



# ACCE News

Newsletter of the American College of Clinical Engineering

September/October 2012

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In this Issue:

President's Report	1
AAMI Update	2
Perspectives from ECRI Institute Health Technology	4
Obituary: Steven Wexler	5
Employee Motivation	5
Penalty Box	6
Japanese Clinical Engineers Visit	7
HTF Facilitates CE Needs Survey	7
Nominees Sought for CE/IT Award	8
New Members	8
ACCE Consults in Guyana	9

## President's Message: ACCE Presents its New President and Board of Directors



Jim Keller, ACCE's newly elected President

I am pleased and honored to provide my first contribution to ACCE's Newsletter as President of our amazing organization. I'd like to thank all of the ACCE members who participated in our recent Board election and for placing your trust in me and the rest of our newly elected Board. My fellow Board members and I pledge to do our best to help ACCE fulfill its mission to:

- Establish a standard of competence and to promote excellence in clinical engineering practice.
- Promote safe and effective application of science and technology in patient care.
- Define the body of knowledge on which the profession is based.
- Represent the professional interests of clinical engineers.

I'd also like to formally thank our new Board for agreeing to serve and to officially introduce them to our membership. The Board includes: Jim Keller - President, Paul Sherman – President-Elect, Ilir Kullolli – Vice President, Pratyusha Mattegunta – Secretary, Colleen Ward – Treasurer, Mario Castaneda - Immediate Past President, Jim Welch – Member-at-Large, Jon Blasingame – Member-at-Large, Ismael Cordero – Member-at-Large and Alan Lipschultz – Member-at-Large. The new Board brings great clinical engineering experience to our organization and is enthusiastically engaged to help lead our profession as we enter an exciting and challenging new era. In case you haven't had a chance to learn more about their backgrounds you can check out their biographies on our website at the following link: <http://www.acenet.org/default.asp?page=about&section=officers>.

Our new Board has big shoes to fill. Our past Board faithfully served under the wise direction of Mario Castaneda and helped oversee significant growth in our organization and a wide range of activities and projects that have had a major impact on our profession. Outgoing members of our past Board include Jennifer Jackson, Arif Subhan, Izabella Gieras, and Michael Fraai. On behalf of our new Board and our membership, thank you for your dedication and strong leadership.

I am writing this article from Herndon, Virginia where I participated in the [AAMI-FDA Interoperability Summit](#) which ACCE contributed to as a supporting organization. The summit was convened to identify and address challenges associated with medical device interoperability. This intensive, two-day event delved into the complex issues surrounding interoperability and identified steps that should be taken to improve device interoperability and enhance patient safety. I am also participating in a follow-up meeting that is being co-convened by ACCE, AAMI, the American Society for Healthcare Engineering (ASHE), and ECRI Institute. It's a workshop designed to discuss the risks, challenges and opportunities of wireless technology systems in healthcare. The workshop has a goal

(Continued on page 3)

# AAMI Update: AAMI Tackles System Safety, Service Manuals, and Network Risk Management

*Editor's note: This is the first edition of a new regular column in ACCE News from the Association for the Advancement of Medical Instrumentation (AAMI) announcing AAMI-related information of interest to the healthcare technology management community,*

AAMI is looking at how it can best help healthcare facilities and medical device manufacturers use systems engineering principles to improve the delivery of healthcare.

The strategy, approved by the AAMI Board of Directors this summer, comes as healthcare evolves into “systems of systems” where just about any decision or task in one system can impact another system because of the interaction that comes with greater interoperability of medical devices and networks. “It is complex, and it needs someone like AAMI helping to spearhead that,” says board member C. Philip Cogdill, explaining the role the association can play in educating people. Cogdill is senior director of sterilization and microbiology quality affairs with Covidien.

Salim Kai, clinical engineer with the University of Michigan Health System in Ann Arbor, MI, says the “systems” evolution means healthcare technology management (HTM) professionals must approach their duties and responsibilities with a new mindset. “Part of the traditional view of the HTM profession is reacting to things that break or are not working,” Kai says. “This approach, while it worked for many years, is too simplistic for today’s technology.”

Also, experts say, manufacturers will increasingly have to consider the design of devices from a systems perspective.

## Risk-Management Resources

In a first-of-its-kind collaboration, AAMI is joining forces with the Healthcare Technology Foundation (HTF) to offer risk-management resources. “The risk of integration from multiple disparate systems will present challenges we didn’t see before in healthcare, and the skills

and competencies required to deal with them are not being taught,” says Yadin David, director of Bio-medical Engineering Consultants LLC in Houston, TX.

David is leading the joint project to create in-person workshops and remote training for healthcare technology management professionals on how to apply risk management to networked medical technologies.

The goal is to help hospitals implement the international standard 80001-1, which “lays the foundation for the management of networked medical technology risk,” according to an HTF report.

The standard, published in 2010, is written at a “high, abstract level and much work remains to work out its practical application,” the report reads. “At present, little peer-reviewed literature has been published, no academic programs created or even pilot projects documented that can be used to help guide those who want to get started in applying this new standard.”

David estimates the first education prototype will be ready by the summer of 2013.

## Service Manual Initiative

AAMI has kicked off an initiative to address concerns surrounding the procurement of service manuals and other support materials for devices. Some healthcare technology management professionals say that it has gotten harder to get support materials such as manuals and parts. Some manufacturers won’t provide service manuals at all, “or provide ones with no information and the only method for service is to call them in,” says Kenneth Maddock, vice president of facility support services at Baylor Health Care System in Dallas, TX.

Device makers say they want to

work with their customers and find solutions. “At GE Healthcare, we continually strive to improve serviceability through information, training, and tools, and agree that feedback from our customers is an important way to increase the serviceability of our products,” says Michael Angel, director of customer quality with GE Healthcare.

Angel and Maddock both attended a meeting at the AAMI 2012 Conference & Expo in June to discuss the issue. The initiative will continue with activities and articles aimed at exploring potential solutions and finding common ground.

Robert King, Editor, AAMI News

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## ACCE News

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# President's Message continued: ACCE Participates in Interoperability and Wireless Workshops

(Continued from page 1)

similar to the Interoperability Summit in which stakeholders share their perspectives and come to consensus on steps that should be taken to most effectively address the current and upcoming major challenges with wireless applications in healthcare.

One of the biggest gaps identified during the summit and the wireless workshop was that many hospitals lack the leadership to manage the challenges surrounding interoperability and wireless issues. This includes leadership in planning for the most effective deployment of integrated and wireless healthcare technologies across many different clinical care areas and specialties, in the safe implementation of these technologies, and in managing their inevitable change and performance challenges once in place. It was widely agreed among participants of the summit and workshop, including many fellow members of ACCE, that this leadership gap is a tremendous opportunity for the clinical engineering profession. This is especially because of the near exponential growth that is expected to happen with healthcare technology interoperability and wireless applications.

Clinical engineers have the unique combination of skills required to take on this leadership role. These include the technical knowledge to make wired and wireless connectivity work, a deep understanding of the clinical environment these applications are used in, awareness of their regulatory requirements, and the ability to navigate and work with the many stakeholders in the healthcare setting that are impacted by these technologies. The summit and workshop attendees acknowledged that few clinical engineers or other health professionals have the full skill set required to take on all of the challenges presented by interoperability and wireless applications in healthcare. As such, one of the key recommendations that will come from the summit and the workshop will be to develop educational programs and tools to help achieve the necessary set of skills.

You can expect ACCE's Board to be fully behind this effort to educate and prepare our profession for this new leadership role. We will continue to identify interoperability- and wireless technology-related topics for audio conference series. We'll work with AAMI and other organizations to produce the follow-up steps from the interoperability summit and wireless workshop. And we'll seek other opportunities to support the profession on these issues. Our next effort is to serve as a supporting organization for the upcoming [Medical Device Connectivity Conference and Exposition](#). It is being held in Boston, MA on November 1-2, 2012. The theme of the conference is Connecting Medical Devices to People, Workflow, and Information Systems and features keynote presentations from several ACCE members.

One of the goals of my ACCE presidency is to foster more communication between and among our membership. We host face-to-face membership meetings during the annual HIMSS and AAMI conferences. These are great opportunities to share ideas, network with members, and to learn about ACCE activities. However, many of our members are not able to travel to these conferences. I'd like to create virtual versions of these meetings so that more members of ACCE can benefit from some of the great experiences from HIMSS and AAMI. We plan to host three town hall-like webinars in 2013 in which all ACCE members will be invited to participate. Members of ACCE's Board and our committee chairs will share information on our activities, and we'll provide an opportunity for members to chime in with comments and questions. We'll also pick one or more topics of interest to the clinical engineering community and have a moderated discussion in which members will be able to participate with their perspectives, concerns, and ideas. I'm very interested in ideas from ACCE members on topics to cover in these webinars and for how to most effectively share ideas using this town hall format. I'd also like to

hear from any members who are interested in helping with these programs or any other ACCE activities.

As you know, ACCE is a volunteer run organization. We have many dedicated members participating on our Board, committees, or other activities. Each of them will be happy to tell you how enriching their participation has been for them and how it can create wonderful new career opportunities. Despite the great participation from our members we have plenty of opportunities for contribution from more. For example, our newsletter can use more articles on member experiences, our newsletter editors would love to have more help with article editing and production, our International Committee is routinely seeking faculty to participate in our Advanced Clinical Engineering Workshops, and we have a new Finance Committee that can benefit from additional members with strong financial skills.

In wrapping up, I'd like to emphasize that our organization exists for the benefit of clinical engineering. Our Board will use its best judgment to identify the projects to work on, activities to plan, or issues to address on behalf of the profession. We'll also do our best to lead the profession in this time of amazing opportunity. Our Board has a wealth of experience to draw from to help make those judgments. But we will be much better off and will make much better judgments with active input from our members. So, please remember that we are a membership organization. We want to hear your voice, learn about your ideas, and understand your concerns. Let the sharing begin. I can be reached at the e-mail address for ACCE's President, which as you might expect is

[president@accenet.org](mailto:president@accenet.org).

*Jim Keller, President ACCE*

# Perspectives from ECRI Institute: CE Department Staffing Metrics

In May, ECRI Institute conducted an extensive survey of clinical engineering (CE) departments. We received demographic data from over 500 Clinical Engineering Departments serving nearly 1,500 US hospitals. We are also processing the data from the departments outside of the US.

The primary determinant of CE staffing is the time spent on repair and scheduled maintenance which is driven by the amount of equipment maintained by the CE department. To see the total number of CE staff in the proper context, our survey also included data on the amount of equipment under service contract and the amount of time spent on non-maintenance activities such as special projects, supporting the purchasing process and managing hazards and recalls.

We organized our data into 7 ranges of beds served (101-200 to 701-800) and calculated the average values for: number of FTEs in three job categories (Director/Clinical Engineer, BMET and Administrative Assistant), size of inventory maintained, average percentage of devices under service contract, average amount of time spent on 12 non-maintenance activities, ("Beds Served" means the total beds serviced by a CE department because many departments support equipment at more than one [hospital](#)).

Here are a few interesting findings:

Looking at a single average value is misleading. For example, for CE departments supporting 301 to 400 beds the average value for the total number of FTEs in the CE department ranged from 6.7 to 8.9. When we looked at the average value for Total FTEs in CE departments the average values varied by about 15% within each beds served range so don't let your department be benchmarked to a single average value-ask

to see the range!

Since there isn't a standard method to count equipment, we expected a very wide variation within each beds served category for the inventory maintained. The variations in inventory size were far less than expected. For example, in the beds served range of 301 to 400 beds the inventory varied from 4,995 to 5,723 items (this is less than the average variance of about 30%).

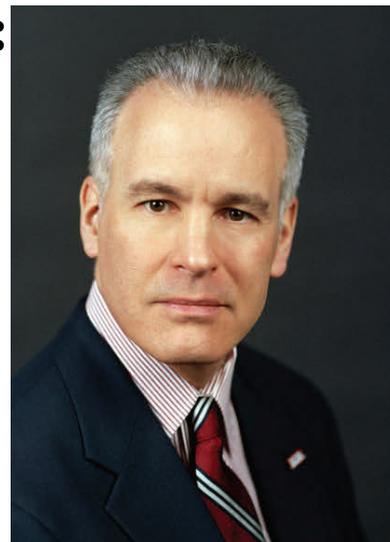
The average amount of time spent on "non-maintenance activities" didn't vary as much as we thought it would over the entire range of beds served. The average value varied from about 1 to 1.5 FTEs in each beds served range. Frankly, we doubt that CE departments are documenting the time spent on those activities.

The amount of imaging equipment under contract ranged from about 60% for smaller programs (101 to 200 beds served) to about 45% in the larger programs (701 to 800 beds served). Within each range of beds served the average values varied by about 35% for imaging equipment. We saw more variation in the responses we received for Clinical Laboratory and for General Biomedical equipment under contract.

We will continue to analyze the data and discuss it with BiomedicalBenchmark's advisory board members and other experienced managers of CE operations. ECRI Institute is convinced that benchmarking is a great management tool when we use it well. Although benchmark data doesn't tell you the reasons for a difference between your program and those at other facilities, the data can help you to focus on the areas that would benefit from further investigation. You certainly want to benchmark your program before your boss does so that you can be prepared to explain why your program may be different (and perhaps even better!) than others in your peer group.

*Jonathan Gaev*

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## Would You Like to Write for ACCE News?

The ACCE News is always looking for good, short (~ 500 –1,500 words), previously unpublished articles. Short technical articles, case studies, controversial issues, opinion pieces (in good taste of course), and other Clinical Engineering-related material is always welcome. If you have any ideas about a one-time article or a continuing series or a column, please contact one of the editors and we will discuss it with you.

Thanks for making the ACCE News your quality newsletter.

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# Obituary: Steven Wexler: Former VA BME Chief

The Veterans Administration (VA) shares with great sadness the news that Mr. Steven Wexler, former Chief, Veterans Healthcare Administration Biomedical Engineering, passed away September 17, 2012. Steven was diagnosed with Stage 4 Pancreatic Cancer this past February. Steven is survived by his mother, his brother, his wife, two sons, a daughter-in-law, and a

grandson.

Steve served VA Health Care and our nation's Veterans for 30 years. He began working with VA in 1978 at the VA Prosthetics Center in Manhattan, NY. In 1982, Steven accepted a position as biomedical engineer at the Brooklyn, NY VA Medical Center. In 1984, he was recruited to VA Central Office as a biomedical engineer, where he served the remainder

of his VA career. Steven retired as the VA Chief Biomedical Engineer in September 2008.

Steven's technical accomplishments and contributions to VA Health Care were numerous and too lengthy to list here. He was a champion for technology, for quality control and safety of medical equipment, and for biomedical engineering professionals across VA and the profession.

People who worked with Steven remember his no-nonsense practical approach, his commitment to VA, his can-do attitude. Steve Wexler always found a way to get things done and inspired others to work with him to get there. No matter the challenge, Steve found a way through or around all obstacles and challenges. Sometimes gently, sometimes very directly. No doubt he honed those skills of getting to the destination while driving taxis in New York City. This is how he got the VA through Y2k, inspired the creation of the Medical Device Isolation Architecture guide and created the VA's Patient Safety Alert process. Two of those processes, the Y2K Guidebook and Medical Equipment Isolation Architecture guide became industry best practices.

Most of all, Steven's affable sense of humor was well known. He had a knack for bringing levity to important and intense situations, without compromising the gravity of resolution. He was always good for a quip, a quote, a story, and a smile. He brought laughter in a way that few people can. Most saw the gentler side of it – when he knew exactly what to say to defuse a tense moment, enabling everyone to move on and solve the challenges. Some of us were fortunate enough to see the other side, when we were butting our heads against a wall, needing to vent – and letting our frustrations fly.

Steve helped advance the state of Healthcare Technology Management for all of us, not just the VA.

He was also a great friend, and we'll miss him. For those that imbibe, Let's raise a toast of Maker's Mark bourbon in his honor.

*Paul Sherman, President-Elect ACCE*

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## Motivating Various Generations

In today's economy, an employers market, you might think that your employees should feel lucky to have a job. There are many employees that are not satisfied with their jobs and we need to have them engaged and motivate them to keep them satisfied and productive.

It is important to choose the right individual for the right position or task. You can offer challenges and educational opportunities to individuals, but not matching the individual's skills to the job or tasks required may mean failure. Once you have the right person in the right job, then you need to motivate them to get it done.

Most of the workforce is not happy just to have a job, they want much more. They want and perhaps need work to be meaningful and fun. They want to be part of the contributing team and be recognized and rewarded for their efforts. The workforce has continued to change and the motivation required to obtain results has changed as well.

The change in the workforce may be tied to the changes in the world economy, world stability, growth of technology, education, and various societal changes, among other factors.

On my way to senior management I noticed that many individuals had other priorities. They wanted time off, flexible work hours and other items. Many years ago, I believe I lived to work, and as I grow older and have a wonderful family; I work to live, so the motivational factors required for an individual can change over time.

We need to manage differently than how we were managed. What the Baby Boomers and I may call traditional management techniques may not apply. The culture of our work environment and workforce are changing and change is the new constant.

While there are many motivational theories and techniques, knowing who you are trying to motivate is important. Applying motivational theories and techniques need to be performed in a strategic way to get the most of what you are trying to get accomplished. I realized many years ago that people were the greatest asset a company could have.

I have always been a big fan of efficiency and effectiveness. My challenge was how to apply this to people and business practices at the same time. Since all the individuals in each generation are not the same, you may not only have to tailor your motivation techniques to the generation, but perhaps the individual.

Motivating your team can be a challenge, but in the end a motivated, happy, productive team is what you need to get results.

*Ken Schwarz, Senior Manager, Clinical Engineering Services, Siemens Healthcare*

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# The View from the Penalty Box: EMRs, Saving Space, CMS and more

The only good thing that comes to mind as we enter the fall season here in the Northern Hemisphere is the political ads will soon be gone from all media. What is of great concern is that everyone running for office at all levels says that they are the ones that will create the jobs and get the economy moving forward, but most have offered no plans, and instead say “trust me”. Most of them are also as sharp as a marble when it comes to something new, any solutions will be slow in coming and probably very confusing to the average person.

Our profession has two major problems to settle quickly, and it does not appear that we will be able to solve those problems without telling some vendors and “experts” to follow what we will be doing or get out of healthcare. The first problem is with the way the federal government’s Center for Medicare and Medicaid Services (CMS) directive on scheduled maintenance is written and what some people are saying while trying to get us to believe that it will help contain costs. As presently written, it will contain costs the same year the Cubs win the World Series They last did that in 1909. The biggest problem is that the directive says that the hospital must maintain the equipment per manufacturer’s specifications using the same testing and repair procedures and tools that the manufacturers use. So much of the field service work is board swapping as the manufacturers cannot afford to equip their field service personnel with the test equipment, software and tools to make repairs so let us look at a winning arrangement. When a hospital or clinic purchases a device, the manufacturer will supply that customer with the software to test, repair and calibrate the device or system and when there is a defective board or component the institution can purchase the item from the manufacture and the user organization and swap out the problem component. If the user cannot correct the problem or is not capable of doing the work the manufacturer will do as they generally do now, show up late and over charge for the work. With the user

doing the diagnostic with the provided software the correct part can be shipped that day so the device is up and running the next day. It is not that uncommon that a device will be down for close to 3 days with manufacturer’s service as they do not always have to repair items in their kits but have to order them. This means that we will have fewer delays in procedures, possible shorter patient stays and better outcomes plus fewer canceled tests so the income flow is a little more stable. Simple, but it will work to hold down costs. There are several ACCE members on an ad-hoc committee trying to work with the FDA and the vendors to resolve this problem. Look for more information in future newsletters.

The second major problem is the interconnect ability of medical devices to electronic health records or whatever they are called now. The name will change just to keep everyone confused. Most hospitals have selected an EHR/EMR or whatever for some departments, such as pharmacy, imaging, scheduling etc. but most have not taken the final plunge to get all the records on line and connect all the various devices to the system. A very large percentage of the hospitals are positioned to move quickly to finalize their systems. We will see a major push on slowing down healthcare costs and the EHR is a good starting point. The medical staff can see all the test results in one format on one computer system. How much time will that save? It will also free up space within the hospital so services can be expanded without building another wing. Between the spaces used for x-ray film which is rapidly going out of use, to the space to house medical records that is a lot of space. Now if you have the speech recognizing software that can convert what the physician is saying or the nurse is writing into the charts it will be a huge money saver. In talking with nurses at various hospitals they said that more than 50% of their time was spent on paperwork pertaining to the patient.



We should help them out by getting these systems working as soon and we can. Instead of having all these great programmers writing code for video games why not put them to use doing something that has value to everyone, including them. Just a thought.

In closing, while I may come across and a cranky old man it is because I am old and see the same problems reappear every few years. Over the years we have made great progress in technology but often forgot that the user is not all that interested in the technology, but is concerned about the patient. We keep making devices more complicated. We forget to listen to the users on what they want but instead pick up what some researcher, who is not involved with day to day patient care, publishes and that becomes the new “gold standard”. What would be interesting is to see if the death rate of patients being monitored has declined over the years as the number of alarms has risen over those same years. I am willing to bet that the death rate has not changed that much for monitored patients over the years. Sometimes we just provide too much information.

Remember to vote, and we should consider term limits for most of our politicians, 2 terms in office and 1 term in jail for all they did wrong.

*Dave Harrington*

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# HTF Facilitates CE Education Assessment



Over 500 responses were received to the needs assessment survey that was posted on-line by the Healthcare Technology Foundation, ACCE, AAMI, and ASHE plus promotion of local BMET chapters and the VA CE Network. This jointly created survey will be used to focus a new education program on specifically needed tools for managing risk related to integrated technology in healthcare delivery organizations. The target audience would include biomedical equipment technicians, clinical engineers, facility engineers, IT engineers, and others responsible for implementing and planning device and IT integration systems in a healthcare facility.

With updated competencies, members of this community may gain new opportunities to become responsible for healthcare technology management and similar clinical engineering services in integrated environment of collaborative systems. The results of this survey will be invaluable as the plan for the course curriculum progresses. It is particularly important to gauge the size of the gap in skills so that the coming training will provide the bridge to cross this gap and delivers the knowledge about how to deal with growing complex issues surrounding facility readiness for more and more wireless technologies, 'systems of systems' networks, IT-device integration, pending FCC rulings on WMTS devices, and much more.

The next step will be to analyze the volume of responses received and to collaborate in developing the course curriculum. The survey results will reveal critical information for the project, profession and healthcare.

## **New brochure is available!**

Through a joint effort of HTF and ECRI Institute, the *Home Ventilation Patient Safety*

*Guide for patients and caregivers* has been published to improve the ventilator safety in the home. This document is available in both English and Spanish on the HTF website.

## **Presenting HTF Board Members**

ACCE President and HTF advisory board member James Keller presented in the *System Level Design Considerations for Safety Critical Technologies* session at the recent AAMI-FDA Interoperability Summit. In November, William Hyman ScD, Past President of HTF, will be making a keynote talk at the 4<sup>th</sup> Annual Medical Device Connectivity Conference on *Meaningful Use – Stage 2*. James Keller, Marge Funk, PhD, HTF Board member, and Tobey Clark, HTF Presi-

dent, will be making presentations in the *Cardiac Monitoring and Alarm Fatigue Session* at the American Heart Association Annual Meeting.

## **New HTF Website**

The Healthcare Technology Foundation website at <http://www.thehtf.org> has been redesigned. Visit the enhanced site to see all the latest news from the foundation, 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!

*Jennifer C. Ott, HTF Secretary*

*Tobey Clark, HTF President*

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## Japanese Clinical Engineers Visit

At the end of August, a team of clinical engineering professionals from Japan visited HTM departments at the Univ. of Vermont in Burlington and Westchester Medical Center, Westchester, NY along with the Fluke Biomedical Corp. The contingent included Minoru Hirose, Ph.D., Professor, Clinical Engineering, Kitasato University, Takashi Kano, Ph.D., Professor, Clinical Engineering, Saitama Medical University, Teruhiko Takakura, Director, Department of Clinical Engineering, Kameda Medical Center, Fumika Aoki, Japanese Pharmaceuticals and Medical Devices Agency, and Atsuko Takehi, Overseas Operations Manager, Taisho Biomed Instruments Co. who served as the interpreter.

In Japan, clinical engineers are individuals who operate life support equipment such as cardio-pulmonary bypass units, dialysis equipment, and ventilators in addition to being responsible for the testing, maintenance and management of medical devices. Their training includes intensive education in medical sciences and clinical procedures along with technical and engineering studies.

In addition to understanding what clinical engineers do in the US and how a department is run, a key purpose of their visit to the US was to research medical device *Instructions for Use* documents – *what is required, what is the content, how are they used, etc.?* In Japan, it is required to provide the document called "Tempu Bunsho" with the device separately from the full operator's manual. This usually 4-5 page document consists of the information such as warnings, contraindications, usage and operations, specifications, etc. This document is thought to be far from user-friendly as there are so many warnings listed at the beginning. As clinical engineers are key professionals regarding this aspect of medical device regulation in Japan, funding was provided from the Japanese government for the trip.

During their visit to the Technical Services Partnership in Vermont, they had a conference call with the FDA, and toured the university's Clinical Simula-

*(Continued on page 8)*

# Japanese CE visit continued

(Continued from page 7)

tion Center, Fletcher Allen Health Care, the campus, and the Burlington region - Lake Champlain and the Green Mountains. As the ACCE International Committee was having its monthly conference call during their visit, the group joined via WEBEX to introduce themselves and to discuss clinical engineering. They were very appreciative of the support provided by ACCE membership to the Japan Association for Clinical Engineering Technologists following the

earthquake and tsunami disaster in 2011. They hope to establish a relationship with ACCE in the future.

*Tobey Clark*

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Japanese contingent visits Elekta LINAC at the University of Vermont

## Nominees Sought for the ACCE/HIMSS Excellence in CE/IT Synergies Award

The ACCE/HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award nominations are now being accepted through **October 15!**

You see firsthand how your colleagues are making a difference, you can share their great work with the industry! [Then nominate your colleague](#) for the 2012 ACCE/HIMSS Excellence in Clinical Engineering and Information Technology Synergies Award!

Award recipients will be recognized at the [2013 HIMSS Annual Conference & Exhibition](#) in New Orleans, March,

2013. ACCE members are encouraged to nominate their peers who have made lasting contributions within ACCE, HIMSS and to the greater healthcare community by October 15, 2012.

Past Recipients of this award:

2011 Paul Schluter, PhD  
2010 Stephen Grimes, FACCE, FAIME, FHIMSS  
2009 Adrian Johnson, BTECH, BEPS  
2008 Todd H. Cooper  
2007 John D. Hughes, Jr, M.S.  
2006 Elliot B. Sloane, PhD and Raymond Zambuto, CCE, FASHE, FHIMSS, FACCE

## New ACCE Members

Lets welcome our newest members, recommended by Membership Committee and approved by the Board of Directors on September 25, 2012:

### Individual members:

**Barrett Franklin** - Chief Clinical Engineer, Dept. of Veterans Affairs - Bedford, MA;

**Christopher Gutmann** - Chief Clinical Engineer, VA Connecticut Healthcare System;

**Jacklyn M. Kelso** - Biomedical Engineer at VA Milwaukee Healthcare System;

**Kedaki Shesh** - Healthcare Technology Planner at NBBJ LLC, Ohio;

**Ali Wasfy** - Project Engineer at Hermitage Medical Clinic in Dublin, Ireland;

**Shashi Avadhani** - Director Biomedical Engineering, Crothall Clinical Equipment Solutions, NJ

### Associate member:

**Brad Peterson** - CEO at Level 3 Medical Designs, AZ

### Candidate members:

**Thomas Kofi Kudah** - Clinical Engineer, Ghana Health Service, Ghana;

**Evelyn Orozco** - grad student at UCONN and intern at VA Health System;

**Karen Taborda Marin** - grad student at UCONN and intern at Baystate Medical Center;

**Urania M. Michael** - grad student at UCONN and intern at UMASS Memorial Medical Center;

**Christine A. Vogel** - grad student at UCONN and intern at Brigham Woman Hospital;

**Michael Heusser** - grad student at UCONN;

**Jordan Elizabeth Anderson** - grad student at UCONN and intern at VA Health System -RI

*James Wear, Membership Chair*

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# Global Links Seeks ACCE to Assess Establishing Clinical Engineering in Guyana

Global Links ([www.globallinks.org](http://www.globallinks.org)) is a medical relief and development organization, based in Pittsburgh, dedicated to promoting environmental stewardship and improving health in resource-poor communities, primarily in Latin America and the Caribbean. Hospitals and clinics in under-served communities often lack the supplies and equipment necessary to provide even basic care to their patients, resulting in needless suffering and deaths. At the same time, the US healthcare industry generates a staggering amount of medical surplus which, without intervention, is destined to pile up in our landfills. Global Links' innovative model of recovery and reuse connects these two social problems in a way that helps to solve both.

This summer Global Links approached Antonio Hernandez, the chair of ACCE's International Committee, requesting that ACCE assist them with assessing the state of medical equipment in Guyana and to recommend possible actions for Global Links to undertake to help Guyana establish a healthcare technology management program. I was honored and fortunate to represent ACCE in this endeavor and in August I traveled to Guyana, with Marisol Valentin, Global Link's Program Officer for the Caribbean Region. Also accompanying us on this trip were Karuna Relwani and Michael Randazzo, both members of Engineers for Sustainable Medical Development (ESMD), a student organization of the University of Pittsburgh's Engineering School. ESMD joined in this trip to explore potential biomedical engineering projects for its members.

Guyana is located on the northern coast of South America, east of Venezuela. It has a population of 756,040, out of which 132,000 live in Georgetown, the capital. The main language is English and it is culturally part of the Anglophone Caribbean.

The Government of Guyana considers health to be the right of every citizen and the responsibility for the health of the people rests with the Ministry of

Health (MOH) and healthcare is provided free of charge to its population. The country has in place some key national frameworks such as the National Health Sector Strategy 2008-2012 which provide strategic direction to the ways in which the national health systems and services are organized and delivered.

There are no established regulations, policies, plans, or systems concerning healthcare technology in Guyana, although the Ministry of Health has recently recognized this and has appointed a person to oversee healthcare technology management in the country. It is estimated that as much as 90% of the medical equipment used in Guyana has been donated by international organizations. This presents unique problems in that there is a multitude of models of equipment which makes it hard to maintain and obtain accessories and spare parts, among other problems. The only public hospital in Guyana to have its own clinical engineering department is the Georgetown Public Hospital Corporation (GHPC), the country's main referral and only tertiary care center. The GHPC has 3 biomedical equipment technicians supervised by Stephen Garnet, who I had met when he attended the Advanced Clinical Engineering Workshop (ACEW) in Kingston, Jamaica in 2005. All of the

other public hospitals do not have in-house biomedical equipment technicians and rely solely on Guyana's only private medical equipment service company for equipment maintenance and support which is far from adequate. The MoH has recognized the urgent need for placing biomedical equipment technicians in the main hospitals in each of the ten regions of Guyana and sees their initial basic training as a priority for the country.

Following the visit, Global Links is now assessing how it wants to proceed with helping develop clinical engineering in Guyana. A couple of potential interventions being considered that would involve ACCE with the collaboration of the MoH and the Pan American Health Organization (PAHO) office in Guyana are to conduct a healthcare technology management workshop for MoH officials and to provide basic training for newly hired biomedical equipment technicians.

I continue to be in touch with Global Links, and I look forward to ACCE playing a central role in the establishment and development of clinical engineering and healthcare technology management in Guyana.

*Ismael Cordero, International Committee*

[ismaelcordero@me.com](mailto:ismaelcordero@me.com)



From left to right: Dr. Beverley Barnett, PAHO Guyana; Ismael Cordero, ACCE; Marisol Valentin, Global Links; Michael Randazzo, University of Pittsburgh; Karuna Relwani, University of Pittsburgh; Dr. Javier Uribe, PAHO Guyana.

# 2013-2014 CLINICAL ENGINEERING INTERNSHIPS UNIVERSITY OF CONNECTICUT

The Biomedical Engineering Program is pleased to announce the availability of Clinical Engineering Internship opportunities at the University of Connecticut beginning the Fall 2013 semester. Students accepted into this program earn a M.S. in Biomedical Engineering, which requires a minimum of 15 credit hours of course work and a Thesis or 24 credit hours of course work without a Thesis.

Institution currently participating in the program include: Hartford Hospital, John Dempsey Hospital, West Haven VA Hospital, Boston VA Hospital, Providence VA Hospital, Baystate Medical Center, Middlesex Memorial Hospital, Massachusetts General Hospital, UMass Medical Center, Brigham & Women's Hospital, Rhode Island Hospital and LINC/ABM Health Incorporated. Activity at these major medical institutions involves an in-depth exposure to all clinical engineering activities.

The two-year Clinical Engineering Internship program offers an in-depth, rigorous, clinical experience that matches the engineering expertise gained in the classroom. The primary objectives of this intense internship program are as follows:

- ❑ Provide exposure to hospital organization and administrative functions.
- ❑ Permit hospital experience of clinical engineering; that is, provide an opportunity to apply engineering techniques to patient care and hospital-based research.
- ❑ Provide substantial experience working with hospital personnel, including administrators, nurses, technicians and medical staff.

The internship includes a stipend for each academic year and a full tuition scholarship. Summer support is also available. Information about this program is contained in the Biomedical Engineering Handbook at

<http://www.bme.uconn.edu/clinical-engineering-internship-program.php>.

A graduate application is also available for download at this site as well.

**For details contact:**

Dr. John Enderle  
260 Glenbrook Road  
University of Connecticut  
Storrs, CT 06269-2247  
Tel (860) 486-5521  
Fax (860) 486-2500  
Email: [jenderle@bme.uconn.edu](mailto:jenderle@bme.uconn.edu)

For full consideration, applicants should have their graduate applications received by January 1, 2013. Interviews will be conducted during February and March of 2013. Final selections will be made in April 2013.

# ACCE

AMERICAN COLLEGE OF CLINICAL ENGINEERING

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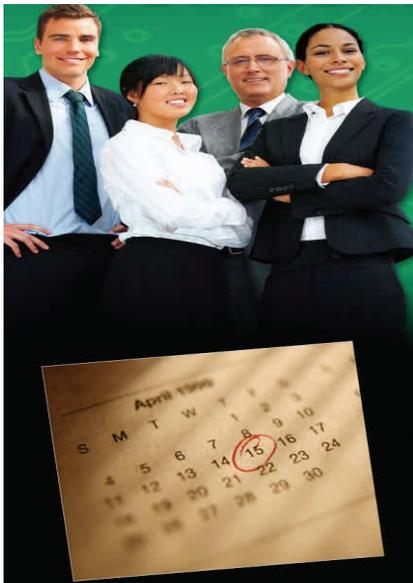
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## ACCE Mission

1. To establish a standard of competence and to promote excellence in Clinical Engineering Practice
2. To promote safe and effective application of Science and Technology to patient care
3. To define the body of knowledge on which the profession is based
4. To represent the professional interests of Clinical Engineers

## Journal of Clinical Engineering – Call for Papers

The Journal of Clinical Engineering, which prints the ACCE News in each issue, is interested in papers from you. If you have an urge to write, and good clinical engineering activities or thoughts 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. He can be reached at [w-hyman@tamu.edu](mailto:w-hyman@tamu.edu). Completed manuscripts can be sent to William or Michael Leven-Epstein at [lecomm1@aol.com](mailto:lecomm1@aol.com)



## Calendar

**November 1-2, 2012**  
Fourth Annual Medical Device  
Connectivity Conference  
Boston, Mass

**March 3-7, 2013**  
HIMSS 2013  
New Orleans, LA

**June 1-3, 2013**  
AAMI 2013  
Long Beach, CA

We are on the Web:

[www.acenet.org](http://www.acenet.org)

### ACCE

#### Teleconferences:

See <http://acenet.org/default.asp?page=news&section=teleconference#1>  
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