Join a Boston Tea Party!

Register NOW!

for the

Summer Bioengineering Conference 2014

in conjunction with the

World Congress of Biomechanics 2014

Boston, MA

John B. Hynes Veterans Memorial Convention Center

July 6-11, 2014

Online Registration Deadline: June 27, 2014

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MESSAGE FROM THE CHAIR

It has been an interesting year, and I am deeply honored to have served you, my friends and colleagues, the members of the Bioengineering Division (BED) community over the past year. As you read this, you are no doubt preparing for the Seventh World Congress of Biomechanics meeting that will be held in Boston July 6-11, 2014 (see http://wcb2014.com/). This is the hallmark meeting of the biomechanics community that occurs once every four years, and brings colleagues and societies together from all around the World. We will look forward to welcoming to the US and seeing our friends from the Australian and New Zealand Society of Biomechanics, the Canadian Society for Biomechanics, the European Society of Biomechanics, the German Society of Biomechanics, the Global Enterprise for MicroMechanics and Molecular Medicine, and the International Society of Biomechanics. The WCB 2014 is held in conjunction with and support from all of these societies. Even though we are not holding our usual summer conference this year, BED members have been hard at work helping to organizing WCB 2014. This includes overall Congress Chair, Dr. Roger Kamm, and Technical Program Chair, Dr. Jay Humphrey, among several others who have been part of our BED community over the years. Though we will not hold a BED banquet this summer, we will hold an open BED Executive Committee meeting and our usual Technical Committee meetings in Boston, and we hope to see you there. Additionally, elements familiar to us - including the 2014 Lissner (Dr. Kyriacos Athanasiou), Mow (Dr. Chris Jacobs) and Fung (Dr. David Merryman) Awardee lectures, and student paper competitions - will be held at WCB 2014. Though not sponsored by our parent society, we are very proud that the WCB 2014 organizers will be putting on a very special event highlighted by a collection of our musically-talented colleagues, BEDrock! This event is sure to attract hundreds of international and domestic colleagues alike, from all of the biomechanics communities represented at WCB 2014, and you will not want to miss this fun and unique networking opportunity.

As we look to a challenging future, I am pleased to be turning over the BED Chair position to Dr. Matt Gounis, who has served us all with dedication as Secretary and Vice-Chair for the past year.

I hope you enjoy this newsletter, which contains reports from various committees and BED leaders, and I look forward to seeing you at WCB 2014 in Boston!

David Vorp, Chair
ASME Bioengineering Division
2013-2014
# Message from the Past Chair

## Editor’s Note

The ASME BED is run by volunteers! Join a technical committee meeting (see above). Thanks to all who contributed articles and information to this edition! Feel free to send comments or suggestions to me.

Ken Fischer  
Editor, BED Newsletter  
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University of Kansas  
1530 W 15th St, Rm 3138  
Lawrence, KS 66045-7609  
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**BED Committee Meeting Schedule, Sunday, July 6th**

<table>
<thead>
<tr>
<th>Committee</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>BED Executive Committee*</td>
<td>Sheraton, Beacon A, 3rd Flr</td>
<td>7:00-9:30 am</td>
</tr>
<tr>
<td>Conference Oversight &amp; Organizing*</td>
<td>Hynes Conv Ctr, Room 102</td>
<td>9:30-10:20 am</td>
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<tr>
<td>Cell and Tissue Engineering</td>
<td>Sheraton, Beacon A, 3rd Flr</td>
<td>10:30-11:20 am</td>
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<tr>
<td>New Directions</td>
<td>Hynes Conv Ctr, Room 102</td>
<td>10:30-11:20 am</td>
</tr>
<tr>
<td>Design Dynamics and Rehab</td>
<td>Sheraton, Beacon C, 3rd Flr</td>
<td>10:30-11:20 am</td>
</tr>
<tr>
<td>Fluid Mechanics</td>
<td>Hynes Conv Ctr, Room 102</td>
<td>11:30-12:20 am</td>
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<tr>
<td>Education</td>
<td>Sheraton, Beacon A, 3rd Flr</td>
<td>11:30-12:20 am</td>
</tr>
<tr>
<td>Honors</td>
<td>Sheraton, Beacon C, 3rd Flr</td>
<td>11:30-12:20 am</td>
</tr>
<tr>
<td>Solid Mechanics</td>
<td>Hynes Conv Ctr, Room 104</td>
<td>12:30-1:20 am</td>
</tr>
<tr>
<td>Industry Advisory</td>
<td>Hynes Conv Ctr, Room 102</td>
<td>12:30-1:20 am</td>
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<tr>
<td>Student Advisory</td>
<td>TBA</td>
<td>TBA</td>
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<tr>
<td>BED open executive committee</td>
<td>Hynes Conv Ctr, Room 102</td>
<td>1:30-2:20 am</td>
</tr>
<tr>
<td>Biotransport</td>
<td>Hynes Conv Ctr, Room 105</td>
<td>1:00-1:50***</td>
</tr>
</tbody>
</table>

*Closed Meetings  
All meeting locations and times may be subject to change. Check the final WCB program information on site.

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As SBC 2014 is being held in conjunction with the 7th World Congress of Biomechanics (WCB 2014) in Boston, we have the opportunity to explore this city that is rich in history and significance to all Americans. While WCB 2014 may not be at the resort areas common for SBC meetings, it does offer incredible opportunities to interact with biomechanics investigators from around the globe. Check out the highlights of the excellent program on the following pages. Head to Boston early for a very memorable week commemorating the American Independence Day. Save yourself some money and time by registering online for WCB 2014 by June 27.
For 2014, the Summer Bioengineering Conference is being held in conjunction with the quadrennial World Congress of Biomechanics. This major international conference will take place from July 6 – 11 in Boston, MA. Maybe it is a stretch to consider Boston to be a “beach” site, but the water is close by and day trips to Cape Cod’s beaches are definitely a possibility!

This combined conference will include a 5½ days of scientific presentations - including over 1800 podium presentations, 12 plenary lectures, and over 1500 posters. It is anticipated that attendance will reach over 3500 in number! While the World Congress may not have the intimate atmosphere of a typical Summer Bioengineering Conference, we have worked hard to include key elements that our members look forward to, including:

- A plenary presentation by Kerry Athanasiou, 2014 Lissner Medalist
- Keynote presentations by the Christopher R. Jacobs, 2014 Mow Medalist, and W. David Merryman, 2014 Fung Medalist
- The Student Paper Competition, with posters at the BS and MS level and podium presentations at the PhD level
- Rehabilitation and Assistive Devices Undergraduate Design Competition
- Grand Challenge to Predict In Vivo Knee Loads
- Recognition of ASME medal winners and student paper competition winners at Wednesday night’s banquet
- The BEDRock concert (see ad p. 6)
- All of the traditional BED committee meetings, which will be held on Sunday (schedule on p. 3)

The breadth of science being presented at the conference is outstanding - from molecular to whole organ biomechanics. The program schedule and details can be found at the WCB website.

There are sessions to match the interests of everyone in the field of biomechanics – from modeling of actin and myosin biomechanics, to reproductive biomechanics, and assessment of blast injuries sustained by members of the armed forces. And of course, the traditional sessions on cardiovascular, musculoskeletal, rehabilitation, and cellular biomechanics along with biotransport and tissue engineering!

The Division has received substantial support from the National Science Foundation (GARDE) for both the Undergraduate Design Competition and a special symposium on Neural Functionality Failure Analysis and Augmentation, along with additional general meeting support from the NSF (CBET) and [fingers crossed!] the NIH (NIBIB). In addition, the World Congress Organizing Team has received substantial support from Industry thanks to the amazing work from BED members Matt Gounis and Jonathan Vande Geeste!

The 2014 Student Paper Competition received over 1000 submissions at the three levels – a daunting task for review and selection of the finalists who will be judged on site. As always, these competitions represent some of the best science presented at the conference, and we are excited to be able to recognize the next generation of researchers.
Of course, we would like to thank: the BED members who were part of the Conference Planning Committee; the Technical Committee Chairs and Associate Chairs who, with their committee members proposed and organized many of the sessions; and BED members who helped to review the 4000+ submitted abstracts to maintain the scientific integrity of the meeting. Organizing this meeting was a daunting task for the WCB Conference Planning Committee, led by Roger Kamm and Jay Humphrey. Coordinating activities of six participating societies with abstracts coming from every corner of the globe is a very complex process. But we believe that the end result will be a World Congress that the BED will be proud to have taken a lead role in and that will provide a great opportunity for our members!

If you haven’t already booked your hotel reservation, we are aware that all of the conference hotel rooms are currently sold out due to the enormous response from international attendees. There are, of course, many hotel options in Boston – and a contract is being pursued with an additional hotel to provide discounted rates. So, please keep an eye on wcb2014.com for details.

We look forward to seeing many of you in Boston at the beginning of July!

Michele J Grimm  
ASME-BED Conference Chair  
World Congress of Biomechanics

Kris Billiar  
ASME-BED Program Consultant  
World Congress of Biomechanics

Through the generous contribution of NSF, the BED has money to help support WCB 2014 attendees who have a disability and may have a hardship in attending and/or participating in a technical conference. The funding will cover the registration and hotel accommodations. Applicants do not need to be presenting or have any affiliation with ASME or SBC, although priority will be given to people who do.

The deadline for applications has been extended until July 1, 2014, and applications will be evaluated and awarded on a rolling basis. You can also get more information and download an application form at last year’s SBC2013 conference website: http://www.asmeconferences.org/SBC2013/TravelSupportDisability.cfm

The SBC2013 forms will be accepted and applications from the above forms can be emailed to maletsky@ku.edu or mgrim@wayne.edu.
The rock-n-roll band made up of BED members and friends will be rocking a tea party! All are invited!

Thursday Night
July 10, 2014
House of Blues*

Let’s tea up some good times!

*Venues and times may change. Check program and announcements at WCB2014. The Bioengineering Division is not responsible for the content of the concert or this advertisement. But BEDrock really wants you to come out and party in Boston!
BED Member Promotes Othopaedics and Bioengineering to Young Women

BED member, Jenni Buckley, PhD, saw the gender gap in orthopaedics and engineering, and she did something about it. With her surgeon co-founder, Dr. Lisa Lattanza, and few female undergraduate engineering students working in her lab, she invited 15 young women from public high schools in the San Francisco Bay Area into her lab for four, one-day workshops. It was a biomechanics and surgery bootcamp. The high school students loved it, and The Perry Initiative was founded and just grew organically from there. The fledgling program was fortunate to receive funding support from Chevron Energy Solutions in the second year, allowing the initiative to expand rapidly both in California and then nationally. The Perry Initiative is named for Dr. Jacquelin Perry, one of the first female orthopaedic surgeons in the country, and a mentor to countless women and men in the field.

Jenni Buckley and her colleagues are following in those mentoring footsteps. She and the program director, Laurie (Meszaros) Dearolf, PhD, find the work very rewarding. Laurie says, “I love to see the instant boost in confidence from program beginning to end. Seeing the girls transition from timidly holding the power drill to sawing and drilling away with confidence is awesome! “

The Perry Initiative now annually conducts 25-30 Perry Outreach Programs (POPs). They are one-day workshops offered for high school students nationwide. The programs expose young women to orthopaedics and bioengineering concepts, and help them gain confidence in both areas. They use real surgical tools and bone models. The girls participate in creative problem-solving and learn the orthopaedic implant design process. POP participants rotate through six mock surgical scenarios and attend three lectures on career decisions given by local women orthopaedic surgeons and engineers. Local medical and engineering students act as hands-on activity instructors for the high school students. The program is highly effective at inspiring girls to pursue orthopaedics and engineering. They find 84% of POP alumna are pursuing STEM college majors, with 21% in engineering and 45% in the biosciences.

The Perry Initiative also now also offers Medical Student Outreach Programs (MSOPs). The first large class of MSOP alumnae will match for residency next year (March 2015). After participating in the program, 90% of the students who were initially undecided on a specialty, 100% of those initially considering another specialty, and 96% of those who were initially considering orthopaedic surgery indicated that they were now considering or strongly considering applying to orthopaedic surgery residency programs.

The Perry Initiative will also pilot an Undergraduate Student Outreach Program this Fall. To learn more and/or get involved, go to: http://perryinitiative.org/
**BIOENGINEERING DIVISION TECHNICAL COMMITTEES**

**BIOTRANSPORT**

The Biotransport (BIOT) committee will hold their annual meeting at the 2014 World Congress of Biomechanics on Thursday, July 10, at 1:00 PM (location, see p. 3). At the BIOT committee meeting, we will deliberate on the status of the past initiatives, ongoing activities, and future direction of our committee in the ASME BED and HTD divisions. We will take this opportunity to recognize several achievements of our members. This is an open meeting and everyone interested in linking transport of energy, mass, and momentum with medicine and functioning of living systems is encouraged to attend. The attendees are expected to advocate, exhort and opine on our future activities! Please, contact the committee chair, Rupak Banerjee (rupak.banerjee@uc.edu) for further details or clarifications.

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**FLUID MECHANICS**

The Fluids Committee annual meeting will be held Sunday, July 6th from 11:30-12:20 at the 2014 World Congress of Biomechanics (location, see p. 3). We are always looking for people who would like to get involved and help review abstracts, chair sessions, provide feedback, and/or organize workshops. Please join us at this open meeting where we will be discussing our committee activities. If you are unable to attend but would like to get involved, please contact me at Loth@UAkron.edu. I look forward to seeing you soon in Boston!

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**SOLID MECHANICS**

The annual meeting of the Solid Mechanics committee will be held at WCB2014 on Sunday, July 6, at 12:30 pm (location, see p. 3). We are always looking for people who want to get involved — reviewing abstracts, chairing sessions, organizing workshops — so please join us at this gathering for an overview of our contributions to WCB2014 offerings and a discussion of our committee activities.. If you want to get involved but cannot attend the meeting, please email me (Rich Debski - genesis1@pitt.edu), Solids Chair.
The Design, Dynamics, and Rehabilitation Committee will have its annual meeting at 10:30 am, Sunday, July 6th, at the 7th World Congress of Biomechanics (location, see p. 3). This committee covers a wide variety of topics including human movement measurement and modeling, rehabilitation, medical device design (orthopedic, cardiovascular, BioMEMS), engineering for surgery, and robotics. At the committee meeting, we will review our 2014 WCB sessions and competitions, future goals for our committee, and other strategic initiatives. Everyone with interest in design, dynamics, and/or rehabilitation is encouraged to attend, including post-docs, faculty members, and industry members. We also encourage regular member of other committees to attend. Those who would like more information are encouraged to contact the committee chair, Martin Tanaka (mtanaka@email.ecu.edu) or the vice-chair, Tammy Bush (reidtama@egr.msu.edu).

Our annual meeting will be held on Sunday, July 6th, 10:30-11:20 am at the World Congress on Biomechanics in Boston (location, see p. 3). Join us, and bring your friends! We have much to discuss, including some interesting new ways in which our committee will try to develop meaningful scientific content and interactions over the next year. We will also will discuss our role in the 2015 ASME NEMB meeting to be held in Minneapolis from April 29–22, 2015, and begin planning for the future direction of our committee. The meeting will culminate with the Tissue and Cellular Engineering's longstanding tradition of throwing the incoming chair, Rob, into Boston Harbor along with 342 containers of over-taxed imperial tea. The election is now in progress for Rob's replacement as co-chair. Be certain to exercise your rights as a Colonial rebel and cast your vote soon! If you cannot attend the meeting but still want to get involved, email either Guy Genin, outgoing chair (genin@wustl.edu), or Rob Mauck, incoming chair (lemauck@mail.med.upenn.edu). See you in Boston!

Encourage Students and Postdocs to GET INVOLVED with BED Leadership

SBC/WCB 2014 authors:

Please nominate your students for our Student Leadership Committee. The purpose of this committee is to aid students in gaining leadership experience and to facilitate planning and execution of student events for upcoming conferences (including WCB2014) and other local/virtual programs.

The students need to commit to a one-year term including coming to WCB2014 and attending a one-hour planning meeting at WCB. Please send your nominations to Kristen Billiar (kbilliar@wpi.edu, BED Board Member in Charge of Student Affairs). The nomination should include a short paragraph about the student in the body of an email indicating why the student is suitable for a position on the committee. We envision the committee consisting of about 10 graduate students, but committed undergraduate students are welcome as well.

Postdocs are encouraged to join our technical committees.
The BED has four administrative committees: Education, Honors & Awards, Membership, and New Directions. Additionally, the BED selects representatives to other bioengineering organizations and to committees within ASME. Within ASME, the BED has representatives to the Thurston Award Committee, the ASME annual meeting (IMECE), and the Basic Engineering Group (see report in this section). Beyond ASME, the BED typically has representatives to the American Institute for Medical and Biological Engineering and the U.S. National Committee on Biomechanics.

Reports from these committees and representatives follow.

ASME IMECE Activities

The Bioengineering Division contributes each year to the Biomedical & Biotechnology Engineering track at the ASME’s annual “International Mechanical Engineering Conference and Exhibition.” The 2014 IMECE will be held from November 14-20 in Montreal, Canada. Although this meeting is not a major focus for the BED, we do have a strong showing each year, and have accepted 178 abstracts for the 2014 IMECE. Abstracts were divided amongst 10 themes:

- Biomechanics of Trauma due to Accident, Surgery or Weapons
- Vibration and Acoustics in Biomedical Applications
- Innovations in Processing, Characterization and Applications of Bioengineered Materials
- Nanomaterials for Biomedical Applications
- Bioinspired Materials and Structures
- Viscoelasticity of Biological Tissues & Ultrasound Applications
- Dynamics, and Control in Biomechanical Systems
- Clinical Applications of Bioengineering
- Transport Phenomena In Biomedical Applications
- Computational Modeling and Device Design

The track will have two plenary talks: one by Jason Bates from the University of Vermont, entitled "The Dynamic Mechanical Function of the Lung as a Signature of Pulmonary Disease," and one by Said Hanmir of Mitihheart, entitled "Mechanical Cardiovascular Assist Devices."

The Bioengineering Division executive committee assigns one member each year to co-organize this track. Guy M. Genin (Washington University in St. Louis) is organizer for the 2013-2016 term. The track is jointly organized by Ahmed Al-Jumaily (Auckland University of Technology) and M. Erol Ulucakli (Lafayette College).

Guy M. Genin
IMECE Representative
2013-2016

Enjoy a dinner cruise on Boston Harbor, and relax after a busy day at WCB 2014!
The activity of the US National Committee on Biomechanics (USNCB) for the past year has primarily been helping to organize The 7th World Congress of Biomechanics (WCB), to be held in Boston July 6-11, 2014. This will be the first return of the WCB to the USA since the first meeting, held at San Diego in 1990. Sponsoring societies include the Australian and New Zealand Society of Biomechanics, the Canadian Society for Biomechanics, the European Society of Biomechanics, the German Society of Biomechanics, the Global Enterprise for MicroMechanics and Molecular Medicine, and the International Society of Biomechanics. This meeting promises to be the premier meeting in biomechanics in 2014, bringing together all colleagues in the field from around the World. Plan to join us in Boston. Check the WCB website (www.wcb2014.com) often for updates and details.

David Vorp
BED Representative to the USNCB
2007 – 2014

Explore the Back Bay neighborhood and parks, that are close to WCB 2014 at the Hynes Convention Center!

Ozan Akkus
Chair, BED Membership Committee
2011 - 2014

You or one of your colleagues may be eligible as an ASME Fellow if you have been an active and productive member of the ASME for 10 years or more (http://www.asme.org/about-asme/honors-awards/fellows). The process of becoming a fellow involves a nominator and three sponsors. Two of the three sponsors are required to be ASME Members or Fellows. It is important that nominators are in the field of the nominee. The official announcements of most recent Fellows from the BED Division will be made during the WCB 2014 and the citations of new fellows will be published in the fall edition of the BED newsletter.

We also encourage you to become involved in your local ASME chapters to raise the interest of new members in BED. The BED membership development committee welcomes your feedback! Please contact me with your suggestions or any questions you may have at ozan.akkus@cwru.edu.

Ozan Akkus
Chair, BED Membership Committee
2011 - 2014

ASME INTERNATIONAL BIOENGINEERING DIVISION
ADMINISTRATIVE COMMITTEE REPORTS
MEMBERSHIP DEVELOPMENT COMMITTEE

Ozan Akkus
Chair, BED Membership Committee
2011 - 2014

David Vorp
BED Representative to the USNCB
2007 – 2014
The Bioengineering Division participates actively in the activities of the ASME Basic Engineering Group Operating Board (BEGOB), whose primary mission is to provide representation for 6 ASME technical divisions, including: Bioengineering, Heat Transfer, Fluids, Applied Mechanics, Materials and Tribology. In addition, the Nano Engineering Council, an interdisciplinary group but not a division, reports to BEGOB.

BEGOB took the lead role in drafting the memorandum to Dr. Luc H. Geraets, VP of Technical Communities for ASME Knowledge & Community (K&C), questioning the decision made by ASME’s Committee on Finance and Investment (COFI) to end the Financial Accounting Information and Reporting (FAIR) process and the policy of returning a portion of proceeds from the ASME journals to the divisional nominations to the Thurston Lecture Award Committee. The BED representative in this committee for 2013-2016 will continue to be Don Giddens.

Your BED representatives to BEGOB are Michele Grimm (Wayne State University) and Ender Finol (University of Texas at San Antonio). As of July 1, 2014, David Vorp (University of Pittsburgh) will take over for Michele Grimm.

During 2013-2014, BEGOB was also responsible for oversight of the divisional nominations to the Thurston Lecture Award Committee. The BED representative in this committee for 2013-2016 will continue to be Don Giddens.

Ender Finol and Michele Grimm
BED Representatives to the ASME BEGOB
2013 – 2014

Again this year, the emphasis of this article is to highlight that the SBC (this year the WCB), which is attended primarily by researchers from academia, is only one of the events sponsored by the ASME BED. Earlier this spring, the 3rd NEMB conference and the annual Design of Medical Devices conference were held. Also, the call for abstracts for NEMB 2015 is already published (see pg. 19). These BED events are a great fit for industry participation! You are encouraged to attend one of these events!

Also, the two newer BED journals are strongly aligned with industry. The Journal of Medical Devices and Journal of Nanotechnology in Engineering and Medicine provide great opportunities for BED members from industry to gain relevant knowledge and actively participate in the biomechanical design and research community.

If you have suggestions as to how ASME/BED can provide more value to our members from industry, let your voice be heard! Are there needs of industrial members that are not being met? We want to ensure that the Division is cognizant of and responsive to the needs of industry members. The Industry Advisory Committee is working to be the voice of industry to BED. Let us hear from you.

Jeff Bischoff
Chair, Industry Advisory and External Affairs Committees
2009 – 2015
As an incoming chair of the Bioengineering Division Honors and Awards Committee, I encourage you all to nominate candidates for the three special recognition awards of the Division.

Nominations from the pool of active members of the BED are now open for the 2015 awards! To nominate a colleague or yourself for a 2015 award, please submit the nomination form to the Chair of the appropriate Honors Committee no later than Sept. 1, 2014. In preparing nomination packages please note that Honors committee members cannot submit a candidate or provide a letter of support to the committee they are serving.

The **Y.C. Fung Young Investigator Award** recognizes outstanding investigators, early in their careers, for significant potential to make substantial contributions to the field of bioengineering and a demonstrated commitment to bioengineering. Candidates must have earned a relevant Ph.D. or equivalent degree within seven years of their nomination and must be under 36 years of age on June 1 of the year of nomination. [Click here for a nomination form.](#)

The **Van C. Mow Medal** is bestowed upon an individual who has made significant contributions to the field of bioengineering through research, education, professional development, leadership in the development of the profession, mentoring of young bioengineers, and service to the bioengineering community. The individual must have earned a Ph.D. or equivalent degree between ten and twenty years prior to June 1 of the year of the award. [Click here for a nomination form.](#)

The **H. R. Lissner Medal** was created in 1977 by the Bioengineering Division of ASME to recognize significant contributions to bioengineering. These may be (1) research contributions; (2) new methods for measurement; (3) new equipment and instrumentation; (4) educational contributions; and/or (5) service to the BED and/or the bioengineering community. [Click here for a nomination form.](#)

Please join us this summer as we recognize the recipients of the 2014 awards at the WCB banquet and consider nominating a deserving colleague for the 2015 awards.

Noshir A. Langrana  
Chair, Honors & Awards Committee  
2014 - 2017

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Try (or just watch) an alternate form of exercise when taking a break from WCB sessions!
This year, the ASME sponsored Student Paper Competition (SPC) will occur at the 2014 World Congress of Biomechanics. It is a well-advertised global event, and we received an unprecedented number of entries. In fact, over 1,200 student abstracts were submitted—roughly three times the usual number for the ASME SBC. A total of 36 PhD finalists will give podium presentations in six sessions to occur on Monday and Tuesday, July 7-8. Also, approximately 60 MS and 35 BS students will showcase their research at a poster session scheduled for Monday night. We want to congratulate the students who were selected as finalists; competition was particularly fierce this year. We would encourage all delegates to be present at the PhD sessions and BS/MS poster session as talented students from across the globe present their work!

This competition would not be possible without the effort of many individuals. We thank those who volunteered their time to organize the event and judge abstracts. If you would be willing to judge either a poster or podium presentation onsite please contact Andrew Anderson (aea4@utah.edu). We look forward to seeing you next month!

Andrew Anderson, Overall Chair
Steven D. Abramowitch, Ph.D Chair
Eric A. Kennedy, M.S. Chair
Spencer Lake, B.S. Chair

The Education Committee of the Bioengineering Division has continued its strength of planning workshops and posters for SBC. This coming year at WCB, a few posters will be featured. The Committee meeting will be on Sunday, July 6th at 11:30am – we welcome both new and “more experienced” committee members (location, see p. 3). The chief business of the day will be strategic planning for future Education Committee activities – bring your ideas along! A secondary order of business will be a discussion about how the Education Committee can better serve the members of the Bioengineering Division – are there bioengineering education pedagogy resources (electronic or otherwise) that you wish we had, and if so, should it be a priority for our committee to develop them?

See you at WCB!

Laurel Kuxhaus, Chair
BED Education Committee
2013-2016

Arrive in Boston early and enjoy the 4th of July celebrations, including the annual sailing of the USS Constitution, an evening concert by the Boston Pops, and, of course, FIREWORKS!!!
At the ASME Summer Bioengineering Conference last year in Sunrivert, a Student Leadership Committee (SLC) was formed to plan student-focused events for this year’s World Congress of Biomechanics (WCB) meeting in Boston. The purpose of the committee was to engage students at future conferences through both social and informative events. In order to cater to the interests of as many students as possible at the WCB 2014, the SLC began by creating a survey, which was distributed to the ASME student members. In response to the 58 completed surveys that were received and in order to maximize the effectiveness of the committee, the SLC decided to separate into three sub-committees in order to coordinate three main types of events: a Social Committee, a Grant Funding Committee, and an Academic and Industry Panel Committee.

Since the SLC met last summer, the Social Committee has been working towards completing a number of different objectives. The primary goal was to organize a social for graduate students at WCB to foster networking and socializing amongst students. Space has been booked at the Lir on Boylston Pub across from the convention center for this purpose on Tuesday, July 8th, from 8 pm until close. The committee also put together a flyer advertising all ASME BED SLC events being held at WCB along with other nearby attractions in Boston. This flyer has been posted on the ASME BED Facebook page as well as on the WCB webpage (event info - affiliated events) and in this newsletter. Finally, a Twitter account has been created (@asmebedstudents) as a means of spreading general year-round information and any last minute changes during the conference. As we approach the conference and meeting locations are confirmed, the committee will update the flyer and Facebook page to reflect those changes.

The Grant Funding Committee has been working diligently on setting up a Q&A panel session at WCB that students can attend to better understand the process of applying for grant support. Drs. Jonathan Vande Geest, Damien Lacroix, and Ted Conway, who have backgrounds ranging from new and tenure faculty to current involvement with the NSF, have committed to serving on the panel. These individuals will share their personal insights on the process of applying for funding as well as answer the questions of students present at the forum. This session will take place Thursday, July 10th, from 6:30-7:30pm.

Finally, the Academic and Industry Panel Committee has focused on organizing two Q&A sessions for students that will be used to discuss life after graduate studies. The academic panel session will shed light on the application and interview process for academia while the industry panel session will discuss employment opportunities in the biomedical industry for recent graduates. The attendance of Drs. Mark Buckley, Pat Alford, Spencer Lake, and Grace O’Connell has been confirmed for the academic panel session which will take place Tuesday, July 8th, from 1:30-2:30pm. For the industry panel session the attendance of Dr. Jeff Bischoff, Dr. Jenni Buckley, Dr. Eran Linder-Ganz, and a representative from Bose have been solidified. The industry panel session will take place from 6:30-7:30pm on Tuesday, July 8th.

We also strongly encourage our student participants at the WCB to attend the open BED committee meetings on Sunday, July 6th to see how our all-voluntary organization works. In particular, please join the SLC in the Student Affairs Committee meeting (time and room TBA, check http://wcb2014.com/event-info/affiliated-events/ before the conference). All ASME participants (students, postdocs, faculty, and industry) are invited to attend and help us plan workshops and events to aid in student development.

Double-check the WCB 2014 program for times and locations of all above sessions/meetings.

Elisabeth Jensen, Dan Romanyk, Tom Metzger, and Kristine Fischenich
BED Student Leadership Committee

Kristen Billiar, Chair
BED Student Affairs Committee
7th WORLD CONGRESS OF BIOMECHANICS

The World Congress of Biomechanics is an international meeting held once every four years, rotating among Europe, Asia and the Americas. This, the 7th WCB, will once again bring together bioengineers, life scientists and medical researchers from around the world for 5 days of in-depth discussions and presentations. Vendor exhibitions will highlight the latest technologies, publications, and medical devices.

Plan to join us in Boston, just following the US Independence Day festivities on July 4th.

www.wcb2014.com

ORGANIZED BY:
World Council of Biomechanics

IN CONJUNCTION WITH:
American Society of Biomechanics
American Society of Mechanical Engineers
Australian and New Zealand Society of Biomechanics (ANZSB)
Canadian Society for Biomechanics
European Society of Biomechanics
German Society of Biomechanics
International Society of Biomechanics
Global Enterprise for MicroMechanics and Molecular Medicine
US National Committee on Biomechanics

JULY 6-11 2014

John B. Hynes Veterans Memorial Convention Center
Boston, MA

FEATURING A STUDENT PAPER COMPETITION,
SPONSORED BY ASME BIOENGINEERING DIVISION
The ASME BED Student Leadership Committee welcomes you to the 2014 World Congress of Biomechanics!

**Student Leadership Committee Planned Events**

- **Tues. July 8 – Academic Careers Panel**
  Get insight and career perspectives from recently hired bioengineering Ph.D.s in faculty positions.
  Time: 1 – 2 pm
  Location: TBA

- **Tues. July 8 – Industry Careers Panel**
  Get insight and career perspectives from recently hired bioengineering Ph.D.s in industry positions.
  Time: 6:30-7:30 pm
  Location: TBA

- **Thurs. July 10 – Grant Funding Panel**
  Learn about ways to bioengineering researchers secure funding.
  Time: 6:30-7:30 pm
  Location: TBA

- **Thurs. July 10 – Graduate Student Social**
  Join your peers for food and drinks at the bar LIR on Boylston and experience the exciting Boston night life (must pay for your own food and drinks)! This venue is located within a block of the convention center.
  Time: 8 pm – close
  Location: 903 Boylston Street

For live updates on these events follow us on Facebook (ASME Bioengineering Division) or Twitter (@asmebedstudents)

- **Back Bay District Public Garden (69 Beacon St.)** – relax and unwind while strolling through this ornate botanical garden. Even go for a scenic ride through the gardens on a swan boat. Located just 1.4 miles from the convention center.

- **Newbury Street Shopping District** – Any shopper will enjoy a stroll down this street, which features eight blocks of upscale boutiques, shops, restaurants, cafes and bars. Come to shop or just to enjoy the street’s brownstone architecture, influenced by the Art Nouveau style of the 1920s, and the Boston culture. The shopping district is 1 mile from the convention center.

- **Skywalk Observatory, Prudential Tower (800 Boylston St.)** – For a breathtaking view of the city visit the Skywalk Observatory located on the 50th floor of the Prudential Tower. Museum-like displays offer information on the history of Boston. Tickets are $13 for University students and the location is just 0.1 miles from the convention center.

- **The Mapparium at The Mary Baker Eddy Library (200 Massachusetts Ave.)** – A three-story, stained glass globe inside the Mary Baker Eddy Library, it gives a 3D perspective of the world in 1935. The viewing is enhanced by an original word, music, & LED lights display to illustrate how ideas have spread across time and geography to change the world. The library is 1 mile from the convention center.

- **Faneuil Hall Marketplace (1 Faneuil Hall Square)** – A unique urban marketplace offering visitors a variety of shops, restaurants, bars, and daily outdoor entertainment. It has served as a marketplace since 1742, with many American patriots giving inspirational speeches here. It’s located just 2.1 miles from the convention center.

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**7th World Congress of Biomechanics**

*July 6-11, 2014*

John B. Hynes Veterans Memorial Convention Center
100adinon Street | Boston, Massachusetts 02115
Call for Papers and Save the Date!

The 4th Global Congress on NanoEngineering for Medicine and Biology, to be held April 19–22, 2015 in Minneapolis, MN, will focus on nanoscale materials, methods, and devices for the study of biology and the treatment of disease.

WWW.ASMECONFERENCES.ORG/NEMB2015

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Dr. Shuichi Takayama, University of Michigan
Dr. Paul Weiss, UCLA
Dr. Denis Wirtz, Johns Hopkins University

TRACK THEMES

Track 1 Nano-Imaging and Nanophotonics
Track 2 Nano-Therapeutics
Track 3 Nano and Microfluidics
Track 4 Nano-to-Macro: Multiscale Modeling
Track 5 Nanotoxicology in Public Health and the Environment
Track 6 Biomimetic Materials and Nanoscale Analysis of Living Systems

Deadline for Submission of Abstract: January 5, 2015

Awards
Student and post-doctoral participants will compete for outstanding poster awards.

Sponsorships and Exhibits Available
Companies interested in promoting and showcasing their products and services are invited to reserve a table-top exhibit space or sponsorship. Contact Michelle Lewittin (lewittinnm@asme.org), advertising and sponsorship sales coordinator, or James Pero (peroj@asme.org), media sales assistant, for further information.

Venue
The 4th Global Congress on NanoEngineering for Medicine and Biology (NEMB2015) will be held April 19–22, 2015 at the McNamara Alumni Center, The Commons Hotel, and the Minnesota Nano Center at the University of Minnesota.

www.asme.org
ASME BED ROSTER 2013-2014

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