCE members and friends

Adriana Velazquez, Suly Chi, and women CEs

ICEHTMC attendees on October 22, 2015

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.

Send manuscripts to William or Michael Leven-Epstein at: michael.levinepstein@gmail.com

Journal of Clinical Engineering Subscriptions for ACCE Members

ACCE members receive a discounted subscription to the Journal of Clinical Engineering for only $99! (Originally $222). You must login to the ACCE website to view the code. Then visit LWW.com to enter code.

IFMBE-CED at ICEHTM 2015

I had the opportunity to represent the International Federation for Medical and Biological Engineering (IFMBE), at the first International Conference on Clinical Engineering and Health Technology Management ICEHTM 2015. The IFMBE is primarily a federation of national and transnational societies. These professional organizations represent interests in medical and biological engineering. IFMBE is also an NGO (non-governmental organization) for the United Nations and the World Health Organization (WHO).

The Clinical Engineering Division of IFMBE, which I am honored to chair, has set up this year, for the first time in its history, a complete awards program that includes three categories of awards for Clinical Engineering professionals who have made outstanding contributions to the field of Clinical Engineering.

The program consists of three award categories:

1. IFMBE/Clinical Engineering Division Award – assigned once every three years – that recognizes an individual who has made outstanding regional or international contributions to the field of Clinical Engineering.
2. Clinical Engineering Teamwork Award – two recipients per year – that recognizes an individual or a group that has fostered and facilitated cooperation between clinical technology managers and other members of the healthcare field, to successfully achieve outstanding impact on the clinical engineering field.
3. Best Clinical Engineering Article Award – two recipients per year – that recognizes an individual or a group that stood out for writing the best clinical engineering article, published in IFMBE Conferences Proceedings and Journals, providing an innovative research contribution that results in progress in clinical engineering.

In the first part of this year, the CED Awards Committee, chaired by Dr. Yadin David, selected the recipient of the CED Award that was given during the IFMBE World Conference in Toronto in last June, to *Ms. Adriana Velazquez Berumen* for her outstanding career and contribution to the field.

In Hangzhou we announced the recipients of the Clinical Engineering Teamwork Award and of the Best Clinical Engineering Article Award. We had some extraordinary candidates, and I wish to thank all the CED Awards Committee for the fantastic work that has been performed in fixing the criteria, selecting the candidates and choosing the winners. My warmest congratulations go to all the winners of these prestigious awards, may their career grow up with the awareness of the worldwide strong estimation from their colleagues.

The winners awarded at ICEHTM2015 are:

Teamwork Award Recipients

First Place

Zheng Kun, Director of Clinical Engnieering, Children's Hospital of Zhejiang University School of Medicine,Hangzhou, China, for his work with the College of Chinese Clinical Engineers (CCCE)

Runner-Up

Dr. Lorenzo Leogrande, Clinical Engineer, Università Cattolica del Sacro Cuore - Policlinico A. Gemelli, Rome, Italy, for his work with the The Italian Association of Clinical Engineers (AIIC)

Best Article Award Recipients

First Place

"End-to-End Quality of Service-Based Admission Control via Virtual Sensor Nodes." (*The International Conference on Health Informatics.* IFMBE Proceedings 42, 2014). Drs. Carlos Abreu & Paolo Mendes, Escola Superior de Tecnologia e Gestão, Instituto Politécnico de Viana do Castelo, Viana do Castelo & Centro Algoritmi, Universidade do Minho, Braga, Portugal

Tied for Runner-Up

"Health Technology Assessment Applied to Health Technology Management through Clinical Engineering." (*XIII Mediterranean Conference on Medical and Biological Engineering and Computing 2013.* IFMBE Proceedings 41, published 2014). Francisco A. Santos, A.E. Margotti, R. Garcia & F.B. Ferreira, Institute of Biomedical Engineering IEB-UFSC, Federal University of Santa Catarina, Florianopolis, Brazil & Faculty of Science and Technology FCT-UNL, Universidade Nova de Lisboa, Lisbon, Portugal

"Medical equipment maintenance personnel and training in Zambia." (*World Congress on Medical Physics and Biomedical Engineering*. IFMBE Procedings 39, pp. 750-753, 2012, published 2013). Shauna Mullally, & T. Bbuku and G. Musonda, Tropical Health and Education Trust, London, United Kingdom, & Clinical Care and Diagnostic Services, Ministry of Health, Lusaka, Zambia

Ernesto Iadanza, PhD
Chairman, Clinical Engineering Division of the International Federation for Medical and Biological Engineering (IFMBE/CED)
ernesto.iadanza@unifi.it

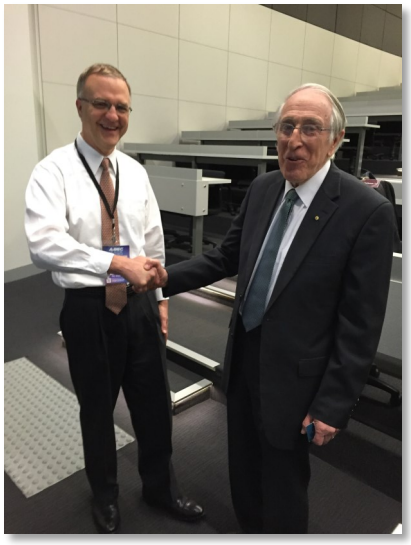
Perspectives from ECRI Institute

I was a keynote speaker at this November's Australian Biomedical Engineering Conference in Melbourne. It was a great conference with an impressive lineup of speakers, especially my fellow keynotes. I appreciated having an opportunity to get to know or reconnect with our Australian clinical engineering colleagues. They are a very resourceful group and are very hospitable. If you every have a chance to visit Australia, I highly recommend including Melbourne on your itinerary. It's a charming and eclectic city. It's known for its flavorful coffees and many relaxing cafes to take it all in.

For me, the most memorable part of the conference was Graeme Clark's opening keynote. Dr. Clark is the inventor of the Cochlear Implant. He told a very inspiring story of his lifelong quest to design the implant. Dr. Clark who is now 80 years old was motivated to develop a "bionic" ear as young boy after learning that his father would suffer from profound hearing loss. His father's hearing loss was a particular challenge with his work because he was a pharmacist. Imagine having to ask customers to speak more loudly during what should be private discussions about their medications. This caused great embarrassment and set Dr. Clark off on an almost single-minded mission to help deaf people hear.

Dr. Clark's efforts combined many of the elements of the clinical engineer's world. It included the technical challenges of developing a product that a patient could wear and tolerate. Dr. Clark and his team needed to have a deep (i.e., clinical) understanding of, literally, the inner workings of the ear. And pretty much until the very end of the process, funding for the implant was very limited. Dr. Clark had to step out of his technical and clinical comfort zones and become the ultimate spokesman and fund-raiser for his work. All along the way, Dr. Clark and his team were confronted with many doubters and naysayers. He worked extremely hard to buoy the spirits of his team to keep them motivated towards achieving their ultimate goal. All of those efforts paid off.

In 1978, Ron Saunders received the first Cochlear implant. Since then over 200,000 patients worldwide have received the implant. Dr. Clark started the aptly named company called Cochlear that sells a range of hearing loss related products and had over $800 million in annual revenue in FY 2015. Products include cochlear implants, designed to help patients with moderate to profound sensorineural hearing loss; bone conduction implants, designed to help patients with conductive hearing loss, mixed hearing loss, or single-sided deafness; and acoustic implants, designed to help patients with moderate to severe sensorineural or mixed hearing loss.



Jim Keller with Graeme Clark at the 2015 Australian Biomedical Engineering Conference in Melbourne, Victoria

Jim Keller checking out amazing sights in Victor Harbor, South Australia

I had the pleasure of meeting Dr. Clark after his keynote. He was very gracious and seemed to be an overall nice person. In case you are interested, a new book just came out about Dr. Clark's work on the Cochlear implant. It's entitled "Graeme Clark: The Man Who Invented the Bionic Ear". It was written by Mark Worthing and was published by Allen & Unwin. Dr. Clark's latest research involved electrode stimulation-related treatment for paraplegic and epileptic patients and the bionic eye implant. Pretty cool.

The topic of my keynote was "New Directions for Clinical Engineering – From the US Perspective". It went well, but I was a little bit intimidated at the start after having to follow such an iconic and excellent keynote presenter like Dr. Clark. The rest of my trip included presentations and business meetings in Adelaide and Sydney, visiting with family in Canberra, and working on a project for the Hong Kong Department of Health in Hong Kong. Very busy and hectic, but fun and interesting.

Jim Keller, Vice President for International Market Development, ECRI
jkeller@ecri.org

The ACCE-HIMSS Clinical Engineering and Information Technology Synergies Award Announced

Congratulations to Jennifer Jackson, the 2015 ACCE/HIMSS Excellence in Clinical Engineering and information Technology Synergies Award recipient.

Jennifer Jackson, MBA, CCE is the Director of Clinical Engineering and Device Integration within the department of Enterprise Information Services (EIS) at Cedars-Sinai Health System in Los Angeles, CA. Her overall responsibilities are for the operations, strategy, and growth of the clinical engineering portfolio in an effort to lead the institution in new advanced directions that address the convergence of information and medical device technology. Recent accomplishments include implementing a bidirectional communication interface between the Cedars-Sinai eMAR system and IV pumps for all adult inpatient settings, completing physiological monitoring device integration with the Cedars-Sinai EHR, and overseeing the tremendously successful transition of Clinical Engineering to the CSMC EIS department.

"Jennifer epitomizes the spirit of the 'Synergies' award. She's worked on device interoperability for about as long as I've known her. Jennifer's enthusiasm and dedication to Healthcare Technology Management and Health Care IT partnership affects those around her. She introduced me to the IHE efforts at an early showcase, which brought my analog self into the 21st century and helped me get involved. By continuing those efforts at the point of healthcare delivery, Jennifer enables the growth CE-IT synergies." Paul Sherman, ACCE President

Attend these cosponsored ACCE can't-miss events at HIMSS16

Pre-conference Symposia (separate registration required)

Health IT Safety Symposium

Health IT Safety Culture: Working Together to Improve Patent Care
Date/Time: Monday, February 29, 9:00 AM - 5:00 PM
Location: Sands Expo & convention center
Description: This symposium educates you on strategies, which improve Health IT safety and quality of patient care. Providers and Health IT developers share their experiences and work together to develop tools, which improve clinical decision support, Health IT safety culture and safety.

Cybersecurity Symposium

Cybersecurity: Time to Improve Your Posture
Date/Time: Monday, February 29, 8:15 AM - 4:30 PM
Location: Sands Expo & Convention Center, Room # Lando 4205
Description: Hospitals, payers, and business associates are increasingly leveraging the Internet, medical and mobile devices in order to improve care, lower costs, and retain competitive advantage. With this shift to digital comes increased risk to protected health information (PHI). Healthcare organizations need an improved security posture to avoid compromise and breach. This symposium will help guide your information security posture to re-align and defend against emerging cyber threats.

ACCE Education Session # 20 — Medical Device Patching – Factors for Strategy & Execution

Date/Time: Tuesday, March 1, 2016, 10:00 AM - 11:00 AM
Location: Sands Expo and Convention Center, Room Delfino 4102
Description: This session will begin to breakdown the challenges of medical device patching from a regulatory, policy, and operational perspective. By outlining a tiered approach, this session will walk through the key elements of a medical device patch management program including C-Suite Level Strategy, Life-Cycle & Change Management, Automation, and Execution. Participants will also gain an understanding of the limitations of a patch management program and the mitigating controls that should be considered.
Speakers: *Axel Wirth*, CPHIMS, CISSP, HCISPP, US Healthcare Industry, Symantec Corporation & *Daniel E. Silverstein*, MCSE, CISSP, Cyber Security Principal Strategy Consultant at Kaiser Permanente (CISSP)

Click here for Schedule at a glance

ACCE members to register at discounted Endorser Rate. Click here to REGISTER

Healthcare Technology Foundation News

HTF is proud to support AAMI Horizon issue!

Infusion system safety is a subject of intense interest for medical device manufacturers, clinicians, regulators, healthcare technology experts, and patient safety advocates. The Healthcare Technology Foundation is proud to support the fall issue of AAMI's *Horizons* supplement, the focus of which is infusion system safety. The issue provides insights from experts on topics such as improving the user interface for smart pumps, improving ease of use for and compliance with smart pump drug libraries for infusions, and how human factors engineering can help improve ease of infusion pump programming. To learn more, check out the news release posted at www.aami.org/press/Horizons and visit this issue splash page at www.aami.org/horizons. Included in the publication was an article by HTF board member Karen Giuliano, PhD, Rn, MBA – ***IV Smart Pumps: The Impact of a Simplified User Interface on Clinical Use***. HTF's newest board member, Erin Sparnon, MEng, was a contributor to the roundtable discussion on ***Working Toward Safer, Easier–to-Use Infusion Systems***.

HTF Welcomes New Board Member!

HTF is proud to welcome Suzanne Steidl as an Advisory Board member. She is a member of the AAMI Foundation's Healthcare Technology Safety Institute and has been an active participant in HTSI meetings. She is a patient advocate and has lobbied actively to include the voice of the patient in what we do as professionals in clinical engineering. She has helped HTF as a reviewer of several patient safety brochures, always promoting simple and direct language to foster greater understanding for patients and care givers. Suzanne is the founder of Your Daughter's In Town, (www.yourdaughtersintown.com) an advocacy group for elderly patients. She was an invited speaker at the AAMI/FDA Summit on Healthcare Technology in Nonclinical Settings, Herndon, Virginia, October, 2013. Her prime interests in our field are in applying Human Factors and Empathetic Design principles to the design of devices, particularly home medical devices and their accompanying literature. She has advocated for individuals and organizations for more than thirty years beginning with the Alliance for Consumer Protection in Southwestern Pennsylvania, one of the first grass-roots consumer advocacy organizations in the country. She is also a member of the Beryl Institute which works toward improving the patient experience.

HTF Board Member Ronda Bradley presents at AAMI Foundation Webinar and AARC Congress 2015!

This was part of the AAMI Foundation offering of complimentary patient safety seminars that examines how hospitals can achieve The Joint Commission's National Patient Safety Goal on alarm management. It was held Friday, December 4, "Creating a Culture of Safety in Home Mechanical Ventilation", and featured a presentation regarding a review of the types of home ventilator circuits and how the circuit can affect patient safety. The presentation also included a discussion of practical safety tips that can help with ventilator alarm management and patient safety. The webinar is available on the AAMI Foundation's National Alarm Coalition website: http://www.aami.org/thefoundation/content.aspx?ItemNumber=2004&navItemNumber=2685

Ronda's presentation at the AARC (American Association for Respiratory Care) Congress 2015 was titled: Creating a Culture of Safety: Not Just the Concern of the Respiratory Therapist. The AAMI, FDA, AARC, equipment manufacturers, engineers, and health care providers have formed a consortium to address medical equipment concerns, ventilator technology, and patient monitoring due to alarm fatigue. She discussed specific information at this health care summit, and updated attendees on project goals and deliverables as of the date of the meeting. In addition, this lecture discussed the National Patient Safety Goal on alarm fatigue, what is to be expected of hospitals in 2016 related to this NPSG, and existing best practices.

HTF Healthcare Technology FOUNDATION

Improve healthcare delivery outcomes by promoting the development,

application and support of safe and effective healthcare technologies.

HTF Board Member Tobey Clark Presents Alarm Education Webinar

The AAMI HTSI National Coalition for Alarm Management is a group of thought-leaders sharing information with other pioneers in the "alarm-management space," driving improvement in alarm management nationwide, and seeking standardization where possible. At the October 27th meeting of the group, Tobey Clark of HTF presented a webinar on Alarm Management at the University of Vermont Medical Center: Focus on Education. The presentation included the online training developed by the University of Vermont for the Neonatal ICU.

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 Cross, RN
President, HTF
president@thehtf.org

Jennifer C. Ott, MSBME, CCE
Secretary, HTF
secretary@thehtf.org

Call for Nominations!
Clinical Engineering Hall of Fame
Class of 2016

The American College of Clinical Engineering is seeking nominations of individuals who had made outstanding and notable contributions to and/or the evolution and advancement of Clinical Engineering.

Please submit your completed nomination form and supporting information to ce-hof@accenet.org by February 28, 2016.

Induction - June 5, 2016 in Tampa, FL.

Nomination form Eligibility Requirements 2015 Inductees

ACCE Calendar

January 14, 2016
ACCE Educational Webinar: Medical Equipment Planning for Healthcare Construction

January 25-29, 2016
IHE North America Connectathon
Cleveland, OH

February 11, 2016
ACCE Educational Webinar: Joint Commission Update

February 29-March 4, 2016
HIMSS 2016
Las Vegas, NV
Register here

March 10, 2016
ACCE Educational Webinar: Collaborative Support Models for Health Information Systems

Contributions to the ACCE Newsletter are always welcome. For ACCE Newsletter Guidelines, please go to:
http://accenet.org/publications/pages/newsletterinfo.aspx

The ACCE Board and Committee Chairs

President	Paul Sherman
President Elect	Petr Kresta
Vice President	Arif Subhan
Secretary	
Treasurer	James Panella
Member-at-Large	Shelly Crisler
Member-at-Large	Joan Brown
Member-at-Large	Ilir Kullolli
Member-at-Large	Alan Lipschultz
Immediate Past President	Jim Keller
Education Co-Chairs	Chris Falkner, Jennifer DeFrancesco
Membership Committee Chair	James Wear
Advocacy Committee Chair	Steve Juett
Revenue Planning Committee	Mario Castaneda
International Committee Chair	Antonio Hernandez
Nominations Committee Chair	Jim Keller
Body of Knowledge Committee Chair	Arif Subhan
Secretariat	Suly Chi