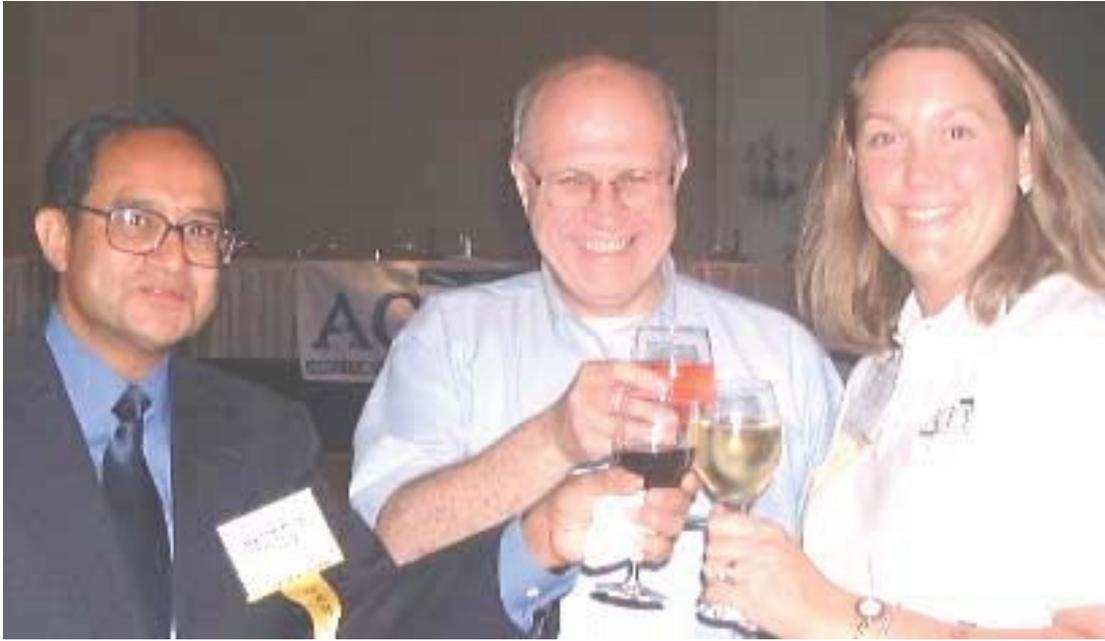


# ACCE News

Vol. 10, No.4– July 2000



*American College of Clinical Engineering*

## Colleagues Toast to Health of ACCE in San Jose

***ACCE Symposium 2000*** ☞

*3<sup>rd</sup> Annual ACCE Symposium scores another success, p. 4.*

***ACCE Annual Meeting*** ☞

*10<sup>th</sup> Annual ACCE General Membership Meeting, p.6.*

***ACCE Teleconference*** ☞

*Sign up today for the information-packed Teleconference series! p. 11*

***Telemetry Update*** ☞

*FCC creates wireless medical telemetry service, p. 13.*

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# ACCE News

21 Bob's Lane      Setauket, NY 11733

# 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.

## ACCE Web Page

[http:// accenet.org](http://accenet.org)

Editor's new e-mail address:

[Dyro@alum.mit.edu](mailto:Dyro@alum.mit.edu)

## President's Message

Jennifer C. Ott, MSBME, [jennifer.ott@tenetstl.com](mailto:jennifer.ott@tenetstl.com)

State of Clinical Engineering Address from Annual Membership Meeting held on June 6, 2000.

For those of you who are keeping track, ACCE is about to complete 10 years of existence. Founded in 1991, ACCE has filled a much-needed niche in the healthcare market. This niche has grown even more important in the past few years.

However, I would go so far to say that clinical engineering is in a state of flux. There is this Jekyll and Hyde persona as we are all struggling to do more with less, learning to please our employers, keeping up with the fast proliferation of technology, and advocating for a profession. There are a lot of great things happening in clinical engineering and a few not so great. One thing for certain is that ACCE is prepared to lead clinical engineering into the next decade and beyond.

Many of us tout the late 70's as the start of clinical engineering, which times it pretty well for a mid-life crisis! Clinical engineering has always struggled with identity, recognition and definition. Over the years there have been many great presentations and articles about selling clinical engineering to yourself, your boss, your co-workers, and your employer. I will remind you that ACCE is the only organization solely dedicated to the field of clinical engineering.

There are other organizations out there involved in the periphery of clinical engineering. AAMI is one organization. However, they choose to represent a greater constituency in the medical technology community. I think this forum continues to be a source of frustration for those in the clinical engineering field, especially considering the disbanding of SBET, the seemingly unplanned discontinuation of clinical engineering certification, and the general perception that their interest is in money and not enhancing the clinical engineering profession. Members of ACCE have been in contact with AAMI on many issues and we are happy with our previous collaborative efforts and look forward to improving the relationship further.

In a similar vein, ASHE works very hard to represent the hospital-based clinical engineer. It is especially lucky to have such strong leaders as Joe McClain. We must remember that ASHE has always dominated the facility-engineering field more and non-clinical engineers are their chief constituency. Plus, as many of us within ACCE know, clinical engineering does not exist in the hospital alone. Similar to AAMI, ACCE has worked previously with ASHE and will continue to pursue avenues as such.

Understanding what options exist and the growing pains of ACCE, ACCE needs to address some specific strategic issues in the very near future:

- Clinical engineering certification, as many know was suspended in July 1999. ACCE submitted a proposal to the USCC and the CCE committee is working very closely with USCC representatives and AAMI to update the body of knowledge and bring this program back on line as soon as possible.
- There has been previous dialogue in the *ACCE News* regarding Clinical Engineers versus Biomedical Engineering Technicians. There is currently an *ad hoc* committee exploring the definitions and other issues and this will feed nicely within the certification program. Whether they are the same or different is a silly argument. The fact remains that the definition is blurred at this point, the field is too small to sub-divide further, and we all need to work together to achieve the same goal. The concern within ACCE lies in the fact of our foundation and what modifications we need to make to further strengthen the organization and the profession of clinical engineering.
- Bob Morris has offered to put a committee together to review the bylaws. In 10 years there have been minimal changes. We really need to explore the tenure of committee chairs and representatives as well as continuity of the Board of Directors. This review will occur soon with changes to be voted on before next year's Annual Meeting.
- One of the most important aspects ACCE needs to address is the communication mechanism for the membership. We need to make it easier for the membership to communicate with the Board and for the Board to disseminate information and update activities.

Everyone can understand that these are all important, timely and relevant issues that need to be addressed soon and with a cross-section of the ACCE membership.

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Of all the years the President has given the State of Clinical Engineering Address this year is the most important. We need you, the membership, to help us help ourselves by making ACCE and the clinical engineering profession stronger, better understood, and prepared for the next decade and beyond.

The Annual Meeting is a great forum for the ACCE membership to hear the accolades and activities of the Board of Directors both past, current and future. Please keep in the back of your mind where you may be able to assist and let me know.

Clinical engineering is in a state of flux, but it is a good flux and I for one am as excited for the next 10 years of ACCE as I have been about the previous 10.



Jennifer Ott

## The ACCE Board

President	Jennifer C. Ott
First Vice-President	Bryanne Patail
Second Vice-President	Brian Porras
Secretary	Caroline Campbell
Treasurer	Henry Montenegro
Member-at-Large	Joseph McClain
Member-at-Large	Ted Cohen
Member-at-Large	Vinnie DeFrancesco
Member-at-Large	Gary Evans
Past President	Robert Morris

## Committee Chairmen

Advocacy	Thomas O'Dea
Membership	Kelly Galanopoulos
Public Affairs	Wayne Morse
ICC Liaison	Frank Painter
Nominations	Robert Morris
Education	James O. Wear
International	J. Sam Miller
AAMI Liaison	Elliot Sloane

## ACCE News

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**The Editor encourages readers to express their views by way of letters that might be printed here for the benefit of the readership. He also likes to get mail.**

## Certification Saga

*Joseph F. Dyro, [dyro@alum.mit.edu](mailto:dyro@alum.mit.edu)*

For years, the farmer jerked and tugged the ring on the bull's nose. After a while the bull, realizing it was quite capable of doing what a bull does without the "help" of the farmer, lowered its head and butted his former "helper" out of the barnyard. The bull moves on determining its own destiny.

A long time ago in a galaxy far away, clinical engineers began to populate the hospital scene. With the growth of medical devices and procedures the need for the engineering mind in health care was recognized and a profession was born. Certification of clinical engineers eventually became an AAMI program, officially under the auspices of the International Certification Commission an amalgam of interested parties yet under the strict administrative and financial control of AAMI. Clinical engineers became certified. Regrettably, AAMI failed to effectively promote the certification program, applicants for certification predictably waned, and revenue dropped.

# ACCE News

AAMI is a business and this part of its business failed. Dropping the certification program was expedient.

Last year, AAMI entertained proposals from other organizations to take over the certification process. The only organization to respond was the American College of Clinical Engineering (ACCE). ACCE proposed a fiscally sound plan. Incredibly AAMI said it needed more time to analyze the situation, to get input from other organizations, to allow a consultant to gaze into the crystal ball of clinical engineering. Was the suspension of the certification program last year undertaken without such due diligence? AAMI invoked the suspension, set a time for proposals, received the proposals, reneged, and stalled. What's wrong with this picture?

It is as plain as the nose on your face. Since when does the butcher, baker, candlestick maker, or farmer direct the course of clinical engineering?

Friends, AAMI, countrymen, it is time! Most clinical engineers in the USA are members of the ACCE and international membership is climbing fast. ACCE defines the body of knowledge. ACCE defines the scope of clinical engineering. ACCE is the body to verify evidence of continued practice. ACCE has the relevant examination questions. ACCE through its voluntary efforts educates clinical engineers around the world through Advanced Clinical Engineering

Workshops (ACEW), audio-teleconferences, and annual symposia. ACCE promulgates the body of knowledge, in which the profession is grounded. .

The nationally and internationally recognized ACCE has come of age. All around the world, Advanced Clinical Engineering Workshop participants want to know about ACCE certification; they already think ACCE runs the program. Why? Because ACCE workshop faculty emphasizes the importance of certification and administers and grades examinations. It is through the tireless, voluntary effort of ACCE members that certification programs have been established in Brazil and Mexico and programs are developing in China, Dominican Republic, Russia, Panama and Venezuela.

ACCE continuously monitors the pulse of engineering needs and opportunities, developing ways in which the profession can remain viable and an ever-increasing benefit to the medical field at large. Witness the powerful influence ACCE had in convincing the FCC to assign frequencies that would not interfere with medical telemetry.

I thank AAMI for administering certification in that galaxy far away, before ACCE came of age. Let us hope that for the good of the profession it will now gracefully hand the reigns to ACCE, the one organization that represents clinical engineering. It is time.

## Meetings

### ACCE Symposium 2000

*Brian Porras, brian  
porras@premierinc.com*

I am pleased to report that a successful Third ACCE Symposium was held Saturday, June 3 at the 2000 AAMI Annual Meeting at San Jose, CA. The Symposium, titled "Frequency Allocation Issues in Medical Telemetry", was an extensive discussion of the new regulatory changes to extend protections to electromagnetic frequencies used by medical telemetry. Symposium participants included representatives from hospitals, the American Hospital Association, the Food and Drug Administration (FDA), medical device manufacturers, and the Federal Communications Commission (FCC). Topics covered included the

historical events which initiated a review of medical telemetry frequency allocations, the AHA Medical Telemetry Task Force's role in providing recommendations to the FCC, FDA regulation of telemetry technology, important selection criteria in evaluating medical telemetry devices, and advice to healthcare facilities on how to prepare for the changes in medical telemetry frequencies

It is always our intention to select timely topics for the ACCE Symposium. In fact, this year's topic was so timely that it presented a special dilemma in the days leading up to the event. The FCC has a rule that its staff cannot speak publicly about a topic upon which its Commissioners will be voting within the next seven days. Since the FCC was to meet on June 8 (five days after the Symposium) to vote to establish the new Wireless Medical Telemetry

Service, the FCC's representative could not attend the ACCE Symposium. Thankfully, one of the FDA representatives volunteered to give the FCC presentation.

Given the complicated subject matter and the large number of panelists participating, this year's Symposium was much more difficult to organize than last year's event. ACCE board member Caroline Campbell's tireless efforts in getting things organized and working with the many differing personalities on the panel are to be commended.

We were again pleased with the attendance at the ACCE Symposium. In total, we estimate that approximately 70 people attended. Several medical device manufacturers brought a contingent of staff to sit in the audience, as the FDA unveiled in general terms its strategy on how it would handle new and existing medical telemetry devices

in light of the new frequency bands. Copies of the *ACCE News* and additional information about ACCE were available to attendees.

We are now in the process of selecting a topic for next year's Symposium. If you have any ideas, please submit them to Brian Porras at [brian\\_porras@premierinc.com](mailto:brian_porras@premierinc.com).

## San Jose Highlights

Ted Cohen, [ted.cohen@ucdmc.ucdavis.edu](mailto:ted.cohen@ucdmc.ucdavis.edu)

I attended the 3<sup>rd</sup> ACCE Symposium, the AAMI Annual Meeting, and the ACCE Annual Meeting in San Jose last June. What follows are some of my observations and comments on the Clinical Engineering management "hot issues" relevant to ACCE.

### Clinical Engineering Certification

Great progress has been made on the role of ACCE in the future of clinical engineering certification. Although the ACCE proposal is not yet approved by AAMI, attitudes have changed such that if a viable business plan can be developed and implemented, then ACCE proposal will be considered. Many thanks to Frank Painter, Ray Zambuto and Bill Betts and others to turn this into a constructive process that hopefully will yield a reasonable outcome.

### Electronic Distribution of ACCE News

More than half the members at the ACCE Annual Meeting, by a show of hands, would like to have an electronic distribution of the newsletter, rather than paper. This will save ACCE funds and should be implemented as an option as soon as possible. I suggest that anyone who has an e-mail address on file in the ACCE member directory, by default, receive his or her newsletter electronically. Others without an e-mail address, and those that specifically request paper, could still receive their newsletter by paper. When the newsletter is ready for publishing, I suggest a broadcast e-mail to the membership with a link to the newsletter address where it is posted. Perhaps the best place is on the ACCE WebPage.

Adobe Acrobat in pdf format is probably the easiest way to publish the newsletter on-line with photos and graphics and easily allows the members to print it themselves if they would rather read it on paper than from their computer screen.

### ACCE News Advertising

Efforts are being made by Jennifer Ott, Jay Hall and others to increase newsletter advertising. All members of ACCE are encouraged to be aware of the need for advertising to support the newsletter operation. Should a member think that a company would want to advertise in the *News*, that member should contact Jay Hall at [jaywhall@aol.com](mailto:jaywhall@aol.com).

### Workplace Profiles

Departments managed by Allan Lipschultz and Ira Soller will be featured in Workplace Profiles in future issues of ACCE News.

### Medical Errors

The Institute of Medicine medical errors report sparked considerable discussion. Most discussion revolved about the following questions:

How much of the problem is medical equipment?

What are some of the ways that clinical engineers can work on the systems problems, even those that are not equipment related, e.g. drug delivery problems?

How can clinical engineering contribute to the education, lack thereof, issues with healthcare staff?

How can clinical engineers provide feedback to manufacturers regarding errors that are caused or partially caused by poor equipment design, e.g. poor user interface?

Marv Shepherd has taken the lead with others to address these questions and to develop ways to foster a change in the current "culture of blame" to a more constructive outlook on solving these problems.

### Modifying Scheduled Maintenance

Malcolm Ridgway proposed to develop a standard methodology for reporting PM/Scheduled Inspection yield

so that all can pool non-financial data and develop more cost-effective maintenance programs with data-driven procedures and intervals.

### Clinical and Information Systems

The integration of clinical and information systems technology is an issue of concern for clinical engineers and information technologists. For example, what should be the clinical engineering and IT support model for computer-based medical systems? Since the Chief Technology Officer (CTO) concept never worked and there is no room for another senior executive, should Information Technology and Clinical Technology organizations merge within hospitals and healthcare institutions and should the resultant organization be directed by a CTO/CIO person?

### Survival

Bryanne Patail is leading an ACCE taskforce to look into the "root cause" of the decrease in the hospital-based demand for clinical engineers, particularly in the United States. Bryanne's task force will look at the problem from at least two perspectives: supply and demand. Part of this effort will entail defining the roles of BMETs and CEs and differentiating between the two.

### Certified Technology Manager

Related to the certification of clinical engineer issue and the ACCE "root cause" task force, AAMI and ASHE are both looking at whether another level of certified professional between the BMET and clinical engineer is appropriate, *i.e.* the Certified Technology Manager. Increasing BMET managers, particularly of smaller programs, fill the role to a lesser or greater extent using consultants if more expertise is needed.

#### You are witnessing a first!

Reacting to the suggestions of Ted Cohen (see above report) *et al*, your editor with the right tools and a somewhat uncharacteristic alacrity rendered this present issue of the *ACCE News* in pdf format, thus making it the first issue to be capable of widespread electronic circulation.

# ACCE News

## 10<sup>th</sup> ACCE Annual Membership Meeting

After a wine and cheese social hour, Jennifer Ott convened the 10<sup>th</sup> Annual ACCE General Membership Meeting, welcoming the membership and introducing the Board members and Committee chairs. The meeting was held in San Jose, California on June 6, 2000.

### Award Presentations



Manny (l) receives award from Marv

Manny Furst received the Advocacy Award given to recognize individuals for activities that are helpful in advancing clinical engineering as a profession through



Juett(l) receives award from Johnston

the media. For the past 16 years, Manny has been chair of AAMI's Clinical Engineering Management and Productivity Committee. Manny always makes sure that project objectives are met within budget. Manny

received a plaque, \$250, an ACCE polo shirt, and a complementary subscription to the *Journal of Clinical Engineering*.

In recognition of his identification of DTV interference at the Baylor University Medical Center in February 1998 and his interaction with the press concerning that event, Steve Juett received the Devteq Award, which included a plaque, a complementary membership for ACCE, a complementary copy of the *Devteq System*, an ACCE polo shirt, and a complementary subscription to the *Journal of Clinical Engineering*.

As the Division Chief of the largest Clinical Engineering division in the Army, which is also recognized by the Army as a center of excellence, Joe McClain is entitled to present the Walter Reed Army Medical Center's Coin of Excellence to extraordinary clinical engineers. This year, he presented three coins. They went to Yadin David for



McClain (l) honors Campbell with coin

his contribution to telehealth, Caroline Campbell for her work on the American Hospital Association's Medical Telemetry Task Force, and Antonio Hernandez for his work with Latin American countries and Advanced Clinical Engineering Workshops.

Bob Morris, Yadin David and Joe McClain were presented with plaques in recognition of their advancement to Fellow status, which signifies outstanding achievements in clinical engineering.

Bob Morris was awarded a plaque in recognition as the outgoing president for ACCE.

### President's Report (Jennifer Ott)

Joe Dyro, Editor-in-Chief of the Academic Press Handbook of Clinical Engineering asked the ACCE Board to review and comment on the Handbook's Table of Contents. Many ACCE members

will be asked to contribute chapters to this comprehensive text designed to span the broad range of the clinical engineering profession. For more information on this landmark project please contact Joe Dyro. A contract is in development for ACCE Secretariat duties. Nominations of ACCE members to various FDA Committees are in development. Joe Welsh of Carelift International contacted ACCE with a request for ACCE's support in development of educational activities for a Regional Health & Technology Training Institute probably to be located in Moldova.

The ACCE membership gave a standing ovation to Binseng Wang, *in absentia*, for his wonderful work in coordinating the clinical engineering track at HealthTech for the last two years. Equipment donation guidelines were developed in about 1992. George Johnston is reviewing those guidelines to determine their applicability to refurbished equipment. Dave Simmons participated in meetings with HCFA



Prez (l) awards X-Prez Morris plaque

regarding ISO 9000. Dave supplied Jennifer with an electronic copy of the new guideline. Contact Jennifer to receive a copy of this 100-page document. ACCE is working with Andrei Issakov concerning supporting Doctors without Borders.

The ninth Advanced Clinical Engineering Workshop was presented in March in the Dominican Republic. Other ACEWs presented this past year were in Cape Town, South America, and Moscow. In July, an ACEW will be held in Chicago just prior to the World Congress where ACCE is also developing the clinical engineering track. Upcoming ACEWs are under discussion or in development in Peru

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and Nepal. Contact Bob Morris if interested in participating.

## First Vice President's Report (Bryanne Patail)

Copies of the membership survey were distributed just before the membership meeting. Copies of the survey will be mailed to members that are not in attendance. The Root Cause Analysis Task Force is developing a template for promoting clinical engineering to middle and high school students. Ethan Hertz and Jay Hall are looking at demand side. The project's first phase is to identify methodologies for

response by ACCE and a designated member to monitor government activities including those of the FDA and the FCC. The implementation phase would also involve regular development of position papers with a cover letter for submittal to the press.

The Board has developed Policy Guidelines for Project Payments that will facilitate tracking of the Advanced Clinical Engineering Workshops and other ACCE projects.

The ACCE Symposium was presented on Saturday, June 3<sup>rd</sup> concerning Frequency

Historic records are being compiled for a Central Policy Repository. Production of the Membership Directory for 2000 will begin following compilation of the membership survey results that will demonstrate preferred methods of distribution.

## Treasurer's Report (Bryanne Patail)

ACCE is financially healthy with 2 years worth of membership fees in reserve. ACCE has selected a new teleconference service provider to improve quality of service while reducing cost.

## CCE Committee's Report (Frank Painter)

Last year, AAMI suspended the clinical engineering certification program for new applicants. The USCC later requested proposals to administer the certification program. ACCE members Frank Painter, Tom Judd, George Johnston, Ted Cohen, and Ray Zambuto with the Board's approval developed and submitted a business plan for certification to the USCC Board for consideration. Following review of the business plan, Bill Betts wrote a letter to the USCC recommending further study of the issue. The USCC Board met today and gave ACCE suggestions for strengthening that business plan. The plan will be resubmitted with revisions on August 1<sup>st</sup>. Also at today's meeting, the USCC suspended the CE Board of Examiners. An ad hoc committee will continue the work of processing applicants that began the certification process prior to the suspension.

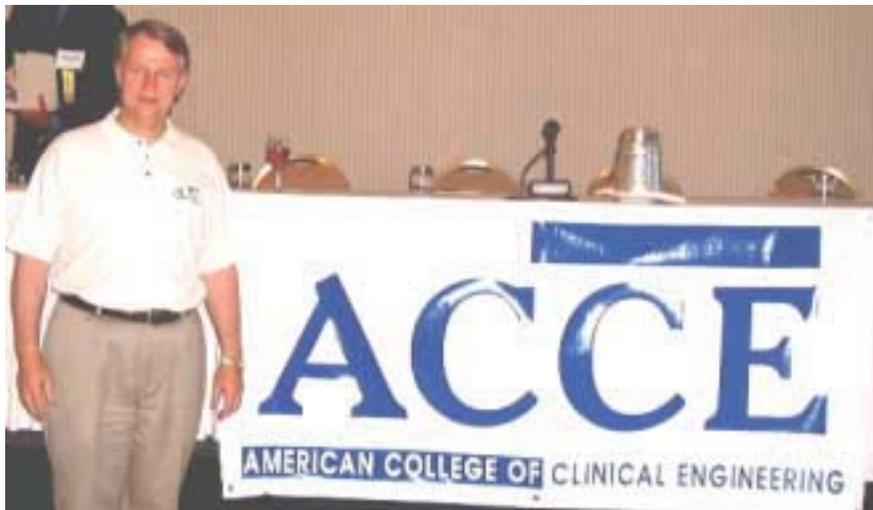


Francoeur, Zambuto and Brody enjoy the camaraderie

development of clinical engineering. This includes determining the unique services that clinical engineers provide, determining a sound byte that succinctly describes clinical engineering, identifying clinical engineering's allies such as key government officials and non-ACCE organizations, and determining our competitors. The second project phase is to implement those methodologies. This might involve a designated member to scan the news for items with a potential clinical engineering slant for

Allocations in Medical Telemetry.

## Secretary's Report (Caroline Campbell)



Painter striking a handsome pose against the ACCE banner is the only photo in this issue not taken by Frank

A certification program is under consideration at the Executive Board of ASHE and a survey of the ASHE membership regarding interest in certification is underway. ASHE will pursue an AHA certification for a technology manager only if ACCE and AAMI are unable to move forward with a certification plan. ASHE is interested in partnering with ACCE to develop the body of knowledge and test if they

# ACCE News

decide to pursue an AHA certification.

## Membership Committee Report (Kelly Galanopoulos)

The following occurred over the past year: three members were advanced to Fellow, 12 Individual Members were



Elliot Sloane and John Hughes appear content

accepted, two additional members were advanced from Candidate to Individual membership, four Associate members were accepted and three Candidate members were accepted.

## Education Committee Report (by Jennifer Ott for Jim Wear)

Seven teleconferences were held in 1999 and seven more are scheduled in 2000 including presentation of Equipment Management Inclusion Criteria, Lessons Learned from Y2K, Human Errors, and Why is Clinical Engineering a Profession.

## International Committee Report (Sam Miller)

ACCE has entered a contract for coordination of the INFRATECH Internet discussion group used by the World Health Organization. This will bring a net income of approximately \$5k this year. Al Jakniunas will serve as coordinator. ACCE has entered into a contract with the World Health Organization to develop an annotated curriculum outline (Workshop Syllabus) for a 1-week and a 2-week Advanced Clinical Engineering Workshop and to prepare an outline and concept of developing an ACEW textbook with full lectures. This will bring a net income of approximately \$9k this year. Jim Wear and Joe Dyro are co-editors of the Workshop Syllabus.

## Advocacy Committee Report (Marv Shepherd)

A Medical Errors White Paper developed by Marv Shepherd, George Johnston, and Al Jakniunas will be distributed via broadcast e-mail for review by the membership.

## Nominations Committee (Bob Morris)

Bob will be reviewing bylaws to ensure continuity of experience in the Board members.

- President: Jennifer Ott
- Interior Vice President: Elliott Sloane
- Exterior Vice President: Raymond Zambuto
- Secretary: Caroline Campbell
- Treasurer: Henry Montenegro
- Member at Large: Joe McClain

## Newsletter Report (Ted Cohen)

Five issues of the *ACCE News* were distributed this year. The *News* needs the support of the membership in the form of professionally written opinion pieces. To

facilitate remaining within budget the *News* staff will concentrate on securing advertisements and electronic distribution.

## New Issues

Elliot Sloane proposed initiation of an archive of Power Point slides of ACCE work that could be indexed over time. Tom Bauld stated that Jay Goldberg is the program coordinator at Marquette College of Technology Management, a program designed to prepare people to work in healthcare and industry. The College will be providing quarterly seminars to which ACCE may consider contributing. Joe Bronzino has retired from the Clinical Engineering Internship Program Directorship at UCONN/Trinity College. Frank Painter will assume leadership of the program. Antonio Hernandez on behalf of PAHO thanks ACCE for support in promoting clinical engineering in developing countries.



Say, Manny. It's about the bill.

All photographs in this issue of the *News* are courtesy of peripatetic paparazzi Frank R. Painter.

# On the Move and In the News

## ACCE Welcomes Baragano, Bronke, Dyro, Takenaga and Tan

The ACCE Board recently approved new members.

Jorge M. Baragano is a graduate of the Marquette School of Biomedical Engineering in Milwaukee and has been the director of operation and

president of J.M. Baragano Biomedical PM and Consulting, Inc. since 1991.

Jeffrey Bronke, AS, BS, MS, is a Service Representative Specialist with the Baystate Health System in  
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Springfield, MA. He has been involved in clinical engineering since 1995 and previous to that had experience both with software development and as an electronic technician for aircraft.

Frances M. Dyro, MD was granted associate membership. Dr. Dyro holds numerous academic, hospital, and professional positions. She is accredited by the American Board of Electrodiagnostic Medicine and the American Board of Psychiatry and Neurology.

Jorge Takenaga completed his graduate studies at Case Western Reserve University in Cleveland and currently is a doctoral candidate at the Engineering University of Tokyo.

Kok-Swang Tan, Ph.D. is a research scientist with the Medical Devices Bureau for Health Canada specializing in electromagnetic interference. Dr. Tan received the Outstanding Research Paper Award from AAMI in 1993.

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## Professor Painter at University of Connecticut

Frank R. Painter will be clinical director of the clinical engineering internship program at the University of Connecticut.

The Clinical Engineering Internship program (see *ACCE News*, Vol. 10, No. 2, p. 12) formerly under Dr. Joseph Bronzino's guidance has produced a constellation of brilliant clinical engineering stars.

Assistant Professor Painter says that he will do all in his power to maintain the fine tradition established by his predecessor.

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## Velázquez Heads ICC

Adriana Velázquez was elected Chairperson of the International Certification Commission (ICC).

## Campbell, David, McClain and Paperman Put ACCE and FCC on Same Wavelength

Caroline Campbell, Yadin David, Joseph McClain and David Paperman were instrumental in the most significant contribution ACCE members have made to date in influencing public policy. The four were members of an AHA expert panel on assignment of communications frequencies. On June 8, 2000, the FCC accepted the panel's recommendations.

In following the advice of knowledgeable clinical engineers, the FCC unanimously adopted a primary allocation of spectrum for the Wireless Medical Telemetry Service (WMTS) in three bands: 608-614 MHz, 1395-1400 MHz, and 1429-1432 MHz (the FCC's so-called Option 1). The ruling on assignment of frequencies avoids dangerous interference with medical telemetry and thus protects the health and safety of hospital patients.

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## David a Fellow

Yadin David, PE, CCE, first President of ACCE, has been promoted to Fellow status. Yadin is a prolific author of national and international acclaim. He has been the Director of Biomedical Engineering at Texas Children's Hospital/St. Luke's Episcopal Hospital since 1982 and has been the Director of the Center for TeleHealth since 1998.

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## Dyro PACE/ EMBS Featured Speaker

Joe Dyro has been selected to special seminar at the World Congress on Medical Physics and Biomedical Engineering in Chicago, July 24, 2000.

Dyro's presentation will be on Career Development and the Meaning of Life.

The Seminar is sponsored by PACE, the Professional Activities Council of the Institute of Electrical and Electronics Engineering (IEEE) and the Engineering in Medicine and Biology Society of the IEEE.

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## Painter Puts Clinical Engineering in World Congress 2000

Frank Painter is Chairman of the Clinical Engineering Track at the upcoming World Congress on Medical Physics and Biomedical Engineering, Chicago, July 23-25.

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## Wang Toasted in Dallas

Binseng Wang received a standing ovation at the conclusion of HealthTech 2000 in Dallas, Texas in May. The thunderous applause was testimony to his organizational skills and technical acumen that saw a highly successful clinical engineering track presented for the second consecutive year at HealthTech.

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## ERRATUM

*In the last issue of ACCE News, vol. 10, no. 3, page 9, in the article on the Dominican Republic Advanced Clinical Engineering Workshop, the workshop coordinator was incorrectly identified. The workshop coordinator was Frank Painter. Frank did a super job in helping to make the workshop a tremendous success. Sorry Frank.*

# ACCE News

THE VIEW FROM THE PENALTY BOX *David Harrington, davesbt@kersur.net*

Well, things are back to normal, the Stanley Cup and NBA title have been liberated from Texas, the Red Sox are playing just good enough to keep up interest and everyone is still complaining about the cost of medical care.

As I write this I am preparing for a trip to Romania, the first time out of the country in two years. The last time I was with Bob Morris and it has taken this long to recover. We are headed for the city of Craiova, which is about three hours by car west of Bucharest. This is a new city for me and the challenge of getting everything done in five days looms large. I will be installing 16 ICU beds and 15 telemetry channels in a 2000-bed hospital that currently has only two monitors. In addition to installing the equipment, we have to train the staff on its use and service. Also there will be the obligatory sessions with the local business groups, schools and physicians. All will be asking for help on some project or program. We should generate enough requests to keep us challenged for the next few years.

What is impressive and rewarding is what people can do if they are offered a little help. Some eight years ago I was heavily involved, along with Grant LaFleur, on moving medical equipment into another city in Romania. The city of Cluj is a college town located in Transylvania; Dracula's Castle is about an hour outside of the city. We brought the contents of a California hospital that closed and helped to install it and to train the staff. We worked with some excellent engineers and technicians there. As strange as it may seem two engineers who attended the first ACCE Advanced Clinical Engineering Workshop, in 1991 in Washington, DC, one from Columbia and the other from Honduras, went to school in Cluj on government scholarships and both married Romanian women. Now we are going into a new area, for us, but some of our colleagues from Cluj will be coming to help. One of the physicians with whom we worked closely has now opened a home health care program and was previously involved with an HMO. When we first met the Romanians were in awe of the US healthcare field and now are emulating it in their own country and helping others in their country progress.

If Grant and I did nothing else right in all the time we spent in Romania other than convincing the physicians and administrators that engineers are an essential part of modern healthcare we accomplished a lot. All the programs in progress involve engineers and most administrators in Romania will seek out the engineers to contribute to planning sessions. In that respect the Romanians are ahead of us here in the States.

I recently attended several product "fairs" put on by manufacturers of biomedical equipment and found that the same mistakes are still being made. Manufacturers are trying to put too much into their general use devices. I would be surprised if one in ten thousand users needed all of the features on one monitor on display. During the presentation, using a simulator as the patient, it took two people to do all the functions. What will happen when there is a critical patient connected instead of a simulator? We as engineers have to stop this type of device from coming into general use for reasons of cost and safety. Devices like these present too many potentials for errors that can effect patient care. We need simple, reliable devices that 50-year old people can use not 10-year olds. Stop and think how many times have you had to ask your kids how to do a function on Windows or program a VCR? We need to impress on the manufacturers one very basic principle, THINK SIMPLE. Some 30 years ago I was involved with the design of the most versatile pressure amplifier known to mankind. Unfortunately it had some 18 controls and was almost impossible to use, but it was an engineering marvel. We don't need any more of those engineering marvels.

In closing I ask each of you reading this piece to submit one short article to this newsletter over this next year, describing a major coup or a major oops. We all can learn from each other.



## Clinical Engineering for the Millennium

- June 15, 2000**                    **"Equipment Management Inclusion Criteria: An improved method for including equipment into the program and determining inspection frequency."**  
Binseng Wang, Sc.D., CCE and Al Levenson, B.Sc., MEDIQ/PRN Life Support Services, Inc  
Pennsauken, NJ 08110
- July 20, 2000**                    **"Lessons Learned from Y2K"**  
Steve Wexler, Chief Biomedical Engineer, Chief Network Office (10NB), VA Headquarters  
810 Vermont Avenue NW, Washington, DC 20420
- August 17, 2000**                **"Human Error as the Cause of Medical Device Failures"**  
Marvin Shepherd, PE, DEVTEQ, 2977 Ygnacio Valley Road, Walnut Creek, CA 94598-3535
- September 21, 2000**            **"Why Is Clinical Engineering a Profession"**  
Raymond P. Zambuto, CCE, FASHE, President, Technology in Medicine, Inc.  
115 Water Street, Milford, MA 01757
- October 19, 2000**                **"Investigating an Equipment Incident"**  
Joseph F. Dyro, Ph.D., President, Biomedical Resource Group, 21 Bob's Lane, Setauket, NY 11733
- November 16, 2000**              **"Value Center for Medical Service"**  
Walt Gasparovic, The Gasparovic Group, 1700 Rand Road, Suite 100, Palantine, IL 60074
- December 21, 2000**              **"Medicare/Medicaid Reimbursement Strategies"**  
Speaker to be announced later

*The course fee includes phone charges, master copy of handout materials and CEU certificates.  
Information: Call James O. Wear (501) 257-4175*

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## ACCE 2000 EDUCATION PROGRAM

Founded in 1991, the American College of Clinical Engineering (ACCE) is committed to enhancing the profession of clinical engineering. With members in the United States and abroad, the ACCE is the only professional society for clinical engineers.

For 2000, ACCE will offer an exciting educational program at a low-cost. By participating in an audio-teleconference, you will be able to obtain up-to-date materials without incurring any travel expense or time away from office. There will be a 1-hour class once a month and a different topic will be covered in each class.

Recognized experts in the field are selected to make up the faculty and the topics are the ones requested by our members. In a class the lecture will last for 45 minutes followed by a 15-minute question and answer period.

Classes will be conducted on the third Thursday of each month at 12:00 noon, EST. Continuing education units will be issued by the University of Arkansas for Medical Sciences. For participating in the audio teleconference you are required to use a phone with a mute button.

The ACCE audio-teleconference is an opportunity to get the clinical/biomedical engineering people in your area together. The teleconference can be a way to start a discussion with your colleagues. The cost can be shared by different institutions paying for each course or they can pool their funds for the series. A larger site might sponsor the course and charge single attendees from other sites.

# ACCE News

## Course Registration Complete form for each site

Name \_\_\_\_\_  
 Company/Hospital \_\_\_\_\_  
 Title \_\_\_\_\_ Mail Station \_\_\_\_\_  
 Mailing Address \_\_\_\_\_  
 \_\_\_\_\_  
 State \_\_\_\_\_ ZIP \_\_\_\_\_  
 Business Phone \_\_\_\_\_  
 FAX \_\_\_\_\_ e-mail \_\_\_\_\_

Please select course(s):

All Sessions	June	July	August
September	October	November	December

### Schedule of Fees

Courses \_\_\_\_\_ X \$125 = \_\_\_\_\_  
 Series Fee (All Sessions for \$875) = \_\_\_\_\_  
 Additional (over 4) attendees  
 \_\_\_\_\_ X \$10 = \_\_\_\_\_  
**Total** = \_\_\_\_\_

\_\_\_\_\_ Check                      \_\_\_\_\_ Purchase Order  
 \_\_\_\_\_ Credit Card              \_\_\_\_\_ Visa              \_\_\_\_\_ MasterCard

Account Name \_\_\_\_\_ Account # \_\_\_\_\_ Expiration Date \_\_\_\_\_

Make course registration check payable to: **American College of Clinical Engineering**

Purchase orders and credit cards will also be accepted. Visa and MasterCard will be accepted by providing the account name, account number and expiration date.

### Mail or Fax registration to:

ACCE Course Registration, 5104 Randolph Road, North Little Rock, AR 72116, FAX 501-771-1775

# ACCE News

## FCC Creates the Wireless Medical Telemetry Service

Larry Movshin and Timothy Cooney

At the FCC's June 8, 2000, meeting this morning, the FCC unanimously adopted a primary allocation of spectrum for the Wireless Medical Telemetry Service ("WMTS") in three bands: 608-614 MHz, 1395-1400 MHz, and 1429-1432 MHz. Hugh Van Tuyl of the FCC presented the item, explaining the current secondary status of wireless medical telemetry and the increasing instances of harmful interference.

Chairman William E. Kennard noted that this allocation was the result of pro-active spectrum management, and he expressly thanked the leadership of the FDA and the AHA in that regard. Commissioner Susan Ness expressed her support and related that her legal assistant, Mark Schneider, with whom the AHA Task Force met, had personal experience (because of his hospitalized, prematurely born daughter) with the importance of and need for interference-free medical telemetry. Commissioner Harold Furchtgott-Roth also expressly supported the allocation. He noted that this allocation goes against the trend of flexible allocations (where users can use a band for whatever purposes that comply with the technical rules and do not interfere with adjacent channels), but that the allocation to WMTS is an "appropriate exception" to the trend. He also warned prospective applicants that other spectrum bands likely will not be allocated for specific uses. Commissioners Michael Powell and Gloria Tristani also expressly supported the allocation.

The one area that got the most discussion was the "transition" from the 450-470 MHz band, which the FCC intends to establish by providing these new frequencies. First, the FCC announced its intention to lift the 450-460 MHz Freeze almost immediately. While the new spectrum will be available immediately upon the effective date of the new rules, it appears that manufacturers will have only 2 years to design new equipment; apparently, after that date, all newly authorized WMTS equipment must be designed to operate in the new bands. There does not appear to be any requirement to terminate the manufacturer of older designs. However, while users of existing equipment will be able to continue to operate forever in the old bands, they will be strongly encouraged to migrate, since the FCC has announced its intention to lift the freeze on Land Mobile use of the 460-470 MHz band three years from the effective date of this decision.

Julius Knapp did say at the press conference that the FCC would be coordinating with the FDA on this "immediate" lifting of the 450-460 MHz freeze. He said the FCC's survey of that band had only about 25 responses so that few medical telemetry users should be affected.

As we had previously learned, the Order will not designate the frequency coordinator; rather, the entity who will fulfill that role will be designated by the FCC's Wireless Telecommunications Bureau to act as database manager, rather than as a traditional coordinator, to help WMTS users know where frequencies are available and facilitate sharing among hospitals. The FCC will

issue a separate public notice establishing the criteria for selecting the WMTS "coordinator."

The FCC said that WMTS equipment would be authorized under certification procedures (not Declaration of Conformity procedures).

Federal government hospitals, including the VA, will be eligible to use the new WMTS bands. No mention was made of authorizing higher power in the 608-614 MHz band or of the potential for sharing with Itron and utility telemetry industry. In the latter regard, as discussed previously, the FCC Commissioners hinted that users should not expect any more industry-specific allocations.

## ACCE Board Meeting Highlights April 20, 2000

### President's Report (Jennifer Ott)

Jim Wear won the contract for secretariat duties including web site management. Al Jakniunas, George Johnston, and Marv Shepherd are developing an ACCE Medical Errors White Paper, a position statement on the issue. There will also be an ACCE booth at HealthTech.

### First Vice President's Report (Bryanne Patail)

The Board approved policy guidelines for project payments. A membership survey will be distributed at the AAMI meeting and then distributed by mail.

### Second Vice President's Report (Brian Porras)

AAMI has requested that ACCE co-sponsor a teleconference on the telemetry issues next fall. Wayne Morse of Morse Medical is no longer interested in a marketing relationship with ACCE.

### Secretary's Report (Caroline Campbell)

An e-mail was distributed to all current and past Board members requesting collection of all existing policies in a central repository. Early this summer, the Membership Directory for 2000 will be distributed to members electronically if e-mail addresses are provided. A hardcopy directory will be mailed to all others.

### Treasurer's Report (Henry Montenegro)

The Board approved the calendar year 2000 budget. ACCE tax status and need to retain a CPA was discussed. ACCE's current reserve is \$23k. We are currently ahead of budget with the newsletter and teleconference expenses our major expenses.

### CCE Committee's Report (Frank Painter)

The Board approved the Business Plan for Certification Program. Under this proposal, ACCE will

- Identify, with the assistance of an independent organization such as ECRI, an appropriate body of knowledge from a survey of the clinical engineering community,
- Develop an examination of that body of knowledge,
- Have the exam and the exam process verified by an external examination company for test quality,
- Recreate the Board of Examiners with by-laws & constitution,
- Publicize the value of certification & ask for applicants,

# ACCE News

➤ Process the renewals.

The considerable start-up costs may be offset by an Infratech contract.

## Membership Committee's Report (Jennifer Ott)

Kok-Swang Tan and Jeffrey Bronke are new Individual Members and Yadin David has been elevated to Fellow status.

## Education Committee's Report (Jim Wear)

All scheduled topics and speakers are confirmed for this year's Teleconference series except December's (Medicare/Medicaid reimbursements). After coordinating the teleconference for several consecutive years, Jim is looking for a replacement to run teleconferences next year. To facilitate that staffing transition, Jim is putting together guidelines for teleconferencing.

Joe Dyro and Jim Wear are co-editors of the ACEW Syllabus, which the World Health Organization has contracted with ACCE to develop.

## International Committee's Report (Jennifer Ott)

As part of the ACCE PAHO/Infratech contract, Al Jakniunas is updating the database and developing a keyword subject list to support searches of database.

## Newsletter Report (Joe Dyro)

Kathy Zaveron is Circulation Manager, Jay Hall is Advertising Manager, and Ted Cohen is Assistant Editor.



ACCE Board Ponders

## ACCE Board Meeting Highlights June 5, 2000

Highlights of the June 5, 2000 Board Meeting are contained in the report on the Annual Meeting, which can be found on page 5 of this newsletter.



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## Special Topic IEEE EMBS Third International Conference on Information Technology Applications in Biomedicine ITAB '00

In Collaboration with the Third Workshop of the  
International Telemedical Information Society – IT IS '00

### Technology Challenges and Global Opportunities in the New Millennium

Washington, DC November 9-10, 2000

Program Topics Include Regular and Invited Sessions,  
Posters, Round Table and Symposia

- Collaborative Technologies: Telemedicine, Telehealth and Home Care Delivery
- Web-Based Clinical and Health Information Systems including Electronic Patient Records
- Bioinformatics, Genomics, Biological Pathways and Systems Modeling
- High Performance Computing, Communications and Next Generation Internet Initiatives
- Public Health Informatics, Education and Training
- Multimedia, Virtual Reality, Visualization, Advanced Imaging and Robotics in Medicine
- Information Technology Issues: Standards, Security and Ethical and Legal Issues
- Digital Libraries, Data Mining and Distributed Computing

Deadline for paper submission is August 1, 2000

Please call or send e-mail to:

Swamy Laxminarayan, Conference Chair, New York Institute of Technology, Room 5200,  
Guttenburg Information Technology Center, 323 Martin Luther King Boulevard, Newark, NJ  
07102, USA, Tel: 201-228-7068/7021, Fax: 201-363-8986, email: s.n.laxminarayan@ieee.org

# ACCE News

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State of Ohio Board of Proprietary Schools Registration 94-05-13981

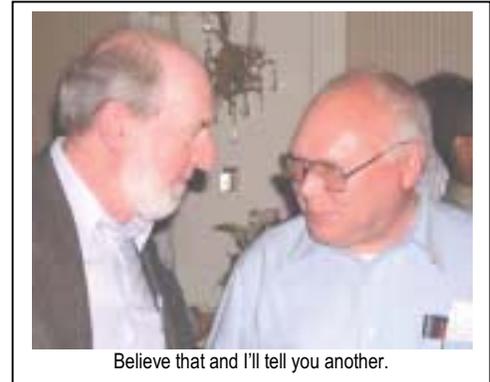
## Calendar of Events

- ACEW, Advanced Clinical Engineering Workshop, July 21-23, 2000, Chicago, IL. <http://www.wc2000.org>.
- World Congress on Medical Physics and Biomedical Engineering, July 23-28, 2000, Chicago, IL, <http://www.wc2000.org>.
- 2<sup>nd</sup> Annual Ciracet Seminar, Telemedicine, Teleradiology and PACS; can they deliver? Sept 7-8, San Juan, Puerto Rico. 787-848-0185, 787-284-1044 fax, [www.ciracet.com](http://www.ciracet.com).
- Advanced Clinical Engineering Workshop, September 15-22, 2000, Vilnius, Lithuania, Al Jakniunas (202) 865-6312.
- IEEE-EMBS Asia-Pacific Conference on Biomedical Engineering, Sept. 26-28, 2000, Hangzhou, China. [www.ee.cuhk.edu.hk/~APBME](http://www.ee.cuhk.edu.hk/~APBME).
- II ESO BME MP – Second European Symposium in BME and MP, Oct. 6-8, 2000, Patras, Greece. <http://bme.med.upatras.gr/symposium>.
- Third Annual BEACON Symposium, Oct. 27, 2000, Farmington, CT. 860-297-5364, [Jane.mussehl@mail.trincoll.edu](mailto:Jane.mussehl@mail.trincoll.edu).
- EPSM 2000 – Annual Medical Physics and Biomedical Engineering Conference, Nov. 5-9, 2000, Newcastle, Australia. <http://www.newcastle.edu.au/department/ph/epsm2000.html>.
- IEEE EMBS Third International Conference on Information Technology Applications in Biomedicine – ITAB '00, Nov. 9-10, 2000, Washington, DC, Swamy Laxminarayan, 201-228-7068/7021, 201-363-8986 fax, [s.n.laxminarayan@ieee.org](mailto:s.n.laxminarayan@ieee.org).
- II Congreso Latinoamericano de Ingenieria Biomédica, Mayo 23-27, 2001, La Habana, Cuba, [www.hab2001.sld.cu](http://www.hab2001.sld.cu).
- 10<sup>th</sup> International Conference on Biomedical Engineering, Dec. 6-9, 2000, Singapore. <http://www.nus.edu.sg/DB/icbme/>.
- AIMBE Tenth Annual Event, March 2-4, 2001, Washington, DC. 202-496-9660.
- 23<sup>rd</sup> Annual International Conf. of the IEEE Engineering in Medicine and Biology Society, Oct. 25-28, 2001. Istanbul, Turkey.

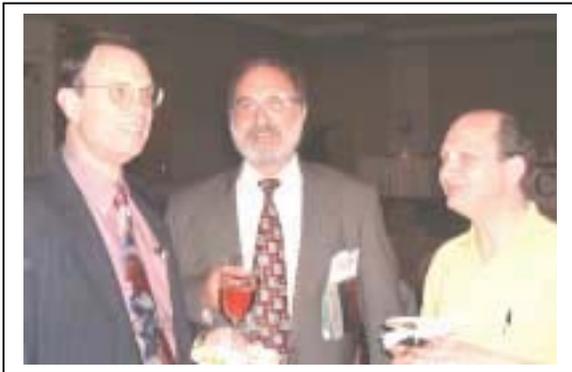
# ACCE News



ACCE Annual Meeting in San Jose



Believe that and I'll tell you another.



I heard that marvelous photographer, Frank Painter, is snapping some candid.

