

# ACCE News

Volume 3, Number 3 April, 1993

## *President's Message*

*Joseph F. Dyro, Ph.D., C.C.E.*

Your Board and Committee Chairs, Committee members and individual members have been hard at work on many programs and tasks. Since the last newsletter the Board met in January and in April. Many committee meetings were held throughout the year. Most of these meetings utilized teleconferencing.

Your President attended the American Institute of Medical and Biological Engineering (AIMBE) annual conference, March 7-9, 1993, to represent ACCE in the AIMBE Council of Societies. ACCE is one of eleven societies comprising the Council. The AIMBE annual conference focused on the role of biomedical engineering in health-care delivery. A great deal of discussion centered on the current health-care reform strategy being developed by Hillary Clinton. AIMBE is concerned that the positive aspects of health-care technology be emphasized, those aspects relating to the improvement in diagnostic capability and therapeutic intervention. Proper selection and use of technology was a recurrent theme and it is here that clinical engineering can make enormous contributions to cost containment. Clinical engineers are ideally poised to assist and guide hospitals in technology acquisition and utilization. To apprise the Administration of the profession of Clinical Engineering, a letter was sent to incoming Secretary of Health and Human Services, Donna Shalala. ACCE offered to help wherever possible especially in the area of medical device regulation and FDA-related issues.

Thanks to treasurer Ira Tackel's sound fiscal management, ACCE has a cash reserve of \$8,000 which will be used to fund membership programs. Unfortunately, the Internal Revenue Service ruled recently that ACCE is not qualified for 501(c)(3) status. This status would have allowed contributions to ACCE to be tax-deductible. A tax-exempt status is currently being requested, however, so that ACCE does not have to pay taxes. Tax deductible status would be available to divisions of ACCE whose activity qualifies for this status, for example, an educational foundation.

In order to be as responsive as possible to the needs of our membership, the Board endorsed two survey instruments, one to assess the desires of the members and the other to develop a membership profile database. Thanks go to vice-president Tom Bauld for developing these two surveys. These surveys have already been sent to you along with your ACCE lapel pins. Results of the needs survey will be presented to the general membership at the Annual Meeting in May. All members are urged to complete both surveys. While the Board does hear from individual

members throughout the course of the year and while this input gives the Board some sense for the direction ACCE ought to take, it is felt that the entire membership should be afforded a convenient way of expressing its opinions. Please help us to help you.

The Advocacy Committee developed and presented a comprehensive report listing goals and objectives. The main objective, according to chairman Denver Lodge, is to influence government, hospital administrators, and skilled health professionals in such a way that these groups have a clear understanding of the role of clinical engineering in the health-care environment. The Committee's proposal to establish an ACCE scholarship was endorsed by the Board. Through this scholarship program, ACCE will financially support members to present papers on clinical engineering given to audiences of hospital administrators or physicians. Details of this program will be announced at the Annual Meeting in Boston.

The second ACCE Advanced Clinical Engineering Workshop will begin on May 12 in Boston. Thanks to the efforts of Workshop President Yadin David and a supportive committee, over 40 clinical engineering leaders from over 20 countries will attend. Come to the Annual Meeting and meet our guests. This year's Workshop is directed toward participants from Eastern European and Latin American countries. Supporters of this important educational offering include AAMI, American International Health Alliance, ECRI, International Federation of Medical and Biological Engineering (IFMBE), Pan American Health Organization, United Nations, and World Health Organization. Individual clinical engineers and many medical device manufacturers helped to underwrite the costs of this program. Instructors are members of ACCE and the Board of the Clinical Engineering Division of the IFMBE. Your president thanks all for their support of this Workshop, regarded by many as a superb outreach to firmly establish the position of the clinical engineering profession throughout the world.

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## ANNUAL MEETING

The ACCE annual meeting will be held in Boston on May 11, 1993. The exact time and place of the meeting will be announced in the next ACCE newsletter.

### BOSTON ORGANIZING COMMITTEE

The Boston Organizing Committee is proud to announce a two and one-half day workshop for clinical engineers from May 12 to May 15 in Boston following the AAMI meeting. The workshop will be at the Wentworth Institute in Boston and will run from 1 to 5 PM on Wednesday, and from 9 to 5 PM on Thursday and Friday. The cost per half day for non ACCE members is \$50 or \$250 for the full program. ACCE members get a 50% discount on the program. Lodging is available at Wentworth for \$40 per night for the duration of the workshop. The teaching schedule is as follows: Wednesday – Introduction to Management followed by Financial Management, each two hours in length; Thursday – Technology Management (3 hours), Equipment Asset Management (3 hours), and Regulatory Compliance, QA and Risk Management (2 hours); Friday – Equipment Impact on Facility Design and Utilities (2 hours), Strategic and Equipment Planning (3 hours), and Laser/Surgical Instrumentation.

The faculty includes Michael Argentieri, ECRI, Tom Bauld, University of Michigan, Mark Brody, Baystate Medical Center, Joe Bronzio, Hartford Graduate Center, Yadin David, Texas Childrens, Joe Dyro, Stony Brook, Dave Harrington, NEMCH, Tom Judd, Kaiser Permanente, Robert Morris, University of Oregon, Frank Painter, NovaMed, Binseng Wang, MediqPRN, Jim Wear, VA. For an application, contact Tom Judd (404) 365-4240 or Jim Wear (501) 370-6618. Reservations must be made by May 1, 1993.

### TREASURER'S REPORT

*submitted by Ira Tackel*

Each member will soon receive an individually prepared dues statement reflecting the amount owed for the 1993 calendar year minus any credit remaining in your account from the 1992 calendar year. We are attempting to annualize dues on a calendar year basis and future renewal notices will be sent out in December for the following year. If you notice that any name or address corrections are necessary, please indicate them on the return portion of the statement.

A detailed financial statement for ACCE will be presented at the annual meeting during the AAMI meeting in May. Shortly following the May meeting, a full budget and fiscal report will be offered to the ACCE membership.

#### Editorial Staff

David Harrington, Editor	
Daniel Benson, Graphic Coordinator	
Joseph F. Dyro, PhD	Bob Morris
Mark Brody	Wayne Morse
Grant LaFleur	Ira S. Tackel

For those of you coming to Boston for the meeting there are several travel tips that may be of help. Boston can be an expensive city to visit if you are not careful. The trip from the airport can cost from 85¢ to \$10 depending upon the time of day and mode of travel. The least expensive method is the "T" which is great if you don't have a lot of bags. Simply get the bus outside the terminal which takes you to the "T" station, take the inbound train to Hay Market Station if you are staying at the Sheraton or the Hilton, than transfer to the Green Line, any train except Huntington Avenue and stay on it until the Auditorium Station, which is one block from the hotels. If you are staying at the Tremount House you follow the same procedure at the airport, but get off the Blue Line at the State Street Station and change for the Orange Line (the Forrest Hills Direction) to the Medical Center Station which puts you one block from the Tremount House. A listing of restaurants and local activities will be available at the meeting but here are a few activities: The Boston Pops will be playing at Symphony Hall on Friday, Saturday, Sunday, Tuesday, and Wednesday nights. Symphony Hall is only a short walk from the Sheraton and two subway stops from the Tremount. Some 11 live theater presentations will be going on, mostly near the Tremount House. Dog and horse racing will be taking place and is reachable from the Blue Line. The Celtics and Bruins will be into the playoffs and if they are still playing, the tickets will be hard to get. Unfortunately, the Red Sox will be out of town.

You should not rent a car. It will be very expensive and difficult to park for the convention – \$12 to \$20 per day is common. If you are interested in day trips, rent a car for the day. You may wish to purchase a 3 or 5 day transit pass for the subways as it might be cheaper over the course of the meeting, especially if you are at the Tremount House.

### NOMINATING COMMITTEE

As a reminder to all members, the nominating committee is looking for candidates for the position of Vice President (Tom Bauld becomes president in May) and the replacement of Gerald Goodman, Texas Childrens, and Phil Katz, Graduate Health Systems, who are barred by the bylaws from seeking another term as members at large. The nominating committee is chaired by Matt Barelich.

### WHAT'S NEW

The Newsletter is happy to report that George Johnson has escaped from the jungles of Guyana and is back in the United States. His articles in the **Journal of Clinical Engineering** on the life of a *Migrant Clinical Engineer* were interesting reading. Judging from phone conversations, the experiences in Guyana were similar to the China experiences with several twists. Welcome George back when you see him at the meeting.

Marv Shepherd's book, **Sheperd's System for Medical Device Incident Investigation and Reporting**, Quest Publishing, is receiving a lot of interest and is a valuable addition to any department's reference library.

Hewlett Packard and Acuson are in court over three patents, trying to determine who is infringing on who.

Senator Cohen, of Maine, has introduced legislation that would seek to eliminate the unnecessary duplication and proliferation of expensive medical technology and high cost services by creating a five year grant for hospitals to work cooperatively to share equipment. Hospitals will cooperate in this manner when the Army, Navy, and Air Force cooperate in a similar manner, look to your own first Senator Cohen.

In other Beltway Follies, Senator Wellstone, of Minnesota, Rep Conyers, of Michigan, and Rep MacDermott, of Washington, have introduced legislation that would establish a national health securities board that would be responsible for establishing payments for medical devices. The board would conduct negotiations with manufacturers and distributors to determine the going price of a device and all institutions receiving federal funds and Medicare/Medicaid would be able to purchase the device at that price.

Reports from our industry colleagues indicate that the MIB/MEDIX standard writing may have come to a halt. If this is the case, have many of us been too eager to invest in the computerized bedside and interconnections and commit additional hospital funds to the project by insisting that what we bought will be compatible with the standards?

In another report Kodak has announced that it has successfully used the DICOM 3.0 standard to transmit both black/white and color ultrasound images over an Ethernet network. DICOM stands for Digital Imaging and Communications in Medicine.

Yadin David has been the host to a series of doctors from Russia who are trying to learn more about health care technology.

## **THE POLITICALLY CORRECT ADVERTISEMENT**

Denver Lodge, Chair of the Advocacy Committee is requesting any member who spots an advertisement or news story that has requirements for a clinical engineer that do not meet the definition of a clinical engineer published by ACCE to inform Marv Shepherd who will respond with a correct definition to the person advertising or writing the article. Please fax the item to Marv at 510-945-7384.

## **DONATED EQUIPMENT STANDARD**

In Volume 3 number 2 of the ACCE NEWS, an article was published on donated equipment as an informational piece with no endorsement by ACCE. The Standard developed by TECH, Technical Exchange for Christian Healthcare has prompted the ACCE to investigate and possibly write its own version. President Dyro appointed Al Jakniunas, Howard University Hospital, as chairman of the commit-

tee and, with help of other members, the draft standard will be ready in the near future. See the letter to the editor from Enrico Nunziata on the subject.

## **CLINICAL ENGINEERING WEEK CELEBRATION** *submitted by Tom Bauld*

The William Beaumont Hospital of Royal Oak, Michigan, hosted the first annual Clinical Engineering and Biomedical Technology Week celebration in the state of Michigan. The event was organized and sponsored by the Michigan Society of Clinical Engineering and was scheduled as part of National Engineers week. The intent was to improve the public understanding and appreciation of the engineering profession and technology in healthcare.

The symposium was designed to provide technical information, clinical perspectives, engineering design concepts, and regulatory implications for a variety of devices and processes in the development, use, and management of medical devices. The week long event included service schools provided by manufacturers.

The culminating event was a four track symposium with sessions covering Device Research, Design and Development, Management of Healthcare Technology, and Investigational Devices and Collaborations. The organizing committee included Bryanne Patil, Dale Petty, Philip Bendick, Donovan Bakalyar, Jahan Azizi, Roger Zielinski, Steve Henning and Brian Hamilton. Over 150 people attended the sessions.

Editors note – There are numerous events throughout the year when Clinical Engineers participate in symposiums and perform other good deeds. Please send in summaries to the newsletter so that they can be publicized.

## **EXCERPTS FROM HHS RESEARCH REPORT**

Issue 160 of the HSS Agent for Health Care Policy and Research report has several items that are of interest to Clinical Engineers.

In a study in Massachusetts it was found that patients from managed health care had an average of 2 fewer days in an ICU with \$9000.00 less in cost than patients with fee for service health plans.

In another study the outcomes of 1,292 patients in Japanese ICU's and 5,030 patients in US ICU's were compared with a conclusion that the Japanese patients had better outcomes. The major flaw is that the data from Japan was from the years of 1987 to 1989 while the US data was from 1982. Anyone who has had any knowledge of ICU's in the US knows that the way medicine was practiced in 1982 was very different from the way it was practiced in 1989. One possible side effect of this study could be that the Clinton Advisory team will conclude that the US is over instrumented in the ICU's.

## OPEN POSITION

The Indian Health Service has a opening for a Chief Clinical Engineer to be the supervisory manager within the IHS nationwide program based in Rockville, MD. The position requires interaction with tribal councils, contractors and other agencies. Developing policies and procedures, technical standards, standardized reporting systems, tracking and database systems. The applicant should be able to develop training programs in a multitude of areas.

To apply you must submit Federal Form SF-171 making note of announcement 93-12 for the position GM-858-14 to the Indian Health Service, Headquarters Personnel Operations Branch, 5600 Fishers Lane, Room 4B-44, Rockville, Md. 20857.

## CONFERENCE ANNOUNCEMENTS

The **Thirteenth Southern Biomedical Engineering Conference** will be held on April 15th to 17th, 1994 at the Engineering Research Institute of the University of Washington in Washington, D.C. Suggested topics for the presentations include Computers in Medicine, Bioinstrumentation, and Clinical Engineering, just to name a few. Contact Jafar Vossoughi, Ph.D. at (202) 282-2388 for more information about the conference and about the submission of abstracts for presentation. First deadline for abstract submission is October 1, 1993.

The **Rio '94 World Congress on Medical Physics and Biomedical Engineering** will be held in Rio de Janeiro, Brazil, from the 21st to the 26th of August, 1994. Deadline for abstract submission for both oral and poster presentations is November 20, 1993. All presentations will be in English and topics include such diverse subjects as Artificial Organs, Health Information Systems, Clinical Engineering, Medical Imaging, and Technology Assessment. For more information, contact the General Secretariat in Brazil at +55-21-220-3386.

## EDITORIAL

The year 1993 has not been kind to many Clinical Engineers in that they have received an unreasonable amount of pressure from their administration to cut costs, increase services, and reduce staff. Some of our colleagues have lost their positions and are looking for employment while others have had their salaries cut. When we see that the government is looking for ways to cut health care costs and doesn't have any technical people on the committees, that equipment decisions are being made by the financial people with no technical input, and that hospitals keep adding to the public relations staff while cutting the technical staffs and direct patient care personnel, we have a major problem in the health care industry. Hardware manufacturers are feeling the pain also because equipment is not being turned over as often as in the past, service is deferred, and upgrades

not purchased. Why is technology blamed for the rising cost of health care? In 1993 we can get a cardiac output in about 30 seconds for less than \$2.00 inclusive, 20 years ago it would take over 4 hours to get a cardiac output. My first knee operation put me in a hospital bed for 6 weeks. Thirty years later, a more involved knee operation took 45 minutes and I was back playing hockey in 10 days. These are only 2 of many examples where technology advances, designed and developed by engineers, have allowed the physician to work faster and better, with better information.

The same physician who will not return our calls, will be the first to insist that an engineer accompanies them if they venture into the developing world on a medical mission. They know that the level of work that they do is directly related to the SCIENCE of engineering not just to the PRACTICE of medicine. We are very good at the SCIENCE and that has allowed the PRACTICE of medicine to advance. If we are not better supported by those practicing the science, the science may disappear.

While in a developing country, I had the opportunity to spend time with a physician who had spent some 30 years in the United States not only in private practice but as an assistant dean of a medical school and as the head of a department of surgery. He returned to his homeland to become the assistant minister of health. In talking with him I asked what he missed the most in the hospitals. Big Mac's were his most pressing loss, and then he replied, "Engineers". He went on further to state that "The quality of health care in a country is directly related to the quality of technical people to support that health care". He said that the physicians in that country were as good as any in the world, given their limited technology support. Several months later I was back in the country with a team of physicians from the Boston area, who were going to save everyone. But, when they started ordering test after test only to be told that those tests were not available, they were completely frustrated and wanted to leave, saying that medicine could not be practiced. What an eye opener to them, when the assistant minister of health talked with them and pointed out that the life expectancy of the country was 1 years less than ours. Also, their infant mortality rate was much better than ours. The Boston physicians were mystified. The Assistant Minister told the visiting physicians that if the level of technology in the United States was available in that country, the numbers would be even better. Basically we have been making the physicians look good for many years and now they are more than willing to let our profession die for the purposes of cost cutting. It is time for all of us to get to the physicians and form the strong alliance between the SCIENCE and PRACTICE in health care. - Please send your comments to the newsletter.



Please Note: The membership roster included with this edition of the ACCE newsletter is for the private use of its members and should not be shared with manufacturers or other organizations without the approval of the executive board.