

### American Society of Biomechanics Newsletter

Vol. 20 December 2007 No. 2

www.asbweb.org

### From the President Rodger Kram

In this column, I want to outline a few initiatives that I plan to work on during my tenure as President. I can't do them alone; I need your help.

First off, I am determined to grow the participation of biologists in the society. One way is to reach out to the Society of Integrative and Comparative Biology (SICB). Research interests at SICB span the range of organisms on the planet from ants to zebras and from amoebas to xylem. I encourage you to google "SICB biomechanics" and check it out. They provide a list of their members and institutional affiliation. You probably have a local biomechanics colleague and don't even know it. Drop them an e-mail, invite them to your lab, have a cup of coffee, exchange ideas and encourage them to join ASB or attend our meeting. Or maybe put together a proposal for a regional joint ASB-SICB conference. Bob Full of UC Berkeley is the chair of biomechanics for SICB and we are working on a plan to encourage ASB and SICB members to attend each other's meetings.

Our <u>annual</u> meeting is obviously the primary reason for the existence of ASB. My second initiative is two-fold: make ASB a more frequent part of your scientific life and foster the fascination of young people with biomechanics. One way to achieve both goals is to use Internet video. Currently, only 2 or 3 keynote lectures per year are sponsored by ASB and they are seen by only 500 members at the annual meeting. I'd like to begin with an annual ASB Internet keynote lecture/ presentation, build an archive, and hopefully increase the frequency of these Internet video keynote lectures. I envision that eventually labs around the country would schedule a meeting around these events and there would be interactive Q&A. More broadly, I hope that these presentations would be engaging enough that high school science students would check them out and hopefully even think they are "cool". Many of us first

heard about biomechanics through popular media (NOVA, Discovery Magazine etc.). Young people today spend their time online, not on TV. If you want to see some examples of the kind of amazing presentations that I have in mind, google "TED Theo Jansen" or "TED arm Dean Kamen". Please send me your suggestions for scientists who give dynamic, highly visual and coherent presentations.

I also have two ambitious goals that involve fundraising. Did anybody else notice the William Gates computer science building on the Stanford campus? I feel strongly that ASB should broaden our appeal for corporate donations beyond narrowly focused biomechanics companies. Almost every ASB affiliated lab uses products or services from much bigger companies, like Microsoft, Apple, Google, Matlab, National Instruments, and United Airlines. We need to ask them to invest in our future scientists. My goal is to develop corporately endowed conference travel grants for our students. If you have a personal connection with someone at a large company, please let me know me so that we can leverage your contact.

On a related note, I would like create a new opportunity for our longtime members to establish a legacy at ASB. Other scientific societies have arrangements whereby people can endow a fellowship in their name as part of their estate planning. The Jim Hay award in sports biomechanics is a perfect example of this idea. I would be most grateful if any senior members of ASB would like to help me out with this project.

Finally, if you are like me and subscribe to the adage "procrastination is an elegant form of time management", mark your February calendar now! The abstract deadline for the joint meeting of ASB and CSB (=NACOB) in August is MARCH 1<sup>st</sup>, not the more typical April deadline. The team at Appalachian State, oops, I mean the University of Michigan does not believe in procrastination and their plans for this meeting are in great shape. OK, that's it from Boulder. Remember to keep the rubber side down.



### ASB NEWSLETTER volume 20, number 2

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### **Editorial Board**

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### **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 Max Kurz (mkurz@mail.coe.uh.edu), 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.

### **Newsletter Advertising**

The Editorial Board invites various businesses and corporations 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
separate insert	\$600

If you are interested in learning more about advertising in the ASB newsletter, please email William Ledoux at:

wrledoux@u.washington.edu

### **Back Copies of Newsletter:**

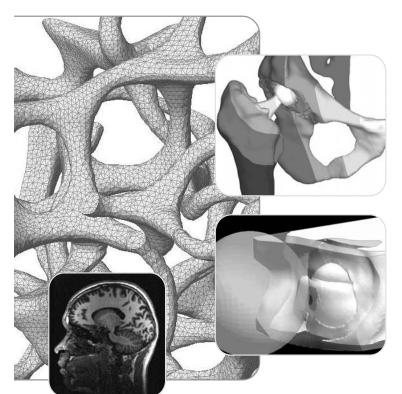
All previous ASB newsletters have been converted into pdf documents and are archived on the ASB website:

### http://www.asbweb.org/newsletters/ newsletters.html





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### Student's Corner Katie Bieryla

The 31<sup>st</sup> annual ASB meeting held at Stanford was a great success. Students from all over the United States were well represented. Highlights from the program included a night out in downtown Palo Alto, lunch with founding members of ASB, and a well attended Women in Science lunch on the last day of the conference.

One important date for student members to be aware of is January 15, 2008, which is the due date for ASB Graduate Student Grant-In Aid applications. Last year the program was very competitive and five applications were granted awards. We expect the award to be just as competitive this year. The Grant-In Aid program offers research funding for small equipment items, materials and supplies, and animal or subject costs. The money cannot be used for salaries or travel. To be eligible for the award the student must be a student member of ASB or have an application pending by January 1, 2008. The executive board anticipates awarding 3-5 grants ranging from \$500 to \$2500. More information is available at the ASB website (www.asbweb.org).

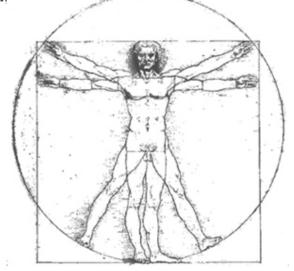
With spring approaching more quickly than you think, ASB regional meetings will soon be here. As information about the regional meetings dates and locations become available, it will be posted on the ASB website. Be sure to check back periodically to see if there will be a regional meeting in your area. Last year, successful meetings were held at Duke University, University of Maryland, and University of Oregon. The regional meetings present the opportunity for students to present their research work in a more informal setting than the large national meeting. If you have the chance to attend a regional meeting I suggest you take it.

The 2008 annual meeting will be a joint meeting with the Canadian Society of Biomechanics (called the North American Congress on Biomechanics or NACOB). This means it is going to be bigger and

longer than before. The meeting will be held at the University of Michigan, from August 5-9, 2008. The key date to remember is March 1, 2008, which is when abstracts will be due. Begin to formulate ideas now as we would like to have a fantastic student showing at this meeting. Each year the scientific program becomes stronger due to the quality of the abstracts that are submitted, with many coming from students. At this meeting we will plan some student activities to mingle with our biomechanics friends from the north. More information about that will come in the spring newsletter. Additionally, my appointment as student representative will end at the NACOB meeting where we will elect a new student representative to the executive board. Begin to think about serving ASB in this capacity.

A new initiative has been started to compile a list of graduate programs in biomechanics that will be posted on the ASB website. This information will be helpful for prospective students interested in entering the field of biomechanics. This will only work with your help. We would like your assistance by providing us with the names and URLs of your departments, programs, laboratories, or groups. Please email me with this information (<u>kbieryla@vt.edu</u>). We will continue to add to this list and hopefully many students will find this a helpful resource.

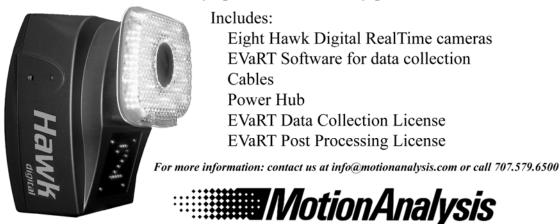
Good luck in the upcoming year with research and classes. As always, feel free to email me with any suggestions on how ASB can be of better service to you.



**ASB** Newsletter

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**ASB** Newsletter

### Education Committee Nick Stergiou

I assumed responsibility as Education Committee Chair at the August ASB meeting held at Stanford University in California. Many thanks to Steve McCaw, the previous Chair, who made this transition practically seamless.

I am located at the University of Nebraska at Omaha (biomech.unomaha.edu). Many of you when you hear Omaha, you probably think of countless acres of land covered with corn. However, it is not exactly like that. Omaha has a variety of attractions with something to fit almost everyone's interest. We are the home of the College World Series and the world class Henry Doorly Zoo. Our easily reached riverfront has first class restaurants, the Qwest Convention Center, beautiful parks and a surprising amount of out of the ordinary shopping. I am a native of Greece and yes, I do miss the easy access to the Mediterranean and the mountains. However, I fell in love with Omaha because of how friendly and helpful the people are here. Omahans also love all kinds of sports, as do I. One of the things I enjoy most is my morning run, because I frequently see deer and other wildlife less than a mile from my home.

#### The ASB Graduate Student Grant-in-Aid Program

is our biggest item to discuss, which is detailed below. The purpose of this program is to support ASB student members pursuing biomechanics research by offering a source of research funding. The grants are distributed on a competitive basis and are intended to offset the costs directly associated with conducting research. Funds may be used for small equipment items, materials and supplies, and animal or subject costs, but cannot be used to support travel costs or salaries. ASB anticipates awarding 3-5 grants, ranging from \$500 to \$2500 for a one-year period.

To be eligible, an applicant must be a student member of ASB or have a membership application received by the Membership Chair no later than January 1, 2008. Applications must be submitted in a single file by electronic mail (Word or ASCII text only, no PDF materials are acceptable) by midnight January 15, 2008. The email must have as the subject line: **2008 ASB GIA**. The attached file should have the applicant's name as the file name using the following format: *LastNameFirstNameInitialYear.doc* (i.e. StergiouN08.doc).

The application must include:

- 1. the name of the applicant and the title of the project
- 2. a 150 word abstract
- 3. the significance of and need for the research
- 4. specific aims and hypotheses to be examined
- 5. a succinct overview of the methods to be employed
- 6. reference list
- 7. an itemized budget (note that ASB does not pay indirect costs for the GIA)
- 8. a curriculum vita of the applicant
- 9. a letter of recommendation from a faculty advisor/supervisor
- 10.the name and mailing address of the fiscal agent at the institution responsible for handling any grant funds provided, and the recipient title that should appear on the check.

Sections 1 to 7 of the application should not exceed seven double-spaced pages. Page margins should not be less than 2.5 cm and font size no less than 11 point (9 point for the references). Since applications are distributed electronically for review, neither letterhead graphics nor electronic signatures are required on the letter of recommendation.

The Education Committee of the American Society of Biomechanics will review applications, with funding distribution expected by June 1. The rule is that recipients must present at the annual ASB meeting in the year following receipt of a GIA. For example, those receiving funding distributed in 2008 will be expected to attend and present at ASB in 2009. Applications and inquiries should be submitted to: Nick Stergiou, Ph.D. Chair, ASB Education Committee University of Nebraska at Omaha Email: nstergiou@mail.unomaha.edu. Email subject: 2008 ASB GIA

I look forward to working with the ASB Executive Board and all committee members over the next three years. If you're interested in serving on the Education Committee, or if you have any issues/concerns that you would like to raise, please contact me by phone or e-mail.

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### Secretary/Treasurer Paul DeVita

On August 25, 2007 I succeeded Don Anderson as the Secretary-Treasurer of ASB. So far, so good: ASB still exists and there remains money in the accounts. We have actually been moving through an extended transition period that is continuing to January of 2008. We are using this period to move to a new on-line membership system that will enable you to apply to ASB and renew your ASB membership among other functions. Don continued to process membership payments with the eminently difficult Access system while I learned the new system and worked to get it running. As I write this article the new system is not yet functioning. As you read this article, the new system is hopefully ready to go, and as January rolls around, the new system will make all our ASB membership issues a joy to behold. Well, there's always hope.

I want to thank Don for all the help he has provided me during the past year and for his continuing efforts over this autumn for the Society. For example, my modus operandi on each of your requests and questions these past few months was: 1) become confused, 2) ask Don how to solve the problem, 3) solve the problem. Don has generously donated his time and energy to ASB well beyond the norm (i.e. what I'll probably do) and we all owe him a Great Big Thanks. GBT, Don.

Getting back to the money, I report to you that the current value of ASB investments totaled \$149.280 and this value is \$10,700 higher than the investment total one year prior. The cash accounts are in both Iowa (\$4,015) and North Carolina (\$11,050) for a total of \$15,065. We will keep some money in Iowa while Don is still on duty. The total is a bit lower than previous reports and because we have not yet collected the corporate membership fees. The cash account fluctuates greatly depending on the time of year. It is high after the membership renewal period and then slowly decreases through the year as we pay journal subscriptions, various grants, and regional meeting fees. I apologize for being somewhat vague here and I will try to be more specific in future newsletters.

I am not sure what we have gotten ourselves into by electing me as the Secretary-Treasurer (emphasis on the Treasurer part) for the next three years. I certainly thank the membership for having confidence in me and for electing me to this position. I hope to serve the Society well...as I mentioned, there's always hope. Please contact me if you have any questions about ASB financial matters or if you have a funny story. Thank you.



### Past-President Kenton Kaufman

I invite and urge you to consider submitting an application for one of the ASB awards. There are awards for individuals at all stages of their career, ranging from Pre-doctoral and Post-Doctoral Young Scientist awards to the prestigious Borelli and Hay Awards. A fifth award, the Travel Award, also requires a submission package. In this column I will briefly describe the awards that require a submission package. The remaining awards (Journal of Biomechanics, Clinical Biomechanics, and President's Award) are selected from the abstracts submitted to our annual meeting. Information on all of the ASB Awards can be found on our website (http://www.asbweb.org/html/awards/ awards.html).

As Past-President, I serve as the Chair of the Awards Committees and administer the process. For those interested in submitting an award package, please note that we have an electronic submission process. All award application materials must be submitted by March 15, 2008. If you are not planning to submit an award application, please consider serving on one of the awards selection committees and send me an email indicating your willingness to serve. My contact information is provided below. Good luck to everyone!

Kenton Kaufman, PhD, PE ASB Past President Chair, ASB Awards Committees Charlton North L-110L Mayo Clinic 200 First Street SW Rochester, MN 55905 kaufman.kenton@mayo.edu

### Borelli Award

The Borelli Award is the most prestigious honor given by the ASB, recognizes outstanding career accomplishment, and is awarded annually to an investigator who has conducted exemplary research in any area of biomechanics. The award is named after Giovanni Alfonso Borelli (1608-1679). Borelli, a mid-17<sup>th</sup> century Professor of Mathematics from Naples, Italy, is considered to be the father of modern biomechanics. Borelli's novel contribution, the treatise "On the Movement of Animals" (translated by Paul Maquet and published by Springer-Verlag), puts forth numerous propositions on the movements and displacements of the limbs of man and animals.

The Borelli Award selection is based on originality, quality and depth of the research and the relevance of this work to the field of biomechanics. The awardee must attend the Annual Meeting of the ASB in order to receive the award and to deliver the Borelli lecture. The award consists of an engraved plaque and a check for \$1500. The Borelli Award is open to all scientists, including non-ASB members, but excluding ASB officers and members of the Borelli and Hay Awards Committees. Candidates may be self-nominated or nominated by others. Candidates should be established scientists whose work incorporates biomechanics in any scientific field. Submission material for the Borelli Award includes a letter of nomination (Word document or PDF), a comprehensive curriculum vitae (Word document or PDF), and five publications on a single topic or theme (PDF). All materials must be sent by e-mail (or post-marked) by March 15, 2008 to the ASB Past-President.

### Hay Award

The Jim Hay Memorial Award for Research in Sports and Exercise Biomechanics was established in 2004 from the financial support of the Hay family and additional donors to recognize outstanding career accomplishment. The Hay Award is presented annually to an investigator who has conducted exemplary research in the area of sports and exercise science biomechanics.

The Hay award is based on originality, quality and depth of the research and the relevance of this work to the field of Sports and Exercise biomechanics. The awardee must attend the Annual Meeting of the ASB in order to receive the award and to deliver the Jim Hay Memorial lecture. The award consists of an engraved plaque and a check for \$1,000. The award is open to all scientists, including non-ASB members, but excluding ASB officers and members of the Borelli and Hay Awards Committees. Candidates may be nominated by themselves or by others. Submission material for the Hay Award includes a letter of nomination (Word document or PDF), a comprehensive curriculum vitae (Word document or PDF), and five publications on a single topic or theme (PDF). All material must be sent by e-mail (or post-marked) by March 15, 2008 to the ASB Past-President.

### Young Scientist Awards

The Pre- and Post-Doctoral Young Scientist Awards are amongst the most competitive in our society and recognize outstanding early achievements by promising young scientists. Selection is based upon the scientific quality of the submitted material. Both awardees must attend the annual ASB meeting to present their work in a special Awards session. Each award consists of an engraved plaque, a check for \$500, and a waiver of conference fees for the annual ASB meeting.

Regarding eligibility, nominees must be current or pending members of the ASB *at the time of submission*. A young scientist is considered eligible for the pre-doctoral award if they have not received their doctoral degree in the year prior to the ASB annual meeting. A young scientist is considered eligible for the post-doctoral award if they have received their doctoral degree within five years prior to the year of the annual meeting. Candidates may be self-nominated or nominated by an ASB member for either award.

Submission materials are identical for the two awards and include a letter of nomination from the department head or graduate research advisor (Word document or PDF), a curriculum vitae (Word document or PDF), and a description of the nominee's current research. Please include a statement specifying the nominee's contribution to all work described and to all accompanying publications (limit 2) pages, Word document or PDF). Finally, candidates for the Young Scientist Awards must submit an abstract of original research (via regular call for abstracts) to the ASB annual meeting with the nominee as first author. All materials (excluding the abstract) must be sent by e-mail (or post marked) by March 15, 2008, to the ASB Past-President.

### **Travel Award**

All ASB members are eligible to apply. Travel and lodging costs are covered. Budget requests may be up to \$1000. Matching funds from the candidate's or host's institution are desirable, but not required.

Applications must include a cover letter, current curriculum vitae, letter from host indicating support for the travel, a synopsis (2 pages maximum) describing the purpose of the travel, and a detailed budget with justification. A short report (2 pages maximum) explaining the significant outcomes of the travel must be submitted following the completion of the travel (to be published in the ASB newsletter).

All application materials (Word document or PDF) must be submitted electronically by email to the ASB Past-President (or post-marked) by March 15, 2008.

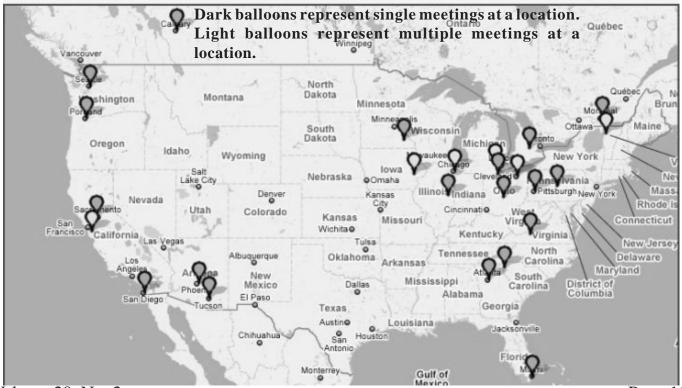
### Communications Committee Andy Karduna

Just a short update on what I've been working on. After a lot of digging, we now have a complete history of all past executive board members and all past award winners. Using a great program called Community Walk (which uses Google Maps), I have mapped out all ASB national and regional meetings (see figure below).

Members of the Communication Committee have also been busy. Iain Hunter is in the process of updating our conference archive page so that all past meeting abstracts will be available and Zong-Ming Li is working on resurrecting our list of ASB graduate programs. Perhaps the area that I've spent the most time on has been investigating the idea of developing an on-line membership system. After exploring many options, talking to members of other societies and getting several bids, we've decided on a Member IT, which is the same company that the ISB is working with. I'm sure Paul will be talking about it elsewhere in the newsletter (see page 8), but we are hoping to have the system up and running in time for next year's membership renewals.



### Past ASB Meetings



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### Northwest Regional Conference 2007

The 2007 Northwest Biomechanics Symposium (NWBS), northwest regional ASB meeting, was held at the University of Oregon on May 18-19, 2007. A total of 33 scientific presentations from 6 US states (Oregon, Washington, Montana, Arizona, Arkansas, and Louisiana), 1 Canadian province (British Columbia), and France were included in the program. More than 90 participants from 18 different research laboratories, local corporations or institutions, and international vendors attended the symposium.

There were five podium sessions, two poster sessions, and three round table discussions during this one and a half day symposium. Sessions included Gait, Methodology/Modeling, Control of Movement, Instrumentation, and Spine, with 4-5 presentations in each area. For the round table discussions, attendees were divided into small groups of 10-15 to enhance interactions among individuals and to continue discussion on the research thread of the previous session or on selected topics in biomechanics.

The symposium was highlighted by the ASB Keynote address, delivered by Dr. Rodger Kram (University of Colorado), with a title of "Using Biomechanics to Dissect the Energetic Cost of Running." It was a topic well-suited to the City of Eugene, "Track Town, USA." A dinner banquet held at the UO Casanova Center concluded day one.

The second day of the symposium continued to be filled with podium and poster presentations by both undergraduate and graduate students. Given the high quality of each presentation, the award selection judges had a difficult task. Ultimately, the awards for best podium and poster presentations (sponsored by MEA Forensic Engineers & Scientists Ltd) went to Nève de Mévergnies (title: "Development of optical instrument for cartilage and bone cell biomechanics"; Portland State University) and Shannon Kroeker (title: "Cervical spinal cord injury due to axial tension"; University of Washington), respectively. We sincerely appreciate the ASB, AMTI, MEA Forensic Engineers & Scientists Ltd, Motion Analysis Corp., Motion Lab Systems, NeuroCom, Oregon Neuroscience Institute/Sacred Heart Medical Center, Rehabilitation Medicine Associates of Eugene-Springfield, Simpleware, Slocum Research and Education Foundation, Tekscan, University of Oregon, and VA RR&D for their generous financial support. The symposium co-chairs (Li-Shan Chou and Mike Pavol) are grateful to all of the participants, who made this symposium a great success. We look forward to seeing you again at the 2008 symposium, to be held at Boise State University.

### Northwest Regional Conference 2008

We are pleased to announce the 4th Northwest Biomechanics Symposium to be held May 9-10, 2008 at Boise State University in Boise, ID. This symposium, in the spirit of ASB meetings, will encourage students in biomechanics, assist regional collaborations between research institutions, and advance the state-of-the-art in biomechanics.

The program will include student presentations (podium and poster), a keynote address by a renowned biomechanist, a student/faculty dinner banquet, and round table discussions on current biomechanics research. These activities are expected to provide an atmosphere rich in student and faculty networking for both career and research advancement. Boise is convenient to outdoor recreation including world-class whitewater rivers, skiing, mountain biking, hunting, fishing, and camping, so plan to stay in the area and enjoy the recreational opportunities after the meeting.

Abstracts from all areas of biomechanics will be considered. The tentative abstract submission deadline is April 1, 2008.

More details on the meeting can be found by contacting Symposium Co-chairs: Michelle Sabick (<u>msabick@boisestate.edu</u>) and Ronald Pfeiffer (<u>rpfeiff@boisestate.edu</u>), or Program Chair: Michael Hahn (<u>mhahn@montana.edu</u>). Information will also be available on the ASB website (www.asbweb.org).

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### New Foot and Ankle Biomechanics Community Announced

The i-FAB initiative (International Foot and Ankle Biomechanics community, <u>www.i-FAB.org</u>) has been launched to support an international community of research users related to foot and ankle biomechanics.

i-FAB will use research from the University of Salford's *Future Work Spaces* group to create an online collaborative workspace comprising a range of IT tools to facilitate greater connectivity and collaboration on foot and ankle biomechanics. i-FAB was officially launched at the International Society of Biomechanics (ISB) meeting in Taipei on July 2nd 2007, following a full day of foot and ankle sessions, chaired by an i-FAB steering group member Dr Alex Stacoff (ETH Zurich).

In addition to the online community, the first i-FAB Conference is planned for 4-6<sup>th</sup> September 2008, at Istituti Ortopedici Rizzoli, Bologna, Italy (<u>www.ior.it</u>).

A range of activities are envisaged within the i-FAB community, from international databases of research projects and post graduate community forums to the development of international standards, consensus and position papers.



See: <u>www.i-fab.org</u> to join i-FAB on line, to download the i-FAB launch presentation and for details of the September 2008 Congress in Bologna.

### CALL FOR PAPERS North American Congress on Biomechanics August 5-9, 2008

The North American Congress on Biomechanics (NACOB 2008), a joint meeting of the American Society of Biomechanics (ASB) and Canadian Society for Biomechanics (CSB), will be held August 5-9, 2008, at the University of Michigan in Ann Arbor, Michigan, U.S.A. The organizers of NACOB 2008 encourage you to submit papers in a broad range of biomechanics topics, including aging, biofluidics, comparative and developmental biomechanics, cellular mechanics, dental, ergonomics, finite element modeling, injury prevention, locomotion, molecular motors, motor control, neuromechanics, novel instrumentation, orthopaedics, prosthetics, protein folding, rehabilitation, reproductive biomechanics, sports, tissue engineering, and vehicle occupant safety. Both modeling and experimental work is encouraged at scales ranging from the molecular to the whole body level. The program will include four concurrent sessions, lab tours, tutorials, symposia, four keynote lectures, best paper competitions (Microstrain, Clinical Biomechanics, and Journal of Biomechanics awards), the ASB Borelli, CSB Career, ASB Hay, and Young Investigator award presentations. Please see the ASB and CSB web sites for information on awards for outstanding research by student and other investigators. On-campus housing will be available.

The deadline for abstract submission is March 1, 2008, and online submission will open February 1, 2008. Note this date is earlier than previously announced. Abstracts are to be submitted electronically at http://www.abstracts.nacob2008.org/.

For more information, please visit the NACOB 2008 website at http://www.nacob2008.org/.



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**ASB** Newsletter

### A View From the Blue Michelle Sabick

Well, I have officially been ASB Newsletter Editor for over a year now, and it is amazing just how much has happened in that time. I successfully made it through the tenure process last April, received two major research grants in May, had a beautiful baby girl in June, didn't sleep a wink in July, visited with many old friends and colleagues at Stanford in August, and spent September, October, and November trying to find the balance between family and career that I discussed in my column last June.

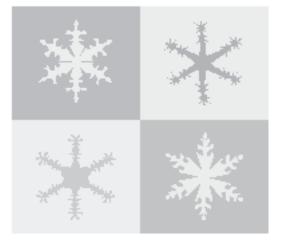
Given all that has been going on, I hadn't given too much thought to the form or function of the newsletter until today. But sitting here staring at the screen trying to come up with a meaningful column prompted me to give some thought as to how the newsletter is organized and the information that it contains (there are many ways to procrastinate <sup>(2)</sup>). Before our mid-year meeting of the ASB Executive Board in February, I would love to receive input from many of you regarding how you use the newsletter (if you do), and what we could do to improve it for you.

A quick look at the newsletter archives on the ASB website shows that the layout and graphics have been more or less the same since the ASB newsletter made its "modern debut" in 1988. We have a nice newsletter template and it would certainly be easy for me to continue to use the traditional format, but I am considering updating the graphics and layout a bit. If anyone has examples of particularly welldesigned newsletters from other professional societies or other types of organizations I would love to see them.

In addition, the Executive Board has discussed several times whether members would prefer to receive hard copies of the newsletter or if electronic delivery would be preferable. Obviously, if you have gotten this far into this hard copy of the newsletter I am probably not getting an unbiased sample, but we would love feedback regarding whether people actually read the newsletter and find it useful. The Society could save a substantial amount of money each year in printing and mailing costs if we moved to an electronic newsletter, as many other societies have. The general consensus among the Board members has been that they like receiving a hard copy of the newsletter. However, many members in the generation of "millennials" that are now attending colleges and universities may not even open paper documents. If that is the case, maybe the money spent on publishing the newsletter could be put to better use elsewhere.

Finally, content of the newsletter has shifted somewhat over the years. For example, job advertisements used to be listed for free in the newsletter. As the use of BIOMCH-L and other electronic resources increased, we have moved away from trying to coordinate free job listings. However, this month we had a record number of paid job postings in the newsletter (special thanks to Bil Ledoux for handling all the mayhem with ease), so I have organized them into their own section once again. Is this something that should continue? Are there other types of information that we could include that would be (more) useful? Some examples might be scientist profiles, career guidance for students, book reviews, or a Dear Abby-type advice column for biomechanists.

Please let me know your thoughts by the end of January (<u>msabick@boisestate.edu</u>). If anyone actually responds, maybe things will look a little different when you read this column next June. In the meantime, Happy Holidays to you and your families.



### **Paid Job Advertisements**

The Department of Rehabilitation and Movement Science at The University of Vermont is seeking to fill three 9-month, tenure-track positions at the assistant/associate professor level. There is a strong emphasis on interprofessional research and teaching among faculty in Athletic Training, Physical Therapy and Exercise and Movement Science.

The positions require that candidates have a record of publication, demonstrated excellence in teaching and the ability to develop a funded research program related to the Department's mission of health promotion, rehabilitation, and prevention of injury, illness and disability.

EXERCISE PHYSIOLOGY: Applicants must have a doctoral degree in Exercise Physiology or a related field and be qualified to teach undergraduate courses in exercise physiology and related topics. Postdoctoral experience desirable.

MOVEMENT SCIENCE: Applicants must have a doctoral degree in Human Performance, Neuroscience or a movement science related field. Post-doctoral experience is desirable.

Candidates with current certification in athletic training or physical therapy licensure are encouraged to apply for either position.

The University of Vermont is an Affirmative Action/Equal Opportunity employer. The Department of Rehabilitation & Movement Science is committed to becoming a leader in developing a diverse faculty and student body to serve the professional, educational and local communities. Demonstrated commitment to diversity and inclusion is considered desirable.

Prospective candidates must apply online at www.uvmjobs.com Search for the position using the department name (Rehabilitation and Movement Science). Attach curriculum vitae and letter detailing areas of expertise and professional goals. Deadline is December 15, 2007. For additional information contact:

Sharon M. Henry, PT, PhD, Chair, Faculty Search, Sharon.Henry@uvm.edu, http://www.uvm.edu/~rms/

#### **California State University, Sacramento Tenure Track Assistant Professor Position in** Kinesiology/Biomechanics.

Doctorate in Kinesiology/Biomechanics or closely related field required. Individuals who are verified ABD at the time of application will be considered but degree must be completed by August 1, 2010. The applicant should have a strong academic background necessary to teach Kinesiology (Anatomical Kinesiology). Preferences will be given to applicants with a background in neuromuscular development, structural anatomy, and biomechanics. The successful candidate will teach Kinesiology to majors and other classes as needed. See CSUS website for full vacancy announcement: http://www.csus.edu/fas/fsaindex.htm

Review of applications begins January 14<sup>th</sup>, 2008 and will continue until the position is filled. Address letters of inquiry to Dr. Fred D. Baldini, Chair, Department of Kinesiology and Health Science, CSUS, 6000 J Street, Sacramento, CA 95819-6073, email: baldinif@csus.edu, phone: 916-278-6441. AA/EO

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The Department of Mechanical & Biomedical Engineering at Boise State University seeks candidates for a tenure-track opening in our growing emphasis area of biomedical engineering. The successful candidate will be expected to make balanced contributions in teaching, research, and service; supervise undergraduate and graduate students; collaborate with existing faculty and local industry; and develop sustainable funded research programs. Preference will be given to candidates with expertise and interest in biomechanics, biomechanical modeling, and related areas. Appointments are targeted for the assistant professor level; however, candidates with exceptional qualifications will be considered for appointment at the associate professor level. An earned Ph.D. in Mechanical Engineering or Biomedical Engineering or a closely related field and demonstrated potential for excellence in research and education are required. Further information concerning this opportunity can be found at:

http://hrs.boisestate.edu/joblistings/faculty/

To be considered for this position, qualified applicants should submit a curriculum vitae, statement of research interests, statement of teaching interests, and contact information for at least three professional references to: Dr. Steve Tennyson, Mechanical & **Biomedical Engineering, 1910 University Drive, Boise State** University, Boise, Idaho, 83725-2075. Applications may also be emailed to <u>bblank@boisestate.edu</u>. Boise State University is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply. Veterans Preference.



The Department of Orthopedics at UMMS invites applications for a tenure-track faculty position in musculoskeletal biomechanics. UMASS Medical School Applicants must hold a doctorate in

a relevant field and have demonstrated an ability to conduct outstanding research. The position is open to all ranks; candidates for the senior rank must have a successful track record in obtaining external research funding. Applications will be accepted until the position is filled.

This position is part of the Musculoskeletal Center of Excellence, directed by David C. Ayers, MD, Chair of the Department of Orthopedics, at the UMMS and the UMASS Memorial Health Center. Current research programs in the Department of Orthopedics includes molecular and cellular mechanisms of skeletal development and bone metastases, biomaterials/musculoskeletal tissue regeneration, mechanical models and molecular mechanisms of osteoarthritis, animal genetic and surgical models for skeletal defects, radiostereometric imaging of total joint replacement, and clinical and outcome research.

Ranked fourth in the nation in primary care education in the 2006 US News & World Report's, UMMS is also one of the fastest-growing research institutions in the US. Federal research grants and contracts at UMMS rose to \$160 million in 2005. The campus is undergoing a major expansion in stem cell and RNAi research, and in clinical and translational investigations. For more information, visit our web site: http://www.umassmed.edu/research/core.aspx

Applicants should submit a copy of a curriculum vita, a statement of research interest, and complete contact information for three references. The application package should be sent to: Chair, Biomechanics Search Committee, Department of Orthopedics, S4-827, University of Massachusetts Medical School, 55 Lake Ave., North Worcester, MA 01655, Biomechanics.Search@umassmed.edu Email submission is encouraged. UMMS is an affirmative action/equal opportunity employer; gualified women and minority candidates are encouraged to apply.

#### Westmont College Department of Kinesiology Biomechanist Faculty Member

The Kinesiology department announces a tenure-track position at the assistant professor level, with specialization in Biomechanics, to begin August 2008. Applicants must have a Ph.D. and demonstrated excellence in scholarship and classroom teaching. Strong preference will be given to candidates with demonstrated abilities in coaching, swim instruction and/or pool management.

Westmont is a nationally ranked liberal arts college in the Protestant evangelical tradition. Faculty are expected to embrace the college's mission wholeheartedly, relating their Christian faith to their teaching, scholarship, mentoring, and action. The college has a strong commitment to build an ethnically, culturally, and academically more diverse faculty of the highest caliber. The college encourages students to participate in on and off-campus programs that enable them to study in environments culturally and ethnically different from their own, and applicants with expertise and experience to participate in these activities are particularly encouraged to apply.

Applicants should send cover letter describing research experience and interests and teaching experience along with *vita*. Letters of recommendation and additional materials will be requested after the initial screening process. Please send letter of interest and *vita* to Dr. Gregg Afman, Department of Kinesiology, Westmont College, 955 LaPaz Rd., Santa Barbara, CA 93108.

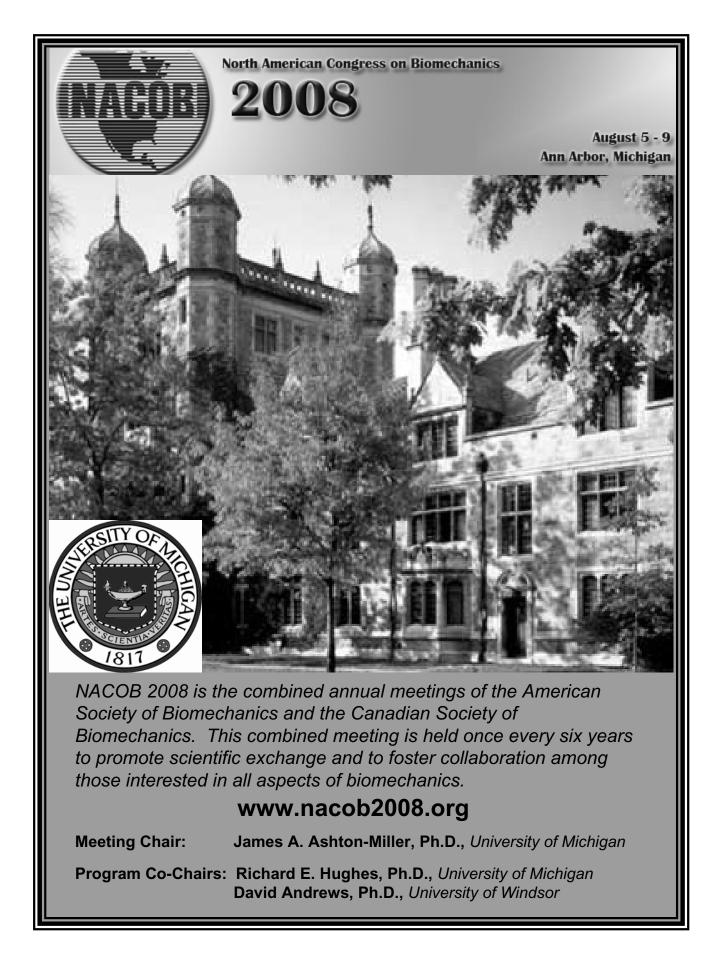
The Indiana University Department of Kinesiology invites applications for a tenure-track Assistant or Associate Professor position in Biomechanics. The position will be available in August, 2008. Qualifications include doctorate in biomechanics or related field, publications in appropriate journals, and demonstrated ability to attract external funding. Preference will be given to candidates with research emphasis in gait analysis, sport or workplace injuries, ergonomics, or musculoskeletal modeling. Responsibilities include: Maintain a biomechanics research program, publish research in refereed journals, acquire external funding to support research activities, advise graduate students, direct master's theses and doctoral dissertations, and teach courses in biomechanics and related topics. Send letter of application with a brief statement of professional objectives, curriculum representative vitae, publication reprints, transcripts, and a listing of at least three professional references to: Chair, Biomechanics Search and Screen Committee, Department of Kinesiology, Indiana University, Bloomington, IN 47405 (phone: 812-855-6541; ktanksle@indiana.edu). Applications email: received by January 1, 2008 will be assured of consideration, but applications will be considered until the position is filled. Indiana University is an Equal Opportunity/Affirmative Action Employer.

#### Staff Research Associate Supervisor-Full Time (\$37,920 to \$67,248 annually) UC San Francisco Orthopaedic Surgery

The Orthopaedic Bioengineering Laboratory is seeking a qualified applicant for the position of Staff Research Associate II or III- Supervisor. This position involves the design and execution of numerous in vitro biomechanical tests of orthopaedic implants as well as basic lab managerial duties, including equipment maintenance and tissue database management. This position will involve extensive collaboration with UCSF clinical and research faculty as well as representatives from the orthopaedic device industry. It presents a tremendous opportunity for individuals interested in the development of new orthopaedic implants.

The SRA III Supervisor position, in addition to the above, must be able to take the initiative to address research issues as they arise, must be able to work independently and accurately with minimal supervision, but also be able to function as part of a team. The SRA III-Supervisor must demonstrate the ability to exercise good judgment and effective decision making toward making innovative contributions in the laboratory. The incumbent is responsible for oversight and risk management of the design and execution of numerous in vitro biomechanical tests of orthopaedic implants as well as basic lab managerial duties, including equipment maintenance and tissue database management.

SRA II Supervisor Applicants must posses a BA/BS in related science and 1+ years of experience or combo. In addition, comprehensive knowledge of standard related scientific procedures in a well established field of science. SRA III Supervisor Applicants must have a B.S. or M.S. in Mechanical or Bio-engineering and at least two years of experience in biomechanical testing for orthopaedic applications and knowledge of scientific methodology and related research literature sufficient to contribute original ideas; or journey level knowledge of scientific procedures in two or more distinct fields of science. Other required qualifications for both SRA II and III Supervisor include: 1) knowledge of basic human anatomy and experience with dissection and preparation of human cadaveric tissue, 2) prior use of industrial testing platforms, e.g., MTS or Instron, 3) good design and machining skills, 4) expertise in use of sensors, e.g., strain gages and load cells, 5) extensive experience with Labview® and Matlab®, and 6) demonstrated effective written and oral communication skills; 7) proven ability to prioritize multiple projects. 8) provide leadership, activity planning, coordination, day-to-day direction of tasks and direction of cross-functional team including leading team meetings. Interested individuals should contact Dr. Jennifer Buckley (buckleyj@orthosurg.ucsf.edu) and send an updated CV or resume.



### **Calendar of Events**

### William Ledoux

### International Conference on Mechanics of Biomaterials and Tissues

December 9 - 13, 2007, Lihue, Kaua'I Hawaii Abstract deadline - past www.icmobt.elsevier.com

#### American Academy of Orthotists and Prosthetists

February 27 - March 1, 2008, Caribe Royale Resort, Orlando Florida Abstract deadline - past www.oandp.org/meeting2008/default.asp

#### International Symposium on Computer Methods in Biomechanics and Biomedical Engineering

February 27 - March 1, 2008, Porto, Portugal Abstract deadline - past www.cmbbe2008.cf.ac.uk

#### Orthopaedic Research Society March 2 - 5, 2008, San Francisco, California

Abstract deadline - past www.ors.org

#### $Gait\,and\,Clinical\,Movement\,Analysis\,Society$

April 2 - 5, 2008, Richmond, Virginia Abstract deadline - past www.amrms.com/ssl/gcmas

### International Symposium on Robotic Applications in Biomechanics

May 3 - 5, 2008, Banff, Alberta, CA Abstract submision begins12/1/07

#### American College of Sports Medicine

May 28 - 31, 2008, Indianapolis, Indiana Abstract deadline - TBA www.acsm.org/AM/ Template.cfm?Section=Annual\_Meeting2

World Biomaterials Congress May 28 - June 1, 2008, Amsterdam, The Netherlands Abstract deadline - TBA www.wbc2008.com

#### International Sport Engineering Association June 2 - 6, 2008, Biarritz, France Abstract deadline - past www.isea2008.estia.fr

#### $International \, Society \, of \, Electrophysiology \, and \, Kinesiology$

June 18 - 21, 2008, Niagara Falls, Ontario, Canada Abstract deadline - December 31, 2007 www.isek2008.ca/default.asp

#### American Society of Mechanical Engineers

June 25 - 29, 2008, Marco Island, Florida Abstract deadline - January 31, 2008 divisions.asme.org/bed/events/summer08.html

#### **European Society of Biomechanics**

July 6-9, 2008, Lucerne, Switzerland Abstract deadline - past www.esb2008.org

### North American Conference on Biomechanics Date: August 5 - 9, 2008, Ann Arbor, Michigan Abstract deadline - March 1, 2008 www.nacob2008.org

#### IEEE Engineering in Medicine and Biology Society August 20 - 24, 2008, Vancouver, Canada Abstract deadline - April 7, 2008 www.embc2008.com

### European Society of Movement Analysis for Adults and Children

September 11 - 13, 2008, Antalya, Turkey Abstract deadline - May 1, 2008 www.esmac.org

#### Human Factors and Ergonomics Society September 22 - 26, 2008 New York, New York Abstract deadline - tba

www.hfes.org/web/HFESMeetings/meetings.html

#### International Conference of Experimental Mechanics November 8 - 11, 2008, Nanjing, China Abstract deadline - May 15, 2008 www.icem2008.org

International Society for Posture and Gait Research June 21 - 25, 2009, Bologna, Italy Abstract deadline - tba *ispgr.org/conferences/italy-2009/conference-overview/ index.html* 

NOTE: For a more comprehensive international listing, please visit ISB's website at: www.isbweb.org/conferences

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