



The newsletter for the
East Tennessee
Biomedical Association



ewsletter

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New Technologies:

Randy Bueckman

There are quite a few emerging technologies out there that do not seem to be hitting the headlines. In fact, one new technology was somewhat a surprise to a service technician in our hospital that works for a subsidiary of one of the companies listed below.

The first development is a wearable medical monitoring system. I know, telemetry immediately comes to mind. Well yes, but with a major twist. Wearable in this case means biomedical clothing with sensors woven into it. Also built into the suit are accelerometers that detect motion. A 10cm x 2cm x 2 mm built in module runs signal analysis and incorporates a flash memory card for record storage. The suit also contains a wireless transmitter. To find out more, follow the link to <http://www.eetimes.com/story/OEG20031008S0016> . Oh did I mention that Philips is the one developing the wearable monitor?

Next in the patient care arena we find a company that I am unfamiliar with but may be one to keep an eye on. Sensitron has designed a wireless monitoring system that has been installed and is being tested at Fort Detrick's Forward Digital Deployable medical Treatment Facility. This system uses Bluetooth and WiFi wireless technologies for communication to central monitoring systems around the world. Most of us do not need that range of monitoring capability in our hospitals, but across systems it may prove a useful technology. What I find most interesting about this system is that it only took an hour to set up the entire field hospital. For more on this technology go to

<http://theezine.net/articles/29/Wireless-Physiological-Monitoring-System-Demonstrated-At-Fort-Detricks-Forward-Digital-Deployable-Medical-Treatment-Facility-FDDMTF.html>

Finally, a system that has been used in an area far removed from healthcare, seems to be growing in popularity. Apparently used in mining for some time, leaky feeder systems or leaky cables are being used to cover large areas with very little expense. The idea is to use a cable that works like a garden hose with holes punched in it. Instead of water, RF energy is leaked through the holes. This provides the effect of multiple antennas over long distances. Verizon is attempting to use this technology to provide cellular phone service to users of the New York subway system. Miners are using this technology for communication as well as monitoring tunnel sensors. Articles about leaky cables can be found at

<http://www.newsfactor.com/perl/story/10206.html> .

**Volume X
Issue 4**

Don't forget the PDA giveaway at our December 9 Membership Meeting!

Update on the National Biomedical Association

Randy Bueckman

The national biomedical association is beginning to develop. A name was chosen for the organization. After a request for submission of names from across the country, the board narrowed the selection down to four possibilities. Those four were then voted on and the winner was Medical Equipment and Technology Association (META).

A 'T - shirt' was designed and sales began. The proceeds of the shirt sales were used to purchase a domain name and space on a web host. Unfortunately, like the ETBA attempts to obtain a domain name, META.org was already taken. So the website is <http://www.mymeta.org>

My responsibilities for the national organization have been narrowed to web page development. I guess they liked what they saw on the ETBA web site! The current home page was moved from the old site with additional opening comments by Mary Coker. If you want to see the main page that I am currently working on, you can go to <http://www.mymeta.org/testarea/frames.html> and check it out. Just for your information, most of the links on the new page are not functioning - yet.

Financial Report

Mack Webster

ETBA Financial Report

Mack Webster

Balance 3/1/2003 **7,816.70**

Inflows:

Corporate Membership	600.00
General membership	530.00
Financial Support (social)	398.00
ETBA Shirt Sale	30.00
Total Inflows	1558.00

Outflows:

Purchase of ETBA Shirts	308.95
Meals and Bev (Mar Mtg)	81.14
Newsletter Printing	88.41
Postage	144.60
Refund (Mbr Overpay)	5.00
Riverside Tavern (social)	934.20
Total Outflows	1562.30

Balance 9/10/2003 **7812.40**

Net Increase/Decrease **-4.30**

The 2003 ETBA officers:

Board Chairman - James Gregg
President - Charles Verzi
Vice President - Larry Morton
Secretary - William Teilhet
Treasurer - Mack Webster
Program Director - Scott Macfarland
Newsletter Editor - Randy Bueckman

This year the ETBA Board decided to spend a little extra money along with many other efforts (SPECIAL THANKS to all especially Scott Macfarland and Larry Morton for all their extra work) to boost membership. The September Social was our biggest effort and the results were good. The attendance to the Social was ok. We had 27 or 28 people there with a number of new faces. Besides that, we've been contacted by others who heard about it and had questions about ETBA.

The September Social was also our biggest financial investment with a total cost of \$934.20 paid to The Riverside Tavern. We had support from Mike Turner of Zoll Medical of \$200.00 and from Ken Tate and Marc Robinson both of \$99.00 each bringing the total cost down from the \$934.20 to \$536.20 (MUCH THANKS TO THEM). We also have commitments from Jeff Davis of Nellcor and Sean Silverstein of NexAir. We promised to give equivalent ETBA Corporate Membership to them in return for their monetary support.

The equivalent corporate membership will reflect some of the Sept Social costs to next year's budget in lost membership revenue but our hope is to overcome it with new membership.

First Protein Map

Randy Bueckman

Scientists have recently published the protein map of a fruit fly. We have heard over the past few years that genome sequencing was going to be the greatest thing for medical breakthroughs ever. Well as they completed their studies they found that it didn't help much to know what genes there were when they had no clue as to how they interact.

With the protein map, they have discovered 20,000 unique interactions of the 7,000 proteins found in a fruit fly. Because humans have many of the same proteins, a biotechnology company has begun to use this information to develop drugs to fight cancer, heart disease and diabetes. It is guesstimated that humans have about 250,000 proteins versus 30,000 genes.

Shortly after the protein map was published, another article came out indicating that along with the benefits of this interactive knowledge there was a dark side. This knowledge could also be used to develop new diseases never before seen. For this reason, it is likely little more will be published of how the different proteins talk to each other within the cell.

The September Social Was a Hit

Scott Macfarland

Here we are in late fall with cold weather, and the idea of a beautiful evening spent on the banks of the Tennessee River seems like a Christmas wish now. That is however just what those that attended our ETBA Social on September 25th were able to enjoy. The weather couldn't have been better and a more relaxing "meeting" I can't imagine. We had good turn out with a great deal of interest from areas outside our usual membership as well as

good member participation. It just goes to show what a little planning, perseverance, and free food can accomplish.

I would like to extend a hearty welcome to our newest members and I hope you'll find our organization to be as beneficial as I have.

I would also like to thank our sponsors: Jeff Davis of Nellcor, Marc Robinson and Ken Tate of GE, Sean Silverstein of

NexAir, and Mike Turner of Zoll. This event would not have been possible without their generous support.

Lastly, I want to note that while this social brought the reward of good food, nice weather and relaxing fellowship, I hope that all of our members will continue this same effort and enthusiasm in the future to make ETBA the best that it can be!

Prolific Officers

I just wanted to note that two ETBA officers have recently added to our great society - not to mention increased the prospect that Social Security may yet be around when I retire! Yes, Scott and Tracey recently had their first child, a boy by the name of Colton. Meanwhile, and not to be outdone, Larry and Cindy had their first grandchild, again, a boy by the name of Braydon. I am sure that if you were to ask, they could produce a few (hundred) pictures to share at the December meeting. (I know they have them because Mack and I have had to look at them for weeks now!)

Join us in congratulating Larry and Scott on their newest arrivals!

December Membership Meeting

Our next membership meeting will be held December 9, 2003 at 7:00 PM. Soft drinks, coffee and tea will be provided at the meeting.

At this meeting we will be electing officers for 2004. Think about serving your association in some capacity next year. To nominate someone, you will find a nomination form on the ETBA website by using the destination selection drop down box. Please make sure you verify that they are willing to serve in the capacity you are nominating them for.

There will also be a round-table discussion of current hospital issues. In the past these discussions have been very lively and of great benefit. Those who have attended this type of meeting in the past have suggested that at least one meeting a year be of this type!

If you remember at the beginning of the year you were told that a PDA (\$150.00 value) would be given away at the December meeting. Well, this is that meeting! Your name will be placed in the drawing once for each membership meeting you attended in 2003. The more you attended the better your chance of winning! You could be the one walking away with a new PDA!!

The meeting will be at the Holiday Inn at the Morristown exit. Basically take I-81 to Exit 8 and look for the Cracker Barrel. It is right across the street from there. There is a form on the website that will give you exact driving directions from any location. Just go to the membership meeting web page and fill in the Yahoo Maps form.

I hope to see you there!!!



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Inside:

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