ACCE News

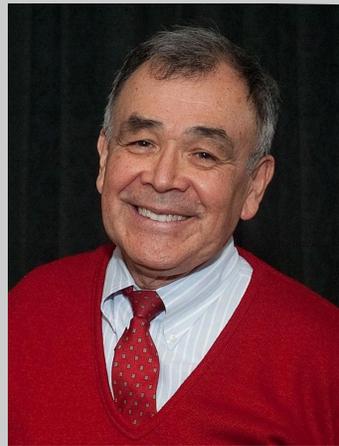Newsletter of the American College of Clinical Engineering

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A Farewell Note

Dear Members,

As ACCE moves forward to electing a new leadership team, I want to take the opportunity to acknowledge each member of our Board of Directors for his and her contribution to ACCE. In the past year, our organization grew an impressive 33% in membership, and increased its visibility both nationally and internationally. We are poised to shape the future of our profession, representing the interest of our members, and advocating for patient safety in the new world of complex, connected health care technology.

ACCE models volunteerism at its best, and our volunteer officers exemplified their commitment to our profession. Jennifer Jackson, Immediate Past- president, laid the foundation for my term and brought forth incredible educational programs – including the Scholars Program – that propelled the current successes. Jim Keller, President-elect emphasized the importance of the voice of our members and all along was preparing as our next president to bring ACCE to higher levels of visibility and influence. Jim Welch, Vice-president, modeled his effective executive approach to addressing our organizational issues, and promoted ACCE from his influential position in industry, as well as lending his expertise as one of the foremost world authorities in clinical alarms. Jon Blasingame, Secretary, kept us in line to produce and document our governance meetings, on top of all other volunteer duties and support for ACCE (including running the ACCE programs at HIMSS); and Colleen Ward, Treasurer, placed ACCE on a solid financial footing.

We could not have done our governance work so effectively without the wisdom, experience and commitment of the Board members. Izabella Gieras, Michael Fraai, Ilir Kulloli, and Arif Subham committed time, carved away from their busy schedules, to attend the meetings and to review and swiftly vote electronically on motions that required immediate action outside scheduled Board meetings. Ilir performed double duty as Board member and Chair of the Education Committee. Finally, I want to thank the Chairs of the Committees: Tom Judd, Advocacy; Antonio Hernandez, International; Ilir Kulloli, Education; and James Wear, Membership, for their incredible contribution to making ACCE shine. Committees are the heart of ACCE operations, and we had a big heart running for the past two years!

President's Message: A Farewell Note

We were fortunate to have Suly in the Secretariat office leadership role. Suly literally kept our organization running like clockwork and enhanced ACCE's market image. I consistently receive comments from members and other stakeholders about how well our programs are managed.

I will transition to Immediate-past president. This position's main roles are to chair the Strategy Committee, be liaison to the Board for assigned Committees, and to prepare and get approval for a slate of officers and Board members for the 2013 ACCE elections.

It was an honor and a privilege to have served the ACCE membership for the last two terms, and I want to thank the awesome Board that served with me. We made a difference!

Respectfully,

Mario Castañeda
ACCE President, 2010-2012

ACCE Members Recognized

Dr. Baretich and Dr. Ridgway were among the 94 new AIMBE Fellows inducted to the 2012 class of the College of Fellows of The American Institute for Medical and Biological Engineering (AIMBE).

Mathew F. Baretich, PhD, PE, CCE, President, Baretich Engineering was cited "*For leadership in the development of standards and processes that insured enhanced patient safety with application of healthcare technologies.*"

Malcolm Ridgway, PhD, CCE, Chief Clinical Engineer, Aramark Healthcare Technologies was cited for "*Pioneered independent medical-equipment maintenance and management service organizations, thereby enhancing patient safety and containing costs for healthcare institutions.*"

Arif Subhan, MS, CCE, Chief Biomedical Engineer, VA Nebraska-Western Iowa Health Care System was presented the 2012 AAMI Clinical/Biomedical Engineering Achievement Award in recognition of *"his major contributions to the clinical/biomedical engineering fields, for the development of individuals within it, and influential leadership."*

Welcome New Members

Let's welcome our newest members, approved by the Board of Directors on July 31, 2012:

Individual Members:
Mariel Alexis Ponseti - Biomedical Engineer at Veterans Health Administration, New Orleans, LA

Michael Capuano - Manager, Hamilton Health Services, ON, Canada

Shelly Crisler – Biomedical Engineer, VA Midwest Healthcare Network, Minneapolis, MN

George Yanulis - Sr Medical Consulting at John Laughlin LLC, NY

Isaac O. Adjakwah – Director, Korle BU Teaching Hospital, Accra, Ghana

Robert Hijazi - Chief Biomed Engineering, Wm. Jennings Bryan Dorn VA Hospital, Columbia, SC

Associate Members:
Lingan Ekambaram – President, Elixir Center for Enviro Quality, Chennai, India

Mohammad Rahman – Biomedical Image Coordinator, NY Presbyterian Hospital, NY

Candidate Members:
Laura Caltagirone – Graduate student, Italy

Avinash Konkani – PhD student at Oakland University, MI

Inducted to Fellow Status:
We congratulate **Arif Subhan, CCE**: Biomedical Engineer, Veterans Health Administration, who was inducted to **Fellow** Status

A Commitment Kept

Love Those Clinical Engineers

I'm sure I'm not the only one, but I love getting together with other Clinical Engineers (CEs) of all ages, from all places, in all kinds of roles. There is a certain vibrancy, singleness of purpose and beauty to these folks that I find energizing and stimulating. I am always looking for leaders who can tap into our professional psyche and <u>build us up</u>.

Leaders who (1) <u>empower</u> us individually and as teams to unleash our <u>creativity;</u> (2) set <u>strategy and vision</u> we can follow; and (3) unite us with <u>outside entities</u> to maximize potential for all as we strive together to improve care.

One Such Leader

We welcomed ACCE President, Mario Castañeda, into his role in September 2010. In the ACCE newsletter that Fall, he began by thanking his mentors, notably two great female leaders who preceded him in this role.

He stated, "I have the privilege of now leading an organization distinguished with a great brand, a wealth of membership talent, and the potential to be an increasingly significant player in 21st century health care delivery."

"We are not only facing changes in underlying technologies, but changes in business practices and culture. In the coming months, we will renew our vision for CE, reaffirm our collective stewardship, and provide initiative and leadership as healthcare adapts to increasingly complex technical, regulatory, financial and marketplace dynamics."

He called for all of us to lend our talents within CE, and to share our networks with external partners to meet these opportunities. These perspectives coalesced into the following vision and strategy for CEs:

Leadership—Educate and drive needed change in healthcare

Stewardship—Key stewards of patient safety in the clinical environment

Partnership and Collaboration—Partner appropriately with many key healthcare leaders and groups

How Have We Done

Membership—Increased engagement of practitioners over 30% in two years.

Leadership—Characterized by his humility and relentless empowering of others, he built on our legacy of monthly leading-edge teleconferences and national symposia. Key committees—Membership, Education, International, and Advocacy—were re-energized and bore quick and lasting fruit, emphasizing the *Good to Great*[1] leadership traits noted below.

Stewardship—A focal point has been our work on CE-IT Interoperability, Risk Management, and Medical Alarms alongside others.

Partnership and Collaboration—He has aggressively and tirelessly partnered with many entities, lending his and our voice of influence, where it most counted.

Conclusion

Mario—Thank you for the advocacy. ACCE has become great because of your leadership.

Tom Judd
ACCE Advocacy Committee Chairman
judd.tom@gmail.com

1. Collins, J. (2001). *Good to Great: Why Some Companies Make the Leap... and Others Don't* (1st ed.). New York: HarperCollins Publishers Inc.

Desirable Traits of Good to Great Organizations[1]

- Leadership: exemplified by personal humility and professional will
- First who then what
- Confront the brutal facts, yet never lose faith
- Simplicity
- Culture of discipline
- Technology accelerators—pioneers in select technologies

2012 ACCE Membership Meeting and Awards Reception during AAMI 2012. Board members: Jon Blasingame, Arif Subhan, Jim Welch, Jim Keller, Jennifer Jackson, Izabella Gieras & Mario Castaneda, Committee Chairs: Tom Judd, Antonio Hernandez, ACCE Newsletter Editor: Ted Cohen, secretariat: Suly Chi

The View from the Penalty Box

This past hockey season was interesting in many ways, with a first-timer winning the Stanley Cup and a lot of new teams doing well in the playoffs while many of the older teams were out early or never got in. This is similar to our profession where many of the "old timers" are now consultants or have left the field. It is never good to loose experienced people, but it is happening all too often.

Some time back I mentioned that there was a group trying to force the automakers to sell or license the repair information to independent auto shops by proposing legislative action. The bill did not get too far. Basically, it got buried in committee. Here in Massachusetts, we have the right to petition to get a topic onto the ballot if enough voters sign the petitions. Much to the displeasure of the automakers, dealers, and legislators, the group pushing the "right to repair" got enough signatures and it is now one of the questions on the ballot in November. It will be interesting to see how this turns out and if we can get some this of to apply to vendors who do not want to share any repair information. Speaking about November, are you tired of the campaign ads yet? If all of these people are as good as their ads say they are, why are we in such a mess? Or are the negative ads more accurate and the people running for election total screw ups? We need some leadership, at all levels to get us out of this financial mess.

We have a budget buster looming over our heads if the CMS directive to hospitals relating to equipment maintenance is enforced—that one portion of a sentence, "and document that the equipment is maintained to manufacturer's specifications". I can visualize the company in Wisconsin that is moving to China, after over 100 years there and who does not pay US taxes on billions in profits, who is reported to make 7 times the profit on service that it does on capital goods, planning its manuals so only they can work on the equipment if the hospitals want to comply with the CMS rule.
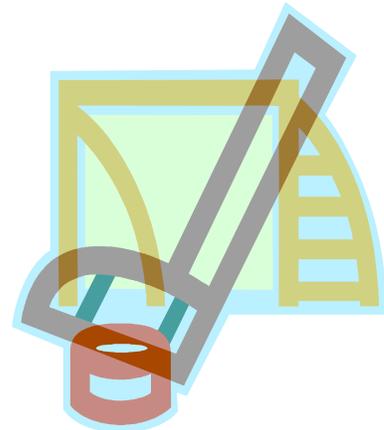
To read more on this topic there is a very good article in the July issue of Tech Nation.

Just when we think that things are under control, we hear that we may be losing part of our telemetry bandwidths. Depending on the article, this is either a done deal or under consideration. Keep watch on what is happening and hopefully the vendor that supplied the equipment to your hospital will keep you informed as to options.

Talk about not solving a problem. I was doing some digging on interconnecting medical devices. The same problems reported from 1990, in an article in the JCE, by me, to Steve Grimes's article in IEEE Engineering in Medicine and Biology magazine, May June 2004, and in numerous presentations this year at AAMI. When you look at 20 plus years of not solving a problem or coming up with something that works we are about the same productivity level as congress. We need to move forward. We need something in place that has open software so it can be adapted to all of healthcare.

In going over some of my past Penalty Boxes I noticed a pattern of comments about vendor service or the lack thereof. While I am no longer on the front line, I still hear of vendors overcharging for service or parts, but we seem not to be bothered as much by it as in the past. I have not found a reason for the change in attitude, except maybe we are tired of fighting the same battle and are doing our best to make sure that the vendor does not get any new device orders. If that is the case, congratulations, as you have now become a person that used the pen to punish poorly performing vendors. Keep it up and someday you will be getting a visit by someone higher up in the company who will ask you why they are no longer getting the business from you, automatically. You have their attention so it is time to unload on them.

ACCE member Tobey Clark had his presentation at AAMI heavily quoted in an article in the CMIO, www.cmio.net, and newsletter in early June. The presentation was on Alarm Management and what is happening. He pointed out that the alarm problem was reported in 1974 in an ECRI hazard report, but little has been done to solve the problem. Based on this timeframe we have another 20 years before the interconnect of medical devices is established? I sure hope not. Tobey presents some excellent information in the article and it is worthwhile reading and having in your files. As clinical engineers we have to get very involved with this problem and we should start by trying to influence the various vendors of what alarm conditions require an audible alarm and what conditions just need to be noted in the electronic file of the patient.

I hope the rest of your summer is great and that we can work together to solve "the interconnect" and alarm problems. Remember to vote in November, even if your selection process is "who is the less wacky".

Keep smiling,

Dave Harrington
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ACCE International Committee Report:

A Hot and Challenging Summer

This summer, the Washington DC area has been hit by a series of strong electric storms and as result, several counties in the region have experienced power blackouts. Some of these blackouts lasted for a week. Hospitals in the area have successfully managed these emergencies and no problems have been reported. The hospitals and their associated technology have been working as usual. This series of summer events in the Nation's Capital and surrounding areas, reminds me that there are parts of the world where power blackouts, lack of electric power and continuous fails in the electric distribution systems is the rule rather than the exception. This is the working environment faced by some of our colleagues around the world. This makes their work more challenging and stressful than usual. This situation presents an opportunity for ACCE to prepare a list of recommendations on how to be prepared and respond to these electric power emergencies.

Antonio Hernandez speaking at the "International Solutions for Health" seminar in Bogota, Colombia

During this summer, most of the International Committee members have continued their voluntary work actively supporting the international Clinical Engineering community, responding to the requests of our colleagues and advocating for Health Technology and Clinical Engineering programs. I had the opportunity to represent ACCE in the seminar "Integrated *Solutions for Health*" organized by Welch Allyn and CISCO in Bogota, Colombia. The event was attended by more than 120 hospital directors, administrators and engineers. In the seminar, I addressed the topic of interoperability, the need of a close coordination between clinical engineering and information technology groups and the role of ACCE in IHE and HIMSS. The Q&A section was very intense and the participants wanted to know more about trends, opportunities and good practices on connectivity of medical devices to

networks and information systems. It was evident that there is a need for the health staff to have access to information in a continuous and structured manner in the field of interoperability. This would apply not only to the participants of the event, but, by extension, to all of the technology groups around the world. This is another opportunity for ACCE.

Global Links is a medical relief and development organization based in Pittsburgh and dedicated to promoting environmental stewardship and improving health in resource-poor communities, primarily in Latin America and the Caribbean. They're sponsored by the Pan American Health Organization, and have approached ACCE-IC for a joint project in Guyana for the organization of a clinical engineering and technology management training program. The partners on this initiative are the University of Pittsburgh

and Georgetown University in Guyana. The fact finding and planning mission is programmed for the third week of August. Our colleague, Ismael Cordero, will travel in representation of ACCE.

Yadin David has joined the ACCE-IC as a member. Yadin's works, knowledge and experience in the international environment will be of great value to the mission and work of the international committee. A warm welcome to Yadin.

Antonio Hernandez, ACCE International Committee Chair
internationalchair@ACCEnet.org

Perspectives from ECRI Institute:

Helping to Find a Low– or Medium-End Option for CT Scanners

With certain healthcare technologies, high-specification models offering cutting-edge advanced features are marketed with great fanfare, and a perception sometimes develops that only those high-performance products have real value. More basic—though capable—models receive far less attention and may even be seen as less desirable. One of the biggest ways that the clinical engineering profession can have an impact is to help guide our organizations towards appropriate lower cost technology alternatives to these higher-end products. Computed tomography (CT) is one example of a technology where we can do this.

Today's top-of-the-line CT scanner models have amazing capabilities, such as producing 4-D images and scanning a beating heart. Hospitals have been under considerable pressure to adopt these latest features, but advanced CT capabilities aren't used as often as might be thought. For example, while it might be assumed that every CT provider is overwhelmed with requests for higher-end cardiac studies, informally surveying radiology department managers shows that (1) cardiac CT patient volumes are actually very low in most radiology departments and that (2) it is not unusual for some expensive features to be underused. Furthermore, the economic realities of reduced reimbursement, higher patient copays, and preauthorization requirements mean that the number of CT scans being performed is declining. As a result, the overall revenue from CT is declining.

Clinical engineers can use this declining revenue to emphasize to our employers that for most CT scanner studies, a lower-end system will suffice. We can advise them that, by taking a judicious approach to their CT purchases, significant savings can be achieved. The least expensive CT scanner systems available in the United States have 16 channels; these are the most common of the lower-end systems. Vendors also offer systems with 20, 32, or 40 channels, which perform about the same as 16-channel systems, but have advantages such as upgradability and the more recent technological features. Although lower-end systems have fewer features to reduce patient radiation dose, as well as only limited capability to perform advanced applications such as dynamic studies, the reality is that for most routine uses, such features aren't needed.

ECRI Institute has recently reviewed CT scanner device specifications and found that for most routine studies, the majority of 16-channel systems should produce images of the same quality as those of the 64-channel systems from the same manufacturer. Our study was published in the July 2012 issue of *Health Devices*. It included reviews of 16-channel systems from GE, Neusoft, Philips, Siemens, and Toshiba. We compared the capabilities of these devices against those found in higher-end systems. Our *Health Devices* report is designed to be a resource to help clinical engineers and other health professionals appropriately select alternatives to these higher-end and more expensive CT scanner products.

Members of ECRI Institute's SELECT-Plus, Health Devices Gold, and Health Devices System programs can view our CT scanner report from their member webpages. The following link will take you right to the *Health Devices* issue after entering a valid user name and password.

https://members2.ecri.org/Components/HDJournal/Issues/hd410707.pdf

Feel free to contact me at jkeller@ecri.org if you have any questions about our CT scanner study or if you would like to learn how to access this information if you don't have the necessary ECRI Institute login credentials. Jim Keller is Vice President for Health Technology Evaluation and Safety at ECRI Institute and ACCE's President-Elect.

Jim Keller, Vice President for Health Technology Evaluation and Safety at ECRI Institute and ACCE's President-Elect

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2012-2013 Educational Teleconference Series

The ACCE Education committee is announcing the 2012-2013 Educational Teleconference Series. This series will be a TEN monthly sessions starting September 13th, 2012.

Date: 2nd Thursday of each month (10 sessions)

Time: 12:00PM - 1:00 PM (Eastern)

Location: Webex/tel

For more information visit: ACCE Website

To Register: Registration Form

ACCE Nominees for the Board of Directors Election August 2012

President
Jim P. Keller, Jr.
ECRI Institute

President– Elect
Paul Sherman
VA Center for Engineering

Vice President
Ilir Kullolli
Kaiser Permanente

Immediate Past President
Mario Castañeda
Healthitek, LLC

Treasurer
Colleen Ward
UC Davis Health System

Secretary
Pratyusha Mattegunta
Partners Healthcare

Report from the ACCE Nominating Committee

These candidates, having expressed their desire to serve the College, have been nominated for the offices as indicated.

The following officer and director is continuing in unexpired term:

Treasurer: Colleen Ward—UC Davis

Current President, Mario Casteñada, will automatically become Immediate Past President.
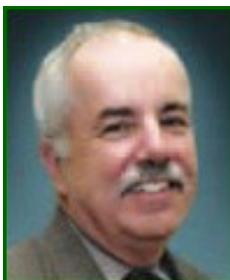
At Large Board Member
James P. Welch
Sotera Wireless

At Large Board Member
Jon Blasingame
Philips Healthcare

At Large Board Member
Ismael Cordero
Clinical Engineering Consultant

At Large Board Member
Alan Lipschultz
HealthCare Technology Consulting, LLC

Current ACCE Emeriti, Fellows and individual members are invited to participate in ACCE's 2012-2013 Officer and Board Election. Votes must take place by **August 21st, 2012**.

To cast your vote, please go to the Survey Monkey link: http://www.surveymonkey.com/s/BN5T27W

The Board nomination and voting page has also been updated on the ACCE website: http://www.accenet.org/default.asp?page=members2&section=mboard

Healthcare Technology Foundation News

ACCE — AMERICAN COLLEGE OF CLINICAL ENGINEERING

HTF Healthcare Technology FOUNDATION

Work continues with the joint HTF/AAMI project, "*Tools for Managing Integrated Technology Risk in Healthcare Delivery Organizations*". HTF and AAMI have had numerous meetings to plan the various activities, overall project schedule and milestones. A needs assessment will go out soon to various stakeholders including other involved societies. This will allow the core group to identify the major content areas for module development. Leadership building components are high on the list of importance. The goal is to have a face-to-face program followed by an electronic or distance learning tool. Look for a joint press release shortly with further details on how you can be involved!

Board member, Marjorie Funk, PhD, RN, recently participated in a National Patient Safety Foundation webinar. The topic: 'Monitor Alarm Fatigue: Lessons Learned'. She was joined by Maria Cvach, a well known researcher in this topic. The slides from the webinar can be viewed at, http://www.thehtf.org/clinical.asp. The objectives of the program were as follows:

- Define the problem and implications of alarm fatigue for caregivers and patients
- Identify best practice strategies to reduce alarm fatigue
- State three methods to assure secondary alarm notification
- And specify four recommendations for the design of future research on monitor alarm fatigue

Don't forget about HTF for your donation opportunity. We will accept them anytime and they are always tax deductible! Please visit our website: http://www.thehtf.org/

Jennifer C. Ott, MSME, CCE
Secretary, HTF
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Tobey Clark, MSEE, CCE
President, HTF
president@thehtf.org

ACCE Calendar

Virtual Meeting/Teleconferences

August 16, 2012
ACCE Teleconference
"Integration Strategy Development"

September 13, 2012
ACCE Teleconference
"CMS Revised Requirements

October 11, 2012
ACCE Teleconference
"Project Management for CE: Part 1—IT Point of View"

November 1-2, 2012
4th Annual Medical Device Connectivity Conference & Exhibition—Boston, MA

The ACCE Board and Committee Chairs

President	Mario Castaneda
President Elect	Jim Keller
Vice President	Jim Welch
Secretary	Jon Blasingame
Treasurer	Colleen Ward
Member-at-Large	Izabella Gieras
Member-at-Large	L. Michael Fraii
Member-at-Large	Arif Subhan
Member-at-Large	Ilir Kullolli
Past President	Jennifer Jackson
Education Committee Chair	Ilir Kulloli
Membership Committee Chair	James Wear
Advocacy Committee Chair	Tom Judd
IHE PCD Task Force Co-chairs	
	Todd Cooper, Ray Zambuto, Elliot Sloane
International Committee Chair	Antonio Hernandez
Nominations Committee Chair	Jennifer Jackson
Professional Practices Committee Chair	Paul Sherman
Body of Knowledge Committee Chair	Colleen Ward
Strategic Development Committee Chair	Jennifer Jackson
Secretariat	Suly Chi