American Society of Biomechanics

Founded 1977



www.asbweb.org

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Newsletter

Volume: 25 - Number: 2, December 2012

From the President

John H. Challis

It is a privilege to serve the society as its 36th president. Indeed the honor of serving is highlighted to me when I read the list of previous presidents. I note that the 36th president of the United States was Lyndon Johnson. Perhaps President Johnson is best remembered for escalating the war in Vietnam, but he also signed the Higher Education Act into law. This act was designed to strengthen US colleges and to help provide student access to higher education; it has changed the landscape of higher education.

The members of our society are all invested in higher education in one way or another. We have student members who are in the midst of their education, many are professors at colleges actively engaged in providing an education as well as pursuing education through research, while others do not work in education, but are in positions where they are trying to identify and hire suitably qualified employees. Higher education is at a confluence, facing a number of challenges including rising costs, competing modes of delivery, and the impact of new technology. These factors will influence us all in one way or another.

Rising costs are illustrated by the increases seen in student tuition fees, which unfortunately have not been matched by similar increases in faculty salaries. Between 2008 and 2010 the mean tuition at four year US public universities increased by 15%. If a longer term view is taken, since 1978 tuition has increased 1120%. In comparison over the same period medical expenses have increased 601%, and the consumer price index by a meager 244%. The AAUP present data showing that faculty salaries increased at one third of the rate of increases in tuition at public doctorate granting colleges from 1981 to 1992, a quarter of the rate from 1991 to 2002, and at one hundredth of the rate from 2001 to 2012. These increases in tuition have also influenced graduate education, something to which the ASB is strongly committed. One impact is the reluctance of some students to attend Graduate School because either they do not want to incur further debt or delay paying off existing debt. At many institutions it is a similar cost to hire a post-doctoral fellow to work on a grant as it is to hire a graduate student, thus fewer grants are being used to support graduate students.

The traditional college lecture has been the standard mode of information delivery since the 12th century. In the early days the lecturer probably read from a book, but now a lecture can be a multi-media extravaganza. At the last ASB Conference a symposium on teaching included presentations on alternative modes of information delivery (see page 5). Residence is no longer a requirement for a college education as many colleges offer on-line classes and degrees. My own gradu-

Continued on page 3....

Student's Corner

Jennifer Bagwell

It is fall again and in addition to celebrating the holidays, spending time with friends and family, and the return of pumpkin lattes, it is the time of year to reflect on the Annual Meeting. The 36th Annual Meeting, hosted by the University of Florida, was a great event with strong student involvement. On the opening day of the conference 45 students attended the Student Event. Dr. Rodger Kram led a discussion about how to successfully network at ASB to maximize the conference experience. Dr. Angela DiDomenico presented on having a career in industry and Dr. Thomas Clanton shared tips for a successful NRSA (F31). There was a great response and lots of enthusiasm at this event. In addition to taking advantage of these group learning opportunities, student interest in the one-on-one Student Mentoring Program grew to 54 participants this year. Thank you to the students for their involvement and a special thank you to the mentors who make this effort possible by sharing their experience and advice with students.

Another networking event available for students was the Women in Science Breakfast. This informal opportunity for women to come together and network was attended by 45 students and scientists. Additionally, the Diversity Luncheon was attended by 25 students and scientists this year. Dr. Anne Silverman helped organize this event which was an opportunity for attendees to discuss the role of diversity in the organization and to brainstorm ideas to encourage and celebrate diversity in the future. These suggestions were recorded and will be used to help shape future diversity events within ASB.

The Student Night Out event continued this year and was a great success with 45 students in attendance. This informal event at Gators Dockside in Gainesville, Florida, allowed students the opportunity to network while sipping a beer and enjoying a local establishment. Thank you to all of the students who attended and made this a fun event!

As we look forward to the 37th Annual Meeting in Omaha, Nebraska, any suggestions or comments on these events would be greatly appreciated. Please email me at petersjj@usc.edu if you have any thoughts regarding the Student Event, Student Mentoring Program, Women in Science Breakfast, Diversity Luncheon, the Student Night Out, or anything pertinent to students in ASB. These events continue to evolve and your input could help make them better. I will be looking for a new Student Advisory Committee soon as well, so please consider volunteering to be part of this committee which serves the students of ASB. Good luck finishing classes and research for the semester and enjoy the holidays and those pumpkin lattes while they last!

"Success consists of going from failure to failure without loss of enthusiasm."
- Winston Churchill



Editorial Board

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Advertising in the Newsletter

The Editorial Board invites businesses that have products or services of interest to members of the Society to advertise in the ASB Newsletter. Advertising space may also be purchased for job postings or other special announcements.

The current advertising rates are as follows:

1/4 page--\$100 1/2 page--\$200 full page--\$400 back page--\$600

If you are interested in learning more about advertising in the ASB newsletter, please e-mail Dan Gales:

DGales@lhup.edu



ASB Involvement

If you are interested in becoming more active in the Society (e.g., serving on a committee or chairing a conference session), contact Andrew Karduna. Secretary/Membership Committee Chair, with your name, address, phone/fax number, email address, and your desired involvement. This information will be included in a database which is periodically updated and distributed to the Executive Board.

Back Copies of the Newsletter

All previous ASB newsletters have been converted into pdf documents and are archived on the ASB website.

From the President (cont.)

John H. Challis

ate students use on-line resources in the same way students 20 years ago might have visited the library; for example they often visit Khan Academy to check certain math techniques. While the methods of college education have remained largely unchanged for many centuries it could be argued that these methods have undergone their greatest changes in the last 10 years.

The make-up of the faculty in higher education has altered over the last 30 or so years. AAUP data indicate that in 1976 tenured and tenure track faculty comprised 57% of college faculty, but in 2009 that figure had fallen to 30%. More teaching is being performed by full-time and part-time non-tenure track faculty. This means that colleges are choosing not to spend their money on faculty whose job descriptions include both teaching and research. One suspects that the required long-term financial commitment to a faculty member with tenure in part accounts for this demographic shift.

One of the great things about the ASB Conference is not just the opportunity to immerse oneself in current research, but it is also the opportunity to interact and compare notes with colleagues on aspects of academic life. With the rapid changes in college education it is great to be able to exchange ideas and perspectives with colleagues from different colleges. The 2013 ASB Conference in Omaha promises to be a rewarding experience, and this will be another opportunity for us to keep track of the latest initiatives in college education. In the meantime if you have any comments about the activities of the ASB please feel free to email me (jhc10@psu.edu).



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Education Committee

Gerald Smith

Beginning of December is the yearly deadline for graduate student Grant-in-Aid applications to be submitted for review. Annually, ASB helps support several outstanding projects, typically for about \$2000. The grant cycle begins in April which allows about a year before abstracts are due for the ASB annual conference. Each year we look forward to viewing the fruits of the GIA program – Watch for several excellent GIA supported projects to be presented at the next conference in Omaha and see Jason Franz's article in this newletter.

For the current round of applications, 17 proposals were received and are being reviewed by the evaluation committee (Ajit Chaudhari, Bradley Davidson, Zachary Domire, Saryn Goldberg and Gerald Smith). These awards not only help finance worthy projects but also stimulate professional attachments to the society. Membership in ASB for both the student applicant and the student's advisor are part of the requirements. Each year we encounter several students and advisors who haven't recognized the membership requirement for GIA proposals and must apply at the last minute. The ASB executive board has discussed this situation and reaffirms the inclusion of membership as part of the GIA requirements. Funding for GIA awards derives largely from the membership and thus we believe that the awards should remain one of the benefits of membership. Advisors of graduate students please encourage all of your students to apply for ASB membership – it is an inexpensive but beneficial professional connection which serves all biomechanists.

In addition to GIA awards, ASB serves the student membership through sponsorship of regional conferences which are expressly student centered. Regional conference proposals are submitted each Fall to support meetings during the following Spring. This year, the following conferences have received funding support from the ASB:

April 12-13, 2013:

South Central American Society of Biomechanics Regional Meeting Texas Woman's University, Dallas, Texas

April 12-13, 2013:

Rocky Mountain ASB Regional Meeting YMCA of the Rockies, Estes Park, Colorado

May 31-June 1, 2013:

Northwest Biomechanics Symposium University of Idaho, Moscow, Idaho

Each of these yearly gatherings has developed as a regional tradition which serves the students from a variety of institutions. ASB thanks the organizers for their efforts to engage students and provide appropriate opportunities to grow professionally. But there is certainly room for expansion of this successful program to other regions of the country. The Northeast, Midwest, and Southwest portions of the country have been underserved in this regard — Biomechanists of those regions, please consider organizing a local conference particularly focused for the students of your area. Applications for ASB support are due each year at the end of September; see the ASB website for submission details.



ASB Executive Board 2012-13

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Secretary/Membership Chair

Andrew Karduna

This is my first newsletter contribution as Secretary, so bear with me while I look up some numbers. Mike Madigan told me to login to the membership database, click here and then here. Great, so according to our records, there are 2738 ASB members (about half Regular and half Student members). I have to say that is quite a jump from what has been reported in recent years, possibly due to extreme weather conditions, the Coriolis Effect, or even... What was that Mike? Those are not all active members. I see. So what did I do wrong? Got it! Let's start again. There are 618 active ASB members: 8 Emeritus, 364 Regular and 246 Student. This is down 48 Regular and 15 Student members from this time last year. Mike, those numbers don't sound as good, are you sure I can't use my original calculation? No? OK, there it is then. Not sure how to explain the > 10% drop in membership at this point (Coriolis Effect?). However, in reviewing the database, I have come across many of my ASB colleagues that have not renewed their memberships over the past few years. So while John Challis is an active member, 6 out of the last 15 presidents are not current ASB members. Clearly, we can be doing a better job in the membership renewal department. The good news is that we have four newly elected ASB fellows: Scott Delp, Paul DeVita, Rick Lieber, and Mary Rodgers.

I want to thank Young-Hui Chang for agreeing to serve on the membership committee. We are planning on a major review of the membership application process. If you are interested in serving on this committee, please get in touch with me (karduna@uoregon.edu). I also wanted to thank Mike for helping with the transition. He doesn't know it yet, but he may have to give up his holidays to help with the membership renewal process. I'm sure his family won't mind.

In a couple of minutes, I will be talking to Gary Heise about issues related to membership. So by the time you are reading this (assuming anyone is actually reading this), you should be able to login to www.asbmem.org to renew your membership for 2013. OK, just got off the phone with Gary, he says we are good to go. Please renew now, especially if you are an ex-president.



<u>Treasurer</u>

Gary Heise

It's membership renewal time for ASB members. Our society dues remain \$60 for regular members and \$15 for student members — a bargain in the world of professional societies. As you know, our membership dues support the Grant-In-Aid program, ASB regional meetings, student travel, and well-deserved awards presented at the annual meeting. Our society checking account is stable given the monthly fluctuations of income and expenses. Regarding income and expenses, our overhead is incredibly low, which is a credit to the efforts of the executive board, the society's committee members, and the hardest working group within the society, annual meeting organizers. Whenever you see a former meeting organizer at an ASB conference, thank them...profusely. During my time as Treasurer, our annual meetings have done exceptionally well (actually making money for the society, as I have detailed at our yearly business meetings).

Over the last few years, the society's long-term investments remained untouched, with the exception of investments made to the Hay Award Stock Market Certificate. By the way, this new paragraph would be a good time to renew your membership, if you haven't done so already. As of September 30th, 2012, our long-term investment portfolio value was \$157,760 with Ameriprise Financial Services. Thanks to Ted Gross for initially setting up those funds – I assume it was Ted because the office we communicate with is located in Seattle. Thanks also to another former treasurer Rob Shapiro, who found us a "tax-man" in Kentucky that keeps ASB Treasurers out of hot water with the IRS. Anyhow, the slowly recovering US economy has allowed the Ameriprise portfolio to increase from its 2010 year-end value of \$147,118. Thanks to my predecessor, Paul DeVita, these funds were safeguarded through the tumultuous 2007-2010 economic downturn. It may be time for the society to re-evaluate these funds, but this task will fall to my successor.

This brings me to an upcoming transition in the ASB Treasurer position. Karen Troy, from the University of Illinois at Chicago, will take over as ASB Treasurer at the Omaha meeting in 2013. I encourage you to contact me, Karen, or any other ASB executive board member with your ideas about our finances and the society in general. The executive board considers ALL questions and suggestions from the membership, but to be a member you MUST RENEW your membership. Thanks for all your financial support of ASB – now go online and renew your membership online (www.asbmem.org) before you read another scintillating article in this newsletter. Cheers!

"I sent the club a wire stating, "Please accept my resignation. I don't want to belong to any club that will accept me as a member.""

- Groucho Marx



ASB Executive Board 2012-13

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2012 Award Summary

Borelli Award Carlo De Luca

Jim Hay Memorial Award

Jesus Dapena

Pre-Doctoral Young Investigator

Jacob Elkins, University of Iowa

Post-Doctoral Young-Investigator Award

Metin Yavus, Ohio College of Podiatric Medicine

Journal of Biomechanics Award

Nick Fey University of Texas as Austin

Clinical Biomechanics Award

Metin Yavus, Ohio College of Podiatric Medicine

ASB Graduate Student Grant-In-Aid

Jason Franz

"Although the world is not flat, this reality is often overlooked in the study of human gait." I began my proposal for the 2010 ASB Graduate Student Grant-In-Aid with that simple observation. However, this observation underscored the largest challenge I faced while completing my dissertation research at the University of Colorado. Like many biomechanics labs, ours included force plates and a dualbelt, force-measuring treadmill securely mounted to level ground. But, I sought to investigate the effects of advanced age on the biomechanics of uphill and downhill walking. Thus, a dilemma - how does one measure ground reaction forces during uphill or downhill walking with a treadmill that doesn't incline or decline? As an ASB graduate student member, I outlined my strategy in a Grant-In-Aid proposal: take a machine shop safety course, purchase supplies, and construct a precise set of aluminum wedges fixed at 3°, 6° and 9° on which I could mount our treadmill. With the ensuing support of the Grant-In-Aid, I constructed those wedges which ultimately led to series of five studies on the biomechanics of uphill and downhill walking in young and older adults. I very recently and successfully defended my doctoral dissertation, which would not have been possible without the support of the ASB Grant-In-Aid.

Mine is but one of many examples of how the Grant-In-Aid program has been and continues to be a valuable asset to the research projects of ASB graduate student members. Other students in recent years have used the Grant-In-Aid to study barefoot vs. shod running biomechanics, dynamic imaging of *in vivo* tendon mechanics, and stride-to-stride fluctuations in amputee gait. The deadline for this year's proposals has come and gone. Nevertheless, if you are a current ASB student member in the early stages of your graduate studies, I encourage you to consider how the Grant-In-Aid might help you achieve your research goals as it did for me and these other students.

You can find more information about the Grant-In-Aid program (e.g., instructions and deadlines) on the ASB website.

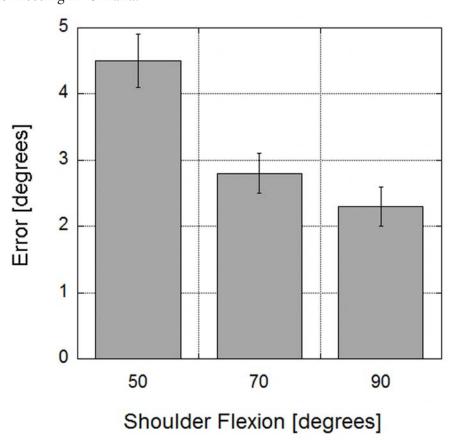


Quickie Research Study

Andrew Karduna

Want to test proprioception? There's an app for that.

Over the past few years, our lab has been developing protocols to assess proprioception during active movements. However, these approaches require expensive testing equipment and the necessity of a visit to our research lab. To address these limitations, we worked with Dana Maher, from UO's InfoGraphics Lab, to develop a mobile app that runs on Apple's iPod touch (or iPhone). It uses the internal sensors (accelerometers and gyroscopes) to record the orientation of a segment with respect to gravity. This past summer at the annual ASB meeting in Gainesville, we participated in the quickie research study to demonstrate the feasibility of this concept by conducting a large scale field based study. Over the course of the conference, we collected data from a total of 126 willing participants. Our protocol consisted of subjects wearing an iPod touch on their arm, moving their shoulder to a predetermined flexion angle (50, 70 or 90 degrees) and then attempting to replicate that position in the absence of vision. The results are shown in the accompanying figure. As we have observed in our lab-based studies, errors were found to decrease as the flexion angle increased. We are currently analyzing the data to examine whether there are any effects of age or sex on end point errors. Thanks to Liz Hsiao-Wecksler for setting up this program, Chris Hass and Mark Tillman for accommodating all of our requests for help at the meeting, and to all the participants who gave their time. Be sure to look for an abstract at next year's meeting in Omaha.





Additional 2012 Awards

ASB Fellows

Scott Delp, Stanford University

Mary Rodgers, University of Maryland

Paul Devita, East Carolina University

Rick Lieber, University of California, San Diego

Student Travel Awards

Abigail Carpenter, University of Northern Colorado

Charalambos Charalambous, Medical University of South Carolina

Ata Kiapour, University of Toledo

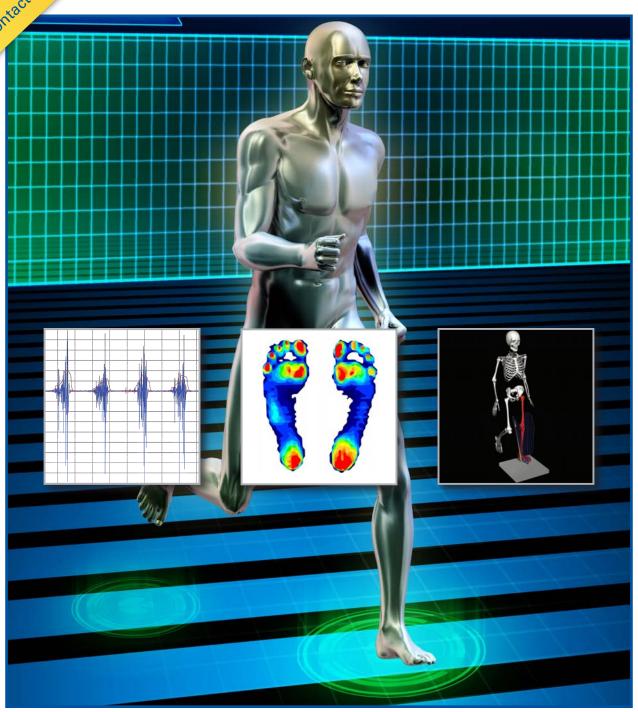
David Lipps, University of Michigan

Dustyn Roberts, Polytechnic Institute of New York Univesity

Shane Wurderman, University of Nebraska Medical Center

Clinton Wutzke, University of North Carolina, Chapel Hill E for a damo

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Communications Committee

Michelle Sabick

Greetings ASB Members! While I have served on the Executive Board for a number of years, this is my first year in the role of Chair of the ASB Communications Committee. The primary roles of the Communications Committee are (1) to maintain a professional and up-to-date ASB website, and (2) to facilitate electronic communications with ASB members and the public through electronic publications. While that sounds fairly simple, there is actually quite a lot to learn. I need to take this opportunity to thank my predecessor, Zong-Ming Li, who really helped me to get a handle on all the different resources that the Society has been using to communicate. I would also like to thank the rest of the Communications Committee: Bil Ledoux, Jason Franz, Tarang Jain, and Dan Gales, for their past and future efforts on behalf of the Society. In addition, several other volunteers help us coordinate different resources, such as Iain Hunter (who uploads the conference archive after each annual meeting) and Matt Seeley (who has helped maintain the Videos of the Month) site. Thanks for all of your help.

Since I took office at the annual meeting in Gainesville, I have been working to learn the ropes of the website, the Executive Board communications and data storage sites, video of the month storage, conference archives, webinars on You-Tube, biomechanics graduate programs listing, and a host of other details that the Communications Chair encompasses. I am currently working to streamline this list a bit, by consolidating storage of some of these resources to one or two places. My next big goal is to update and reinvigorate the website this year. If you have ideas regarding content that you wish were there, ways to better organize the site for easier navigation, how to better link to our social networking sites, etc. please send them my way. Over the next several weeks I will be developing a proposal for the updated site to be presented to the Executive Board at our mid-year meeting in February. Hopefully, by the next time you hear from me I will be describing all the new features of the website and how to use it.



Additional 2012 Awards

Doctoral Student Poster

Jessica Deneweth

Master's Student Poster

Richard Ellis

Undergraduate Student Poster

Harrison Bartlett

President's Award

Bruce Wiggin

Photos of many of the award winners are available on the ASB Facebook page (http://tinyurl.com/bk4nrnh).

Call for Abstract Reviewers

Abstract reviewers are needed for the 37th Annual Meeting of the ASB, to be held in Omaha, Nebraska. Reviewers should possess PhD, MD or similar post-graduate degree and will be required to review approximately 10-15 abstracts between mid to end of March. To volunteer, please send your name, title, and affiliation to Rakié Cham, ASB 2013 Program Chair at: asb2013programchair@gmail.com.

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ASB Corporate Members 2012

Corporate membership categories are aimed at encouraging affiliation by commercial organizations that market products which are used by the biomechanics research community, or companies that are otherwise engaged in activities that fall within the Society's general interest areas. Companies wishing to become a Corporate Member are encouraged to contact Gary Heise, Treasurer.

The ASB Executive Board is pleased to recognize the following companies:

Supporting Member Polhemus



Partner Member Tekscan





Real-Time Active Optical 3D Motion Capture Systems



Exclusive 90° Angle Capture

Real-Time Tactile Feedback Automatic & Continuous Calibration

Sync. With Other Equipment No Marker Swapping Errors

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Requirements for the position include

- Ph.D. in human movement science (biomechanics, kinesiology), engineering, biomedical
 engineering, or related field with 1 year relevant work experience or Master's degree with
 7 years' work experience in a similar field
- Proven track record creating a robust research agenda, and leading a team towards a common goal
- Experience in a biomechanics laboratory, with commonly used biomechanical tools (three-dimensional motion analysis; force plates, pressure sensors, accelerometers, EMG, etc.) and analytical methods (kinematics/kinetic analysis, 3D rigid body motion, signal processing, programming, modeling, etc.)
- Demonstrated understanding of injury mechanisms and sports performance. Experience
 with clinical biomechanics, athletic training or related clinical field a plus
- · Ability to manage multiple projects simultaneously
- Good communication and people skills
- Experience in applying scientific insight to tangible product solutions
- Experience working with high level athletes a plus
- . Knowledge of footwear product creation processes is a plus
- Experience with basketball as an athlete or researcher a plus
- Up to 20% travel

To apply, click this link: <u>Nike NSRL Senior Researcher</u> Questions should be emailed to <u>Arati Parthasarathy</u>. Other Senior Biomechanics Researcher role can be found at this link: <u>Nike Jobs Biomechanics</u>.

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SIMPLEWARE RELEASE 5.1 OUT NOW!

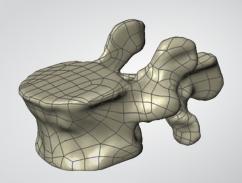
Version 5.1 Simpleware's image visualisation, analysis and model generation software suite introduces the new +NURBS module, as well as some exciting new features that will help you accelerate the process of segmenting and meshing your 3D image data.

New and improved features of version 5.1 include:

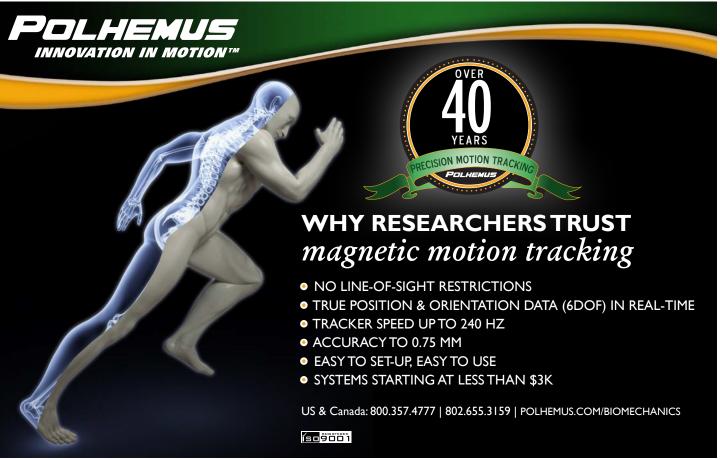
- New +NURBS Module: generate NURBS surfaces from your image data
- New Volume Rendering for Background and Masks:
 visualise your image data quickly and easily
- Additional Mesh Optimisation: specify additional mesh optimisation in +FE
- Improved Statistics Framework:
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About Simpleware Ltd.
Simpleware develops world-leading software solutions for the conversion of 3D image data into high-quality CAD, Rapid Prototype, CFD and Finite Element models. Simpleware customers range from international blue chip corporations to research institutes and universities world-wide.

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http://www.youtube.com/watch?v=jv1jW2BqzI4&feature=related http://youtu.be/mPiAqptEQhU



Instrumented Treadmill https://www.youtube.com/watch?v=Qufejx5agWM



WWW.Qualisys.Com



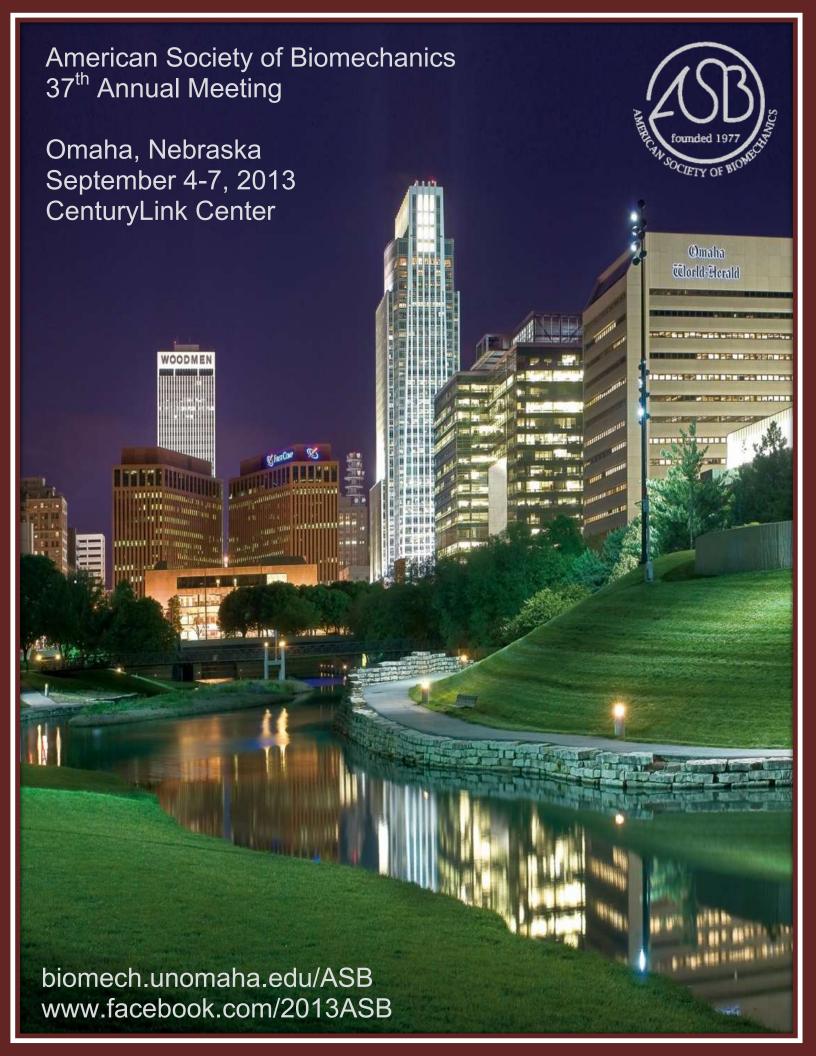
http://www.youtube.com/watch?v=wu69FbKX6qU



http://www.youtube.com/watch?v=RSk K8ks-9s



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Check in often for updates to the program on Facebook and the meeting website.

Program Chair Rakié Cham

CALL FOR ABSTRACTS

37th Annual Meeting of the American Society of Biomechanics

September 4 to 7, 2013

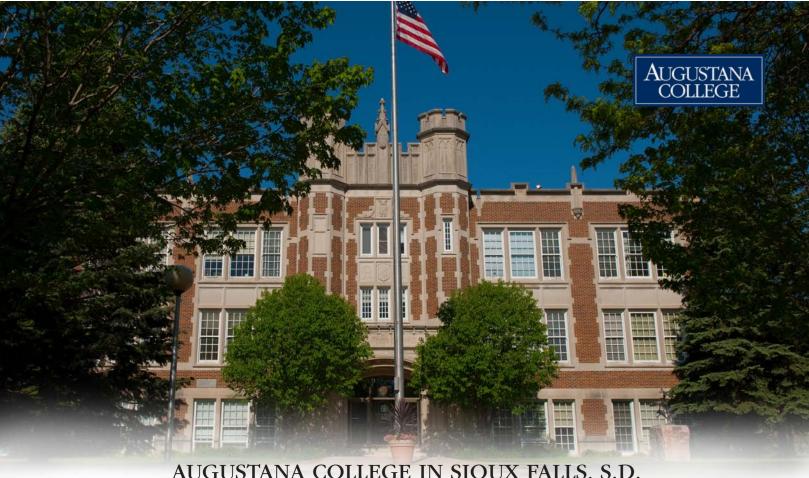
The 37th Annual Meeting of the American Society of Biomechanics will be held September 4 to 7, 2013 in Omaha, Nebraska. The organizers of ASB encourage the submission of abstracts on the full and broad spectrum of biomechanics-related research including but not limited to gait, posture and balance, rehabilitation engineering, ergonomics, orthopedic mechanics, cellular and molecular mechanics, comparative biomechanics, motor control, sports, and teaching. In addition, the theme of the 2013 conference will be "thinking outside of the biomechanics box." Thus, we are also interested in research that relates biomechanics with traditionally non-biomechanics factors. For example, researchers are encouraged to submit abstracts relating cognition and movement, brain imaging and movement, etc. Both computational and experimental work is encouraged at scales ranging from molecular to whole body biomechanics.

The program will include multiple concurrent sessions, lab tours, tutorials, symposia, keynote lectures, best paper competitions (Clinical Biomechanics, Journal of Biomechanics), and honorary awards (Borelli, Hay, Young Scientist Pre-Doctoral, Young Scientist Post-Doctoral).

The abstract submission website will open on February 1, 2013 and abstracts will be accepted until 5:00 PM EST on March 1, 2013.

Meeting information is available through the ASB website (www.asbweb.org) and the meeting website, including links for abstract submission, meeting registration, and details on the eligibility and nominating requirements for each of the awards.





AUGUSTANA COLLEGE IN SIOUX FALLS, S.D. FACULTY OPENING

Augustana College seeks to fill a full-time, tenure-track position for **Assistant Professor of Exercise Science** in the Health, Physical Education, and Recreation (HPER) Department. This is a growing department serving more than 200 majors in Exercise Science, Athletic Training, Fitness Management, Physical Education and Sport Management. Excellent opportunities exist for collaboration with educational partners, health care agencies, and research centers in the Sioux Falls area.

Qualifications: Qualified candidates will possess an earned doctorate in the field of exercise science or a related field by August 2013. A commitment to quality teaching and scholarship and active participation in allied professional organizations is necessary. Collegelevel teaching experience and the ability to involve undergraduate students in research are required. Applicants should have primary expertise in kinesiology and biomechanics. Additional expertise in athletic training and/or exercise science is helpful.

Responsibilities: The successful candidate will be teaching undergraduate courses in kinesiology and biomechanics along with other courses to support majors in Exercise Sciences and Athletic Training. Possible additional courses include, but are not limited to: Motor Development, Nutrition and Exercise, Personal and Community Health, History and Principles of Sport, or Fitness Administration. The candidate will be expected to advise students, promote undergraduate student research, and provide service to the college and community.

Review of complete applications will begin December 15, 2012, and remain open until filled. Please submit a complete application, including a letter of application with educational philosophy, curriculum vitae, transcripts, and a list of three references (include name, address, telephone number, and e-mail address) electronically to: humanresources@augie.edu. While electronic submissions are preferred, application materials may also be mailed to the below address. Learn more at www.augie.edu/jobs. For additional information or inquires, contact: Dr. Sherry Barkley, Chair, HPER Department, sherry.barkley@augie.edu or 605-274-4312.

About Augustana

Founded in 1860, Augustana is a selective, residential, comprehensive college of the Lutheran Church. Committed to enriching lives and fostering development, Augustana combines a foundation in the liberal arts with professional skill and advanced study, leading the Templeton Guide to include the College among those that inspire students to lead ethical and civic-minded lives. With more than 1,850 students from 35 states and 42 countries, Augustana is featured among "America's Top Colleges" by *Forbes*; was ranked among the top baccalaureate colleges in the nation for its efforts to advance social mobility, research and service by *Washington Monthly*; has been named a "Best Midwestern College" by *The Princeton Review*; and is ranked No. 3 among the best colleges in the Midwest by *U.S. News*.

Learn more about Augustana at www.augie.edu





THE UNIVERSITY OF MICHIGAN Department of Industrial and Operations Engineering Faculty Positions

The Department of Industrial and Operations Engineering at the University of Michigan invites applications and nominations for faculty positions beginning September, 2013.

We seek outstanding candidates for faculty positions in the areas of Human Factors and Ergonomics at all levels and in Discrete Event Simulation at all levels. Applicants in research areas including cognitive and physical ergonomics, and system safety are encouraged to apply, as are applicants with research and teaching interests in simulation modeling and analysis.

Candidates must have a Ph.D. and must demonstrate a strong commitment to high-quality research and evidence of teaching potential. Experience related to manufacturing and/or service operations is desirable. Candidates for Associate or Full Professor should have a commensurate record of research publications and are expected to provide organizational and research leadership, develop sources of external funding, build relationships with industry, and interact with faculty colleagues.

Candidates should provide (i) a current C.V., (ii) a list of references, and one page summary statements describing: (iii) career teaching plans; and (iv) research plans. Candidates should have their references send recommendations to us directly at IOEFacultySearch@umich.edu. The deadline for ensuring full consideration of an application is November 1, 2012, but the positions will remain open and applications may still be considered, at the discretion of the hiring committee, until appointments are made.

We seek candidates who will provide inspiration and leadership in research and actively contribute to teaching. We are especially interested in candidates who can contribute, through their research, teaching and/or service, to the diversity and excellence of the academic community. The University of Michigan is responsive to the needs of dual career families.

Please submit your application to the following:

Web: http://ioe.engin.umich.edu/people/fac/fac_search/

If you have any questions regarding the web application submittal process or other inquiries, please contact, Gwendolyn Brown at gjbrown@umich.edu or (734) 763-1332.

The University of Michigan is a non-discriminatory, affirmative action employer.

Umbrellas are for Tourists

William Ledoux

Greetings! As I type this on a dreary, drab Tuesday morning, I am reminded that I have been preparing for this moment for the last 9 years, ever since that fateful day when former newsletter editor Andy Karduna leveraged our long-term relationship to convince me to serve the ASB. (Actually, there wasn't much arm-twisting, as I had long wanted to contribute to our society.) But I am getting ahead of myself... Let me begin with an introduction. My name is William Ledoux (but I go by Bil) and I work for the Department of Veterans Affairs in Seattle, WA. I am also an Affiliate Associate Professor in the Departments of Mechanical Engineering and Orthopaedics & Sports Medicine at the University of Washington. But before I could be officially offered the editorial board position, I had to meet some minimum qualifications that Andy had established:



ASB Newsletter Qualifications

You must be able to answer yes to all questions below:

Do you have a pulse? yes/no

If you are unsure how to answer this question, please try the following:

Take two fingers, preferably the 2nd and 3rd finger, and place them in the groove in the wrist that lies beneath the thumb. Move your fingers back and forth gently until you can feel a slight pulsation. If you can feel this pulsation, circle yes, if not circle no. Note - one common reason for a false negative with this test is trying to use the fingers on the same arm that you are attempted to take a pulse of. If this occurs, do not panic, but try and repeat the test with the fingers on your other hand.

Once we had ascertained that I was indeed qualified to serve on the board, I agreed to help with the calendar (and later the ads). Hence I began my long, 8.5-year apprenticeship, first working with Andy and then, over the last 6 years, for our outgoing newsletter editor Michelle Sabick, who was recently promoted to Communications Committee Chair. I knew from the beginning that I was potentially being groomed to one day take over, and have for years been thinking about two related questions: 1) what could I possibly write intelligently and interestingly about twice a year and, more importantly, 2) what the heck would I call my column? (Seriously, I've been thinking about these things for years!) But like any good procrastinator, I didn't settle on either until just last night.

Answering the first question, my initial thought due to my own experiences on the editorial board were to discuss appenticeships, but given the length of this column already, I think that will have to wait until the next newsletter (whew, there! I have my first year's topics covered!), except to say that I have really enjoyed working with both Andy and Michelle. In particular, Michelle's work over the last 6 years to move the ASB from a hardcopy, printed newsletter to an online, hyperlinked version has left me in a very good position. Among the things I hope to accomplish over the next few years, "redesigning the newsletter" is not one of them. I am looking forward to continuing the strong work of the previous editorial teams. Related to that, I'd like to acknowledge Dan Gales, who is an Associate Professor and Department Chairperson in the Department of Health Science at Lock Haven University and has agreed to take over my old job of managing the newsletter ads and the calendar. If our interaction these last few weeks is any in-Page 18



<u> Umbrellas are for Tourists (cont.)</u>

William Ledoux

dication, the next few years will be smooth sailing.

In answer to the second question, I decided to spend sometime reviewing what past newsletter editors had written. My intention was to reread every newsletter in the society's history, but alas there have been 51! Then I settled on reading just the newsletter editorials, but, did you know, there have been 51! After getting through the first dozen or so, I began to just skim the topics and review the past editors' article titles. It started with Keith Williams, who opined from 1988 to 1991 without a title until his last newsletter, in which he penned "The Tilted Perspective". Kit Vaughn was the next editor from 1992 to 1995, and he wrote under the heading "A View from the Academic Village" in a nod to Thomas Jefferson's characterization of the University of Virginia. Joe Hale served from 1995 to 2000 and his article had two names, beginning with "A View from the Blue Ridge" while he was at UVA, before switching to "Between the Lakes" when he moved to the University of Minnesota. Likewise, our next editor - Don Anderson, who wrote from 2000 to 2003, also had two titles due to a mid-editorial career move from the University of Minnesota to the University of Iowa - what began as "Into the Woods" became "A View from Amidst the Corn". (For those of you interested, Don gave a very nice historical perspective in Vol 15, Issue 2 of the previous editors. Incidentally, in my research, I noted that Don assisted both Kit and Joe with the calendar for an astounding 8.5 years, equaling the length of my own apprenticeship.) Following Don came Andy, who wrote at the University of Oregon from 2004 to 2006 under the byline "These Go to Eleven", in tribute to the wonderful This is Spinal Tap, thereby breaking a streak of three editors in a row who used both "A View..." and some variation of their locale. Of course, Michelle, our most recent newsletter editor from 2006 to 2012, wrote "A View from the Blue" from Boise State, thereby properly restoring both streaks.

All this brings us full circle to the title. I considered many of the things that Seattle is known for (Starbucks, Boeing, Microsoft, Amazon, Nirvana/Pearl Jam, Mt. Rainier, big trees, salmon, rain) but "A view of a big green mountain, obscured by gray, grungy clouds, while hearing jets and drinking salmon-flavored coffee as I type on my PC and order Christmas presents" wouldn't work because, well, I use a mac. Finally, I settled on the one topic we can always talk about – the weather. "Umbrellas are for tourists" is a Seattle localism. Yes, I began this article by noting the drab weather today, but December is the worst month weather wise and really, it is not *that* bad. Yes, we have a lot of cloudy days (over 150 days with more than 0.3mm of rain), but overall we get substantially less inches (sorry, SI units) mm of rain per year than New York or Boston (en.wikipedia.org/wiki/Seattle). So, a lot of days with light showers, but very few torrential downpours. Hence, most Seattleites have good coats with hoods and semi-water proof shoes, but use an umbrella? Nah, they are for tourists!

My goals over the next few years are to keep up the fine tradition begun by my predecessors. As I complete my review of the older newsletters this winter, I hope to reprint some of the more humorous or insightful articles. I'd also like to ask all of you to either contribute or provide suggestions of what you'd like to see in this space. Guest editorials, book reviews, etc. – all are welcome. And with that, I'll end my first editorial with a few ideas still tucked away for next summer's issue.



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"The more that you read, the more things you will know. The more that you learn, the more places you'll go." - Theodor Seuss Geisel (Dr. Seuss)



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NOTE:

For other listings of international conferences, please visit either the ISB's website or Biomch-L.

Events Calendar

Daniel Gales

Orthopaedic Research Society
January 26-29, 2013, San Antonio,
Texas
Abstract deadline - past
www.ors.org/2013annualmeeting/

American Academy of Orthotists and Prosthetists

Enhancement 20, 23, 2013, Orlando, Elera

February 20-23, 2013, Orlando, Florida

Abstract deadline - past www.oandp.org/meeting2013

Computer Methods in Biomechanics and Biomedical Engineering

April 3-6, 2013, Salt Lake City, UT Abstract deadline - December 12, 2012

cmbbe13.sci.utah.edu/

Gait and Clinical Movement Analysis Society

May 14-17, 2013, Cincinnati, Ohio Abstract deadline - past www.gcmas.org/conference2013

American College of Sports Medicine

May 28-June 1, 2013, Indianapolis, Indiana Abstract deadline - past *tinyurl.com/avbyxjl*

ASME Summer Bioengineering Conference

June 26-29, 2013, Sunriver, Oregon Abstract deadline - January 11, 2013 www.asmeconferences.org/SBC2013/

European College of Sport Science June 26-29, 2013, Barcelona, Spain Abstract deadline - February 15, 2013 www.ecss-congress.eu/2013/13

Biology SocietyJuly 3-7, 2013, Osaka, Japan
Abstract deadline - past *embc2013.embs.org*

International Society of Biomechanics

August 4-9, 2013, Natal, Brazil Abstract deadline - January 30, 2013 isbbrazil.com/ **European Society of Biomechanics** August 25-28, 2013, Patras, Greece Abstract deadline - January 31, 2013 *www.esbiomech2013.org*

European Society of Movement Analysis for Adults and Children September 2-7, 2013, Glasgow, Scotland

Abstract deadline - April 26, 2013 www.esmac2013.com

American Society of Biomechanics September 4-7, 2013, Omaha, Nebraska

Abstract deadline - March 1, 2013 www.unomaha.edu/biomech/ASB/in-dex.php

International Research Council on Biomechanics of Injury

September 11-13, 2013, Gothenburg, Sweden

Abstract deadline - December 17, 2012

www.ircobi.org/conference.php

Human Factors and Ergonomics Society

September 30-October 4, 2013, San Diego, California Abstract deadline - February 19, 2013 *tinyurl.com/agfrl3n*

European Orthopaedic Research Society

October 13-16, 2013, Servolo, Italy Abstract deadline - May 1, 2013 www.cors2013.org

World Congress of Biomechanics
July 6-11, 2014, Boston, Massachusetts
Abstract deadline - TBA
wcb2014.com

3-D Analysis of Human Movement July (TBA) 2014, Lausanne, Switzerland Abstract deadline - TBA

Abstract deadline - TB. website TBA



