



Biomedical Engineering Division

Fall 2001

A Message from the Chair

John Gassert

Milwaukee School of Engineering

In 1999, as the chairman of the Biomedical Engineering Division (BED), Willis Tompkins asked; "What is it that we should be teaching to every undergraduate student that will clearly provide the foundation of knowledge necessary to have a successful career?" He pointed to the National Academy of Engineering claim that Health Care Technologies was among its twenty "Greatest Engineering Accomplishments of the Twentieth Century." (<http://www.fda.gov/cdrh/ost/trends/TOC.html>) He correctly wrote "as educators, we have the challenge to select from all these advances of the 20th century in essentially every discipline of engineering to put together the core curriculum for biomedical engineering." Last year, Jack Winter's primary agenda was to make the ASEE BED a twelve-month society, i.e., he wanted members involved throughout the year. I believe both are correct. We have the challenge of developing appropriate curricula and encouraging continued involvement by BED members. I would suggest that all of us look at the "Future Trends In Medical Device Technologies: The Results Of An Expert's Survey" that was commissioned by the Center for Devices and Radiological Health. (<http://www.fda.gov/cdrh/ost/trends/toc.html>.) I believe that these future trends are being addressed by the sessions that have been presented for the past two years and those scheduled for next year's conference in Montreal. I

Chair continued on page 3

INSIDE THIS ISSUE

- 1 A Message From the Chair
- 1 ASEE BED Conference Call for Papers
- 2 2001 Theo C. Pilkington Award Winner
- 3 Call for nominations for 2001 Pilkington Award
- 4 Officers 2001-2002

Call for Papers

ASEE Annual Conference

Vive Le Engineer!

Montréal, Quebec, Canada

June 16-19, 2002

ASEE is heading north of the border for its 2002 Annual Conference to one of the most exciting cities in North America, Montréal! Romantic and cosmopolitan, Montréal calls to those with a love of magnificent cuisine, exceptional wine and old world architecture. It is the perfect location for those who insist on a meeting of equal parts sophistication, flair and joie de vivre.

<http://www.asee.org/conferences/annual2002/>

The Biomedical Engineering (BIO) Division asks Biomedical Engineers in academia and industry from across the world to consider submitting a paper that focuses on education for the annual 2002 ASEE Conference and Exposition in Montreal, Quebec on June 16-19. Six of the following ten topics listed below will be included in the Biomedical Engineering Division of the 2002 conference program, depending in part on the papers submitted:

- Biomedical Engineering Education Outside the U.S. including Study Abroad Programs.
- Assessment of Biomedical Engineering Educational Programs.
- Industry Participation in Biomedical Engineering Education.
- Curriculum Development in Biomedical Engineering.
- Biomedical Engineering Laboratories, Virtual versus Traditional Approaches.
- Problems Facing New Biomedical Engineering Programs.
- Careers for Biomedical Engineering Graduates (The value of internships and where do they go after graduation).
- Clinical Exposure in Biomedical Engineering Education.
- Innovative Educational Materials and Textbooks in Biomedical Engineering.
- Societal Issues and Ethics in Biomedical Engineering Education.

Call continued on page 2

2001 Pilkington Award

Contributed by Mary C. Verstraete

BED 2001 Awards Chair

The Theo C. Pilkington Outstanding Educator Award recognizes the contribution of Theo C. Pilkington as a true pioneer in Biomedical Engineering who contributed significantly to the advancement of Biomedical Engineering Education. The Theo C. Pilkington Outstanding Educator Award is conferred by the Biomedical Engineering Division (BED) for significant contributions not only to ASEE, but also to biomedical engineering and education profession as evidenced by the development of successful graduate level programs, curricula, textbooks and professional papers and by membership and activity in ASEE BED and other biomedical engineering organizations. The award consists of \$300 and a commemorative plaque.

The 2001 Theo C. Pilkington Outstanding Educator Award from the ASEE Biomedical Engineering Division was awarded to Dr. Richard T. Hart of Tulane University. Dr. Hart was nominated for this award by the faculty in the Department of Biomedical Engineering at Tulane University. Dr. Hart has played a significant role in the development of the undergraduate curriculum at Tulane. He has advised numerous students, both undergraduate and graduate, and maintained an active research program at the same time. Letters of recommendation spoke highly of Dr. Hart's commitment to excellence in all academic arenas. His past and present activities speak highly of his commitment to Biomedical Engineering Education at all levels.

This year's recipient was honored with a commemorative plaque and a check for \$300.00 at The Biomedical Engineering Division's annual Awards dinner during the ASEE Meeting in Albuquerque on June 25, 2001.

Congratulations Rich on your outstanding accomplishments!

For those of you wishing to be authors, a 200-300 word abstract will be required by November 1, 2001 and, if accepted, the final paper will be due by January 15th. Abstracts will be judged based on the level of innovation, technical merit, demonstrated outcomes, and relevance to biomedical engineering, science and technology education.

All the abstracts and papers must be submitted via the WEB via the main ASEE site at <http://www.asee.org>

Please consider submitting a paper for the 2002 ASEE Annual Conference.

BIO Program Chair:

Gerard L. Coté, Ph.D., P.E.,
Biomedical Engineering Program
Texas A&M University
233 Zachry Bldg.
College Station, TX
77843-3120
cote@tamu.edu



The 2001 Theo C. Pilkington Outstanding Educator Award was awarded to Richard Hart from Tulane University. The presentation was made by BED Awards Chair Mary Verstraete (left) at the 2001 ASEE Conference in Albuquerque. Photo courtesy of K.C. Dee.

believe that an undergraduate biomedical engineering education forms a cornerstone for addressing the challenges of future technologies in healthcare.

Our annual conference in Montreal will have a number of excellent sessions that I believe will address these topics. Gerald Coté (cote@tamu.edu) from Texas A&M University will be this year's BED Program Chairman. Sessions proposed for the conference include curriculum assessment, industry participation, curriculum development, laboratories, careers in biomedical, BE outside the United States, BE clinical experience, innovative materials, and social and ethical issues in biomedical engineering education. I encourage all of you, as members of BED, to participate in the 2002 conference. Last year there were thirty-six peer-reviewed papers presented in six sessions with over fifty papers submitted for review. The call for papers has gone out and I would encourage you to examine the topics and consider submitting a paper. I would further encourage those of you whose primary employment is in the biomedical/healthcare industry to submit papers that challenge the current and future biomedical engineering programs.

In addition to the technical sessions, all of you are invited to participate in the Monday evening get-together and awards ceremony. The Theo C. Pilkington Outstanding Educator Award is conferred on one of our colleagues as recognition for achievements in biomedical engineering education at this event. There is also a BE Program Chair's luncheon on Monday and the BED business meeting on Tuesday. All of you are invited and encouraged to attend. Your camaraderie and input are important.

With the growing number of biomedical engineering undergraduate programs expected to almost double over the next few years, from the current twenty-two accredited programs to approximately fifty programs, the Annual ASEE Conference is an invaluable forum for guiding the future of biomedical engineering education.

John Gassert
ASEE-BED Chair

Call for Nominations

The Theo C. Pilkington Outstanding Educator Award is given each year in recognition of exceptional contribution to biomedical engineering education and teaching. Nominations are due by December 1, and should include a cover letter from the nominator that outlines the nominee's contribution, the nominee's CV, and three letters of support (to be collected by the nominator and attached to the nomination materials). The award is presented during the ASEE-BED annual Awards Banquet during the June conference.

Send nominations to the 2002 Awards Chairman:
John Enderle, Program Director for Biomedical Engineering, University of Connecticut, Room 223 B, 260 Glenbrook Road, U-157, Storrs, CT 06269-2157;
jenderle@bme.uconn.edu.

Newsletter

If you have suggestions or submissions for the ASEE Biomedical Engineering Division newsletter, please submit them to:

Joseph M. Reinhardt
Biomedical Engineering
University of Iowa
Iowa City, IA 52242

319-335-5634
319-335-5631 (FAX)
joe-reinhardt@uiowa.edu

Thanks to everyone who had contributions and suggestions on content for this issue.

ASEE BED 2001–2002 Officers

CHAIR (2002): John Gassert, Biomedical Engineering Program, Milwaukee School of Eng., 1025 N. Broadway St., Milwaukee WI 53202-3109, 414-277-7167, fax 414-277-7465; gassert@msoe.edu

CHAIR-ELECT and PROGRAM CHAIR (2002): Gerard Coté, Biomedical Engineering Program, Texas A&M University, 233 Zachry Engineering Center, Mail Stop 3120, College Station TX 77843, 979-845-4196, fax 979-847-9005; cote@tamu.edu

PROGRAM CHAIR-ELECT (2003): Ron Fournier, Bioengineering Department, University of Toledo, Toledo OH, 419-530-8035, fax 419-530-8076; rfournie@eng.utoledo.edu

PROGRAM CHAIR-ELECT (2004): Mary Verstraete, Department of Biomedical Engineering, 301-H Olson Research Center, University of Akron, Akron OH 44325, 330-972-7691; mary@brain.biomed.uakron.edu

VICE-CHAIR, CAREER DEVELOPMENT AND AWARDS: John Enderle, Program Director for Biomedical Engineering, University of Connecticut, Room 223 B, 260 Glenbrook Road, U-157, Storrs, CT 06269-2157, 860-486-5521, fax 860-486-2447; jenderle@bme.uconn.edu

VICE-CHAIR, CURRIC. DEVELOPMENT: Jack Wasserman, Department of Mechanical and Aerospace Engineering and Engineering Science, University of Tennessee, 313 Perkins Hall, Knoxville, TN 37966-2030, 865-974-7678, fax 865-974-7663; Jack-Wasserman@utk.edu

VICE-CHAIR, PROF. DEVELOPMENT: Lisa Milkowski, Department of Electrical Engineering and Computer Science, Milwaukee School of Engineering, 1025 N. Broadway, Milwaukee, WI 53202, 414-277-7394, fax 414-277-7465, milkowsk@msoe.edu

SECRETARY-TREASURER: John W. Steadman, Department of Electrical Engineering, University of Wyoming, Box 3295, University Station, Laramie WY 82071, 307-766-2240; jwstead@uwyo.edu

MEMBER-AT-LARGE (Term Ends 2002): Edwin L. Dove, Biomedical Engineering, College of Engineering, University of Iowa, Iowa City IA 52242, 319-335-5635, fax 319-335-5631; Edwin-Dove@uiowa.edu

MEMBER-AT-LARGE (TERM ENDS 2003): Michele Grimm, Wayne State University, Bioengineering Center, 818 W. Hancock, Detroit MI 48202, 313-577-8395, fax 313-577-8333; grimm@rb.eng.wayne.edu

MEMBER-AT-LARGE (TERM ENDS 2004): Paul H. King, Vanderbilt University, VU Station B 351631, Nashville TN 37235-1631, 615-322-2201, fax 615-343-7919; Paul.H.King@Vanderbilt.edu

NEWSLETTER EDITOR: Joseph Reinhardt, Biomedical Engineering, College of Engineering, University of Iowa, Iowa City IA 52242, 319-335-5634, fax 319-335-5631; Joe-Reinhardt@uiowa.edu

PAST CHAIR & CHAIR OF NOMINATING COMMITTEE: Jack Winters, Department of Biomedical Engineering, Marquette University, P.O. Box 1881, Milwaukee WI 53201-1881, 414-288-3375; jack.winters@marquette.edu

▪

Joseph M. Reinhardt
Newsletter Editor
Biomedical Engineering
University of Iowa
Iowa City, IA 52242

ADDRESS CORRECTION REQUESTED