

# AEMB National Newsletter

*Alpha Eta Mu Beta  
National Biomedical Engineering Honor Society*

## *2004-2006 National Officers*

### *National President*

Herbert Voigt, Ph.D.  
Boston University  
[hfv@bu.edu](mailto:hfv@bu.edu)

### *National Student President*

Heather Swanson  
Milwaukee School of  
Engineering  
[swansohe@msoe.edu](mailto:swansohe@msoe.edu)

### *National Student Vice President*

Teresa Murray  
Arizona State University  
[teresa.murray@asu.edu](mailto:teresa.murray@asu.edu)

### *National Student Treasurer*

Vivek Mukhatyar  
Boston University  
[vivmuk@bu.edu](mailto:vivmuk@bu.edu)

### *National Student Secretary*

Mary Coldorera  
Louisiana Tech University  
[Mec023@latech.edu](mailto:Mec023@latech.edu)

### *Executive Director*

Patricia I. Horner  
Biomedical Engineering Society  
[pat.horner@bmes.org](mailto:pat.horner@bmes.org)

### *Alpha Eta Mu Beta*

c/o Biomedical Engineering Society  
8401 Corporate Drive, Suite 225  
Landover, MD 20785-2224  
301-459-1999, fax 301-459-2444

## ● *Attention Officers*

With the year nearly to a close, we hope that chapters have had a fun and productive year. As you are looking to elect new officers for next year please note that at least the Chapter President needs to attend the AEMB Annual Business Meeting. The meeting will be held at the BMES Fall Meeting in Baltimore, September 28<sup>th</sup> to October 1<sup>st</sup>, 2005.

Since we know that the seniors are going to be busy with jobs or grad school next year, just a reminder to, after you have elected new officers, let us know who your new officers are so we can communicate with your chapter. The forms are available on the AEMB website <http://ahmb.org> using the "Chapter Status Form" and mail to: AEMB c/o BMES, 8401 Corporate Dr., Suite 225, Landover, MD, 20785-2224, (301)459-1999, (301)459-2444(fax), or email the information to [swansohe@msoe.edu](mailto:swansohe@msoe.edu).

Also **DUES ARE DUE!** If your chapter has not already done so, please send in the initiates form with their national dues. If you need a form, you can access it at our web site <http://ahmb.org>; click on the 'Forms' link or call 301-459-1999. Please note that chapters that have not paid their dues will not receive travel grants to attend the annual meeting this fall. Send the form and check to the AEMB c/o BMES address above.

**SPECIAL NOTE: DUES HAVE INCREASED FROM \$30 TO \$37.** The increase was to include the price of the Honor Cords given out for Graduation.

Already paid dues? **IT STILL ISN'T TOO LATE!!!** If you hurry you can still order the AEMB Honor Cords for graduating seniors. Each gold braided cord is \$7.00. Have your treasurer order them through AEMB c/o BMES (use telephone/fax and address that is listed above).

## *Dr. Voigt's Remarks at Our Second Annual AEMB Fundraising Dinner Oct 14, 2004*

On October 14<sup>th</sup> at the BMES 2004 Fall Meeting in Philadelphia, PA, AEMB held its Second Annual Fundraising Dinner. We were pleased to have our President Dr. Herbert F. Voigt address the attendees. These were his remarks:

“Hello and Welcome to the 2<sup>nd</sup> Alpha Eta Mu Beta Banquet. I am Herb Voigt, current President of Alpha Eta Mu Beta and I am delighted to welcome you. I want to thank-you for being here and wish to recognize Dr. Peter Katona, President of the Whitaker Foundation, Sue Van, President of the Coulter Foundation; and Pat Horner, Executive Director of Alpha Eta Mu Beta and the Biomedical Engineering Society.

All of us are very fortunate to be a part of this remarkable field and I know that each of us has and will traverse a unique path that brings us here for a brief moment tonight before we continue along our diverse life's trajectory. Some have had easy paths; some have been harder. I think it is sometimes instructive to examine a life in order to glimpse the depths of character displayed by some who have gone before us in order to appreciate this quality that has traditionally been one of the four qualities that characterize those in an Honor Society, such as Alpha Eta Mu Beta. The other being: Scholarship, Service and Leadership.

Character is that quality a person displays when the path is not particularly easy. I recently became aware of an extraordinary surgical technician, who was partially responsible for finding a surgical solution to heart malformations resulting from a syndrome known as “Tetralogy of Fallot.”

Vivian Thomas was a poor high-school graduate and carpenter who got a job sweeping the lab and kennels of Dr. Alfred Blalock at Vanderbilt University in the 1920s. Vivian was a very bright man with an interest in medicine; he soon became an indispensable surgical technician in Blalock's lab.

Blalock, a celebrated surgeon, moved to the Johns Hopkins Hospital, but one of the conditions for the move was that Vivian Thomas was to be given a job at Hopkins as well.

In the early 1940s, Dr. Helen Taussig was instrumental in getting Blalock interested in considering a surgical solution to this life threatening “Blue Baby” condition. Blalock and Vivian Thomas first created an animal model for the “Blue Baby” condition and then a surgical solution which has been adopted around the world.

This made an enormous impact and opened the entire field of cardiac surgery. There are now more than 1,000,000+ cardiac operations per year.

Taussig and Blalock received world recognition for their accomplishments while Vivian Thomas stayed in the shadows—because you see, Vivian was black, he was paid the wages of a janitorial staff person; he could not use the bathrooms designated for white people; he could not enter Hopkins through the front door. Blalock defended him in the fights he was forced to fight, but he never publicly shared the lime-light with him.

What remarkable courage Vivian showed when he tolerated the social conditions in which he found himself. Why did he continue to work after failing to receive the wages he deserved or the recognition he ought to have? Why—because the work was so important. Vivian showed remarkable character!

This story was recently recounted in a HBO made-for-TV movie entitled “Something the Lord Made” and recently received an Emmy Award. I find it to be an inspiration story—Hopkins recognized Vivian's contributions by awarding him an honorary doctorate in the 1970s. He became the Director of Laboratories and trained scores of cardiac surgeons. Thank-you.”

For more information about this inspirational story see:

<http://www.medicalarchives.jhmi.edu/page1.htm>

PBS also showed a movie “Partners of the Heart” which documents the relationship of Blalock and Thomas:

<http://www.pbs.org/wgbh/amex/partners/>

“Something the Lord Made”:

<http://us.imdb.com/title/tt0386792/>

<http://www.hbo.com/films/stlm/>

## *Introducing AEMB New National Officers*

At the 2004 annual meeting in Philadelphia new officers were elected by the meeting attendees.

The new national officers for will hold their position for two years (2004-2006).

The following board positions were filled:

- President: Dr. Herbert F. Voigt
- Student President: Heather Swanson
- Vice President: Teresa Murray
- Secretary: Mary Coldorera
- Treasurer: Vivek Mukhatyar

The elected officers are listed on the front page of the bulletin along with their e-mail addresses.

Special thanks to Dr. Herbert F. Voigt for graciously accepting re-election and Teresa Murray for accepting election of Student Vice President after her term as Student President for the 2002-2004 term.

Thanks again to our Executive Director Patricia I. Horner [pat.horner@bmes.org](mailto:pat.horner@bmes.org)

The number of ABET-accredited Biomedical Engineering programs is growing substantially. With this growth, we have an unparalleled opportunity to increase the number of AEMB chapters, to hopefully represent the outstanding students at each ABET-accredited program, improving our sphere of influence, and increasing awareness of the prestige of membership in Alpha Eta Mu Beta.

## *From the Student President*

I would like to thank the organization for the opportunity to hold this office. I plan to help the organization by making it easier for chapter involvement and activity.

As AEMB student president I wish to develop a system that will help chapters stay organized and keep track of chapter activity. This will most likely be a generic filing system with blank forms that will be sent to all the chapters which can be placed into a three ring binder. My hope is that with a clear outline of general activities, chapters will find it easier to plan and follow through with service and social activities as well as submission of activity reports.

One of the other goals for my term is to update the current webpage, or get a new webpage underway. This will hopefully increase participation and awareness of AEMB chapters.

Once again I would like to thank AEMB for this honor and responsibility. I hope to have a wonderful and productive term as president and I wish all of the seniors luck in their home stretch to graduation and in their future endeavors.

*Heather Swanson*

AEMB National Student President

### *The Four Pillars Challenge*

Alpha Eta Mu Beta, the National Biomedical Engineering Honor Society, invites its chapters to submit a project that speaks to one of the four pillars of the Honor Society: Scholarship, Leadership, Character and Service. Ideally, these qualities should be evident in the behavior of each of the Society's members. These projects will be judged by a subset of the faculty serving on the Advisory Council.

An example of such a project involving character is a report on the life of Vivian Thomas, a poor cardiac technician, who worked for Dr. Blalock at Vanderbilt and then at Johns Hopkins, under less than ideal conditions and who showed considerable character because the work he did was so important and made such a tremendous difference.

Another example project would examine the pros and cons of stem cell research. Consider the political and social arguments as well as the scientific promise such work shows.

The projects will be judged for their creativity, thoroughness, scholarship and quality of the report. Please send your submissions to Heather Swanson [swansohe@msoe.edu](mailto:swansohe@msoe.edu) and they will be passed along to the judging committee.

### *Ethics Session*

This year we are very excited at the BMES Fall Meeting we will be hosting an Ethics Discussion that will hopefully become our trademark at future BMES Fall meetings. Although the format for the 1.5 hour session is not yet set in stone, it is worth while considering some alternatives. A panel discussion following formal presentations was suggested, but we are open for suggestions and thoughts on the matter.

If you would like more information about this or are interested in participating or just have general ideas for the session please send an email with your questions or ideas to [swansohe@msoe.edu](mailto:swansohe@msoe.edu) and they will be forwarded on to the committee.

**PLEASE SEND US YOUR NEW OFFICERS NAMES AND E-MAIL ADDRESSES**

Alpha Eta Mu Beta Chapter (Year Chartered)  
Advisor, Title and E-mail Address  
Department Address  
Chapter President and E-mail Address  
Chapter Web Site

***Arizona State University 1994***

Eric Guilbeau, PhD  
Chair, Harrington Dept of Bioengineering  
Arizona State University  
P.O. Box 879709  
Tempe AZ 85287-9709  
480-965-3028  
eric.guilbeau@asu.edu  
Anusuya Das, Co-President  
Anusuya,das@asu.edu  
Terri Murray, Co-President  
teresa.murray@asu.edu  
<http://www.asu.edu/clubs/aemb>

***Boston University 1994***

Steve Colburn, PhD  
Professor  
Dept of Biomedical Engineering  
Boston University  
44 Cummington St  
Boston MA 02215  
617-353-2817  
hfv@bu.edu  
Dominic Fullenkamp, President  
dominic@bu.edu  
<http://people.bu.edu/aemb>

***Case Western Reserve University 2005\*\****

Mark Pagel, PhD  
Assistant Professor  
Dept. of Biomedical Engineering  
Case Western Reserve University  
Wickendon Bldg  
10900 Euclid Ave  
Cleveland, OH 44106  
216-368-8519  
mpagel@case.edu  
Sarah May, President  
Sem17@case.edu

***Johns Hopkins University 1996***

Aleksander Popel, PhD  
Professor, Dept of Biomedical Engineering  
Johns Hopkins University  
720 Rutland Ave  
Baltimore MD 21205  
410-955-6419  
apopel@bme.jhu.edu  
Jonathan Packer, President  
jonp@jhu.edu  
<http://www.bme.jhu.edu/~bmehs/>

***Louisiana Tech University 1979***

Steven A Jones, PhD  
Professor  
Biomedical Engineering  
Louisiana Tech University  
PO Box 10348  
Ruston LA 71272  
318-257-2288  
sajones@coes.latech.edu  
Issam Eid  
ine001@latech.edu  
<http://www.latech.edu/tech/engr/bme>

***Marquette University 1993***

Dean C. Jeutter, PhD, PE  
Professor  
Biomedical Engineering Dept  
Marquette University  
PO Box 1881  
Milwaukee WI 53201-1881  
414-288-5575  
jeutterd@marquette.edu  
Paul Bergl, President  
paul.bergl@mu.edu  
<http://www.eng.mu.edu/aemb>

***\*\*Application Pending***

***Milwaukee School of Engineering 1994***

Vincent R Canino, PhD  
Biomedical Engineering  
Milwaukee School of Engineering  
1025 N Broadway St  
Milwaukee WI 53202  
414-277-7331  
canino@msoe.edu  
Dawn M. Leyendecker, President  
leyended@msoe.edu  
<http://www.msoe.edu/eecs.be>

***Rensselaer Polytechnic Institute 2002***

Rena Bizios, PhD  
Professor, Dept of Biomedical Engineering  
Jonsson Engineering Center 7049  
Rensselaer Polytechnic Institute  
110 8<sup>th</sup> Street  
Troy NY 12180-3590  
518-276-6964  
bizios@rpi.edu  
Ming De Lin, President  
mingde.lin@duke.edu  
518-852-4437

***Texas A&M University 1998***

William A Hyman, PhD  
Professor & Chair  
Biomedical Engineering Program  
Texas A&M University  
233 Zachry Eng Ctr  
MS 3120  
College Station TX 77843-3120  
979-845-5532  
w-hyman@tamu.edu  
Valory Wangler, President  
val@tamu.edu  
<http://biomed.tamu.edu>

***Tulane University 1997***

J-K. Francis Suh, PhD  
Professor  
Dept of Biomedical Engineering  
Tulane University  
Lindy Boggs Center, Suite 500  
New Orleans LA 70118-5674  
504-865-5852  
fsuh@tulane.edu  
Heather Miller, President  
hmiller2@tulane.edu  
<http://www.bmen.tulane.edu>

***University of Illinois Chicago 2003***

John Hetling, PhD  
Dept of Bioengineering MIC 063  
University of Illinois at Chicago  
Science and Eng Offices  
851 S Morgan St., Rm 218  
Chicago IL 60607-7052  
312-996-2335  
jhetli1@uic.edu  
Kimberly Olson-Wheeler, President  
kolson6@uic.edu

***University of Iowa 1988***

Edwin Dove, PhD  
College of Engineering  
1402 Seamans Center  
University of Iowa  
Iowa City IA 52245  
319-335-5640  
edwin-dove@uiowa.edu  
Karsten Temme, Vice President  
kltemme@engineering.uiowa.edu  
<http://www.bme.engineering.uiowa.edu>

***University of Miami 2002***

Weiyong Gu, PhD  
Assoc Professor  
Dept of Biomedical Engineering  
PO Box 248294  
University of Miami  
Coral Gables FL 33124-0620  
305-284-5434  
wgu@miami.edu  
Mark Anderson, President  
m.anderson1@umiami.edu

***University of Pittsburgh 2003***

Sanjeev Shroff, PhD  
Dept of Biomedical Engineering  
749 Benedum Hall  
University of Pittsburgh  
Pittsburgh, PA 15261  
412-624-2095  
sshroff@pitt.edu  
Lauren Kokai, President  
LaurenKokai@hotmail.com

***University of Wisconsin Madison 2005\*\****

Willis Tompkins, PhD  
Professor  
Dept of Biomed Eng  
University of Wisconsin-Madison  
2130 Engineering Ctrs Bldg  
1550 Engineering Dr  
Madison, WI 53706  
608-263-1581  
tompkins@enr.wisc.edu  
Andrew L. Wentland, President  
alwentland@wisc.edu

***Vanderbilt University 1998***

Jerry C Collins, PhD  
Res Assoc Professor  
Dept of Biomedical Engineering  
Vanderbilt University  
5824 Stevenson Center

Nashville TN 37235  
615-322-3521  
jerry.c.collins@vanderbilt.edu

***Washington University St Louis 2003***

Salvatore P Sutera, PhD, PE  
Spencer T. Olin Professor  
Dept of Biomedical Engineering  
Campus Box 1097  
One Brookings Drive  
St. Louis MO 63130-4899  
314-935-6164  
sps@biomed.wustl.edu  
Stuart P Rosenberg, President  
stuart.rosenberg@wustl.edu  
http://biomed.wustl.edu

***\*\*Application Pending***

***We Need YOUR Help  
To Update Our Contact List To  
Enable Effective Communication This Year***

**Please send us your list of 2005-2006 Officers.  
Include their name, title and e-mail address.**

**Also, if any of your school information listed  
above is inaccurate, please send us a  
correction.**

**Please send your updates to [swansohe@msoe.edu](mailto:swansohe@msoe.edu)  
AND to [Diane.Solomon@bmes.org](mailto:Diane.Solomon@bmes.org)**

**Or, you may mail or fax the information to  
Alpha Eta Mu Beta  
c/o Biomedical Engineering Society  
8401 Corporate Drive, Suite 225  
Landover, MD 20785-2224  
Phone 301-459-1999; Fax 301-459-2444**

**2004 AEMB Annual Meeting Minutes**  
**14 October 2004**  
**(Unapproved)**

These minutes are from the 2004 AEMB Annual Meeting. They are not approved yet.

**1. Biomedical Engineering Departments Growth**

- Currently 31 ABET accredited Biomedical Engineering Departments
- Currently 16 Alpha Eta Mu Beta Chapters

**2. Fundraisers**

**3. Activity of Student Chapters**

- Student chapters need to become more active
- Chapters can plan activities with other honor societies and BMES chapter.

**4. AEMB Graduation Honor Cords**

- Student chapters will start incorporating cost into induction dues
- Cords cost seven dollars
- National AEMB dues are thirty dollars
- New induction dues with fee increase will be thirty-seven dollars.
- Already inducted members will need to pay seven dollars extra.
- Make sure Nick gets in touch with Pat Horner to get cords in time.

**5. New Member Admission Standards**

- GPA vs. top X % of students
- Graduate Student and Faculty Admissions Criteria
  - Committee formed:
    - Mary Caldorera, Louisiana Tech University
    - Kelli Huckaby, Louisiana Tech University
    - Terri Murray, Arizona State University
    - Anna Web, Louisiana Tech University
  - Students can elect local honorary faculty
  - Report by May about faculty and graduate students to be inducted

**6. AEMB Website**

- Officers need to make sure the website accurately reflects local and national constitutional by laws.
- Official site may be hosted by BMES website

**7. Student Chapter Dues**

- Dues need to be collected during a time frame: February- end of May

**8. Ethics Committee for BMES (proposed by Jerry Collins)**

- Jerry Collins proposes that AEMB nominates several students to serve on ethics committee.
- Yearly project culminating at annual BMES meeting in the form of a workshop, renowned speaker from industry or academics.
- Possible topic:
  - High cost of medical technology.
  - EWH – takes old medical equipment and refurbishes it for third world countries, train technicians/ doctors in language.
  - Amy Smith from MIT – getting current technology to clinics in third world countries.



***2004 AEMB Annual Meeting Minutes***  
***14 October 2004***  
***(Unapproved)***

- Competition – chapter awards (suggested by Johns Hopkins)
- Terri Murry proposed that new student groups at schools not yet in AEMB need to propose ideas to promote ethics, awards, etc.
- Pat Horner proposed that we should initiate a session at BMES focused on ethics, etc, present awards.
- Motion to establish meritorious chapter award (Herb), two votes to abstain
- AEMB Honor Society needs to work with BMES not in competition with them.
- Local chapters can send in brief summaries of activities and projects.
- Development history of local departments
- Leadership must be delegated
- Motion to establish annual session on ethics at BMES conference (unanimous vote)
- Want to establish student members of ethics committee.
  - ASU
  - LT Ringleader
  - Will as local chapters when vision of committee is clear.

**9. 2005 BMES conference will be in Baltimore**

- AEMB 2005 Annual Meeting will be held at BMES conference (unanimous vote)
- AEMB banquet will need to be moved to a luncheon format because of reception at aquarium.

**10. Officer Elections**

- President – Heather Swanson from Milwaukee School of Engineering
- Vice President – Terri Murray from Arizona State University
- Secretary – Mary Caldorera from Louisiana Tech University
- Treasure – Vivek Mukhatyar from Boston University

***Chapter Members:***

***We need your contribution here for our next issue of the AEMB Newsletter!***

Share a brief account of one of your service or social events, a successful fundraising activity, department news, or how you keep track of alumni members. Please send a photo with your article if you have one to share.

Send your articles to [swansohe@msoe.edu](mailto:swansohe@msoe.edu)