

ACCE News

Vol. 7, No. 4 - July 1997

Annual Meeting

Joseph F. Dyro, Editor

This issue of *ACCE News* features the ACCE Annual Meeting in words and pictures. Observers noted a more mature, focused, energetic tone to the meetings, committees and working groups. Adequate time and circumstances enabled constructive informal discussion, generation of ideas, and renewal of friendships. Renewed interest in ACCE was clearly demonstrated by the record number of clinical engineers completing membership application forms on the spot. The centerfold contains candid photos of the Reception and the Meeting. Page 8 recaps the ACCE Advanced Clinical Engineering Workshop. The President's Address (Page 2) is printed in its entirety.

Advanced Workshop

Washington, DC was the site of the Advanced Clinical Engineering Workshop presented by ACCE. Five, half-day sessions focused upon the topics most critical for the clinical engineer in today's health care environment.

- * *Assess, Acquire, & Manage Technology*
- * *Understanding the New Healthcare Market*
- * *Hazard Reduction and Quality Improvement*
- * *Best Clinical Engineering Business Practices*
- * *Technology Trends: EMC, FDA, Telemedicine*

Teleconferences '97

The next ACCE Teleconference for 1997 is on July 17. Ira Tackel will speak on *More Opportunities for Clinical Engineers*. This year's series of lunchtime lectures on critical issues in clinical engineering continues the tradition of high quality, informative presentations by the world leaders. For registration information and the schedule of lectures and speakers see Page 12.

ACCE and ASHE Team Up in Orlando this Fall

On November 11 this year, ACCE and ASHE again will join forces to present an Advanced Clinical Engineering Workshop in conjunction with the ASHE's annual **Medical Technology Management Conference**. Orlando, Florida is host city for this event that premiered last Fall in Chicago. The event's faculty, featuring many ACCE members, will present lectures on technology management, asset management and leading-edge technologies. To be held in conjunction with the American Heart Association Meeting, MTM promises to draw a large attendance. Reserve your place early. For details, contact Patti Costello, One North Franklin, Chicago, IL 60606. Tel: 312-422-3807, fax: 312-422-4571.

Board Elections • Cast Your Vote • See Ballot Insert



World Leaders in Clinical Engineering Read ACCE News

American College of Clinical Engineering

ACCE News

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.

President's Message

- We've had a nearly 15% growth in membership in the past year. This exceeds the goal we set of 10%. To increase membership even farther we have sent the last copy of the newsletter to 350 practicing CE's who aren't members of ACCE.
- We had a very successful teleconference series, which was well attended and even made a small amount of money.
- The web site was expanded and improved.
- We've mailed 6 newsletters on-time since the last meeting. I think you'll agree that Joe Dyro has done a great job with it.
- We've developed guidelines for fund raising and implemented advertising in the newsletter. We greatly appreciate the donations we received for the wine and cheese reception from SpaceLabs, Mediq / PRN, and VitalCom.
- We adjusted the student membership fee downward to 1/2 price to encourage student membership. The Associate Membership category is for anyone with an interest in clinical engineering.
- We offered the Advanced Clinical Engineering Workshop to Clinical Engineers on the West Coast in conjunction with the HealthTech '97 meeting in San Diego last month and on the East



Coast immediately preceding the AAMI meeting.

- The advocacy committee developed a brochure on clinical engineering and ECRI graciously printed them for us at no charge. Contact Jennifer Ott for copies for your local high school guidance counselor, technical college, nursing organization or hospital administrator.
- The government relations committee has planned visits to Capitol Hill in June to distribute letters, newsletters, and brochures to congressmen.
- CareLift International, an organization that donates equipment to overseas hospitals and trains local technicians to support the equipment has given us a grant to develop a medical equipment maintenance training program.
- We organized and publicized National Clinical Engineering Week which was very successful in several locations.
- We have a dedicated International Committee headed by Al Levenson to address the unique issues and needs of the international membership. The team has developed a specific mission statement that has been approved by the Board.
- We developed an expense and revenue budget for all the ACCE programs and are in the black and building a small reserve.
- We've developed a committee to provide a liaison to the FDA to offer input on its new regulations on servicing medical equipment.
- ACCE Sponsored many of the programs at the AAMI meeting., co-sponsored HealthTech '97 obtaining a discount for our members, and co-sponsored the Electromagnetic Compatibility conference June 13 in Arlington, VA.

I'd like to take this opportunity to offer special thanks to all the ACCE Board members. They've put in a tremendous effort this year. I'd especially like to thank Jennifer Ott, our secretary and Bryanne Patail, the treasurer and Tom Bauld, last year's president who helped me in my first year and made it a successful year for all at ACCE.

ACCE is unique in its concern for clinical engineers

- ACCE focuses on Clinical engineering.
- Provides a strategic plan that continues to guide us in providing services.
- Visits Capitol Hill to tell legislators about clinical engineers.
- Involved and represented in the certification process
- Cooperates with other organizations (ASHE, FDA, AFSMI, AAMI, IFMBE)
- Provides education materials to tell others about CE

Other future projects to benefit the members include:

- expanding the membership database to develop a speakers bureau.

ACCE News

- Putting a portion of the budget aside to advertise ACCE and to promote CE.
- Sponsoring speakers to go out into the non-clinical engineering community to talk about clinical engineering.
- Having a more active affiliation with the FDA to collaborate and give them more input from the trenches.

So please remember that the ACCE is a volunteer organization and is only as good as its members. So get involved. We need help in marketing, lobbying activities, writing for the newsletter and other publications, liaisons to other organizations, helping with advocacy, and assisting committees.

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 \$50. To subscribe call (516)751-7244.

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The ACCE Board

President	Frank R. Painter
First Vice-President	Ira Tackel
Second Vice-President	Mo Kasti
Secretary	Jennifer C. Ott
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Member-at-Large	Ethan Hertz
Member-at-Large	Thomas Judd
Member-at-Large	Binseng Wang
Past President	Thomas J. Bauld

Committee Chairmen

Advocacy	Thomas O'Dea
Membership	William Betts
Government Relations	Francine Reibman
Vision 2000	Mo Kasti
Nominations	Thomas J. Bauld
Education	James O. Wear
International	Alan Levenson
Inter-Society	Yadin David

Inside ACCE News

Letters to the Editor	3
ACCE Board Highlights	4
ACCE Annual Meeting	4
Editorial	6
Clinical Engineering Profiles	7
Advanced Clinical Engineering Workshop	8
Annual Meeting in Photos	9
Advocacy Awards	11
Patient Lift Alert.....	11
Meetings.....	11
ACCE Teleconferences 1997	12
Web Trappings	12
Human Factors in Clinical Engineering	13
FDA on the Year 2000	14
Calendar of Events	15

Letters to the Editor

A Vote for Dave

I just finished reading the latest *ACCE NEWS*, which as usual, is well done. I, for one, appreciate what efforts you put forth towards the betterment of our profession. Thanks to you and all the others for your hard work. However, the reason for my letter is less pleasant. It has more to do with the "Letters to the Editor" from both BRIAN.PORRAS@she.spr1nt.com and Mo Kasti.

I think the person and their affiliation should be part of the ending, the readers deserve to know exactly who the author is and their affiliation. If I had not read Dave's response I would not have known who the two authors were for sure.

I totally agree with Dave Dickey. I think the association needs to look at who makes up the body of this organization and serve their purpose, not just those who have large budgets to support their activity on the various programs. I am of the opinion that this association was started by, and is mainly made up of, in-house clinical engineers. I think it is correct for this organization to be concerned on teaching the in-house engineers how to defend their department. After all, we don't have the huge budget to send glossy literature to the CEO, we just do our jobs and in most cases, very efficiently.

I don't mind other folks making a living, in fact I find it's good for the economy. What I do mind is that an organization I pay dues to is becoming a bit too much under the control of those who appear to want my job. I do agree with Mr. Kasti's statement about this being a forum for ALL Clinical Engineers but more especially for the betterment of the majority, not minority.

Dave McCanna, dmccanna@trumhosp.org

Editor's Note:

Future Letters will include authors' names and addresses when given. Mo Kasti can be reached at mkasti@aol.com. Please be sure to turn to Clinical Engineering Profiles, this issue, for a profile of Dave McCanna.

ACCE News

Word Search for Identity

I was delighted to note the increased attention given to the subject of clinical engineering at this year's AAMI meeting. However, my reaction to the concept of clinical engineers being ASSETS MANAGERS is similar to Malcolm Ridgway's. Assets are the total of all things of value, real estate buildings, cash, etc., not just equipment. Do clinical engineers really manage all that? (Not that they can't!) The buzzwords keep coming. First we were maintenance managers; then we graduated to equipment managers, then to technology managers now to assets managers. This while along the way in analyzing ourselves we went from rate comparison to modeling to productivity measurement and analysis to BENCHMARKING. It reminds me of a story from years ago. Seems a young entrepreneur was looking for an inexpensive location for his company's office. He found ideal space on the second floor of a bank building. He was also creative in his advertising. When developing promotional literature touting his company's value, he noted that his office was just above the local bank. So in a big headline on the flyer he prepared he proclaimed ASSETS OVER TEN MILLION DOLLARS!

George Johnston, johnstog@worldnet.att.com

Satisfied Advertiser

Advertising in the ACCE News has brought welcome visibility to a very attractive target market. In the short time since the issue was delivered, inquiries have already begun to be received. We couldn't be more pleased. Again, congratulations to ACCE News. We look forward to a continuing relationship.

Very Truly Yours,

Thomas L. Bruce, President, World Development Group

ACCE Board Highlights

May 14, 1997

Jennifer C. Ott

The Board met on May 14, 1997. Plans were finalized for the Annual Meeting and the Advanced Clinical Engineering Workshop. The ACCE Member Directory will be sent free of charge to all members this summer. Morse Medical will sell copies to non-members. Eight clinical engineers were approved for membership. The Board unanimously approved the recommendations of the Nominating Committee for candidates to fill the positions being vacated this year: Jeff Secunda (Second Vice President) and Ken Taylor and Dennis Minsent (Members-at-Large). The Board unanimously approved the Mission Statement of the International Committee. The full text of the Statement will appear in the September issue of *ACCE News*.

ACCE ANNUAL MEETING

Tuesday, June 10, 1997, Washington, DC

Welcome (Frank Painter)

See **President's Message**, this issue, Page 2.

Outgoing Officer Presentations (Frank Painter)

In recognition of past efforts toward the success of ACCE, Frank Painter presented plaques to ACCE Founders and Outgoing Officers, Tom Judd - Vice President, Marvin Shepherd - Secretary, Ira Tackel - Treasurer, and Tom Bauld - President.

Advocacy Awards (George Johnston)

The Professional Achievement went to Tom O'Dea for his article in the *Journal of Clinical Engineering*, Protecting the Immunocompromised Patient.

Professional Development went to Ira Tackel for his papers *Non-traditional Support: Patient TV System* and *Biomedical Equipment Service - An International Incentive?*

Each recipient will receive a plaque, \$200, a one-year subscription to the *Journal of Clinical Engineering*, and a polo shirt bearing the ACCE logo.

New Fellow Recognition (Tom Bauld)

Marvin Shepherd was recognized for his promotion to Fellow status for his continued support in the field of clinical engineering.

Secretary's Report (Jennifer Ott)

- July 31 is the cutoff date to renew your 1997 dues. The 1997 ACCE Directory will be made and distributed to all current members.
- Certificates and pins are available to all who have not received them. They can be picked up following the meeting or they will be sent this summer.

Treasurer's Report (Bryanne Patail)

- Developed Guidelines for Fundraising (See Page 13) which was approved by the Board to oversee allocation of funds. Each request should include a business plan.
- Received \$900 in donations for the Annual Meeting wine and cheese reception. A special thanks to MEDIQ/PRN, VitalCom, and SpaceLabs.
- As of 6/6/97 we are \$5.60 over budget, however, we have carried over an entire year of dues (\$7575.26). Therefore, we are operating in the black.

Membership Committee (Binseng Wang)

- We processed 16 applications this year: 10 Individual, 4 Associate, 1 Candidate, and 1 Fellow.
- Bill Betts has accepted the responsibility as chair effective immediately.

Vice President's Reports

Education

- Jim Wear updated the membership on the Teleconferences for 1997. We have had one so far with eight participants some with multiple attendees. Please contact Jim to register. Jim is also looking for a promotion assistant and a Steve Kelley who attended the last session but cannot be tracked to a host site.
- Brian Porras updated the membership on the recent ACEW held at PAHO. There were 22 participants with a large international contingency. ACCE made \$1500 profit. The topics were

ACCE News

centered around non-traditional areas affecting the field of clinical engineering with 10 faculty members participating. A one-day ACEW will be held in conjunction with ASHE MTM conference in Orlando. Special thanks was given to Antonio Hernandez and PAHO for their superior efforts in hosting the ACEW.

Member Services

- Joe Dyro updated the Website progress. Significant expansion and improvements have been made over the last year with many links established. See <http://info.lu.farmingdale.edu/~acce/>.
- Joe Dyro informed the membership that job placement services are available. Please contact him to place information in the newsletter.
- Joe Dyro updated the membership on the newsletter. Six issues have been published on-time this year. Copy is always welcome so send in a story or column. Advertisement has begun making the newsletter self-sufficient.

Marketing

- Tom Bauld updated the membership on the advocacy projects. National Clinical Engineers Week was popular with significant celebrations made at University of Michigan, William Beaumont, and Washington Hospital Center. U of M visited 6 local high schools and hosted Joe McClain to speak at the local society meeting. A CE brochure was developed to be used for educational purposes. George Johnston will continue to work on developing a clinical engineering video which may be distributed on PBS.
- Tom Bauld updated the membership on the Government Relations projects. A letter was sent to all members of Congress who are involved with healthcare. Some members will be visited during this meeting and others will be targeted locally.
- Mo Kasti presented at the AFSMI conference on the value of clinical engineering to healthcare.
- Wayne Morse updated the membership on Morse Medical which generated \$6400 in revenues for ACCE. Wayne has an excellent selection of ACCE items, some of which are discounted. Please pick up a brochure and call or e-mail Wayne to order.

Strategic Alliances

- Tom Bauld reported on the progress of the ASHE/MTM collaboration for the November Orlando meeting. This will be held in conjunction with the American Heart Association meeting which will include an expo visit plus ACEW. The entire program is expected to be dynamite.
- Tom Bauld reported that ACCE was represented at HealthTech 1997 and a discount was available for members.
- Tom Bauld reported that collaboration with AAMI is progressing. It allowed us to co-sponsor sessions at this meeting as well as the FDA EMC conference.
- Stan Trojanowski distributed a questionnaire for ACCE members to respond. This is to be used to develop a member speakers list and networking possibilities related to member specialty. Only 10% have responded to date. Many comments were received

regarding the length; however, the general idea was positive. The questionnaire is expected to be shortened and sent out with a request for response as well as CV submittal. Stan will be collecting everyone's e-mail address tonight to facilitate this project.

- Tom Bauld reported that a committee has been developed to work with the FDA and the many issues they will be tackling this year. Anyone interested in participating should contact Tom.
- Paul Ostrowski is working with a local Detroit Engineering Society primarily consisting of Automotive Engineers. This is an excellent example of forming non-traditional alliances.
- MSCE - Michigan Society of Clinical Engineering has developed a local ACCE chapter. There are currently 12-20 people getting together for the teleconferences.

Future Developments (F Painter)

ACCE plans on furthering the organization in the following ways over the next year:

- Keep our focus on Clinical Engineering
- Continue with our Vision 2000 to foster professional development
- Visit Capitol Hill
- Become active in the certification process
- Continue our alliances with other organizations such as AAMI, ASHE, ICC, AFSMI, etc.
- Develop educational materials
- Develop a speakers bureau and publish a list of member specialties
- Advertise in non-clinical engineering journals
- Sponsor clinical engineering speakers at non-clinical engineering conferences
- Actively work with the FDA in the development of public policy

Nominations (T Bauld)

The following posts will be vacant after July 1997: First Vice President, and two Member-at-Large positions. The nomination committee has selected the following ACCE members to fill those positions pending floor nominations and official vote: First Vice President - Jeff Secunda, Member-at-Large - Ken Taylor, Member-at-Large - Dennis Minsent. Jeff has been a clinical engineer for 20 years and has held many leadership positions. Ken is the VP of Research and Development for ValleyLab and would like to provide an industry perspective. Dennis was a founding member of ACCE and works with Premier. He would bring business knowledge to the organization as he has held many offices. A motion was made and accepted to approve these nominations. No floor nominations were made.

Roast of Joe

Binseng Wang presented Joe Dyro with the world's largest cigar for his efforts with the *ACCE News*. Many were skeptical about his potential success given the historical perspective, but everything worked out better than expected and thus he deserved this reward for a job well done!

ACCE News

Special thanks was given to all Board members for their efforts over the past year.

Questions and Answers

- Alan Lipshultz has requested a list of members who would be willing to serve on AAMI committees.
- We would like to start consolidating a monthly report from members just to see what others are involved in including annual or monthly summaries. Frank asked members to send an e-mail to Dave Dickey who began this project last year or to post the information on the website.
- What membership categories are available? The back of the membership application specifies the categories: Individual, Associate, Candidate, and Fellow. This is also available on the website.
- What about international members? There is not an international category at this point. We understand the concern with cost which is why a sponsor message was placed in the newsletter. Anyone interested in helping a fellow international clinical engineer with membership should contact Joe Dyro or Bill Betts.
- Has anyone adopted the ACCE definition of a Clinical Engineer? Some have and others were encouraged to adopt and order the plaque from Morse Medical.



Editorial

Where were all the Clinical Engineers ?

Thomas J. Bauld, Ph.D., Past President

At the recent FDA Conference on Electromagnetic Compatibility there was a noticeable absence of clinical engineers, despite the fact that the conference was one day after the close of the ACCE and AAMI meetings. If not for the inclusion on the program of Joe McClain, Yadin David, and Dave Pepperman, one would never know that people working in hospitals were concerned with possible injurious or life-threatening medical device incidents and management of the electromagnetic environment. Oh yes, there were a few more CE's, Terry Clemans, Todd Gillette, and myself along with Susan Willig and several more BMETs.

You may be skeptical, as I am, about the true extent of the problem; but you must be aware of the standards activities, the work of the manufacturers of wireless devices and medical devices, as well as the FDA's interest in this issue. There are real and documented problems out there that must be dealt with.

You may or may not be aware that the ACCE was an official co-sponsor of the seminar. A casual scan of the attendees showed perhaps four ACCE members were present and three of them were speakers. That was out of 14 clinical engineers and BMETs in the

pre-registered group of 140 people. Being a co-sponsor means that we recognize the value of the event and encourage our members to attend. Co-sponsoring organization members got a reduced registration fee of \$245. Note that the other incremental expenses to attend the meeting would have been one more hotel night and a dinner, since breakfast and lunch were included in the seminar fee.

I find it particularly interesting that, of the clinical engineers there, all of them have been actively involved in this issue for several years. Terry Clemans has made many measurements, done presentations and published material; Yadin David was co-author of the ASHE Guidance Document; and Joe McClain has also published results of a major electromagnetic environmental survey at his institution in addition to raising the awareness of the Army's Clinical Engineering staff. Is there some correlation between making measurements, documenting interference and believing there is a problem. We've made some *ad hoc* measurements at the University of Michigan Health System and have documented some very real problems with ventilators and walkie-talkies.

Nancy Pressly of the FDA / CDRH provided a summary of the MDR's reported over the last ten years and the possible implication of EMI in the incidents. Her team's review covered all the cardiovascular products. This was a fine piece of work actually deriving some information from all the device problem reports.

If there are clinical engineers out there who are willing to face an engineering problem, this is it! Perhaps too many clinical engineers aspire to be technology managers or chief technology officers; or perhaps they are too busy worrying about protecting their present job or working on their next opportunity.

On The Move and In the News

ACCE Welcomes New Members

Congratulations to the following clinical engineers who were accepted to membership in ACCE at the May 14 Board Meeting.

- Marion Baron
- Charles Garascia
- Michael Lauria
- Donald Maurer
- Mark Morse
- Mark Rawlings
- Harry Zabinsky
- Raymond Zambuto

Nominees for ACCE Board

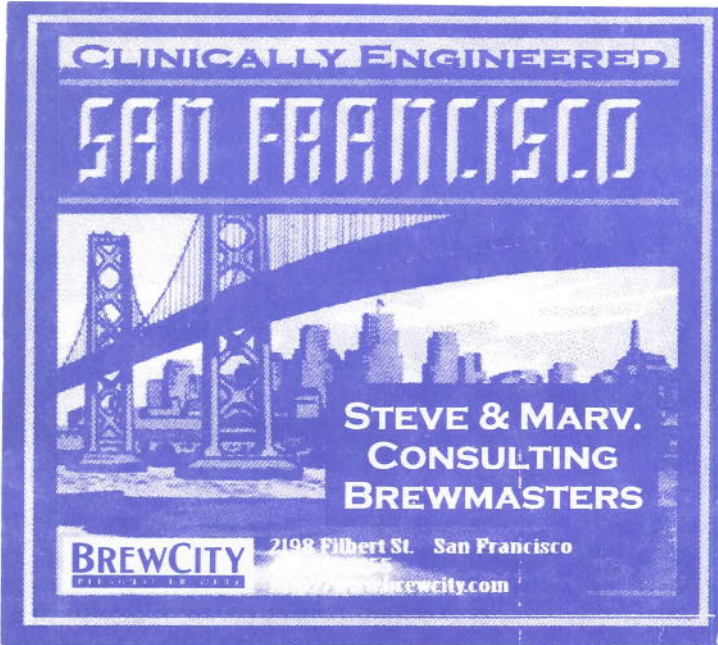
- ◇ Jeff Secunda
- ◇ Ken Taylor
- ◇ Dennis Minsent

Remember to Cast Your Ballot

ACCE News

Clinically Engineered Suds

A micro-brewing first has emerged from California. ACCE members Steve Friedman and Marv Shepherd announce Clinically Engineered beer. The two brewmasters invite any ACCE member out for a taste.



Clinical Engineering Profiles

Dave McCanna

Dave has been married to Hannah for 32 years. They met when he was stationed at Fort Bragg, NC. She is a Certified Phlebotomist and works at Trumbull Memorial Hospital too. They have two sons, who are both married. His oldest, David Glen, is a registered nurse in Charlotte, NC and is married to a nurse as well. They both work at Carolina Medical Center in Charlotte. Their youngest, Troy, is a member of the Ohio Adult Parole Authority as an inspector but has been accepted as a DEA agent. His wife works as an office manager for a specialty Information Systems company.

Dave served in the Army from 1962 through 1968 with one year in Vietnam. He graduated from the first Basic course at Fitzsimmons General Hospital - so basic that he helped unload the equipment from the moving van. He received his Advanced Course a short time later, in the old days, before degrees were granted. He left the Army in 1968 for his present job, starting as a technician.

He is the second oldest CBET in the world, and the oldest with a number on his certificate. Joe McClain got his CBET the day before the rest of the original 10. He is the oldest CBET/CCE around, having gotten his CCE in Atlanta after completing the "two days of hell examination," the first year certification was established.

He has a rather unique array of hobbies, none of which he will admit to doing well or often enough. He has a wood shop where he makes some of the biggest piles of sawdust in Ohio. His "finished" project list is very short. He also enjoys shooting target with pistols.

Vol. 7, No. 4, 1997

He'll never qualify for the "Nationals" but does pretty well at it anyway. He is an active member of the Masonic Fraternity and has held several offices. One of the appendant groups he belongs to is a Grotto that has an active Clown unit. The Grotto holds a two ring circus every year that is 100% not-for-profit. He is Cuddles the Clown for the thirteen



David McCanna

shows in one week. The Grotto takes pride in donating nearly \$100,000 each year. He donates his talents throughout the year as he clowns around entertaining the sick, elderly and the handicapped. Cuddles the Clown has a lot of fun, but doesn't get out as often as he should. As an interesting aside, he has a reputation as a tough negotiator. When a new salesman comes to his office he gets a little confused since his office is decorated with clowns and clown pictures! What a great way to disarm them and break the ice!

At Trumbull Memorial Hospital, Dave directs the Department of Clinical Engineering, made up of 11 technicians, a supervisor, a secretary, and a part time clerk. The techs range from 19 years to one year in seniority with an average of 8.9 years experience. He has worked at TMH for 29 years, his supervisor 17, secretary 15, and clerk 9. Obviously TMH is a good place to work!

His Department takes its role as a service department very seriously tackling any project that can be handled. Rejects and orphans that nobody else is doing well are integrated into the program. The Department services personal computers and installs antenna network fiber optic networks and computer networks. The Department is the hospital's telephone company, performs work in dietary and laundry, and services all logic-based equipment as well as anything clinical. It does not perform maintenance on radiology equipment and maintains contracts on other systems when cost-effective. In complying with the Safe Medical Device Act the Department does reporting, tracking, and incident investigation. What other departments across the land are doing only now, the competent clinical engineers and technicians of TMH been doing for more than 15 years. Keep up the good work, Dave!



ACCE News

WORKSHOP IS HUGE



Journal of Clinical Engineering Managing Editor, Tim Baker (above left) lectures while Jennifer Ott munches. Tim taught attendees how to write.

SUCCESS !!!



A full house enjoys a hearty lunch while faculty lectures



FDA engineer Don Whitters (left) highlighted concerns over electromagnetic interference in healthcare facilities.



Tom Judd (or is that Jones) teaches the Henry VIII School of Fine Dining



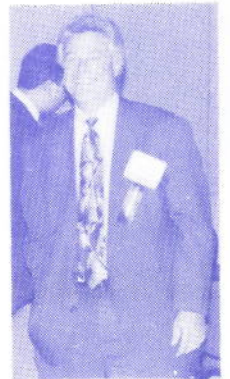
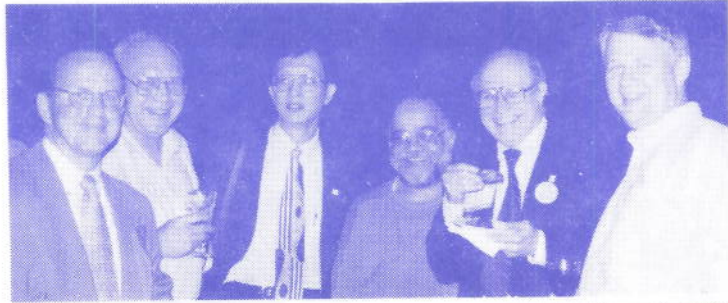
Dave Jetson (left) ponders while Dr. Binseng Wang fiddles with his laptop presentation of Quality Assurance techniques.

Thanks to Antonio Hernandez (r) and the Pan American Health Organization for the Fine Facilities and Kind Support



ACCE News

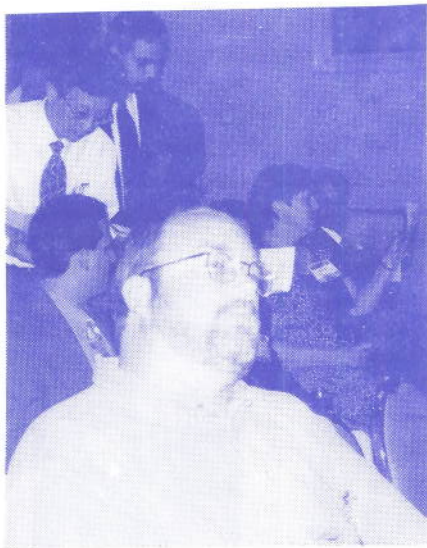
All Enjoy Annual Meeting Reception



ACCE News



Annual Meeting Draws Leaders in Clinical Engineering



Advocacy Awards

George Johnston

Tom O'Dea received the **Professional Achievement Award** for his article in the *Journal of Clinical Engineering*, Protecting the Immunocompromised Patient. Ira Tackel received the **Professional Development Award** for his papers *Non-Traditional Support: Patient TV System* and *Biomedical Equipment Service - An International Incentive?* Each received a plaque, \$200, a one-year subscription to the *Journal of Clinical Engineering*, and a polo shirt bearing the ACCE logo.



Johnston (l) congratulates O'Dea (c) as JCE Editor Dyro presents subscription to the Journal.

Professional Development Award for his papers *Non-Traditional Support: Patient TV System* and *Biomedical Equipment Service - An International Incentive?* Each received a plaque, \$200, a one-year subscription to the *Journal of Clinical Engineering*, and a polo shirt bearing the ACCE logo.

Congratulations!

Patient Lift Alert

Tom Bauld, bauld@umich.edu

Problem description:

We had an incident last week in which a staff person plugged an AC power cord directly into a power socket/receptacle located on an EZ Patient Lift. The lift's batteries were run down; so the person assumed that it would run on line power since the line cord physically fit into a receptacle on the lift. Plugging the AC power cord into the lift caused significant damage to the control box and resulted in an electrical spark seen by the staff member. There was no shock to the staff person and no harm.

The patient lifts are meant to operate on battery only. The battery charger is the only item that is to be plugged into the 115 volt AC power receptacles.

Actions:

1. We are notifying users by this memo to be extra careful.
2. We have notified the manufacturer of the design problem and expect them to develop a permanent remedy that avoids this problem.
3. We have labeled the lifts with small red labels (shown below) located above and below the receptacle.

DO NOT USE AC CORD



----- Receptacle

BATTERY ONLY

Vol. 7, No. 4, 1997

4. Unit staff need to rotate the batteries between the charger and the lift every day as part of the regular routine. This will keep the batteries charged and personnel will not need to worry about depleted batteries.

Summary:

Use the patient lift only with the batteries. Contact Biomedical Engineering at 6-5056 or pager #5663 if there are any questions or problems with the lifts.

Meetings

Thirteen Annual Conference on Cost Effectiveness and Productivity

Manny Furst

Once again ACCE members contributed to the success of the **13 Annual Cost Effectiveness and Productivity Meeting** June 6 in Washington, DC. The meeting began with the presentation of an award to Herb Gardner for his outstanding work in the field. Then views of international members were presented on *What were/are/will be their high priority issues in clinical engineering?* Ted Cohen (ACCE) lead the formal presentations with a tutorial on *Using the Internet*. His talk including list servers and improving communication among clinical engineers worldwide. Larry Hertzler (ACCE) gave an update on the successful In-house bidding at BJC Health System. Malcolm Ridgway, Tobey Clark (ACCE), Frank Painter (ACCE), and Ira Tackel (ACCE) presented their views on Independent Service Organizations (ISO). Ted Cohen talked about *Getting to the Bottom Line* in his Productivity and Metrics project.

Manny Furst (ACCE) gave an update on *Clinical Engineering Improvement Tools* (See Product Review, *ACCE News*, Vol. 7, No. 3, p.11). Peter Smithson discussed *Ten years of experience with ISO 9001 and service planning in the UK*. He gave an introduction to ISO 14000. Nancy Pressly, Elliott Sloane (ACCE) gave updates on Safe Medical Devices Act (SMDA) and Good Manufacturing Practices (GMP). John Hughes (ACCE) presented *New opportunities, developing some old options* followed by his experiences with *Telecommunications* showing phone line and switch savings. Terry Clemans (ACCE) mapped out *Radiology and other telecommunications directions*. Mike Argentieri (ACCE) added his perspectives on *Telemedicine*. Tom Judd (ACCE) discussed the *Implications of managed care*. Jim Keller gave guidelines on *Selecting and reusing disposables*. Elliott Sloane addressed *Alternate site and care issues*. The meeting concluded with talks by ACCE members Bob Morris Tom O'Dea and Manny Furst on Expert systems, Endoscopy PM, and JCAHO, respectively.

New York Metropolitan Area Clinical Engineering Directors Group

Ira Soller

The New York City Metropolitan Area Clinical Engineering Directors Group, consisting of 38 Directors of Biomedical/Clinical Engineering Departments, representing all of the major medical centers in the greater New York City area, met on April 15 and June 3, 1997. In April, a presentation on *Portable Bedside Monitoring*

ACCE News

with *Wireless Communication* was given by Matt Goldhaber, Anthony Epifane and Deborah Zane of Datascope. This was followed by member discussion of challenges of providing after hours on-call/recall clinical engineering support, benefits and pitfalls of equipment maintenance insurance, JCAHO surveys, and recent hospital mergers. In June, Jim Dunn and Dave Lawrenson of Hewlett Packard gave a presentation on *Information-Technology - Paperless Systems*. The impact of paperless systems on healthcare cost reductions was addressed. A member discussion followed which covered recent changes in JCAHO survey requirements and proper methods of administering PM programs. Both meetings were hosted and coordinated by ACCE members Mike Mirsky of St. Luke's Roosevelt and Ira Soller of the Health Science Center of Brooklyn, respectively.

ACCE Teleconferences 1997

James O. Wear

The ACCE Teleconference Series for 1997 is listed below:

Date	Topic and Speaker
July 17	More opportunities for clinical engineers <i>Ira Tackel</i>
August 21	Marketing your services within and outside your health care organization <i>Frank Painter</i>
September 18	Development of a capital expenditure committee <i>Jennifer C. Ott</i>
October 16	Building teamwork between CE staff and maintenance staff <i>Tom O'Dea</i>
November 20	Preparation of RFPs for outsourcing clinical engineering services <i>Bill Betts</i>

The cost for up to four ACCE members at a single site is \$125 per course or \$900 for the series. Additional attendees will be charged \$10 per course. ACCE will accept checks, credit cards, and purchase orders. POs can be sent by way of fax to the attention of Jim Wear (501)771-1775. For further information on the Series, e-mail at wear.james@forum.va.gov or call me at (501)370-6618.

Web Trappings

B.J. Morgan

There are two significant changes in the ACCE Web site to announce. The first, a major change, is new Message Center software which changes the Message Center to an unmoderated forum. Messages are posted to the server as soon as they are submitted. There are also many other features such as the ability for the submitter to delete his or her message, e-mail notification of new messages or replies to your message, the ability to customize your display, and cookie support. The other change is to move the

"Clinical and Biomedical Links" information from the home page to its own page. This cleans up the home page and makes the links info easier to read.

In late June, the web server containing the ACCE web pages was broken into and some malicious damage was done to the software. As a result, only the system administrator has access to the machine, until security measures can be implemented to minimize the chances of this happening again. What this means is that you still have access to the pages (including the Message Center) but I am unable to make any changes or updates. Hopefully, by the time you read this, the problem will be resolved.

Remember, the ACCE web site is a service for ACCE members. Comments and suggestions are welcome. Also, since the web site maintenance is a solitary effort, and prone to error, I would appreciate being notified of any errors or corrections. Please send them to jmorgan@ibm.net.



ARMY Adopts CE Definition

Joe McClain

Joe McClain reports that the Army has recognized the ACCE Definition of a Clinical Engineer. In 1992 ACCE established this as the officially recognized definition. The Army joins other local, national and international organizations in adopting the definition.

Unsolved Mysteries How Well Do You Know Electronics?

The problem posed by Bob Morris in *How Well Do You Know Electronics?* in the May *ACCE News* has not yet been solved. Solve it, tell Bob and collect your prize or you might end up like the poor unfortunate below.



Human Factors in Clinical Engineering

Joseph F. Dyro, Ph.D., CCE, jfdyro@aol.com

Dr. Joseph F. Dyro was invited speaker on *Human Factor Investigation: Litigation Problems and Solutions* at the 6th Annual National Expert Witness and Litigation Seminar in Hyannis, MA, June 19, 1997. The Seminar is one of several educational offerings of SEAK, Inc., P.O. Box 729, Falmouth, MA 02540. For more information on its programs consult the web at www.seak.com or correspond to seakinc@aol.com.

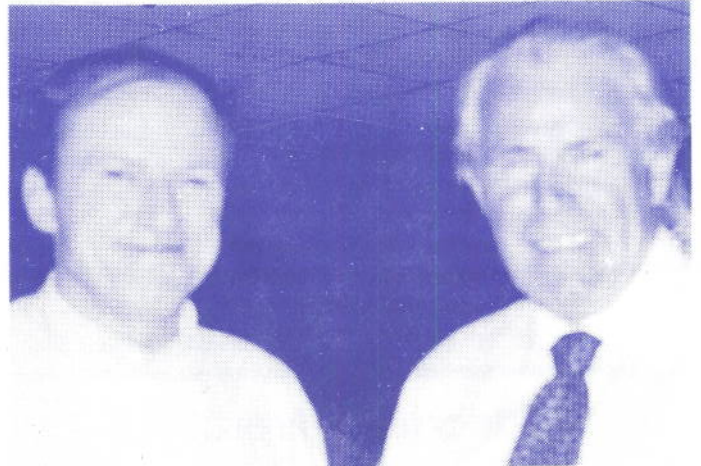
Before a diverse audience of scientists, physicians, attorneys, and engineers, Dyro demonstrated the specialized understanding clinical engineers have of the interaction between human and machine, the nub of human factors. He emphasized the role of the clinical engineer in forensic examination, especially where medical device technologies are involved. Through systems analysis, a technique stressed in *Shepherd's System™*, the respective influences of device, operator, patient, environment and facility can be assessed. Human error, which used to account for approximately 50% of all device complaints, has skyrocketed to 90% in poorly designed, highly complex medical devices. Pointing to the FDA's concern over poor user interface design and its contribution to thousands of adverse incidents each year, Dyro highlighted the need for manufacturers to have a formal human factors review system in the design process. He explained the usefulness of human factors techniques such as fault mode and effects, fault-tree, barrier, force field, and Pareto analysis and critical incident technique. A properly implemented program results in such features as intuitive operation and low reliance on manuals, easy-to-read displays, easy-to-read controls, positive and safe connections, effective alarms and easy repair and maintenance. He shared with those in attendance the educational programs and materials available through the FDA. Using actual devices, Dyro gave several examples of his own work in human factors investigation of incidents and accidents occurring in the hospital, home and workplace.



Dyro (l) explaining infant simulators to seminar organizer Steven Babitsky, President of SEAK, Inc.

Attorneys, judges, and forensic experts spoke on topics of interest to expert witnesses and the attorneys who retain their services. Author and attorney Barry C. Reed taught the attendees the fine

points of *Direct and Cross Examination of a Medical Witness*. Reed has authored several award-winning novels dealing with the medical establishment and the role of law. *The Verdict*, starring Paul Newman, was made into a movie. His most recent work, *The Deception*, is the unraveling, through the relentless pursuit of the truth, of a mystery entwining the tragic death of a patient at a major teaching hospital.



Joe Dyro (l) and Barry Reed Reminiscing

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Fund Raising Policy Guidelines

Bryanne Patail, Treasurer

From time to time, ACCE members have opportunities to raise funds for ACCE through contributions. The Board recently approved the following guidelines to help members in this process. Should any questions remain, please contact me to discuss the particular issue.

- § All ACCE members are reputable and influential enough to raise funds
- § All members are empowered to do so
- § Funds are to be raised only as needed
- § Funds are to be raised only for Board-approved projects
- § The Board decides how to allocate the funds
- § Checks must be made payable to ACCE and to no one else
- § Projects must follow a sound business plan

ACCE News

FDA Draws Bead on Year 2000

Nancy Pressly, FDA/CDRH

Interest is growing rapidly with fears that clock and software dependent medical devices, systems and interfaces will be corrupted when the year 2000 arrives. See *Future Shock - Millennium Clock Kills Medical Devices* in the last issue of *ACCE News*. In response to this concern, the FDA Center for Devices and Radiological Health is sending out a letter to all medical device manufacturers on the **Year 2000** problem.

Check the FDA/CDRH's web page for the text. The address for the web page is www.fda.gov/cdrh. It will appear at least temporarily under the "What's New" heading. Clinical engineers concerned about the life of their medical devices when the Millennium Comes should find this site helpful!

Year 2000 Site

<http://www.monitor.ca/monitor/issues/vol4iss6/feature1.html>

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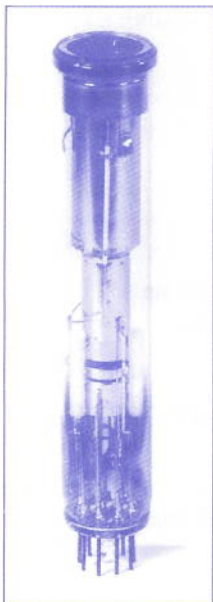
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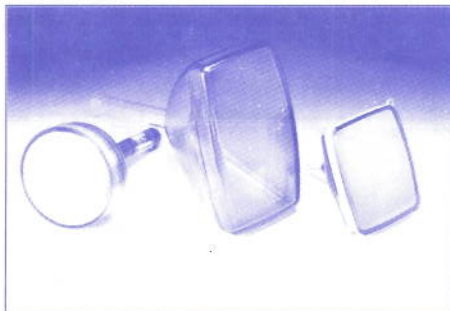
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Calendar of Events

- ◆ World Congress on Medical Physics and Biomedical Engineering, September 14-19, 1997, Nice, France. Contact: NICE 97 SEE General Secretary, Tel: 33-144-6060, fax: 33-144-4960, e-mail: nice97@univ-paris12.fr.
- ◆ American Society of Biomechanics, 21st Annual Meeting, Sept. 24-27, 1997, Clemson, SC. Call Dr. Gharpuray, Chair: (864)656-5556; -4466 fax; vasanti@ces.clemson.edu.
- ◆ First International Conference on Ethical Issues in Biomedical Engineering, Sept. 28-29, 1997, Clemson, SC. (864)656-7603; -4466fax; subrata.saha@ces.clemson.edu.
- ◆ IEEE/EMBS Society 19th Annual International Conference, October 30 - Nov. 2, 1997, Chicago, IL. (714)752-8205; -7444 fax; MeetingMgt@aol.com.
- ◆ International Scientific Meeting on Electromagnetics in Medicine, Nov. 3-5, 1997, Chicago, IL. Sponsored by URSI and IEEE. Information: <http://www.eecs.uic.edu/~emmed>.
- ◆ Advanced Clinical Engineering Workshop, Orlando, FL. Nov. 11, 1997. (312)422-3807; -4571 fax.
- ◆ ASHE/ACCE Medical Technology Management Conference, Nov. 11-15, 1997, Orlando, FL. (312)422-3807; -4571 fax. American Society for Healthcare Engineering: 12th National Conference, Dec. 2-5, 1997, Chicago, IL. Contact: Patti Costello, One North Franklin, Chicago, IL 60606. Tel: 312-422-3807, fax: 312-422-4571.

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Why is this lady smiling?



Jennifer Ott attended the Advanced Clinical Engineering Workshop in Washington, DC in June and loved every minute of it. Her advice to you?

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